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Recent Trademark Challenges in Cyberspace and the Growth of the Initial Interest Confusion and Nominative Fair Use Doctrines

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I. Introduction

The relatively recent legal doctrines of "initial interest confusion" and "nominative fair use" have become the dominant buzz words for defining the scope of permissible trademark use on the Internet, especially in the on-line advertising context. The prevalence of recent trademark cases applying these doctrines stems from the difficulty involved in assessing trademark liability in cyberspace, particularly when the trademark is not used as visible expression, but is instead used as an invisible tool, such as a metatag[1] or keyword.[2] For example, in its well-publicized opinion of *Brookfield Communications, Inc. v. W. Coast Entm't Corp.*, the Ninth Circuit adopted the initial interest

1. A "*metatag*" is "an HTML tag that identifies the contents of a Web page for the search engines. Metatags contain a general description of the page, keywords for search engines and copyright information." TechEncyclopedia, *at* http://www.techweb.com/encyclopedia/defineterm?term=metatag (last visited Oct. 9, 2004).

2. A "*keyword*" is a "word used in a text search; a word in a text document that is used in an index to best describe the contents of the document; or a reserved word in a programming or command language." TechEncyclopedia, *at* http://www.techweb.com/encyclopedia/defineterm?term=keyword (last visited Oct. 9, 2004).

confusion test with respect to the Defendant's use of a Plaintiff's registered mark in its metatags, noting that the traditional multi-factor likelihood of confusion analysis is not always suitable for assessing trademark liability in the Internet world.[3]

In reviewing the Internet trademark cases decided in the past two years, one thing is clear – the parameters of the initial interest confusion doctrine and the nominative fair use defense have not yet been firmly defined. No clear rules for their consistent application exist. These doctrines are still in their infancy, and because cyberspace trademark issues are virtual and novel, courts are wrestling with their application and formulating brick and mortar analogies to bring about an equitable result. In doing so, courts are attempting to protect the intellectual property rights of companies without creating undue restrictions on competition and consumer choice. This has proven to be a difficult feat. The implications are significant; where the courts ultimately strike the balance will directly impact the future for search engines operators, contextual marketers, and competitive advertising on the Internet.

Recent cases have discussed initial interest confusion and nominative fair use in the context of on-line targeted marketing practices like keyword advertising[4] (also known as "keying") and pay-per-click[5] advertising (also

3. Brookfield Communications, Inc. v. West Coast Entm't Corp., 174 F.3d 1036 (9th Cir. 1999)(referring to *Playboy Enters. v. Welles,* 7 F. Supp. 2d 1098 (S.D. Cal. 1998), *aff'd without op.*, 162 F.3d 1169 (9th Cir. 1998)). (Court finding Defendant's use of Playboy's marks in website and metatags was a fair use, and such a "case is not a standard trademark case and does not lend itself to systematic application of the eight factors.").

4. "*Keyword advertising*" is defined as "[p]aying for placement and click throughs on the results list of a Web search site. Advertisers bid an amount to get a link to their Web site placed at the beginning of the results list when the user's search words match their product keywords. For example, a publisher of a computer dictionary might use keywords such as "computer terms" and "computer definitions" as keyword phrases. If the user searches on those words, a brief summary of the product will appear at the top of the results list or at the side similar to a banner ad. If the user clicks on that link to go to the advertiser's Web site, the advertiser is charged the amount it bid for placement." TechEncyclopedia, *at* http://www.techweb.com/encyclopedia/defineterm?term=keywordadvertising (last visited Oct. 9, 2004).

5. "*Pay-per-click*" advertising is a "marketing system on the Web in which the advertiser pays when the user clicks on its advertisement and goes to its site. This is a more interactive, results-oriented method compared to paying for just the placement of a banner ad on a Web page regardless if anyone clicks on it. Pay-per-click search engines, such as Overture, FindWhat.com and 7Search.com, are search sites that return the results of a search based on how much the advertiser bid for placement. The one that bid the most gets its offering to appear first in the results list; the second-highest appears second, and so on. After all paid advertisers are displayed, all the other results appear just like regular search engines. If the user clicks on a paid advertiser's offering to go to

known as "pay for placement advertising"), pop-up[6] advertising, and using competitors' trademarks in metatags. Unfortunately, no clear guidelines are available because many of the relevant cases are still in their preliminary stages and are being examined within the confines of preliminary injunction and summary judgment standards of review. That being said, these decisions provide an insight into attempts by courts to reconcile the competing interests of brand protection and consumer choice.

In order to better understand why initial interest confusion and nominative fair use have gained such traction in current cyber-trademark infringement analyses, a brief description of the doctrines and the cases that launched them are outlined below.

—Brookfield Communications, Inc. v. W. Coast Entertainment Corp.*[7] *and Initial Interest Confusion

Initial interest confusion stands for the premise that trademark infringement can be based upon confusion that creates initial customer interest, even though such confusion is dispelled before an actual sale takes place or even if no actual sale is eventually completed as a result of the confusion.[8] Although dispelled before an actual sale takes place, initial interest confusion in the Internet context impermissibly capitalizes on the goodwill associated with a mark, and as such, has constituted actionable infringement. The initial interest confusion doctrine as a form of likelihood of confusion that triggers a finding of infringement is not new, and has been applied consistently by courts in most circuits in various brick and mortar contexts.[9] However, the initial interest confusion doctrine was first discussed in detail in the Internet context by the Ninth Circuit in the landmark 1999 case, *Brookfield Communications, Inc. v. W. Coast Entm't Corp.* The *Brookfield* decision raised the

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its Web site, the pay-per-click search engine charges the advertiser's account for the bid amount." TechEncyclopedia, *at* http://www.techweb.com/encyclopedia/defineterm?term=pay%2Dper%2Dclick (last visited Oct. 9, 2004).

6. A "*pop up*" is "a small window that is displayed on top of the existing windows on screen. A popup window can be used in any application to display new information. It is widely used on Web pages to cause an ad to 'pop up;' however, popups can be prevented or made to appear beneath the browser window. The first popups were DOS terminate and stay resident programs in the 1980s; or a menu that displays on top of the existing text or image. When the menu option is selected, the popup menu disappears. This is the common structure today, but was a breakthrough in the early 1980s." TechEncyclopedia, *at* http://www.techweb.com/encyclopedia/defineterm?term=popup (last visited Oct. 9, 2004).

7. Brookfield Communications, Inc. v. W. Coast Entm't Corp., 174 F.3d 1036 (9th Cir. 1999).

8. J. THOMAS MCCARTHY, 3 MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 23:6 (4th ed. 2004).

9. *See id.* n.1.1 (discussing various decisions finding infringement where initial interest confusion has been demonstrated outside of the Internet context).

doctrine's profile as a means to regulate the use of third party trademarks on the Internet, particularly in hidden text such as metatags.

In *Brookfield*, Plaintiff, Brookfield Communications ("Brookfield"), owned a federal trademark registration for MOVIEBUFF, which it used in connection with a searchable database containing information on the entertainment industry. Defendant video rental company, West Coast Entertainment Corporation ("West Coast"), began marketing a similar database at its website *www.moviebuff.com,* which re-directed users to *www.westcoast video.com*. In addition to using that domain name, West Coast also included the term MOVIEBUFF in its websites' metatags.[10] Brookfield sued claiming West Coast's use of the MOVIEBUFF mark in its domain name and metatags infringed on its rights.

The issue facing the court was whether use of a competitor's trademark in a domain name and in metatags was likely to cause consumer confusion. The court decided that such use was likely to cause consumer confusion and, with respect to West Coast's use of Brookfield's mark in the hidden text of its metatags, pointed out that such confusion would likely arise from initial interest confusion.[11] The court reasoned that West Coast's use of Brookfield's mark in its metatags constituted trademark infringement because Internet users entering the trademark MOVIEBUFF in search engines would find themselves at West Coast's website.[12] Although users might realize immediately upon accessing West Coast's site that it was not related to Brookfield, some customers who were originally seeking Brookfield's website might be "perfectly content" to use West Coast's services instead of Brookfield's.[13] Because those customers would have found West Coast's site due to West Coast's "misappropriation of Brookfield's goodwill" in its mark, the court concluded that Brookfield was entitled to preliminary injunctive relief.[14]

In support of its position, the *Brookfield* court offered the following brick and mortar analogy:

> Using another's trademark in one's metatags is much like posting a sign with another's trademark in front of one's store. Suppose West Coast's competitor (let's call it "Blockbuster") puts a billboard on a highway reading – "West Coast Video: 2 miles ahead at Exit 7" – where West Coast is really located at Exit 8 but Blockbuster is located at Exit 7. Customers looking for West Coast's store will pull off at Exit 7 and drive around looking for it.

10. *Brookfield Communications, Inc*., 174 F.3d at 1042.

11. *Id*. at 1062.

12. *Id*. at 1057.

13. *Id*.

14. *Id*.

> Unable to locate West Coast, but seeing the Blockbuster store right by the highway entrance, they may simply rent there.[15]

The Court was careful to note that it was not making any over-sweeping rules, recognizing that there are exceptions to a finding of initial interest confusion, such as a defendant's use of descriptive terms in metatags, fair use in comparative advertising, and nominative fair use.[16]

A number of subsequent cases that tracked the rationale of *Brookfield* have also recognized that initial interest confusion applies to a narrow set of facts—specifically, those instances where products or services are competitive and, oftentimes, where wrongful intent on the part of a defendant is present.[17] That said, even though the *Brookfield* court held that a likelihood of initial interest confusion was sufficient for a finding of trademark infringement, the nature and extent of confusion and diversion required to warrant a remedy under this doctrine is still not clearly defined.[18]

—Playboy Enterprises, Inc. v. Terri Welles, Inc.*[19] *and Nominative Fair Use

At essentially the same time that the Ninth Circuit was formulating the initial interest confusion test in order to protect the rights of trademark owners in cyberspace, it was also reining itself by carving out an exception. Specifically, in *Playboy Enterprises, Inc. v. Terri Welles, Inc*., we see the first case to espouse the application of the nominative fair use defense in the cyberspace context.[20]

In *Welles*, Defendant Terri Welles, a model featured on numerous *Playboy* magazine covers and selected as the Playboy Playmate of the Year for 1981, used the title "Playboy Playmate of the Year 1981" on her own web-

15. *Id*. at 1064.

16. *Id*. at 1065.

17. SALLY M. ABEL, TRADEMARK LAW & THE INTERNET, 221, 211-223 (INTA 2d ed. 2001) (discussing *Hasbro, Inc. v. Clue Computing, Inc*. 232 F.3d 1, 2 (1st Cir. 2000) (proof that a few Internet surfers stumbled on Defendant computer consulting company's clue.com website did not merit consideration of initial interest confusion given lack of similarity between computer consulting services and Plaintiff's board game); *Bihari v. Gross*, 119 F. Supp. 2d 309, 321 (S.D.N.Y. 2000) (use of Plaintiff's BIHARI INTERIORS mark in metatags of gripe sites was not initial interest confusion because there was no bad faith effort to trick users into visiting the site, the metatags only cataloged site concerns); and *BigStar Entm't, Inc. v. Next Big Star, Inc*., 105 F. Supp. 2d 185, 211 (S.D.N.Y. 2000) (initial interest confusion is not applicable because parties do not compete, the products are dissimilar, third party uses abound, and no evidence of bad faith intent was present)).

18. *Brookfield Communications, Inc*., 174 F.3d at 1066.

19. Playboy Enters., Inc. v. Terri Welles, Inc., 78 F. Supp. 2d 1066 (S.D. Cal. 1999), *aff'd in part, rev'd in part, remanded by* 279 F.3d 796 (9th Cir. 2002).

20. *Terri Welles, Inc*., 78 F. Supp. 2d at 1073.

site. She also offered free pictures of herself, advertised nude photos for sale, promoted her spokesperson services, and provided her modeling biography on her website. Specifically, she used the terms PLAYBOY and PLAYMATE in her metatags, on the masthead of her website, and in banner ads on other websites. She also used the abbreviation PMOY '81 repetitively in her website wallpaper.

Plaintiff, Playboy Enterprises, Inc. ("PEI"), filed suit claiming such use of its marks constituted trademark infringement, dilution, unfair competition, and false designation of origin. In its analysis, the court noted that Defendant could not invoke a "classic" fair use defense to avoid liability because she was not using PEI's marks in their "non-trademark" or descriptive sense.[21] However, except for Welles's repetitve use of the term "PMOY '81" in her wallpaper, which the court deemed as more than reasonably necessary to identify Welles as an ex-Playboy model, the Ninth Circuit concluded that Welles's uses of PEI's trademarks were permissible nominative uses because there was "no descriptive substitute"[22] for the trademarks used by Welles.[23]

The *Welles* court concluded that while initial interest confusion can form the basis for finding a likelihood of confusion, it does not necessarily require a finding of infringement where a defendant's use is nominative in nature. The court reasoned that nominative fair use is not meant to "implicate a source-identification function,"[24] and therefore, does not require a likelihood of confusion analysis. Nominative use is invoked in instances where the only word reasonably available to describe a particular good or service is the trademark itself. Specifically, according to the court, if the following requirements are met, the nominative fair use defense will shield a defendant from a trademark infringement analysis, regardless of whether a likelihood of confusion exists:

(1) The product or service in question must be one not readily identifiable without use of the trademark;

(2) The mark or marks may be used to the extent that it is reasonably necessary to identify the product or service; and

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21. *Id*. at 1089-90 (specifically, Welles failed the three pronged test for traditional fair use, requiring that (1) Defendant's use of the term is not as a trademark; (2) Defendant uses the term "fairly" and in "good faith;" and (3) Defendant only uses the term to describe Defendant's product (not Plaintiff's product)). As Welles was using PEI's marks in a trademark sense, and in a manner to describe not only Plaintiff's product but her own, this defense did not apply.

22. *Id*. at 1079.

23. *Id*. at 1089.

24. *Id*. at 1075 (citing *New Kids on the Block v. News America Publ'g, Inc.*, 971 F.2d 302, 308 (9th Cir. 1992)).

(3) The user must do nothing that, in conjunction with using the mark, would suggest sponsorship or endorsement by the trademark holder.[25]
In applying these three requirements to Defendant's use of PEI's trademarks, the court held that her use of the PLAYBOY, PLAYMATE, and PLAYMATE OF THE YEAR 1981 marks in her metatags in conjunction with the visible content of her site to be permissible as nominative fair use. However, the usage of "PMOY '81" exceeded the use allowed by the nominative fair use doctrine.

Just as the court's adoption of initial interest confusion in the *Brookfield* case spread like wildfire into trademark infringement complaints and judicial opinions, the *Welles* nominative fair use defense has also begun to permeate trademark infringement analysis in the Internet context. With this background in mind, some of the recent cases examining both the initial interest confusion doctrine and nominative fair use doctrine are discussed below.

II. Recent Case Developments

A. Can a search engine provider's use of trademarked terms in keyword advertising result in initial interest confusion?

1. Yes, depending on the facts. . .

Playboy Enterprises, Inc. v. Netscape Communications Corp.[26]

For a fee, Defendants Netscape and Excite displayed advertisers' banner ads whenever a user entered one of a number of designated "keyword" terms in his or her search. In the case at bar, Netscape and Excite had compiled a pre-designated list of terms related to sex and adult-oriented entertainment to which they would "key" advertisers' banners.[27] Defendants required advertisers in the adult-entertainment industry to link their ads to this set of over-400 terms, which included the terms "playboy" and "playmate."[28] Accordingly, if a user were to type either of these words in Defendants' search engines, they were not only provided with a list of websites which contained such terms, but were presented with paid banner advertising from third party adult entertainment providers.[29] These banners did not contain the terms "playboy" or "playmate," but PEI introduced evidence that the banner ads displayed on Defendants' search results pages were often confusingly labeled or not labeled at all.[30]

25. *Id*. at 1090; *See also* Playboy Enter., Inc. v. Netscape Communications Corp., 354 F.3d 1020, 1029-30 (9th Cir. 2004)(citing *New Kids on the Block v. News America Publ'g, Inc*., 971 F.2d 302, 308 (9th Cir. 1992)).

26. Playboy Enters., Inc. v. Netscape Communications Corp., 354 F.3d 1020 (9th Cir. 2004) [hereinafter *Playboy I*].

27. *Id*. at 1023.

28. *Id*.

29. *Id*.

30. *Id*.

In 1999, PEI sought to preliminarily enjoin Defendants from using PEI's trademarks "PLAYBOY" and "PLAYMATE" in advertisers' keyword search terms, asserting that Defendants' practice infringed upon and diluted[31] PEI's marks.[32] Specifically, PEI asserted that Defendants' practice of "keying" adult-oriented advertisements to PEI's trademarks actively created initial interest confusion, because the unlabeled banner ads appear immediately after users type in PEI's marks, resulting in a likelihood that users were confused as to Plaintiff's sponsorship thereof.[33] Moreover, Plaintiff asserted that since many of the banners instruct users to "click here," users may have done so believing that they would be connected to PEI's site.[34] Using the theories set forth in the *Brookfield* decision as support, PEI argued that even if users realized their mistake immediately upon reaching a competitor's site, the damage was already done as the competitor would still have gained a customer by appropriating the goodwill in PEI's "PLAYBOY" and "PLAYMATE" marks.[35]

The lower court granted summary judgment in favor of Defendants and dismissed PEI's claims. The Ninth Circuit, in reversing the dismissal, noted that PEI's strongest argument for a likelihood of confusion was initial interest confusion because Defendants' did in fact use Plaintiff's marks to divert customers to a competitor's service for purposes of bolstering its own advertising revenue.[36] In contrast to the lower court,[37] the Ninth Circuit held that

31. Although not discussed herein, the court similarly refused to dismiss Plaintiff's dilution claims, finding that the new dilution standard of "actual dilution" set forth by *Moseley v. V Secret Catalogue Inc*., 537 U.S. 418, 433 (2003), raised issues of fact precluding summary judgment.

32. Playboy Enters., Inc. v. Netscape Communications Corp., 55 F. Supp. 2d 1070, 1071 (C.D. Cal., June 24, 1999), *aff'd*. 202 F.3d 278 (9th Cir. 1999) [hereinafter *Playboy II*]. As procedural background, the Central District Court of California denied PEI's request for a preliminary injunction, and the Ninth Circuit affirmed. On remand, the parties filed cross-motions for summary judgment. The district court granted summary judgment in favor of Defendants and PEI appealed.

33. *Playboy I*, 354 F.3d at 1025.

34. *Id*.

35. *Id*.

36. *Id*. at 1024.

37. In contrast to the "Blockbuster at Exit 8" analogy outlined in the *Brookfield* decision, the district court, in dismissing PEI's claims on summary judgment, offered the following brick and mortar analogy of Netscape's and Excite's "keying" practices:

> This case presents a scenario more akin to a driver pulling off the freeway in response to a sign that reads "Fast food burgers" to find a well-known fast food burger restaurant, next to which stands a billboard that reads: "Better Burgers: 1 Block further." The driver, previously enticed by the

the facts were very similar to those of the *Brookfield* case, and emphasized that even if the confusion was dispelled before an actual sale took place, such use of PEI's marks was actionable if the user would have reached a competitor's site because of Defendants' use of the PEI marks.[38] The court agreed that because unlabeled banner advertisements appeared after users type in PEI marks, consumers could be initially confused as to sponsorship.[39] Additionally, PEI's supporting survey and expert evidence of initial interest confusion, even if flawed, gave rise to a genuine issue of material fact precluding summary judgment in favor of Defendants.[40]

The court went a step further and tested PEI's theory of infringement under the well-established eight factor likelihood of confusion rubric set forth in *AMF Inc. v. Sleekcraft Boats*.[41] The court noted that a number of the same factors also supported a finding of likelihood of consumer confusion: the strength of PEI's marks, the similarity of the covered services and trade channels, the low level of care used by customers in making their purchasing decisions for adult entertainment products, and evidence that Defendants intended to capitalize on Plaintiff's marks.[42] Moreover, in reviewing whether evidence of actual confusion was present, the court reintroduced PEI's expert evidence supporting "a strong likelihood of initial interest confusion."[43]

Defendants claimed that their use of PEI's trademarks did not constitute infringement on the grounds of fair use, nominative use, and functional use.[44] The court denied summary judgment in favor of the Defendants on their fair use defense because a genuine issue of fact existed with respect to the existence of a likelihood of confusion.[45] The court also rejected the functional use defense, indicating that Defendant had waived this defense by not raising it at the lower court level.[46]

> prospect of a burger from the well-known restaurant now decides she wants to explore her options. Assuming that the same entity owns the land on which both the burger restaurant and the competitor's billboard stand, should that entity be liable to the burger restaurant for diverting the driver?

Playboy II, 55 F. Supp. 2d at1075.

38. *Playboy I*, 354 F.3d at 1026.

39. *Id*. at 1025.

40. *Id*. at 1026.

41. *Id*., at 1026 (citing *AMF Inc*. *v*. *Sleekcraft Boats*, 599 F.2d 341, 348-49 (9th Cir. 1979)).

42. *See id*. at 1027-30.

43. *Id*. at 1026.

44. *Id*. at 1029.

45. *Id*.

46. *Id*. at 1030 (noting that even if the defense were not waived, the functional use doctrine does not apply in the case at hand because "[u]nder the functional use

In addition, the court refused to accept the nominative fair use defense.[47] As mentioned above in the discussion of *Welles*, three criteria must be satisfied in order for a nominative fair use defense to be invoked, including that the service offered not be readily identifiable without use of the plaintiff's trademark.[48] Here, the court noted that Defendants could use words other than PEI's marks PLAYBOY and PLAYMATE to trigger adult-oriented banner advertisements.[49] Accordingly, Defendants' use of PEI's marks ran "afoul of the first requirement" that the service in question be one that is not readily identifiable without use of the trademark. As such, the nominative fair use defense did not shield Defendants.[50]

In its analysis, the court specifically noted that its discussion was limited to the facts involving the display of unlabelled banner ads that failed to identify their source and, furthermore, intimated that the use of labeled ads could potentially obviate consumer confusion:

> We note that defendants' use of PEI's marks to trigger the listing of PEI sites, and other sites that legitimately use PEI's marks, is not at issue here. In addition, we note that we are not addressing a situation in which a banner advertisement clearly identifies its source with its sponsor's name, or in which a search engine clearly identifies a banner advertisement's source. . .Rather, we are evaluating a situation in which defendants display competitors' unlabeled banner advertisements, with no label or overt comparison to PEI, after Internet users type in PEI's trademarks.[51]

Judge Berzon, in his concurring opinion, expressed concern that the broad theory of "initial interest confusion," as outlined in the *Brookfield* decision, could be applied to even clearly labeled banner advertisements when a consumer was never confused as to source or affiliation.[52] Specifically, Judge Berzon distinguished between

> hijacking a customer to another website by making the customer think he or she is visiting the trademark holder's website (even if

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doctrine, parts of a design that have functional use may not receive protection. . .[w]e do not have such a case here.").

47. *Id*.

48. *See Terry Welles, Inc*, 78 F. Supp. 2d at 1090.

49. *Playboy I,* 354 F.3d at 1030.

50. *Id*. at 1030. *Cf*. Playboy Enters., Inc. v. Terry Wells, Inc., 279 F.3d 796, 802 (9th Cir. 2002)(holding that Defendant's use of PEI marks in the metatags of her website was deemed a permissible, nominative use because Wells would have to use absurd and lengthy turns of phrase to describe her title as a "Playboy Playmate of the Year" without using the marks).

51. *Id*. at 1030.

52. *Id*. at 1034.

> only briefly), which is what may be happening in this case when the banner advertisements are not labeled, and just distracting a potential customer with another *choice*, when it is clear that it is a choice.[53]

The judge cautioned against the overprotection of trademarks in the Internet context by setting forth his own brick-and-mortar analogy to the situation: if a customer goes to a bookstore and asks for a *Playboy* magazine and is directed to the adult magazine section where he sees *Penthouse* magazine or *Hustler* magazine in the front on the rack while *Playboy* is in the back, no one would allege that *Penthouse* or *Hustler* violated PEI's trademark even if these competitors paid to have their magazines placed in front.[54] Almost as a warning to the district court, the judge voiced his concerns about the broad principles of the *Brookfield* initial interest confusion doctrine, which would not only preclude actionable trademark infringement but permissible competitive advertising, as well.[55]

Whether future courts will heed Judge Berzon's warnings remains to be seen, especially in view of the fact that a week after the Ninth Circuit's decision, a representative of America Online, Inc., owner of Netscape, indicated that the two parties had reached a confidential settlement.[56] It remains unclear whether Excite is also a party to the settlement, so these issues still have the potential for further review.[57]

2. Whether courts will extend the logic espoused in the *Playboy Enterprises, Inc. v. Netscape Communications Corp.* case to other search engine providers remains to be seen. . .

Google Inc. v. American Blind & Wallpaper Factory, Inc.[58]

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53. *Id.* at 1035.

54. *Id.* Judge Berzon also provided an on-line example: "If I went to the Macy's website and did a search for a Calvin Klein shirt, would Macy's violate Calvin Klein's trademark if it responded (as does Amazon.com, for example) with the requested shirt and pictures of other shirts I might like to consider as well? I very much doubt it." *Id.*

55. *Id.*

56. Stefanie Olsen, *Playboy, Netscape reach trademark settlement*, CNET News.com (January 26, 2004), *at* http://news.zdnet.co.uk/business/legal/0,39020651,39143700,00.htm.

57. *Id.*

58. Google Inc. v. Am. Blind & Wallpaper Factory, Inc., No. 03-CV-05340-JF (N.D. Cal. Nov. 26, 2003).

Robert Novak, d/b/a Pets Warehouse and Petswarehouse.com v. Overture Services, Inc., et al.[59]

Government Employees, et al. v. Google, Inc., et al.[60]

Rescuecom Corp. v. Google, Inc.[61]

The above four lawsuits were filed in the past year, and except in the *Government Employees, et al. v. Google, Inc., et al.*, known as the GEICO case which is discussed below, no substantive rulings have been made. However, these cases are still worthy of mention, as it will be quite interesting whether the logic espoused in *Netscape,* discussed above, will be extended to the facts of these cases involving Google's and Overture's keyword or "pay per click" advertising programs. An extension of the *Netscape* analysis is likely because these cases deal with the same issue as that in *Netscape*: whether a search engine provider is liable for trademark infringement or dilution when it uses third party trademarks as keywords at the request of its advertising customers.[62]

As background, Google offers a keyword-triggered advertising program known as "AdWords" to its business customers.[63] With "AdWords," advertisers select keywords that trigger advertisements, and Google posts the advertising links on the margins of its search engine results pages based on whichever keywords appear in user queries posted to Google's Internet search engine.[64] Google is compensated based on the number of Internet users who click on its advertising customers' sites.[65]

In connection with its AdWords program, Google provides advertisers with a "Keyword Suggestion Tool"[66] to "improve" advertising relevance. For instance, if an advertiser types in the trademark "Nike" into the suggestion tool, a list of approximately 100 "more specific keywords" like Nike Shoes, Nike Golf, and Nike Women's are provided. In addition, however, under "Similar Keywords," a user is provided with a listing of "Expanded Broad Matches" which incorporate competitor trademarks such as Saucony, Converse, Reebok, Timberland, and the like. Google does provide a disclaimer at the top of the Keyword Suggestion Tool website underscoring that

59. Civ. 02-5164 (DRH) (WDW) (E.D.N.Y., March 25, 2004) (Google, Inc., among others, is a co-defendant in this case).

60. Case No. 04-CV-507 (E.D. Va., May 5, 2004) (Overture Services, Inc. is a co-defendant in this case).

61. Case No. 5:04-cv-01055_NAM-GHL (N.D.N.Y., September 7, 2004).

62. *See Netscape*, 354 F.3d at 1025.

63. *See* Google Adwords, *at* https://adwords.google.com (last visited Oct. 10, 2004).

64. *See id*.

65. *See* Google Adwords FAQ: Pricing and Billing, *at* https://adwords.google.com/select/pricing.html (last visited Oct. 10, 2004).

66. Available at https://adwords.google.com/select/main?cmd=keywordSandbox.

these terms will not guarantee increased traffic and that the advertiser is "responsible" for ensuring that the selected keywords do not violate any applicable laws.[67]

Turning to Google's Trademark Complaint Policy, while Google formerly provided owners of well-known or distinctive trademarks certain proactive steps to avoid keyword advertising issues,[68] in April, 2004, ostensibly to solidify its position that the use of third party marks in keyword advertising is permissible while simultaneously maximizing revenue for its upcoming and now complete initial public offering, Google modified its Trademark Complaint Policy in the United States and Canada to state:

> When we receive a complaint from a trademark owner, we will only investigate whether the advertisements at issue are using terms corresponding to the trademarked term in the advertisement's content. If they are, we will require the advertiser to remove the trademarked term from the content of the ad and prevent the advertiser from using the trademarked term in ad content in the future. Please note that we will not disable keywords in response to a trademark complaint.[69]

Overture's has taken a less laissez-faire approach to handling trademark issues relating to keyword selection. Overture allow bids "only if the advertiser presents content on its Web site that (a) refers to the trademark or its owner or related product in a permissible nominative manner without creating a likelihood of consumer confusion or (b) uses the term in a generic or merely descriptive manner. In addition, the advertiser's listing should disclose the nature of the relevant content."[70] The policy goes on to say: "If you have a concern that a search term associated with an advertiser's listing is an improper use of a term that is a trademark, Overture will review the advertiser's listing for compliance with our relevancy guidelines and, if appropriate, Overture will remove the advertiser's listing or the content of the listing's title or description will be modified."

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67. *Id.*

68. Google's former AdWords FAQs website was available at https://adwords.google.com/select/faq/7.

69. See *http://www.google.com/tm_complaint.html*. In addition, in its May filing with the Securities and Exchange Commission, Google stated: "In order to provide users with more useful ads, we have recently revised our trademark policy in the U.S. and Canada. As a result of this change in policy, we may be subject to more trademark infringement lawsuits. Defending these lawsuits could take time and resources. Adverse results in these lawsuits may result in, or even compel, a change in this practice which could result in a loss of revenue for us, which could harm our business." See David A. Vise, *Firms Sue Google for Ad Links to Competitors*, Washington Post (May 26, 2004).

70. Overture's keyword policy is available at http://www.content.overture.com/d/USm/legal/trademarkinfo.jhtml.

As mentioned above, there has been a substantive ruling in the GEICO case, namely a bench ruling made by the Court on December 15, 2004, although at the time of this writing, the Judge has not yet issued her promised written opinion. In that case, GEICO has been asserting that the use of the trademark "GEICO" as an AdWord purchased by GEICO's competitors constitutes trademark infringement, and that Google is contributorily liable for the infringement. GEICO has also been asserting that use of the trademark "GEICO" in the visible portion of a competitor's sponsored advertisements constitutes trademark infringement, and that Google is likewise contributorily liable for that infringing activity.

During the bench trial of this case, after the Plaintiff concluded the presentment of its evidence, Judge Brinkema ruled on Defendant's Motion for Judgment as a Matter of Law under FRCP Rule 52(c), granting it in part and denying it in part. In her bench ruling, the Judge stated that GEICO had failed to offer any evidence that use of the trademark "GEICO" as an AdWord was likely to cause any consumer confusion and thus ruled in Google's favor that such activity was not trademark infringement. The Judge denied, however, the Defendant's Motion for Judgment on whether use of the trademark "GEICO" in the visible portion of sponsored advertisements resulted in trademark infringement, and she then suspended the trial to give herself time to write a more detailed opinion consistent with her bench ruling.

Unfortunately, Judge Brinkema's written opinion may not shed any light on the legal issues at hand, since her bench ruling is only based upon a lack of presented evidence.

Turning to the facts of the American Blind case, counsel for American Blind and Wallpaper, Inc. ("ABW"), sent a demand letter to Google's AdWords Trademark Complaints Division[71] in July 2002.[72] The demand letter stated that ABW owned United States trademark registrations for "AMERI-

71. Google's AdWords FAQs website provides the following:

> As a provider of space for advertisements, we cannot arbitrate trademark disputes between advertisers and trademark owners. As stated in our Terms and Conditions, advertisers are responsible for the keywords and ad text that they choose to use. We encourage trademark owners to resolve their disputes directly with our advertisers, particularly because the advertisers may have similar advertisements on other sites. As a courtesy, we are willing to perform a limited investigation of reasonable complaints. When we receive a complaint from a trademark owner, our review is limited to ensuring that the advertisements at issue are not using the trademarked term as a keyword trigger. If they are, we disable those keywords from the ad campaign. Please note that any such investigation will only affect ads served on or by Google. Trademark claims can be filed at any time. The trademark owner is not required to be a Google AdWords advertiser in order to file a claim. Please view our trademark guidelines for more information on the use of Google trademarks. If you would like to submit a trademark complaint, please review our full trademark complaint procedure.

CAN BLIND & WALLPAPER FACTORY," "AMERICAN BLIND FACTORY," and "DECORATE TODAY."[73] The letter also requested that Google take the following steps: "(a) cease selling ABWF's proprietary marks and marks similar thereto, (b) remove such marks from all campaigns, and (c) remove all advertisers who have purchased such marks."[74]

Trademark counsel for Google agreed to cease using "American Blind & Wallpaper Factory," "American Blind Factory," and "DecorateToday" as keywords, but told ABW that it could not deny access to terms such as "American blind" or "American wallpaper" because such terms were descriptive.[75] Google's counsel explained further:

> that the software that implemented Google's AdWords service used a "broad matching" algorithm to deliver advertising results in response to user queries on Google's search engine, and therefore, if advertisers had selected generic terms such as "blind" or "wallpaper," [as keywords] their advertisements would also be triggered by a user search for "American blind" or "American wallpaper."[76]

Google's explanation did not appease ABW, and on November 12, 2003, ABW threatened to file suit.[77] On November 26, 2003 Google filed a Complaint for Declaratory Judgment of Non-Infringement in California in order to preempt a trademark infringement suit from ABW.[78] On January 27, 2004, ABW filed suit against Google in New York, alleging that Google's use of the keywords "American," "blind," or "wallpaper" on behalf of advertisers constituted, *inter alia*, trademark infringement and unfair competition.[79] In doing so, ABW also joined to the suit five other companies that used the Google search engine: America Online, Inc.; Netscape Communications Corporation; Compuserve Interactive Services, Inc.; Ask Jeeves, Inc.;

Google Adwords FAQ: Standards, *at* https://adwords.google.com/select/faq/guidelines.html (last visited Oct. 10, 2004).

72. Demand letter from Ms. Susan Greenspon of Kelley Drye & Warren LLP, counsel for American Blind and Wallpaper Factory, Inc., to Ms. Alana Karen of Google, Inc.'s AdWords Trademark Complaints Division 1 (July 23, 2002) (on file with author).

73. *Id*. at 2.

74. *Id*. at 3.

75. Google, Inc. v. Am. Blind & Wallpaper Factory, Inc., No. 03-CV-05340 1, 4 (N.D. Cal. filed Nov. 26, 2003) (on file with author).

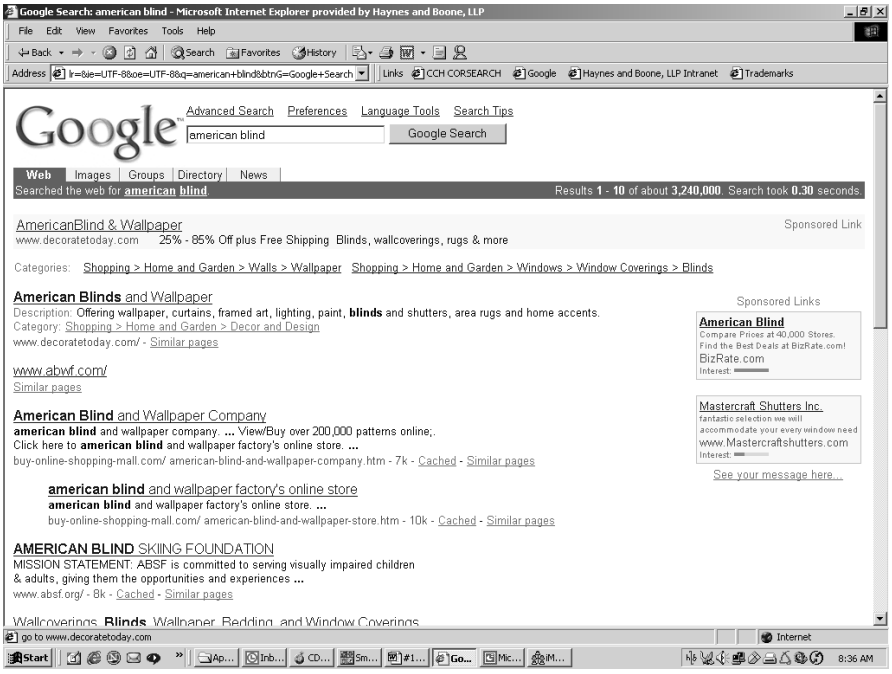
76. *Id*.

77. *Id*. at 1.

78. *Id*. at 6.

79. Am. Blind & Wallpaper, 04-CV-00642 at 15.

and Earthlink, Inc.[80] ABW seeks dismissal of the California Declaratory Judgment action as well as a permanent injunction barring Google's use of the terms "American," "blind," or "wallpaper,"[81] but the key development in these cases at this time is the dismissal without prejudice of the infringement case in New York in June 30, 2004. The rationale behind the dismissal has not yet been made public, but it followed a pretrial conference which took place after Google filed its Motion to Dismiss for lack of venue.[82]



To further illustrate the basis of ABW's claim against Google, the Google search results and AdWord results for "American blind" are reproduced above. The reproduction above displays ABW in the first few search listings. Ironically, ABW is the first sponsored link on the top of the page. Two of ABW's competitors are displayed on the right hand side of the screen and are clearly labeled as "Sponsored Links." In addition to being clearly labeled, both "Sponsored Links" include statements such as "compare prices" or have titles and URLs such as "Mastercraft Shutters," indicating they are unrelated to ABW. Accordingly, the facts at hand appear analogous

80. *Id*. at 1; Sue Reisinger, *Googled into a Court Showdown*, 26 NAT'L L.J. 8 (Feb. 9, 2004).

81. Reisinger, *supra* note 80.

82. *American Blind and Wallpaper, Inc. v. Google, Inc. et. al*., Case No. 04-CV-00642 (S.D.N.Y., dismissed June 29, 2004).

to the scenarios set forth as permissible competitive advertising by Judge Berzon in his concurrence in the *Netscape* decision.[83]

Notwithstanding the bench ruling in the GEICO case, Google may face problematic results if the outcome of foreign cases against Google's subsidiaries are any indication of how United States courts may review the ABW cases. For instance, two travel agencies in France, Société Viaticum and Société Luteciel, recently sued Google France for allowing third party advertisers to use their registered marks, BOURSE DES VOLS (Market for Flights) and BOURSE DES VOYAGES (Market for Vacations), as keywords.[84] Société Viaticum and Société Luteciel claimed Google's use of their registered trademarks as keywords caused the diversion of Internet traffic to competitor sites and constituted trademark infringement.[85] The civil court in Nanterre, France, ruled that such use did constitute trademark infringement under French law[86]. The court not only fined Google France 75,000 Euros, but also ordered Google France to cease such use within thirty days of its decision.[87]

Moet Hennessey Louis Vuitton SA ("LVMH") also filed a trademark infringement suit against Google France in Paris in connection with its AdWords program.[88] At this time, it is unclear whether LVMH is claiming trademark infringement by competitors for using its trademarks to advertise competing goods or by product resellers, like eBay or eLuxury, for using its trademarks to advertise resale goods.[89] Despite this uncertainty, because Europe has stricter comparative advertising guidelines than the United States, the results are not likely to fall in Google's favor.[90] As of November 2003, the parties were scheduled to have "preliminary discussions" to determine

83. *Playboy I*, 354 F.3d at 1035.

84. Société Viaticum et Société Luteciel contre Société Google France, T.G.I. Nanterre, 2eme chambre, Oct. 13, 2003, 03/00051 *available at* http://www.juriscom.net/jpt/visu.php?ID=367 (last visited Oct. 15, 2004).

85. *Id*.

86. *Id*.

87. *Id*.

88. Le Journal du Net, *Liens Promos: Louis Vuitton s'Attaque à Google* (Benchmark Group), *at* http://www.journaldunet.com/0311/031103vuitton.shtml (Nov. 3, 2003).

89. *Id*.

90. As an interesting sidenote, as of February 25, 2004, if one types in the terms "Louis Vuitton" in Google's search engine at *www.google.com*, competitor AdWords boxes appear on the right hand side of the screen and in the preliminary "product search" links before the actual results. However, if one types in the terms "Louis Vuitton" in Google's search engine at *www.google.fr*, no third party banners or links appear before LVMH. *Compare* Google Search: Louis Vuitton, at http://www.google.com/search?hl=en&ie=UTF-8&q=Louis+Vuitton (lasted visited Oct. 15, 2004), *with* Recherche Google: Louis Vuitton, at

whether the suit could be settled amicably.[91] In addition, other cases against Google France are also pending, including one lawsuit filed by a French telephone payments firm called Rentabiliweb for selling its trademark as a keyword to its rival company, Tel 4 Money,[92] and another filed by AXA, the world's third largest insurer, for selling the trademarks AXA and DIRECT ASSURANCE to competitors.[93]

Google France's neighboring European sister company, Google Deutschland, was also embroiled in the German case, *Metaspinner GmbH v. Google Deutschland,*[94] where a Hamburg Court recently overturned a previously granted interim injunction prohibiting Google from displaying a sponsored link for the domain name *www.preisserver.de* on the results page for a search with the keyword "Preispiraten" (translated to mean "price pirates"),[95] and simultaneously threw out the Plaintiff's trademark infringement lawsuit.[96] In this case, Plaintiff owns the German trademark PREISPIRATEN and on that basis sent a demand letter to Google Deutschland requesting deletion of the domain name *www.preisserver.de* from the results page keyword searches including PREISPIRATEN. Plaintiff alleged that the domain name registrant of *www.preisserver.de* was using keywords incorporating Plaintiff's trademark to divert Internet users from Plaintiff's website *www.preispiraten.de*. Google Deutschland did not respond to their first demand letter, so Metaspinner filed suit. The lower court held that such advertising was a breach of Metaspinner's trademark rights under German law and deemed Google a "joint wrongdoer" as it had the opportunity to stop the violation.[97] In May, 2004, Metaspinner filed a follow up lawsuit against

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http://www.google.fr/search?hl==FR&ieUTF-8&q=Louis+Vuitton&meta= (last visited Oct. 15, 2004).

91. *Trademark Ruling Threatens Google Adwords*, Online Publishing News, *at* http:// www. onlinepublishingnews. com/ htm/ n _ olpn20031102. 535629. htm (Nov. 2, 2003).

92. *Liens promos: Louis Vuitton s'attaque à Google*, Journal du Net (Benchmark Group), November 3, 2003, *available at* http://www.journaldunet.com/0311/031103vuitton.shtml.

93. *AXA Takes Google AdWords to French Court over Trademarked Terms*, Search Engine Journal, April 27, 2004, *available at* http://www.searchenginejournal.com/index.php?p=496.

94. Case 312 0 887/02 (Regional Court of Hamburg, 2003).

95. Stephan N. Schneller and Henry Lauf, *Google responsible for infringing sponsored link, court rules*, Maiwald Patentanwalts GmbH, January 22, 2004, *available at* http://www.maiwald.de/news_e.htm.

96. *Schmidt: German Court Killed Lawsuit Against Google*, September 21, 2004, *available at* http://www.forbes.com/facesinthenews/2004/09/21/0921autofacescan05.html.

97. *Id.* (commenting that generally, under German law, there is no obligation on search engine operators to confirm that all content and links are legal – how-

Google in Hamburg, Germany alleging that Google continued to use the trademark "Preispiraten" in its keyword program in violation of the preliminary injunction. Upon review, the Hamburg court overturned the previous decision and ruled in Google's favor, but the rationale for this ruling has not yet been made public.

Even though the Internet knows no borders, Google may be forced to create country-specific trademark and AdWords policies to avoid future suits. As Google reportedly gets most of its revenues from its AdWords program and has recently made an initial public offering of its stock, its ability to continue the AdWords program without rigorous screening requirements and a barrage of lawsuits appears critical.[98]

3. Body Solutions keyword advertising cases – we will never know. . .

In February 2002, Mark Nutritionals, Inc., a diet firm based out of San Antonio, Texas, and the owner of the trademark "Body Solutions," brought suit against search engine providers AltaVista.com, Findwhat.com, Kanoodle, and Overture.com.[99] Mark Nutritionals claimed that Defendants' "pay-for-placement" programs, which prioritized competitors' websites results and banners ahead of Plaintiff's website information when users searched for "Body Solutions," constituted, *inter alia*, trademark infringement.[100] Mark Nutritionals sought $10 million in compensatory damages and $100 million in punitive damages, alleging that these search engines confused consumers.[101] In Mark Nutritionals' complaint against Kanoodle, for instance, Mark Nutritionals alleged that consumers were misled because Defendant did not inform users that priority of the search results were based on paid advertising.[102] However, because Mark Nutritionals filed for bankruptcy in September of 2002 and has been barred by the FTC from conducting future business activity,[103] the trademark infringement cases were

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ever, if operators have affirmative knowledge that a keyword infringes, they are no longer deemed to be acting in good faith and can be held liable).

98. Lisa Baertlein, *Google Asks U.S. Court for Ruling on Trademarks*, USATODAY.com, *at* http://www.usatoday.com/tech/news/techpolicy/2003-12-04-keyword-showdown_x.htm (Dec. 4, 2003) (Google's estimated annual revenues for 2003 deemed by analysts to be between $700 million and $1 billion).

99. Petra Leinemann, *Lawsuit over Keywords. . .a Weighty Issue*, Searchengineposition.com, *at* www.searchengineposition.com/info/articles/keywordlawsuit.asp (Feb. 19, 2002).

100. *Id.*

101. *Id.*

102. *See id.*

103. *Court Closes the Doors on Company That Sold "Body Solutions" Product*, *at* www.ftc.gov/opa/2003/10/marknutritional.htm (last visited Oct. 16, 2004).

dismissed. These decisions would have been interesting, as Mark Nutritionals' website information was allegedly buried on the results list and hidden behind banners.

B. Pop-up Advertising—Does the use of trademarks to trigger display of competing pop-up ads result in initial interest confusion? COURTS ARE SPLIT . . .

1. No initial interest confusion found in pop-up advertising context

U-Haul International Inc. v. WhenU.com Inc.[104]

In this Eastern District of Virginia case, the court granted summary judgment in favor of Defendant adware provider because the court found that the display of Defendant's pop-up advertisement triggered by Plaintiff's URL and presented on Plaintiff's website was not use of Plaintiff's mark in commerce so as to constitute trademark infringement under the Lanham Act.[105]

The facts of this case are as follows. Plaintiff owns the trademark U-HAUL and operates a website.[106] Defendant, WhenU.com, is a software company that distributes advertising software or "adware"[107] called "SaveNow."[108] SaveNow enables Defendant to observe the online behavior of users who have loaded the program in order to target contextual pop-up advertisements in the form of pop-ups, pop-unders, and sliders on users' computer screens in windows that cover all or part of Plaintiff's website.[109] Defendant sells advertising space and opportunities to merchants wanting to take advantage of the SaveNow's targeted marketing software.[110] However,

104. U-Haul Int'l, Inc. v. WhenU.com Inc., 279 F. Supp. 2d 723 (E.D. Va. 2003).

105. *Id*. at 725.

106. *Id*. at 724. The company's website is *www.uhaul.com*.

107. "Adware" is "(ADvertisementWARE) Software that periodically pops up ads in a user's computer. Adware is considered "spyware" and is often installed without the user's knowledge. It typically displays targeted ads based on words searched for on the Web or derived from the user's surfing habits that have been periodically sent in the background to a spyware's Web server. . . or (AD supported softWARE) Software that is given away for free because it contains advertising messages." Techencyclopedia, *at* http://www.techweb.com/encyclopedia/defineterm?term=ADWARE (last visited Oct. 16, 2004).

108. Computer users typically install the SaveNow software as part of a bundle of other software applications that a consumer has downloaded at no cost. When a user downloads the "free" program, she consents to the installation of the SaveNow program onto her computer, generally in a license agreement accompanying the free software that the user seeks to download. About SaveNow, *at* http://www.whenu.com/about_savenow.html (last visited Oct. 16, 2004).

109. *U-Haul Int'l, Inc*., 279 F. Supp. 2d at 725-26.

110. *Id*.

WhenU.com "does not sell individual web addresses to its advertising clients and does not guarantee to any advertising client that its ad will be shown when a consumer visits a particular website."[111] In this way, WhenU.com's service is more akin to that at issue in *Netscape*, discussed above,[112] and distinguishable from the Google AdWords program where individual terms are sold to the advertising clients.[113]

Plaintiff filed suit against WhenU.com alleging that Defendant's pop-up advertisements crowded the user's computer screen and blocked out U-Haul's website display resulting in, *inter alia*, trademark infringement and dilution, unfair competition, misappropriation, interference with a prospective business advantage, unjust enrichment, and copyright infringement.[114] The court granted Defendant's motion for summary judgment and dismissed Plaintiff's trademark and copyright claims on the basis that the SaveNow computer software did not copy[115] or use U-Haul's trademark *in commerce*[116] or impede Plaintiff's exclusive rights in its copyrighted material.[117]

In making its decision, the court noted that a mark is "used in commerce" in connection with services when it is "used or displayed in the sale or advertising of services and the services are rendered in commerce."[118] Plaintiff set forth arguments that Defendant used its marks in commerce in the following three ways: (1) deliberately positioning pop-up ads in close proximity to Plaintiff's trademarks; (2) using Plaintiff's marks to trigger the delivery of advertisements; and (3) hindering Internet users from accessing Plaintiff's websites.[119] The court held that WhenU.com's pop-up ads appearing on the same screen as U-Haul's website failed the "use in commerce" requirement because "WhenU.com's branded window is separate and distinct" from U-Haul's website and did not create a "single visual presentation."[120] The court reasoned that "'use' is not established merely because trademarks are simultaneously visible to a consumer [as] such comparative advertising does not violate trademark law, even when the advertising makes use of a competitor's trademark."[121]

111. *Id.*

112. *See Playboy I, supra* note 26, at 1023.

113. *See Google Inc. v. Am. Blind & Wallpaper Factory, Inc.*, *supra* note 58.

114. *U-Haul Int'l, Inc.*, 279 F. Supp. 2d at 726.

115. *Id* .at 729.

116. *Id.* at 727.

117. *Id.* at 726.

118. *Id.* at 727 (citing 15 U.S.C. § 1127 (2000)).

119. *Id.*

120. *Id.* at 727.

121. *Id.* at 728.

In addition, the court held that WhenU.com's use of the U-HAUL trademark as a part of its process to trigger its pop-up ads did not satisfy the "use in commerce" requirement becauseWhenU.com did not sell the U-Haul URL to its customers, nor display plaintiff's mark or URL in the pop-up; WhenU.com had only used the mark as a "pure machine-linking function."[122]

Finally, the court rejected U-Haul's claim that defendant interfered with plaintiff's web page, and that such interference constituted use in commerce. Here, the court rejected U-Haul's reliance on cybersquatting cases involving situations where defendants prevented or hindered Internet users from accessing a plaintiff's services, stating that those circumstances was markedly different and thus misplaced in connection with the facts at hand.[123]

Because the court held that Plaintiff failed to demonstrate that WhenU.com was using its mark in commerce, the court determined that Defendant was entitled to summary judgment on trademark infringement, unfair competition, and dilution claims.[124] In addition, the court determined that Defendant did not copy or create a derivative work of Plaintiff's copyrighted website in displaying its ads, and therefore, granted summary judgment to defendant on the copyright infringement claims as well.[125]

Wells Fargo & Co. v. WhenU.com, Inc.[126]

Plaintiffs, Wells Fargo and its affiliates, own the mark, WELLS FARGO, for various financial services.[127] Plaintiff, Quicken Loans, owns the mark, QUICKEN LOANS, for mortgage services.[128] Plaintiffs filed suit against WhenU.com claiming that defendant's pop-up advertisements violated Plaintiffs' trademark and copyright rights.[129]

The facts, claims, and analysis in this case, brought in the Eastern District of Michigan, mimic *U-Haul*, discussed above.[130] Finding that the Defendant did not "use" the Plaintiffs' marks "in commerce" as contemplated by section 1114 of the Lanham Act, and that Defendant's advertisements were not likely to confuse consumers, the court concluded that Plaintiffs had

122. *Id*.

123. *Id*.

124. *Id*. at 729.

125. *Id*. at 731. With respect to the remaining claims, the court dismissed those counts without prejudice contingent on the condition that Plaintiff pay Defendants' legal fees for all such claims should Plaintiff re-file these claims. *Id*. at 731-32.

126. Wells Fargo & Co. v. WhenU.com, Inc., 293 F. Supp. 2d 734 (E.D. Mich. 2003).

127. *Id*. at 737.

128. *Id*.

129. *Id*. at 734.

130. *See U-Haul Int'l, Inc., supra* note 104.

failed to demonstrate a strong likelihood of success on the merits of their trademark claims and thus, refused to issue a preliminary injunction.[131]

Pointing to the *U-Haul* decision as authority for its position, the court differentiated the current case from those finding that the use of trademarked terms in metatags resulted in initial interest confusion.[132] The court instead intimated that WhenU.com's use of plaintiffs' marks was not a devious diversion of a user from plaintiffs' websites, but rather, more akin to a comparative advertisement, which provides a user with additional options that might entice him or her to explore a competitor's services.[133] In support of its position, the court emphasized that a defendant's advertisements may be stacked on plaintiffs' websites, but in separate windows like a comparative advertisement and that such "[c]omparative advertisements may . . . make use of competitors' trademarks even if the advertiser reaps the benefit of 'the product recognition engendered by the owner's popularization, through expensive advertising of the mark.'"[134]

Even though the court found that defendant's advertisements did not use plaintiffs' marks in commerce, it went on to explain how no confusion was likely to result from defendant's ads; SaveNow users were accustomed to such ads, understood that they emanated from Defendant, and in the case at hand where the users were financial services consumers, were quite sophisti-

131. *Wells Fargo & Co*., 293 F. Supp. 2d at 757, 769.

132. *See, e.g*., Brookfield Communications, Inc. v. West Coast Entm't Corp., 174 F.3d 1036, 1064-65 (9th Cir. 1999). Interestingly, not knowing of the keyword controversy besieging Google, the court makes a special note that keyword terms such as those used by Defendant are permissible as they are commonly used in the delivery of Internet advertisements by companies such as Google. *See Wells Fargo*, 293 F. Supp. 2d at 747.

133. *See id*. at 761. The court stated that the current case was more similar to the "Better burgers" analogy provided in the lower court's decision in *Playboy Enters. Inc. . v. Netscape Communications Corp*., 55 F. Supp. 2d 1070, 1075 (C.D. Cal. 1999), *aff'd*, 202 F.3d 278 (9th Cir. 1999) as opposed to the "Blockbuster at Exit 8" analogy in the *Brookfield* case:

> This case presents a scenario more akin to a driver pulling off the freeway in response to a sign that reads "Fast food burgers" to find a well-known fast food burger restaurant, next to which stands a billboard that reads: "Better Burgers: 1 Block further." The driver, previously enticed by the prospect of a burger from the well-known restaurant now decides she wants to explore her options. Assuming that the same entity owns the land on which both the burger restaurant and the competitor's billboard stand, should that entity be liable to the burger restaurant for diverting the driver?

Wells Fargo, 293 F. Supp. 2d at 763.

134. *Id*. at 761 (citing *Anti-Monopoly, Inc. v. Gen. Mills Fun Group*, 611 F.2d 296, 301 n.2 (9th Cir. 1979)).

cated.[135] Even more, the court pointed out that defendant's windows bear the indicia of a distinct application as well as a "prominent notice and disclaimer," thereby further negating any potential for confusion.[136]

2. Are the tides changing? Another court determines that WhenU.com's pop-up advertising could result in initial interest confusion. . .

1-800 Contacts Inc. v. WhenU.com, Inc.[137]

In a departure from the previous two cases, the U.S. District Court for the Southern District of New York preliminarily enjoined Defendant WhenU.com on the basis that the display of Defendant's pop-up advertisement triggered by Plaintiff's URL and displayed on Plaintiff's website did constitute use of Plaintiff's mark in commerce, so as to potentially constitute trademark infringement under the Lanham Act.[138]

Plaintiff, contact lens vendor 1-800 Contacts, owns the trademark 1-800-CONTACTS, which it uses in connection with advertising and selling replacement contact lenses through its website at *www.1800contacts.com*.[139] Plaintiff brought suit against WhenU.com and Vision Direct, Inc., a company that markets and sells replacement contact lenses at its website, *www.vision direct.com*, and has also registered the domain name *www.www1800contacts.com*.[140] Vision Direct entered into an agreement with WhenU.com to display pop-up windows containing Vision Direct advertisements to users visiting other contact lens related sites, such as Plaintiff's website.[141] 1-800-Contacts sued on October 9, 2002 alleging trademark infringement, unfair competi-

135. *Id*. at 749. Even more, the court severely criticized the survey evidence submitted by the Plaintiff in support of consumer confusion on several grounds (the surveys were conducted in connection with other cases and were not tailored to the situation at hand) but especially based on the fact that it was unclear, even to the expert, as to whether any respondents were shown WhenU.com SaveNow ads.

136. *Id*. at 750.

137. 1-800 Contacts, Inc. v. WhenU.com, Inc., 309 F. Supp. 2d 467 (S.D.N.Y. 2003).

138. WhenU.com's attorney has stated that they have filed a Notice of Appeal of the district court's ruling with the 2nd Circuit Court of Appeals. *See* David L. Hudson Jr., *Ruling Pops Up Into Controversy*, 3 No. 2 A.B.A. J. E-Report 2 (2004).

139. *1-800 Contacts, Inc*, 309 F. Supp. 2d at 473.

140. *Id*. at 474. With respect to the domain name, which is a tangential issue in this case, the court ordered Vision Direct to cancel its registration of the *www.www 1800contacts.com* domain name, finding that the website address was insignificantly different from Plaintiff's domain name and that Vision Direct had acted in bad faith in registering the domain name.

141. *Id*. at 478.

tion, false designation of origin, trademark dilution, cybersquatting, copyright infringement, contributory copyright infringement, state law trademark dilution, common law unfair competition and tortuous interference with prospective economic advantage.[142]

In its December 22, 2003 opinion, the court found that Defendants were using Plaintiff's trademark "in commerce" by: (1) causing pop-up advertisements to appear when SaveNow users have specifically attempted to find or access Plaintiff's website; and (2) including Plaintiff's URL, incorporating its trademark, *www.1800contacts.com,* in the proprietary WhenU.com directory of terms that triggers pop-up advertisements on SaveNow users' computers.[143] The court distinguished Defendants' use from the mere display of Plaintiff's mark in the following way: "WhenU.com's advertisements are delivered to a SaveNow user when the user directly accesses Plaintiff's website – thus allowing Defendant Vision Direct to profit from the goodwill and reputation in Plaintiff's website that led the user to access Plaintiff's website in the first place."[144]

The court next turned to the issue of whether Defendants' use was likely to cause consumer confusion and noted that initial interest confusion is equivalent to "actionable pre-sale confusion" under the Lanham Act.[145] The court emphasized that even though computer users still reached Plaintiff's website , and were not directly diverted to the advertiser's website, the "harm to the Plaintiff from initial interest confusion lies in the possibility that, through the use of pop-up advertisements Defendant Vision Direct 'would gain crucial credibility during the initial phases of a deal.' "[146]

Once the court established that the principle of initial interest confusion applied, it turned to an analysis of the relevant *Polaroid* factors to determine whether it was likely that "Defendants' pop-up advertisements will confuse consumers into thinking that Defendants are somehow associated with Plaintiff or that Plaintiff has consented to their use of the pop-up advertisements."[147] Applying the relevant *Polaroid* factors, the court concluded that Defendant's action created a likelihood of source confusion and initial interest confusion.[148] Specifically, as support for such a finding the court pointed to the distinctiveness of Plaintiff's marks,[149] the exact similarity of the marks

142. *Id*. at 472 n.1.

143. *Id*. at 510.

144. *Id*. at 490.

145. *Id*. at 491 (citing *Mobil Oil Corp. v. Pegasus Petroleum Corp*., 818 F.2d 254 (2d Cir. 1975)).

146. *Id*. at 493 (citing *Mobil Oil Corp*., 818 F.2d at 259).

147. *Id*. at 494 (citing *Lois Sportswear, U.S.A., Inc. v. Levi Strauss & Co*., 799 F.2d 867, 872 (2d Cir. 1986)).

148. *Id*.

149. *See id*. at 495-96.

used by both parties (as Defendants included Plaintiff's entire mark in its proprietary directory),[150] the identical nature of the services provided by Plaintiff and Vision Direct,[151] and Defendants' bad faith use of Plaintiff's mark to increase the competitive advantage of Vision Direct.[152]

In addition, although the court recognized that Plaintiff's survey evidence was flawed and could not support the existence of actual confusion, the court found that the data suggested a "likelihood of initial interest confusion" as the "results indicate[d] that 68% of 490 surveyed SaveNow users did not know that they had the software on their computers, that 76% of those who knew that SaveNow software was on their computers were unaware" of its function, "that 59% of SaveNow users believed that 'pop-up advertisements [were] placed on the website on which they appear[ed] by the owners of that website,' and that 52% of all users believed 'pop-up advertisements had been pre-screened and approved by the website on which they appear[ed].'"[153] Moreover, in contrast to the *Wells Fargo* court, this court underscored that such confusion could not be alleviated by Defendant's disclaimer, as it found the disclaimer to be "buried in other web pages, requiring viewers to scroll down or click on a link" in order to view the disclaimer.[154]

Finally, the court rejected Plaintiff's copyright infringement arguments. 1-800 Contacts first alleged that Defendants violated its "display right" through the display of pop-up advertisements in conjunction with Plaintiff's website.[155] The court found that such a broad display right would be incompatible with modern computer environment, which allow users to rearrange windows at will.[156] In the alternative, 1-800 Contacts argued that WhenU.com "recast" or "transformed" its website by displaying pop-up advertisements on top of the website, thereby creating a derivative work in violation of its copyright.[157] This theory was rejected as well. The court found the pop-up advertisements were not a derivative work because the "transmitted images" were not "fixed in a tangible medium" and therefore not subject to copyright law.[158]

WhenU.com is currently appealing the court's ruling. Google and the Electronic Frontier Foundation have also filed amicus briefs in favor of WhenU.com's position.

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150. *See id.* at 496-97.

151. *See id.* at 497-98.

152. *See id.* at 501-02.

153. *Id.* at 500.

154. *Id.* at 504.

155. *Id.* at 485.

156. *Id.*

157. *Id.* at 486.

158. *See id.* at 486-89.

3. How will the split resolve itself in the context of the pending Gator cases?

Similar to WhenU.com, the Gator Corporation (which changed its name to Claria) provides its GAIN network adware for contextual marketing purposes. There were numerous lawsuits pending in various districts in connection with Gator's adware and whether it violates the trademarks and copyrights of third parties, and as a number of these cases presented common questions concerning whether Gator's software functions in such a way so as to constitute trademark or copyright infringement,[159] Gator moved to consolidate the following cases for decision by the Judicial Panel on Multidistrict Litigation in Atlanta, Georgia:

The Gator Corp. v. L.L. Bean,[160] *United Parcel Service of Am. v. The Gator Corp.*,[161] *The Gator Corp. v. Extended Stay America, Inc*.,[162] *Six Continents Hotels v. The Gator Corp*.,[163] *Extended Stay Am., Inc. v. The Gator Corp*.,[164] *Lendingtree, Inc. v. The Gator Corp*.,[165] *The Gator Corp. v. PriceGrabber, Inc*.,[166] *The Gator Corp. v. TigerDirect, Inc*.,[167] *Tigerdirect, Inc. v. The Gator Corp*.,[168] and *Teleflora LLC v. Claria Corporation.*[169]

On August 6, 2004, with the exception of the *Teleflora* case, all of the multidistrict litigation cases were dismissed as a result of undisclosed settlements.[170] Even though Gator has also settled most of its pending cases independent of the Multidistrict litigation,[171] at least one case against Gator filed

159. *In re Gator Corporation Software Trademark & Copyright Litigation*, 259 F. Supp. 1378 (J.P.M.L. April 22, 2003).

160. Case No. CV-01-1713-HU (D. Ore. Nov. 27, 2001).

161. Case No. 1:02-CV-2639-BBM (N.D. Ga. Sept. 26, 2002).

162. Case No. C-02-5226-CRB (N.D. Cal. Oct. 29, 2002).

163. Case No. 1:02-CV-3065-JOF (N.D. Ga. Nov. 12, 2002).

164. Case No. 7:02-3845-20 (D.S.C. Nov. 14, 2002).

165. Case No.3:02-CV-519-V (W.D.N.C. Dec. 11, 2002).

166. Case No. C-02-5875-BZ (N.D. Cal. Dec. 16, 2002).

167. Case No. C-02-5875-BZ (Dec. 19, 2002).

168. Case No. C-02-23615 (S.D. Fla. Dec. 20, 2002).

169. Case No. 2:04-cv-3080-ABC-VBK (W.D. Calif. August 17, 2004)

170. Pop-up Purveyor Claria Settles Suits, News.com (August 31, 2004) *available at* http://news.com.com/Pop-up¶urveyor+Claria§ettles§uits/2100-1024_3-5333003.html.

171. *Gator.com Corp. v. Virtumundo*, Case No. C-01-3167-MJJ (N.D. Cal. Aug. 16, 2001); *Washintonpost.Newsweek Interactive Company, LLC, et. al., v. The Gator Corporation* 2002 LEXIS 208879 (E.D. Va. July 16, 2002)(Publishers sued Gator for triggering pop-up advertisements on sixteen web sites operated by Plaintiff news organizations, alleging trademark and copyright infringement. The District Court for the Eastern District of Virginia granted the Plaintiffs'

by Interlinx, L.LC[172] remains pending. The result of this case (if not settled) will be interesting in view of the current divergence of courts.

4. Federal and state legislatures are proposing laws for reigning in adware companies

In view of recent consumer complaints regarding spyware and adware, federal and state agencies and legislatures have started to examine these issues in more detail. Spyware legislation has recently been enacted in California[173] and Utah,[174] and has been introduced in at least five other states.[175] However, since these types of laws undermine the business models of pop-up advertisers like WhenU.com and Gator, they will likely be challenged. Al-

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motion for a preliminary injunction enjoining Gator from causing pop-up advertisements to appear on any websites owned by Plaintiff and infringing on Plaintiff's trademarks and copyrights, but did not outline its rationale. The parties have entered into a confidential settlement agreement); *The Hertz Corporation v. The Gator Corporation*, 250 F. Supp. 2d 421 (March 13, 2003). *Gator.com Corp. v. L.L. Bean, Inc.*, 341 F.3d 1072 (9th Cir. 2003)(L.L.Bean sent a demand letter to pop-up ad Gator. Gator filed a declaratory judgment in California and the Ninth Circuit held that that personal jurisdiction over an out of state Defendant may be based upon its operation of a web site that engages in electronic commerce.). *See also L.L. Bean v. Atkins Nutritionals, et. al.*, Case No. 04-CV-101-GC (D.C. Maine May 17, 2004) (L.L.Bean sued Nordstrom, Inc., J.C. Penney & co., Atkins Nutritionals, Inc. and Gevalia for trademark infringement, unfair competition, false designation of origin, trespass to chattels, conversion and deceptive trade practices for using the L.L.Bean trademark to trigger "spyware" enabled pop-up ad technology on the L.L.Bean web site. All parties settled, and the settlements have been approved by the U.S. District Court in Maine and are rumored to include undisclosed payment of damages to L.L.Bean, as well as instructions to "take all necessary actions to halt such advertisements, including such actions as may be directed by the court pursuant to its continuing jurisdiction." *L.L. Bean Announces Settlements with Gevalia & Atkins Nutritionals*, *available at* http://biz.yahoo.com/prnews/040622/netu 032_1.html. Claria's recent countersuit against L.L. Bean in the Eastern District of Texas alleging that the cataloger tortiously interfering with its advertisers by filing lawsuits against Gevalia, Atkins Nutritionals, Nordstroms, and J.C. Penny for trademark infringement and related claims was also dismissed without prejudice as a result of the settlement on August 27, 2004.

172. *Interlinx, L.L.C. v. Claria Corporation*, Case No. 5:04-cv-60090-MOB-RSW (E.D. Mich., May 12, 2004).

173. Consumer Protection Against Spyware Act (State Bill 1436, signed by Governor on September 28, 2004).

174. *Utah Spyware Control Act* (Utah Code §§ 13-39-101 et seq. (March 2004)).

175. Iowa, Michigan, New York, Pennsylvania, and Virginia are all currently reviewing legislation regarding spyware. See *2004 State Legislation Relating to Internet Spyware or Adware*, *available at* www.ncsl.org/programs/lis/spyware 04.htm.

ready, WhenU.com has sued the State of Utah alleging that the Utah Spyware Control Act is overbroad and violates the Commerce Clause of the Constitution.[176] On June 22, 2004, a preliminary injunction was issued preventing the Utah Spyware Control Act from taking effect. Similar challenges in other states may prevent similar laws from being passed. That said, the need for uniformity at a national level will likely force U.S. Congress to eventually review these issues more closely and enact federal legislation.

C. Use of Third Party Trademarks by Competitors and Resellers in the Internet Context

1. Use of metatags and keywords does result in initial interest confusion

Horphag Research, Ltd. v. Pellegrini[177]

Horphag Research, Ltd. v. Pellegrini presented the issue of whether a competitor-reseller's use of a plaintiff's mark in metatags and text of websites constituted nominative fair use. Applying the three factor nominative fair use test, the Ninth Circuit found that defendant competitor-reseller's use of plaintiff's trademark on defendant's websites did not qualify as a nominative fair use because defendant's references caused confusion as to sponsorship.[178]

Plaintiff owns the federal trademark registration for "Pycnogenol" for its pine bark extract product.[179] Defendant, Larry Garcia, sold pharmaceutical products on his websites, including plaintiff's "Pycnogenol" product.[180] Garcia also sold a competing product, which he called "Masquelier's: the original French Pycnogenol."[181] As admitted by Defendant, he not only sought to compare the respective products but to enhance his site's performance in search engine query responses as well and, accordingly, inserted Plaintiff's mark repeatedly in metatags and the content of his sites.[182] Defendant claimed that his use of Plaintiff's mark was tied to his comparison of the product with his own line, and thus, his use of Plaintiff's mark was a fair use employed to identify Plaintiff's product.

> The Ninth Circuit disagreed and determined Defendant's use constituted trademark infringement and in doing so, held that neither

176. *WhenU.com, Inc. v. The State of Utah*, Case No. 040907578 (D. Utah, April 12, 2004).

177. Horphag Research Ltd. v. Pellegrini, 337 F.3d 1036 (9th Cir. 2003).

178. *Id.* at 1041.

179. *Id.* at 1039.

180. *Id.*

181. *Id.*

182. *Id.*

> a "classic" fair use nor a nominative fair use defense applied.[183] The court noted that a classic fair use analysis is only appropriate where a defendant has used the plaintiff's mark in its primary descriptive sense only to describe his own product, not plaintiff's product.[184] Here, this defense did not apply because the term "Pycnogenol" had no meaning other than its use as a registered mark.[185] In addition, the court held that the nominative fair use defense did not excuse Defendant's conduct; such a defense is only appropriate where the defendant has used the plaintiff's mark to describe the plaintiff's product, even if the defendant's ultimate goal is to describe his own product.[186] Specifically, the court reviewed whether Defendant was entitled to use Plaintiff's mark under the Ninth Circuit's three pronged nominative fair use test.[187] The court ignored the first two prongs and focused on the third, stating that Defendant's use of the mark "spawn[ed] confusion as to sponsorship and attempt[ed] to appropriate the cachet of the trademark."[188]

As a result, the Ninth Circuit affirmed the district court's finding of trademark infringement as well as its award of substantial attorney's fees and costs, noting that Defendant's conduct rose to the level of "willful and deliberate" pursuant to 15 U.S.C. § 1117(a)."[189]

— Bayer Corp. v. Custom School Frames, LLC[190]

The core issue in this case was whether using Plaintiff's mark in metatags by a gray market seller constituted infringement. The court deemed that it did and enjoined Defendant's use of Plaintiff's mark in metatags.[191]

Bayer AG manufactures animal flea control products outside the United States.[192] Plaintiff, Bayer Corporation, its wholly owned U.S. subsidiary, markets Bayer AG's animal flea preparations in the United States under the mark ADVANTAGE. Bayer Corporation owns a U.S. trademark registra-

183. *Id.* at 1041.

184. *Id.*

185. *Id.*

186. *Id.*

187. *Id.*

188. *Id.*

189. *Id.* at 1042.

190. Bayer Corp. v. Custom School Frames, L.L.C., 259 F. Supp. 2d 503 (E.D. La. 2003).

191. *Id.* at 510.

192. *Id.* at 504.

tion.[193] Defendants were Bayer AG's distributors for the ADVANTAGE product in the United Kingdom, Ireland, and Australia.[194]

Bayer AG tailors ADVANTAGE product manufacturing to suit the specific geographic regions and countries requirements and legal regulations, depending on where the products are marketed. Bayer AG appoints distributors for specific geographic regions in order to maintain the quality associated with the ADVANTAGE products within each particular region and prohibits the sale of the ADVANTAGE products outside of a distributor's designated region.

Plaintiff has advertised its ADVANTAGE products and provided dosage and safety information on its website, *www.nofleas.com*, but does not sell the ADVANTAGE products through the Internet. Without Bayer AG's permission, Defendants advertised and sold its foreign animal flea control preparations under the ADVANTAGE mark in the United States. Defendants used the website, *www.no-fleas.com*, to advertise and sell the foreign product. Also, without Bayer AG or Bayer Corporation's permission, Defendants made prominent use of the ADVANTAGE mark on their websites, including *www.no-fleas.com*, as well as in keywords in order to obtain a high placement in Internet search results.[195]

Bayer Corporation filed suit against Defendants requesting permanent injunctive relief prohibiting Defendants from selling foreign manufactured flea control preparations bearing Bayer's ADVANTAGE mark as well as from using the mark on or in metatags of Defendants' website.[196]

The court determined that Defendants' selling the materially different gray market ADVANTAGE product constituted trademark infringement and unfair competition under federal and Louisiana law.[197] Furthermore, the court determined the use of ADVANTAGE in metatags on Defendants' website resulted in initial interest confusion, which was exacerbated by the nearly identical domain names registered by both parties.[198] As such, the court permanently enjoined Defendants from using the ADVANTAGE mark or any confusingly similar mark in metatags, keywords, pay-for-placement or pay-for-rank search engines in connection with any goods, services or websites; using the ADVANTAGE mark in connection with the advertising or promotion of any services; selling ADVANTAGE product through any and all channels of trade including but not limited to the Internet; and registering any other domain names confusingly similar to Bayer Corporation.[199] In addi-

193. *Id.* at 504-05.

194. *Id.* at 505.

195. *Id.*

196. *Id.* at 504.

197. *Id.* at 509.

198. *Id.*

199. *Id.* at 510.

tion, the court required Defendant transfer its domain name registration *www.no-fleas.com* to Plaintiff.[200]

In making its finding, the court, interestingly, did not address whether Defendants had trademark registrations or a license to use the mark ADVANTAGE in other jurisdictions, and how this broad order might affect such use.

2. Use of Plaintiff's trademarks in Metatags and Keywords may not result in initial interest confusion

PACCAR Inc. v. TeleScan Technologies, LLC[201]

In this case, the court decided there may be certain instances where resellers using a plaintiff's mark in domain names and metatags could constitute nominative fair use.[202]

Plaintiff, PACCAR, manufactures heavy trucks and truck parts under the marks PETERBILT and KENWORTH. In addition to manufacturing, PACCAR also administers a used truck locator service on its website at *www.paccar.com*.

Defendant, Telescan, provides truck locator services at its website *www.truckscan.com*, and also maintains a website at *www.telescanequipment.com*, that provides links to Defendant's manufacturer specific websites, including: *www.peterbiltnewtrucks.com, www.peterbiltusedtrucks.com, www.peterbilttruckdealers.com, www.kenworthnewtrucks.com, www.kenworthused trucks.com,* and *www.kenworthtruckdealers.com*. In addition, the marks PETERBILT and KENWORTH are used in Defendant's metatags and wallpaper on various sites. Each manufacturer specific website includes the following disclaimer: "This website provides a listing service for name brand products and has no affiliation with any manufacturer whose branded products are listed herein."

Defendant sought a declaratory judgment affirming that using PACCAR's marks did not infringe Plaintiff's trademarks.[203] PACCAR counterclaimed, alleging trademark infringement, unfair competition, dilution, and false designation of origin and moved for preliminary injunctive relief whereby Defendant would be enjoined "from using domain names that incorporate PACCAR's trademarks and from using websites that convey the impression that the sites are affiliated with or sponsored by PACCAR."[204]

The district court concluded that Plaintiff demonstrated a strong likelihood of success on its trademark infringement and dilution claims.[205] Conse-

200. *Id*.

201. PACCAR Inc. v. Telescan Techs., L.L.C., 319 F.3d 243 (6th Cir. 2003).

202. *Id*. at 256.

203. *Id*. at 248.

204. *Id*.

205. *Id*.

quently, it granted a preliminary injunction requiring TeleScan to transfer its domain names containing "Peterbilt" and "Kenworth" to PACCAR, and prohibiting use of those marks in any domain name, metatag, or wallpaper.[206] On appeal, the Sixth Circuit affirmed the preliminary injunction order with respect to the infringing nature of the domain names.[207] However, the court did find that the injunction's scope was overbroad because the lower court did not conduct a separate analysis over whether Telescan's mere use of the PETERBILT and KENWORTH marks in metatags, without actually including those marks in the domain names, caused confusion.[208] As a result, the court vacated the injunction prohibiting the use of PACCAR's trademarks in Telescan's metatags and the case was remanded for further consideration, leaving open the issue of a reseller's ability to use trademarks associated with the products it is selling in its metatags.[209]

J.K. Harris & Co. v. Kassel[210]

Defendants' use of their competitor's tradename in Defendants' keywords, content, and website links, was deemed permissible under the nominative fair use doctrine because Defendant companies were using Plaintiff company's name to make statements about Plaintiff's business practices.[211] As a result, a preliminary injunction was not extended to enjoin Defendants' use of Plaintiff's marks.[212]

Plaintiff J.K. Harris & Co. and Defendant Kassel both provide tax advisory services and advertise their services on the Internet. Kassel published unfavorable information about Plaintiff's company on his website at *www.taxes.com*. As a result of Defendants' use of Plaintiff's trade name "J.K. Harris" in content, keywords, and links, , Defendants' site was often listed in the top ten "hits" in searches for Plaintiff's company name on various search engines. In fact, Defendant's site was actually the first result with one search engine.

Plaintiff contended that Kassel was liable for trademark infringement for: 1) using "J.K. Harris" or variations thereof up to seventy-five times in key words, resulting in keyword density; 2) creating header tags and underline tags around sentences that used Plaintiff's trade name; and 3) incorporat-

206. *Id*. at 248-49.

207. *Id*. at 258 ("Using PACCAR'S trademarks in its domain names, repeating the marks in the main titles of the web sites and in the wallpaper underlying the web sites, and mimicking the distinctive fonts of the marks go beyond using the marks 'as is reasonably necessary to identify' PACCAR's trucks, parts and dealers." *Id*. at 256.).

208. *Id*.

209. *Id*.

210. J.K. Harris & Co. v. Kassel, 253 F. Supp. 2d 1120 (N.D. Cal. 2003).

211. *Id*. at 1127.

212. *Id*.

ing links on Defendants' site to websites containing information about Plaintiff. Plaintiff filed suit seeking a temporary restraining order and a preliminary injunction enjoining Defendants from using Plaintiff's name anywhere on the *www.taxes.com* website, from posting any defamatory or untrue statements on its site, and from using HTML code and programming techniques to divert Internet users to Defendants' website.

The district court granted Plaintiff's motion for a preliminary injunction in part and denied in part.[213] Kassel asserted a nominative fair use defense, stating that he was providing accurate information concerning Plaintiff's business; however, the court enjoined Defendants from using J.K. Harris's name more than reasonably necessary and from making defamatory statements on their website.[214] In doing so, the district court noted that if a consumer visited Defendants' site, he would realize that it was not associated with Plaintiff.[215] However, the court reasoned that initial interest confusion would occur due to Kassel's excessive use of the name in keywords – which is where the lower court noted Defendants' nominative fair use defense failed.[216]

On motion for reconsideration, the court vacated its order and reversed its prior decision, limiting the preliminary injunction to enjoin Defendants from making allegedly defamatory remarks.[217] The court did agree with Plaintiff that the Ninth Circuit has held that "initial interest confusion" is actionable under Section 43 of the Lanham Act, and accordingly, any purchase made by such user would be with full knowledge of the product's source.[218] However, the court also agreed with Defendants' asserted defense that their intent was not to confuse consumers, but to warn them about Plaintiff's business practices, and as such, Defendants' use of the marks to criticize Plaintiff was permissible nominative use as defined in *Playboy Enterprises, Inc. v. Terri Welles, Inc*.[219] The court agreed that Plaintiff's services were not readily identifiable without use of the J.K. Harris name, that only so much of the mark was used as is reasonably necessary to identify the service, and that Defendants took no actions that would, in conjunction with the mark, suggest sponsorship or endorsement by the trademark holder.[220] To counter Plaintiff's assertion that Defendants' web page used Plaintiff's mark more than reasonably necessary for purposes of the second prong of nominative fair use, the court pointed out that these references were not gra-

213. *Id*. at 1122.

214. *Id*.

215. *Id*. at 1125.

216. *Id*. at 1122.

217. *Id*. at 1131.

218. *Id*. at 1124.

219. *Id*. at 1125 (citing *Playboy Enters. v. Welles*, 279 F.3d 796 (9th Cir. 2002)).

220. *Id*. at 1126.

tuitous but were used to make statements about J.K. Harris, precisely the type of activity the nominative fair use doctrine protected.[221] Consequently, the court limited its preliminary injunction to only enjoin Defendants from making allegedly defamatory remarks.[222]

Of note in this case is that Defendants' use of Plaintiff's mark was not only of a commercial nature, but also competitive with Plaintiff. These are facts different from the usual cybergriping cases where there are typically *non-commercial* first amendment concerns.

Taubman Co. v. Webfeats[223]

Plaintiff, The Taubman Company, built The Shops at Willow Bend, a North Dallas shopping mall, and holds trademark registrations for TAUBMAN and THE SHOPS AT WILLOW BEND. Mishkoff, a web designer, registered the *www.shopsatwillowbend.com* domain name and created a website providing information about the mall, including a map and links to individual websites of the tenant stores. The site included a disclaimer, stating that the website was unofficial and provided a link to Plaintiff's official sites at *www.theshopsatwillowbend.com* and *www.shopwillowbend.com*.

Upon discovering Defendant's activities, Taubman Company requested that Mishkoff cease use of the domain name, claiming such use constituted trademark infringement. Mishkoff refused to sell Taubman Company the domain name, even after it offered Defendant $1000, and thus, Plaintiff commenced suit. Defendant responded by registering the following five additional domain names incorporating Taubman Company's trademarks, each of which provided an outline of events between Mishkoff and Taubman Company in connection with its trademark litigation:

www.taubmansucks.com
www.shopsatwillowbendsucks.com
www.theshopsatwillowbendsucks.com
www.willowbendmallsucks.com
www.willowbendsucks.com

The trial court preliminarily enjoined Defendant's use of the originally registered domain name and the various "cybergriping" domain names.[224] But Defendant appealed, raising First Amendment concerns,[225] and the Sixth Circuit reversed the lower court's injunctions.[226] With respect to *www.shopsatwillowbend.com*, the Sixth Circuit gave credence to Defendant's disclaimer and redirecting URL as a means of preventing consumer confusion.[227] The

221. *Id*.

222. *Id*. at 1130.

223. Taubman Co. v. Webfeats, 319 F.3d 770 (6th Cir. 2003).

224. *Id*. at 771.

225. *Id*. at 773.

226. *Id*. at 780.

227. *Id*. at 777.

Sixth Circuit further noted that so long as Defendant had *no commercial links* on the sites (including links to shirtbiz.com and Webfeats, which Defendant had removed prior to the injunction), the court could not properly issue an injunction.[228] Moreover, with respect to the "sucks" sites, the court emphasized that customers were not likely to be confused, as these sites were purely an exhibition of free speech, and as such, the Lanham Act did not apply.[229]

3. Use of Plaintiff's trademarks in post domain paths not deemed infringement.

Interactive Products Corp. v. a2z Mobile Office Solutions, Inc.[230]

One final case worthy of discussion does not involve Initial Interest Confusion or Nominative Fair Use doctrines, but should be mentioned because it involves permitting the use of a competitor's registered trademark in a post-domain name path.

Plaintiff, Interactive Products Corporation ("IPC"), manufactures and sells portable computer stands under its federally registered mark "Lap Traveler". In 1994, Douglas Mayer, the President of Defendant Mobile Office Enterprise, Inc. ("MOE"), co-founded IPC with Mark Comeaux, the President of IPC. After a disagreement in 1998, Comeaux agreed to purchase Mayer's shares in IPC. In addition, the parties also agreed that the right to use the mark "Lap Traveler" and all related model designations would remain exclusively with IPC. However, both parties remained joint inventors of the product and had the right to manufacture, market, and sell products similar to the "Lap Traveler" product.

Defendant, a2z Mobile Office Solutions, Inc. ("a2z"), sells mobile computer accessories on its website, and from 1996 to 1998, sold the "Lap Traveler" product on its website, *www.a2zsolutions.com/desks/floor/laptraveler/dkfl-lt.htm*. After a disagreement between Comeaux and the President of a2z, Comeaux terminated IPC's business relationship with a2z and told a2z to remove all references to the "Lap Traveler" product from its website.

After dissolving his relationship with IPC, Mayer, through his new company, MOE, began manufacturing and selling a portable computer stand called the "Mobile Desk." After IPC instructed a2z to cease sales of the "Lap Traveler", a2z replaced the "Lap Traveler" site with the "Mobile Desk." Defendant a2z promoted and sold the "Mobile Desk" product on the same web page from which a2z formerly sold the "Lap Traveler," meaning the URL for the web page remained the same, with the word "Lap Traveler" still appearing in the post-domain path. Comeaux alleged that when he conducted web searches on the Internet for the term "Lap Traveler," a2z's inter-

228. *Id*. at 775.

229. *Id*. at 778.

230. Interactive Prods. Corp. v. A2Z Mobile Office Solutions, Inc., 326 F.3d 687 (6th Cir. 2003).

nal web page at *www.a2zsolutions.com/desks/floor/laptraveler/dkfl-lt.htm* appeared as a hit.

In 1999, IPC filed a complaint against a2z and MOE for, *inter alia*, trademark infringement based on use of the "Lap Traveler" trademark in the post-domain path of the a2z URL.[231] In order to prevail on the trademark claims, IPC needed to show that the presence of its registered trademark in the post-domain path of a2z's "Mobile Desk" URL was likely to cause confusion among consumers as to the source of the goods offered by the parties.[232] The district court held that IPC did not present sufficient evidence to create a genuine issue of fact whether consumers were likely to be confused by the presence of its trademark in the post-domain path of a2z's website, and granted summary judgment in favor of Defendants.[233]

The Sixth Circuit affirmed the lower court's decision.[234] The specific issue reviewed on appeal was whether the presence of IPC's registered mark "Lap Traveler" in the URL post-domain path for a2z's portable computer stand web page was likely to cause confusion among consumers regarding the origin of the "Mobile Desk" product.[235] The court distinguished a domain name from a post-domain path, emphasizing that a domain name signifies its source of origin, whereas a post-domain path merely shows how the website's data is organized within the host computer's file.[236] In turn, because people who access web pages typically input the domain name and not the post-domain path, they are not likely to be confused by the post-domain path. Because Plaintiff's own expert testified that the path name did not bias the search engine, the court barely addressed the fact that web searches for "Lap Traveler" consistently listed a2z's page as a result, even after the transition was made to the "Mobile Desk" product.[237]

Furthermore, as Defendant did not reference "Lap Traveler" or variations thereof in its metatags, the court noted that the record contained no evidence explaining why a2z's web page appeared when a user searched for "Lap Traveler."[238] As a result, the Sixth Circuit concluded that the trial court had appropriately granted summary judgment in favor of Defendants on IPC's trademark allegations.[239]

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231. *Id*. at 693.

232. *Id*. at 694.

233. *Id*. at 690.

234. *Id*.

235. *Id*. at 694.

236. *Id*. at 691.

237. *Id*. at 692 n.3.

238. *Id*. at 698 n.7.

239. *Id*. at 690.

III. Conclusion

In summary, the upcoming trademark decisions should better define the Initial Interest Confusion doctrine and its noted exception, Nominative Fair Use. The outcomes of these cases—particularly the *Google* and *Gator* cases—will provide guidance to contextual marketers and competitors as to what constitutes a permissible use of another party's trademarks on the web. Will courts favor protecting trademark owners' goodwill and prevent others from marketing competitive products through the "invisible" use of the trademark owner's trademarks? Or will the courts favor competition and consumer choice by allowing the use of another's trademark as a tool for shopping convenience?

Unfortunately, wherever the courts draw the line between what is and is not permissible, will likely have to be constantly reassessed as the Internet constantly evolves. With ever increasing amounts of information available online, the ability to find a particular piece of information grows weaker. Thus, there will be a continual pursuit to use keywords in metatags and comparative advertising schemes, and to develop completely new methods to help Internet users quickly find what they are looking for.

Copyright Under Siege: The First Amendment Front

by
*Lackland H. Bloom, Jr.**

I. Introduction

For the past twenty-five years, I have taught courses in both Copyright and Freedom of Speech. Until quite recently, these two tangentially-related subjects have co-existed in peaceful harmony. Over the years, I have traditionally devoted about ten minutes of Copyright class time to the free speech issue and no time at all in Freedom of Speech class to issues of copyright. That was then; the old world has changed. Now, we have collectively become embroiled in what some are calling the "copyright wars"[1], with the First Amendment (specifically, freedom of speech) as one of the central battlegrounds. In 1970, two of our leading copyright scholars argued that the internal copyright doctrines adequately reconciled copyright with freedom of speech.[2] In 1985 the Supreme Court accepted their analyses;[3] as a result, independent first amendment analysis has not played a role in copyright cases since that time.

Still, over the past decade, the law of copyright – traditionally an arcane and obscure specialty – has evolved into an extraordinarily controversial legal arena. To a significant extent, though not exclusively, this has been caused by the emerging clashes between copyright on the one hand and digital technology and the internet on the other. Some see copyright as the aggressor in the copyright wars, guilty of threatening the digital revolution, the internet, information policy, privacy, freedom of speech and the public domain.[4] Much of this assault on copyright is culturally driven by the Internet's champions. Inevitably, this cultural challenge is now duly reflected in legal argument as well. As copyright law has generated more and more contro-

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1. Peter Yu, *The Escalating Copyright Wars*, 32 Hofstra L. Rev. 907 (2004); Jessica Litman, Digital Copyright (2001) (Chapter 10 "The Copyright Wars").

2. Melville Nimmer, *Does Copyright Abridge the First Amendment Guarantees of Free Speech and Press?*, 17 U.C.L.A. L.Rev. 1180 (1970); Paul Goldstein, *Copyright and the First Amendment*, 70 Colum. L. Rev. 983 (1970); *see also* Robert Denicola, *Copyright and Free Speech: Constitutional Limitations on the Protection of Expression*, 67 Cal. L. Rev. 283 (1979).

3. Harper & Row Publishers, Inc. v Nation Enters., 471 U.S. 539, 556-560 (1985).

4. *See*, *e.g.*, Jessica Litman, Digital Copyright 151-195 (2001); Yochai Benkler, *Free As the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain*, 74 N.Y.U. L. Rev. 354, 355-360, 400-426 (1999).

versy, several legal scholars have come forth to challenge the traditional reconciliation of copyright and freedom of speech.[5]

Among the aforementioned scholars, whom I will collectively refer to as the "free speech critics", virtually all of them reject the traditional reconciliation of copyright and freedom of speech – though some do believe that the two fields can be harmonized on other grounds. While I regard this genre of scholarship as quite thought-provoking, to the extent that it rejects the traditional reconciliation of copyright and freedom of speech, I ultimately find it unpersuasive. Fortunately, I am not alone; so does the United States Supreme Court, as well as nearly every other federal court that has had occasion to consider the issue.

In a nutshell, my thesis is that the Court's recent opinion in *Eldred v. Ashcroft*[6] should properly be read as the resounding rejection of practically all of the modern first amendment-based copyright challenges. The time has come for the free speech critics to return to the drawing board and, if anything, re-examine free speech doctrine rather than copyright. Moreover, and contrary to recent criticism, the Court's re-endorsement of the traditional reconciliation of copyright and free speech is correct, sensible, and persuasive.

II. Why is Copyright so Controversial Now?

For most of its existence, copyright has been a relatively obscure specialty practiced by a small and somewhat isolated group of attorneys. That is no longer the case. Today most major law firms cannot afford not to have copyright specialists. This change is largely the result of the digital revolution. When widespread computerization, especially at the personal level, swept the country in the early nineteen eighties, copyright began to assume greater prominence because it was the easiest and the cheapest method of

5. *See generally*, Alfred Yen, *Eldred, The First Amendment, and Aggressive Copyright Claims*, 40 Hous. L. Rev. 673 (2003); Erwin Chemerinsky, *Balancing Copyright Protections and Freedom of Speech: Why the Copyright Term Extension Is Unconstitutional*, 36 Loy. L. A. L. Rev. 83 (2003); Edward Baker, *First Amendment Limits on Copyright*, 55 Vand. L. Rev. 891 (2002); Neil Weinstock Netanel, *Locating Copyright Within the First Amendment Skein*, 54 Stan. L. Rev. 1 (2001); Lawrence Lessig, *Copyright's First Amendment* ,48 U.C.L.A. L. Rev. 1057 (2001); Rebecca Tushnet, *Copyright as a Model for Free Speech Law: What Copyright Has In Common with Anti-Pornography Laws, Campaign Finance Reform, and Telecommunications Regulation,* 42 B.C. L. Rev. 1 (2000); Benkler, *supra* note 4, at 354; Eugene Volokh & Brett McDonnell, *Freedom of Speech and Independent Judgment Review in Copyright Cases*, 107 Yale L. J. 2431 (1998); Mark Lemley & Eugene Volokh, *Freedom of Speech and Injunctions in Intellectual Property Cases*, 48 Duke L. J. 147 (1998); Neil Weinstock Netanel, *Copyright and a Democratic Civil Society*, 106 Yale L. J. 283 (1996); Jed Rubenfeld, *The Freedom of Imagination and Copyright's Constitutionality*, 112 Yale L. J. 1 (2002).

6. Eldred v. Ashcroft, 537 U.S. 186 (2003).

obtaining legal protection for software. Then came compact disks, cd-roms, advanced video games, the internet, dvds, mp3s and a host of other digital technological developments of which I am unaware or have forgotten. All of these provided new means by which copyrightable subject matter could be exploited. Much of the underlying content was already protected by copyright prior to digitalization. Digitalization, especially in conjunction with the introduction of the general public to the internet, changed the world of copyright in at least three very significant ways. First, it introduced valuable new ways in which copyrighted material could be exploited. Second, it made it possible for anyone with a computer and subsidiary equipment to make an enormous number of perfect copies of a work inexpensively and anonymously. Third, it made it possible to gather, share, store and distribute information including copyrighted works at a speed, on a scale and with an ease and efficiency never before known. So the digital revolution presented an extraordinary opportunity to exploit copyright as well as an enormous threat of piracy at the same time. This resulted in the introduction of the ordinary person to the law of copyright to an extent that had never before occurred.

Of course, most people had been utilizing copyrighted works on a daily basis but never before had they had the opportunity to gain access to them so readily without payment nor had they the capacity to reproduce and distribute copyrighted works with such ease. In other words, the temptation to infringe became all but irresistible, especially since many did not realize they were infringing or, at the very least, could safely assume that no adverse legal consequences would attach to their conduct. In many instances, the copyright owner could not care less if people copied his work. Indeed, many copyright owners would be flattered that someone actually found their work worth copying. This is hardly the case with commercially distributed entertainment works such as musical recordings, movies and video games, as well as much of the computer application software industry. There, the threat to the copyright owner is great, and the financial stakes are high.

Moreover, widespread public use of the internet gave rise to a subculture which placed an extraordinarily high value on efficient access to and transfer of information. This value is embodied in the popular slogan "information wants to be free."[7] The value of speedy and relatively costless transfer of information is in high tension, if not outright conflict, with copyright. Suddenly, copyright is not simply an obscure legal specialty, but rather a serious impediment to the future of wise information policy. Copyright's critics can easily point to an appealing villain—a wealthy, greedy soul-less Hollywood, especially the music industry with its long standing image of exploiting both artist and consumer. There is delicious irony in the fact that the entertainment industry, which through its products has long championed the courageous rebel who defies the establishment, now finds itself in the position of the very establishment under assault by the anti-copyright rebels.

7. STEWART BRAND, THE MEDIA LAB: INVENTING THE FUTURE AT M.I.T. 202 (1987).

Indeed, if the critics of copyright are to put a face on the copyright world, it would be the face of Mickey Mouse.[8] Mickey has a pleasing face, at least to four-year olds, but it is also a face that seems to represent everything that is wrong with copyright to its critics—vast wealth and an intransigent determination to enforce intellectual property rights to the maximum. Beyond that, the copyright on Mickey Mouse would have entered the public domain absent the Copyright Term Extension Act of 1998; thus, it is often referred to derisively by its critics as the Mickey Mouse Act.[9]

The copyright wars truly exploded into the public consciousness, however, with the development of mp3 digital compression technology that made the widespread sharing of music files easy and hence, inevitable.[10] Peer-to-peer file sharing systems such as Napster appeared on the internet, and copyright infringement, to an extent perhaps never imagined, became common place. Although Napster was quickly vanquished in court,[11] more decentralized file sharing systems which may be much more immune to legal challenge followed in the decisions wake.[12]

It is unfair to suggest that copyright is simply playing defense against unfriendly critics. Two recent amendments to the Copyright Act which add significant protection to copyright holders, have also escalated the conflict. The first is the Copyright Term Extension Act of 1998 (CTEA), also known as the Sonny Bono Act, which extended copyright terms by twenty years and gave that protection to all works already in copyright as well.[13] The second is the Digital Millennium Copyright Act ("DMCA"), which made it a crime to circumvent a system designed to deny access to a copyrighted work or to manufacture or distribute a product whose primary use is circumvention of a technological device designed to protect a right of a copyright owner.[14] This legislation was the entertainment industry's legal response to the threat of widespread digital piracy of its product. First, the industry attempted to pro-

8. *See*, *e.g.*, Yu, *supra* note 1, at 923; Benkler, *supra* note 4, at 21 (worrying about "a world dominated by Disney, News Corp., and Time Warner"); Lessig, *supra* note 5, at 1069 (noting that Disney would like to have perpetual protection for Mickey but relies heavily on public domain works).

9. Yu, *supra* note 1, at 923.

10. Indeed, this may be the only time that a copyright issue has commanded the cover of Newsweek.

11. A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001); *see also* In re Aimster, 334 F.3d 643 (7th Cir. 2003) (affirming the grant of a preliminary injunction against a peer-to-peer file sharing system).

12. *See* Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 380 F.3d 1154 (9th Cir. 2004), *cert. granted*, 125 S. Ct. 686 (2004).

13. Copyrights – Term Extension and Music Licensing Exemption Act, Pub. L. No. 105-298, §§ 102(b), (d), 112 Stat. 2827-28 (1998) (amending 17 U.S.C. §§ 302, 304).

14. Digital Millennium Copyright Act, Pub. L. No. 105-304, 112 Stat. 2863 (1998).

tect its copyrighted works in digital form through encryption; but recognizing that its encryption devices would inevitably be hacked, it obtained legal sanction against both circumvention and the manufacture and distribution of circumvention devices. Copyrights' critics lobbied intensively against each of these amendments to the Copyright Act, but achieved little success.[15]

In a sense, a full-blown culture war has developed over the role of copyright in our legal system. A very significant subculture exists that questions the scope and often the very propriety of copyright.[16] This subculture seems to be young, educated, and technologically skilled. The entertainment industry has embarked on a massive public relations campaign designed to emphasize the value of copyright protection.[17] The industry understands that if it loses the cultural war it will, over time, lose the legal war as well.

III. The Copyright-Free Speech Conflict/Controversy

However, for my purposes, this is all a prologue. I intend to focus on the legal war. Specifically, I will focus on one aspect of the legal war: the clash between copyright and the freedom of speech. Obviously, there is some interface between copyright and freedom of speech. Much, though by no means all, of what copyright protects is expression which would seem to fall within the domain of the First Amendment. So the layperson might well wonder why copyright protection does not violate the First Amendment. At least since the early seventies, academics have addressed the issue of the tension between copyright and freedom of speech. Until quite recently, the overwhelming weight of academic authority has concluded that copyright and freedom of speech can, in fact, coexist in harmony.[18] Moreover, the federal courts have been dismissive, if not hostile, to free speech arguments in copyright cases.[19] Within the past five years, however, there has been a significant outpouring of academic writing arguing that contrary to conventional wisdom, the conflict between copyright and freedom of speech is severe and that some aspects and applications of copyright law should be considered unconstitutional.[20]

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15. *See* Litman, *supra* note 4, at 122-45.

16. *See* Neil Weinstock Netanel, *Copyright and Democratic Civil Society*, 106 Yale L.J. 283, 336-341 (1996) (discussing the minimalist critics of copyright).

17. *See* Yu, *supra* note 1, at 921.

18. Melville Nimmer, *Does Copyright Abridge the First Amendment Guarantees of Free Speech and press?*, 17 U.C.L.A. L. Rev. 1180 (1970); Paul Goldstein, *Copyright and the First Amendment*, 70 Colum. L. Rev. 983 (1970); Robert Denicola, *Copyright and Free Speech: Constitutional Limitations on the Protection of Expression*, 67 Cal. L. Rev. 283 (1979).

19. *See, e.g*, *Eldred*, 537 U.S. at 186; *Harper & Row Publishers, Inc*., 471 U.S. at 539; Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2nd Cir. 2001); *A & M Records Inc*., 239 F.3d at 1004.

20. *See supra* note 5.

Since most of those articles were published, First Amendment arguments against copyright were rejected in two very important cases *Universal Cities Studios, Inc v. Corley*[21] in which the Second Circuit upheld an injunction issued under the DMCA prohibiting the posting on a web site of software which would circumvent the DVD encryption code, and *Eldred v. Ashcroft*[22] in which the Supreme Court upheld the constitutionality of the Sonny Bono Copyright Term Extension Act. These two decisions hardly end the argument over the copyright/ first amendment conflict, however, much in the reasoning of these cases rejects many of the arguments recently set forth by the academic critics, several of whom filed amicus briefs on behalf of the losing parties in *Corley* and *Eldred*. As such, while it would have been very difficult to convince a federal court three years ago that the First Amendment placed significant limitations on copyright law, it will be even harder today.

The potential conflict between copyright and the First Amendment was first addressed by the authors of two of the leading treatises on copyright, Melville Nimmer[23] and Paul Goldstein[24] in articles in the early seventies. Nimmer was no stranger to the First Amendment; having already written several influential free-speech articles,[25] he went on to argue and win *Cohen v. California* before the United States Supreme Court.[26] Essentially, Nimmer and Goldstein contended that copyright does not raise serious First Amendment problems because there are internal limitations inherent to copyright that effectively diffuse the tension between the two areas. Specifically, Nimmer relied heavily on the idea/expression dichotomy, which ensures that copyright protects the latter but not the former, as well as the fact that copyrights are protected for only a limited time,[27] while Goldstein emphasized a number of doctrines including the idea/expression dichotomy, but especially fair use, which provides a privilege for certain socially important uses of copyrighted material.[28] In addition, both authors pointed out that the very purpose of copyright is to encourage the creation and distribution of material that contributes to the public debate and storehouse of knowledge which the First

21. *Corley*, 273 F.3d at 429.

22. *Eldred*, 537 U.S. at 186.

23. Melville Nimmer, *supra* note 2.

24. Paul Goldstein, *supra* note 2.

25. *See*, *e.g.*, Rodney Smolla & Melville Nimmer, Smolla and Nimmer on Freedom of Speech (2d 1990); Melville Nimmer, *Is Freedom of Press a Redundancy: What Does It Add to Freedom of Speech?*, 26 HASTINGS L J 639 (1975); Melville Nimmer, *The Meaning of Symbolic Speech Under the First Amendment*, 21 U.C.L.A. L. REV (1973); Melville Nimmer, *The Right to Speak from Times to Time, First Amendment Theory Applied to Libel and Misapplied to Privacy*, 56 CALIF. L. REV. 935 (1968).

26. *See* Cohen v. California, 403 U.S. 15 (1971).

27. Nimmer, *supra* note 2, at 1189.

28. Goldstein, *supra* note 2, at 988.

Amendment protects.[29] Thus, a world absent of copyright would also necessarily be a world significantly poorer of expressive freedom.

In the two major Supreme Court opinions addressing the copyright /free speech tension, *Harper & Row Publishers, Inc. v. The Nation*[30] and, more recently, *Eldred v. Ashcroft*,[31] the Court strongly endorsed the idea that, in fact, these internal copyright doctrines work together with copyright's overall purpose and operation to diffuse the potential free speech conflict. Some copyright critics argue that these devices provide inadequate protection to freedom of speech.[32] I disagree with them. I think that Professors Nimmer and Goldstein and the United States Supreme Court have essentially got it right.

There are two primary ways in which copyright might come into conflict with the First Amendment. Arguably, copyright might violate the First Amendment, if copyright places off limits material that is essential to the exercise of the right to freedom of speech. Alternatively, copyright could also violate the First Amendment, if it prevents access to material that is in the public domain. Those who believe that copyright and freedom of speech are presently in conflict, tend to believe that copyright interferes with one or both of these interests. I will examine these claims in detail. First, however, it should be noted that the issue is not entirely open. Despite the outpouring of claims over the past five years that copyright infringes the First Amendment, just last year, a very solid majority of the Supreme Court in *Eldred v. Ashcroft* clearly re-endorsed the traditional rationale for why copyright does not present serious First Amendment problems. A broad reading of the *Eldred* opinion's disposal of the copyright free speech conflict might conclude "Game Set and Match Copyright!" That would probably be premature, in that *Eldred* did not address every conceivable way in which the copyright/ free speech conflict might arise.

Eldred was a case that addressed the question of whether copyright unduly infringed on the public domain, specifically, by extending new as well as existing copyright terms for an additional twenty years.[33] The plaintiff's strongest arguments against CTEA were based, not on the First Amendment, but rather on the Copyright Clause itself. Specifically with respect to the extension of existing copyrights, the plaintiffs argued that this furthered no legitimate Copyright Clause purpose, in that there was no need to offer any

29. Nimmer, *supra* note 2, at 1186; Goldstein, *supra* note 2, at 990.

30. *Harper & Row Publishers, Inc*., 471 U.S. at 556-59.

31. *Eldred*, 537 U.S. at 219-21.

32. *See, e.g*., Netanel, Skein, *supra* note 5, at 13-37 (arguing that the idea/expression dichotomy and fair use are insufficiently protective of freedom of speech and that the free speech benefits of copyright have been overstated); Tushnet, *supra* note 5, at 8-26 (arguing that the idea/expression dichotomy and fair use provide insufficient protection to freedom of speech).

33. *Eldred*, 537 U.S. at 193.

further incentive to these authors since the works had already been created.[34] Speaking for the majority, Justice Ginsburg rejected this argument; she explained that the extension to existing copyright holders was justified as a means of creating an incentive to restore deteriorating works, and that the extension also provided incentives by way of harmonizing United States copyright law with that of the European Union and ensuring copyright producers and owners that they would be treated equitably when the law was revised.[35] In addition, she pointed out that Congress has always given existing copyright holders the benefit of term limit extensions.[36]

Turning to the First Amendment argument, Justice Ginsburg noted that the fact that the "Copyright Clause and the First Amendment were adopted close in time . . . indicates that in the framer's view, copyright's limited monopolies are compatible with free speech principles."[37] Moreover, "copyright's purpose is to promote the creation and publication of free expression."[38] Justice Ginsburg then explained how the idea/expression dichotomy and the fair use doctrine accommodate the First Amendment.[39] Finally, the Court distinguished *Turner Broadcasting System v. FCC*,[40] a case upon which the challengers in *Eldred*, as well as recent copyright critics,[41] had relied heavily. The Court pointed out that the First Amendment problem in *Turner* arose because the "must carry" rules compelled speech – by forcing persons to reproduce the speech of others – whereas copyright does not; rather, copyright merely prevents a person from exploiting someone else's speech.[42] The Court did note that the First Amendment "bears less heavily when speakers assert the right to make other people's speeches,"[43] indicating, at least, that there could conceivably be cases in which the use of another's copyrighted material would implicate the First Amendment. Despite this concession, however, in the very next sentence the Court went on to conclude that "to the extent such assertions raise First Amendment concerns, copyright's built-in free speech safeguards are generally adequate to address them."[44] While quite properly rejecting the court of appeals' conclusion,

34. *Id*. at 210-11.

35. *Id*. at 204-06.

36. *Id*. at 204.

37. *Id*. at 219.

38. *Id*.

39. *Id*. at 219-20.

40. Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622 (1994).

41. Netanel, Skein, *supra* note 5, at 54-55; Tushnet, *supra* note 5, at 63; Benkler, *supra* note 5, at 371-77.

42. *Eldred*, 537 U.S. at 220-21.

43. *Id.* at 221.

44. *Id.*

which regarded copyright as "categorically immune from challenges under the First Amendment,"[45] it went on to say that when "Congress has not altered the traditional contours of copyright protection, further First Amendment scrutiny is unnecessary."[46]

In its First Amendment analysis, the *Eldred* Court relied primarily upon its earlier opinion in *Harper & Row Publishers, Inc. v. Nation Enters.*[47] The recent First Amendment critics of copyright could readily explain away *Harper & Row* on the grounds that threats posed by copyright, as well as First Amendment doctrine, had changed sufficiently in the two decades since *Harper & Row* to significantly exacerbate the copyright/free speech conflict.[48] Moreover, the *Harper* Court did not have the benefit of recent scholarship, which argues that copyright often does abridge freedom of speech. Professor Lessig, one of copyright's harshest critics, who represented *Eldred*, and some of the other scholars who have written that copyright raises serious First Amendment questions, filed briefs on Eldred's behalf.[49] However, the Court simply rejected this argument.[50] The *Eldred* Court's strong reaffirmation of the traditional resolution of the copyright/free speech tension should come as a devastating blow to those who have argued that the Court should take a fresh look at the problem and reconsider existing doctrine. Absent any significant legislative change that would qualify as an alteration of "the traditional contours of copyright protection,"[51] which the DMCA may well be, the Court has served notice that it and the lower federal courts will resolve any tension between speech and copyright as they have in the past, through the internal safeguards of copyright: the idea/expression dichotomy and fair use.

IV. ELDRED WAS CORRECT

The *Eldred* Court was correct in concluding that the combination of the idea/expression dichotomy and fair use remains a more than adequate means of protecting free speech against abridgment by copyright in the run of the mill case. Arguably, the enactment of the DMCA constitutes the type of alteration in the "traditional contours of copyright" that requires First Amendment scrutiny; however, even there the threat to freedom of speech is not obviously severe. It should be remembered that providing copyright protection almost certainly results in a net increase—usually a significant net

45. *Eldred*, 537 U.S. at 220-21.

46. *Id.*

47. *Id.*; *see Harper & Row Publishers, Inc.*, 471 U.S. at 539.

48. *See, e.g.*, Netanel, *supra* note 5, at 5; Lessig, *supra* note 5, at 1069-70.

49. *See, e.g.*, Brief of Jack M. Balkin, Yochai Benkler, Burt Neuborne, Robert Post, and Jed Rubenfeld as Amici Curiae in Support of the Petitioners, Eldred v. Ashcroft, 537 U.S. 186 (2003) (No. 01-618).

50. *Eldred*, 537 U.S. at 218-19.

51. *Id.* at 221.

increase—in the amount of expressive material that is produced and made available to recipients either free of charge or for an affordable fee. First Amendment challenges to copyright generally come in two different forms. One challenge is that even with the idea/expression dichotomy and the application of fair use, copyright precludes a person from using material for expressive purposes where the First Amendment should permit such use. Second, copyright might be challenged on First Amendment grounds to the extent it precludes material from falling into the public domain or allows copyright holders to protect much material.

A. Should There Be a First Amendment Right to Use Copyrighted Expression. . .At Least Sometimes?

As noted earlier, one common argument for greater First Amendment scrutiny of copyright centers around the case in which a potential speaker claims that he or she needs to copy, distribute, or display the copyrighted work of another in order to adequately exercise the constitutional right of freedom of speech.[52] The potential liability and threat to freedom of speech by copyrighted material is *de minimis* for several reasons. First, the overwhelming amount of such usage goes undetected. No doubt thousands of time a day, someone e-mails a newspaper column to a friend or posts a cartoon on a traditional bulletin board or web site. Either of these acts would technically violate copyright, but would rarely come to the copyright owner's attention. However, if it were brought to their attention, most copyright owners would not object either because they would be flattered that someone concluded that their work was worth utilizing, would be content that they had already been adequately compensated for creation of the work, would consent to the non-commercial use, or would consider enforcement to be too much trouble. Thus, a great deal of copyrighted work is commonly used by others without any real threat of liability. That is not to say that the potential of liability is irrelevant. Some people will be deterred from using copyrighted material out of legal concerns, especially if they work for an organization that has adopted an intellectual property policy. Of course, others that make small scale, non-commercial use of the copyrighted material will occasionally be sued.

From a First Amendment perspective however, the question is not whether it is convenient to use someone else's copyrighted material to make a point. Rather, the question is whether it is necessary and whether, despite copyright, it is still legally permissible. This is where the internal copyright doctrines of idea/expression dichotomy and fair use come into play. As Professor Nimmer argued over thirty years ago, it is the exception rather than the rule where someone needs to employ the expression of another as opposed to

52. *See*, *e.g.*, Netanel, *supra* note 5, at 15-16; *see also* Tushnet, *supra* note 5, at 8-16 (arguing that there may be cases in which a speaker needs to use the copyrighted speech of another to make his or her point).

the ideas, in order to adequately make a point.[53] Nimmer identified certain newsworthy pictures as an example, citing the Zapruder film of the Kennedy assassination as well as photographs of the My Lai massacre.[54] This calls up the old adage that one picture is worth a thousand words and prompted Professor Nimmer to argue that perhaps there should be a news photo exception to copyright liability.[55] If the underlying idea is not conveyed adequately without the use of a copyrighted photograph and there exists a significant social reason why the idea should be conveyed, fair use properly understood should be adequate to fill the gap. Nimmer didn't believe this would be the case because he did not think fair use should apply where there was clear, commercial harm to the copyright owner.[56] The codification of the fair use doctrine in 17 U.S.C. § 107[57] clearly rejects this reading of fair use as does subsequent Supreme Court precedent,[58] which emphasizes that commercial harm is only one factor in the fair use equation and not necessarily outcome determinative.

How often will it be necessary for someone to use the copyrighted expression of someone else to adequately exercise First Amendment rights? Certainly occasional quotes will be justified either as *de minimis* or fair use and should not present a problem. As a general rule it should follow that the lengthier the copyrighted work, the easier it should be to rewrite without sacrificing the underlying idea. While most of us are unable to turn a phrase nearly as well as George F. Will or Maureen Dowd, the First Amendment has not been interpreted to demand that speakers are entitled to the best or most effective means of expression.[59] Free speech, though a very important right, has always been balanced against other rights and significant societal interests. Occasionally, the argument is made that some quality of a writer, be it manipulation,[60] hatefulness[61] or stylistic brilliance[62] cannot adequately be

53. Nimmer, *supra* note at 2, at 1192.

54. *Id*. at 1197-1200.

55. *Id*.

56. *Id*. at 1200-01.

57. *See* 17 U.S.C. § 107 (2000) (listing the four primary fair use factors, including harm to the copyright holder).

58. *See* Campbell v. Acuff-Rose Music, Inc., 510 U.S. 569, 584-86, 593-94 (1994) (holding that commercial nature of use does not raise a presumption against fair use and noting plaintiff's harm as only one of many factors to consider).

59. *See*, *e.g.*, Miami Herald Publ'g Co. v. Tornillo, 418 U.S. 241 (1974) (noting that the First Amendment precludes any statutory right to publicly reply to critical editorials); *see also* Columbia Broad. Sys. v. Democratic Nat'l Comm., 412 U.S. 94 (1972) (noting that there is no First Amendment-based right of network television access).

60. *See* New Era Publ'ns Int'l ApS v. Henry Holt & Co., 873 F.2d 576 (2d Cir. 1989), *cert. denied*, 493 U.S. 1094 (1990) (denying fair use where it was ar-

captured other than by lengthy verbatim quotation.[63] As a factual matter, these claims are open to serious question. It is not at all obvious that the user of the copyrighted material, within the boundaries of quotation and paraphrase permitted by fair use, could not convey the essence of the copyrighted work without infringing. At the very least, those instances in which this is not the case are almost certainly the rare exception rather than the rule. Fair use properly applied should ordinarily protect most, if not all, such instances.

Free speech critics[64] of copyright often cite *Cohen v. California* for the proposition that words are not interchangeable and that they often have emotive as well as cognitive significance.[65] *Cohen* is a very significant free speech opinion. In *Cohen*, the Supreme Court invalidated a California law which was applied to punish the plaintiff for wearing a jacket bearing the words "Fuck the Draft."[66] While the *Cohen* Court's conclusions that words are not fungible remains true and important, the case clearly cannot stand for the proposition that a speaker has unlimited discretion to choose whatever language he desires (including the use of copyrighted work) to convey his message. Free speech case law in the areas of campaign finance,[67] broadcast regulation,[68] defamation[69] and obscenity[70] illustrate that a speaker is not

gued that extensive quotations from an author's diary were necessary to illustrate his devious nature).

61. Houghton Mifflin Co. v. Noram Publ'g Co., 28 F. Supp. 676 (S.D.N.Y. 1939) (finding fair use did not permit verbatim translation of Hitler's *Mein Kempf*).

62. Salinger v. Random House, Inc., 811 F.2d 90 (2d Cir. year), *cert. denied*, 484 U.S. 890 (1987) (holding that fair use does not cover lengthy quotations when used in order to capture famous author's literary style).

63. *See* Netanel, *supra* note 5, at 14-22 for the argument that the rejection of fair use in these cases should have raised serious First Amendment questions.

64. *See*, *e.g.*, Baker, *supra* note 5, at 897; Tushnet, *supra* note 5, at 8; Ruberfeld, *supra* note 5, at 14-15.

65. *See Cohen*, 403 U.S. at 26.

66. *Id.* at 16.

67. *See* Buckley v. Valeo, 424 U.S. 1, 44 (1976) (finding that federal election law could regulate, and in some instance prohibit, "express advocacy" of a candidate such as "Vote for Candidate X", but could not regulate general-issue advocacy in the absence of those "Magic words").

68. FCC v. Pacifica Found., 438 U.S. 726, 776 (1978) (finding an FCC broadcast licensee could be sanctioned for broadcasting comedy recording containing indecent language).

69. Gertz v. Robert Welch, Inc., 418 U.S. 323, 392-93 (1976) (holding that a defendant may be held liable for defamatory speech, but only upon showing proof of fault).

70. Miller v. California, 414 U.S. 15, 43 (1973) (finding that criminal punishment may be imposed for speech that is legally considered to be obscene).

completely free to choose whatever language best conveys his message when doing so flies in the face of a substantial or compelling state interest. Protection of copyrighted material is just such an interest.

The idea/expression dichotomy has been attacked on the ground that it is simply too vague and uncertain to provide adequate protection of freedom of speech where clarity and fair notice are prized.[71] The "void for vagueness" doctrine itself applies exclusively to criminal prosecutions[72] and is rarely the case in copyright. It is true that the line between idea and expression is notoriously indeterminate. However, the line between protected and unprotected speech does, in fact, sometimes turn on whether or not speech falls on one side or the other of the line that is imprecise at the margin. Obscenity[73] and indecent speech[74] are two examples. Even so, if the idea/expression dichotomy were the only buffer that copyright provided between protected speech and liability for infringement, then perhaps the uncertainty of the standard would in fact raise legitimate constitutional concerns. But it must not be forgotten that in those instances in which it has been established that a defendant did use the copyright owner's protected expression, rather than merely his ideas, the fair use defense will almost inevitably provide a second line of defense. I have argued that Professor Nimmer and the Supreme Court are correct in believing that the idea/expression dichotomy goes a long way toward obviating any free speech problems presented by copyright's restriction on the use of protected expression without consent of the copyright owner. That, of course, is only half of the equation. If anything, the back stop of the fair use doctrine is even more significant in ensuring that copyright law does not trample free speech values. Fair use, a judicially-developed doctrine now legislatively incorporated in section 107 of the 1976 Copyright Act, was explicitly designed to ensure that, in many instances, members of the public have the right to use copyrighted material without the consent of its owner in cases of socially-beneficial purposes. The values protected by fair use are, to a very significant extent, the same or similar to those values that are also protected by the First Amendment.

At the outset, section 107 states that the fair use doctrine is especially protective of uses made for "purposes such as criticism, comment, news reporting, teaching . . . scholarship or research."[75] These are types of uses that clearly are highly valued by freedom of speech as well. Section 107 then lists four factors to weigh when determining whether a specific use of copyrighted work is fair: (1) the nature of the copyrighted work, (2) the purpose of the use, (3) the amount of the work used, and (4) the harm suffered by the

71. *See* Volokh & McDonnell, *supra* note 5, at 2445-52; Tushnet, *supra* note 5, at 20-24; Yen, *supra* note 5, at 675-76.

72. *See*, *e.g.*, Kolender v. Lawson, 461 U.S. 353, 357 (1983).

73. *Miller*, 413 U.S. at 23.

74. *Pacifica*, 438 U.S. at 735, 737-38.

75. 17 U.S.C. § 107 (1976).

copyright owner.[76] A careful application of these factors will usually do the work to serve any purposes that an independent First Amendment analysis would accomplish. Works of a factual nature, for instance, where there would be a high First Amendment interest in access to the information, will be more readily subject to fair use.[77] A use that is for purposes of research, criticism, informing the public or productive scholarship will also be more likely to support the fair use defense.[78] As noted above, the First Amendment interest in using a large portion of a work will generally be weaker than in using selected excerpts, and the fair use doctrine recognizes this as well.[79] Finally, the fair use doctrine recognizes that a use which poses little, if any, harm to the copyright owner will often be considered fair.[80] This recognizes that the value of freedom of information should usually prevail when there is little harm to the interest protected by copyright.

Carefully applying the fair use doctrine – with the remembrance that it is meant to be applied in such a way as to accommodate free speech values to the extent possible – should greatly diffuse the tension between copyright and freedom of speech.[81] That is not to say that fair use is a mirror image of the First Amendment. Indeed, it is not. Admittedly, there certainly could be cases in which a fair use defense would be rejected while a First Amendment defense might provide protection.[82] However, they are likely to be few. Free speech copyright critics often cite a handful of cases in which they argue that the fair use defense failed, but a First Amendment defense would have or should have succeeded.[83]

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76. *Id*.

77. *Harper & Row Publishers, Inc*., 471 U.S. at 563 (recognizing a greater fair use privilege with respect to factual works while rejecting a finding of fair use on the facts of the case).

78. *Campbell*, 510 U.S. at 578-79 (noting a greater likelihood of finding fair use in cases of transformative use). *But see*, Rubenfeld, *supra* note 5, at 16-17 for the argument that the First Amendment disapproves of differentiating between different types of speech based on content.

79. *Harper & Row Publishers, Inc*., 471 U.S. at 565 (holding that the fact alone that a work's substantial portion was copied is evidence of work's qualitative value, to both the originator as well as the copier).

80. Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417, 451 (1984) (holding that, generally, plaintiff must show some type of harm in order to successfully defeat a fair use defense).

81. *See* Suntrust Bank v. Houghton Mifflin Co., 268 F.3d 1257, 1264-65 (11th Cir. 2001) (recognizing, quite explicitly, the need to remain "cognizant of [the free-speech] protections [that are] interwoven into copyright law").

82. *See* Robert Denicola, *supra* note 2, at 316.

83. Netanel, *supra* note 5, at 81 (citing two cases where a First Amendment defense might have provided protection, although fair use did not); Yen, Aggres-

With regard to that handful of "fair use failure" cases, I disagree that a case-by-case First Amendment backstop is warranted, at least merely by virtue of the cases' existence. Truthfully, in some of these cases the fair use defense was properly rejected, and had a First Amendment defense been presented (assuming, of course, that one was actually available), it, too, should have likewise failed under the facts of the cases in question.[84] In other words, the First Amendment interest is simply not as strong as it is claimed to be. In other instances, the fair use defense was improperly rejected.[85] Thus, the problem lies not with the inadequacy of fair use but rather, simple recognition that with the occasional erroneous application of the fair use doctrine, or for that matter any other legal test, doctrine or defense, including a fair use (or for that matter First Amendment) defense, will be erroneously applied on occasion. This absence of perfection in adjudication hardly justifies rejecting or even rewriting the fair use doctrine.

But assuming that there are at least a few such cases in which a First Amendment defense would have provided better protection than the fair use doctrine, the question then becomes whether it would be worth engrafting such a defense into copyright in order to ensure that even these cases are decided "correctly". I do not believe that the small number of cases that might be decided differently would merit the cost of significantly increasing the difficulty of doctrinal analysis in the area. Presently, the Court has resolved the tension between copyright and free speech with a systemic approach. That is, instead of applying free speech principles in copyright cases

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sive Copyright, *supra* note 5, at 692-94 (discussing "Seinfeld aptitude test" case).

84. Professor Yen relies heavily on *Castle Rock Entm't, Inc. v. Carol Publ'g Group, Inc*., 150 F.3d 132 (2d Cir. 1998) involving a Seinfeld Aptitude Test. Yen, *supra* note 5, at 675, 694. He characterizes this as an aggressive copyright claim warranting a First Amendment defense. *Id*. The Second Circuit found upheld the finding of infringement as well as the rejection of the fair use defense. It noted that "free speech, and public interest considerations are of little relevance in this case, which concerns garden-variety infringement. . . . ." *Castle Rock Entm't, Inc*., 150 F.3d at 146. I could not agree more. The case involved blatant infringement—a very weak and unpersuasive claim for a fair use defense. Like the court I am simply baffled by the claim that this case presented any colorable free speech interest.

85. The case most heavily relied on by Netaniel involves a parody of *Gone with the Wind*. Neil Netanel, Skein *supra* note 5, at 82. At the time of his article, the Eleventh Circuit had vacated a preliminary injunction against the parody of Gone with the Wind using a First Amendment analysis, suggesting perhaps that the First Amendment filled an important gap in the copyright system. Suntrust Bank v. Houghton Mifflin Co., 252 F.3d 1165 (11th Cir. 2001). However, the court later issued a revised opinion that reached the same result, but with a very conventional fair use analysis. Suntrust Bank v. Houghton Mifflin, 268 F.3d 1257 (11th Cir. 2001). Consequently, First Amendment analysis was wholly unnecessary to resolve the issue favorably to the defendant.

on a case-by-case basis, the Court has acknowledged that in the overall big picture, copyright promotes rather than discourages free speech – and that copyright has its own, relatively effective internal checks that serve much the same purpose as a separate First Amendment analysis. The Court has concluded, that, as a general matter, copyright and freedom of speech are consistent; it is simply not a worthwhile endeavor to undertake to inject a First Amendment defense into every potential infringement case, even given the rare instances in which it might make a difference. This is a wise decision.

One of the reasons why in recent years, the claim has been made that there is more of a tension between copyright and free speech than has previously been acknowledged is because over the past few decades, free speech doctrine has become increasingly complicated and, arguably, significantly less coherent than it used to be.[86] If this is true, and I believe that most free speech scholars would agree that it is, two conclusions follow from it. One is that it will be easier to find a copyright/free speech conflict because it is not as difficult to find some strand of free speech doctrine that, if taken out of context, will arguably take you where you want to go. Indeed, in *Eldred*, the challengers made just such an argument.[87] In that case, petitioners attempted to argue that one interpretation of the Court's decision in *Turner v. FCC* (upholding rules that required cable systems to carry local over the air broadcast stations), stood for the proposition that any legal regime which allocated speech rights was necessarily subject to a First Amendment review.[88] As noted above, the Court readily concluded that this was a clear misreading of the *Turner* opinion.[89] It is evidence, however, that given the complexity of modern free speech doctrine, it is not difficult for a clever lawyer to find some First Amendment dicta which at least arguably subjects well-settled copyright doctrine to challenge.

The second conclusion to follow from the aforementioned and widely-accepted notion that free speech doctrine has evolved in complexity is this: requiring or even encouraging the federal courts to work through such complicated and difficult First Amendment theory and related defenses in order to merely resolve garden-variety copyright cases would impose significant costs on the copyright system – increasing the costs of litigation while yielding little, if any, benefit in terms of producing different and more speech-protective results. Moreover, in doing so, courts might even ultimately undermine free-speech values in the long run; as-is, the copyright system is intended to – and almost certainly does – promote free speech since it en-

86. *See* Fred Schauer, *Codifying the First Amendment*: New York v. Ferber, 1982 SUP. Ct. Rev. 285 (describing the growing doctrinal complexity of free speech law).

87. Eldred v. Ashcroft, 537 U.S. 186, 220 (2003).

88. Turner v. FCC, 522 U.S. 622 (1994) (upholding rules that required cable systems to carry local over the air broadcast stations).

89. *Eldred*, 537 U.S. at 220-21.

courages the people to produce expressive material. Thus, despite recent arguments that the free speech doctrine should be interpreted to place a check on copyright, there is no reason to believe that the ordinary enforcement of copyright law poses any significant threat to free speech values. Consequently, the Court is correct in concluding that the internal copyright doctrines of both idea/expression dichotomy and fair use provide sufficient protection to free speech values.

B. Does Copyright Law Intrude upon the free Public Domain in Violation of the First Amendment?

Even if the enforcement of copyright law with respect to legitimately copyrighted material does not infringe the First Amendment, the question still remains of whether extension of copyright law into the pre-existing public domain should raise serious First Amendment questions. This issue might arise in at least two different contexts: (1) copyright term extension and (2) "fencing-off" portions of the public domain with encryption technology. The first and easiest issue is the situation – presented in *Eldred v. Ashcroft* – when Congress extended the length of copyright terms, thereby preventing material from entering the public domain as soon as it would have before the term's extension. From a First Amendment perspective, it should not make much difference whether the copyright term is extended with respect to existing or future copyrights. This is because, in either case, the public is deprived of the full use of the material for an additional period of time. In *Eldred*, the strongest argument against a twenty-year extension, based on the Copyright Clause rather than the First Amendment, asserted that there was no legitimate Copyright Clause interest in such an extension to pre-existing works since copyright should properly be viewed as an incentive for the creation of new works and, by definition, no further incentive was needed since the works had already been created.[9091] The Supreme Court properly rejected this argument finding that the extension served several legitimate copyright interests including providing an incentive for the preservation of deteriorating works, harmonizing United States law with that of the European Union, and, as a matter of fairness, providing existing copyright holders with the same benefits extended to new copyright holders.[92] Moreover, the Court emphasized that granting the extension to those already in copyright was quite consistent with historical practice.[93] The well accepted test for constitutionality of an exercise of Congressional power, especially with respect to the type of line drawing inquiry before the Court in *Eldred*, was simply whether the congressional action in question was rationally related to a legiti-

90. *Id*. at 211.

91. *Id*. at 211.

92. *Id*. at 204-08.

93. *Id*. at 194-95, 204.

mate interest.[94] By a 7-2 margin, the Court found in *Eldred* that the test was readily met.[95]

The value of convincing the Court to recognize a First Amendment interest in this case would have been to step up the standard of review to the intermediate level in the hopes that the congressional justification would be insufficient. For the reasons described earlier,[96] the Court declined to apply First Amendment principles to what it viewed as a historically routine extension of the length of the copyright term.

The challengers in *Eldred* also argued that Congress could extend copyrights indefinitely by simply adding an additional term of years whenever existing copyrights were about to expire. Thus, ultimately depriving the public of its share of the traditional copyright bargain by precluding copyrighted works from ever entering the public domain.[97] If in twenty years Congress, chooses to further extend existing copyrights, it is difficult to believe that the Court will give Congress the degree of deference recently extended in *Eldred*. Were Congress to proceed with such a course of conduct, presumably the interest in ensuring that copyrighted material eventually became freely available to the public would be worthy of First Amendment protection. Furthermore, *Eldred* notwithstanding, any attempt to extend copyright perpetually would certainly be invalidated under the limited times provision of the Copyright Clause.[98]

The other means by which Congress could infringe on the public domain and indeed the practice which has received the most withering criticism of all, is by allowing copyright holders to arguably fence off portions of the existing public domain through the device of encryption backed by legally enforceable anti-circumvention prohibitions as embodied in the DMCA.[99] The digital revolution has produced opportunities as well as severe threats to copyright. Digitalization combined with the internet produces an enormous new market for the presentation and distribution of copyrighted work, especially music and movies. However, it also presents perhaps the most serious threat of piracy ever faced by copyright since digital copies of pristine quality can be made and distributed anonymously, instantaneously, and in extreme numbers. Copyright's critics, as well as its defenders, fully realize this. The question that divides them so bitterly is what to make of it and what, if anything, to do about it. Copyright content owners, especially the music and motion picture industries, argue that unless some effective protection against digital piracy is provided, the impact will be financially devastat-

94. *Id*. at 204-05.

95. *Eldred,* 537 at 186.

96. *See supra* notes *supra* 33-51 and accompanying text.

97. *Eldred,* 537 U.S. at 198.

98. U.S. CONST. art. I, § 8, cl. 8.

99. 17 U.S.C. § 1201 (1999).

ing.[100] Critics of the DMCA tend to down play the impact of digital piracy on content based industries and, instead, focus on the extent to which legal prohibition of anti-circumvention and the manufacture or distribution of anti-circumvention technology will allow copyright owners to unfairly extend their monopolies by enclosing portions of the public domain to the great detriment of the public.[101]

The DMCA is not a perfect solution. Arguably, it needs to be more flexible with greater provision for legitimate public access to encrypted works.[102] However, it simply cannot be assessed in the abstract. The DMCA is an admittedly strong measure, but it was developed in response to an extraordinary threat. The impact of digital piracy on the recorded music industry has been well documented.[103] Absent vigorous legal remedies against technological circumvention, the impact on the motion picture industry could be quite severe as well. The same may be said of other industries including computer programs and games which are distributed in digital form. Never before have content owners faced this type of threat of instantaneous, pristine quality, anonymous, mass scale piracy. To respond to this threat by simply suggesting that copyright owners should adopt some different marketing model is hardly an alternative at all since the threat remains enormous as long as a copy of the work is available in digital format.

Still, on the other hand, copyright owners ought not to be able to use anti-circumvention technology and the legal enforcement system behind it to deny access to material that is in the public domain, at least to the extent that there is no alternative means of access to the material. If that turns out to be the case to any significant extent, then there may be a need for some legal counter balance whether through amendment to the DMCA providing for additional protection for some types of circumvention including possibly the application of the fair use doctrine or failing that, possibly the application of First Amendment principles. So far, it is not obvious that the DMCA poses a significant threat of locking up a great amount of public domain information that is not otherwise available or easily discoverable.

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100. *See*, *e.g.*, Peter Yu, *supra* note 1, at 907 (stating that "[e]very year, the industry loses billions of dollars in revenue and faces the potential loss of hundreds of thousands of jobs."); Tim Burt, *Creative Business-Download at Your Peril*, FIN. TIMES, Jan. 28, 2003, at 24 (stating that music sales fell 9-10 % globally and the music industry lost five billion dollars due to on-line piracy in 2002); David Lieberman, *How Dangerous Are Pirates? Music Industry Blames Dying Sales on Copying*, USA TODAY, Apr. 5, 2002, at B1 (recording industry reported that it lost $4.5 billion in sales to on-line music sharing in 2001);.

101. *See*, *e.g*, Jessica Litman, *supra* note 4, at 29-30; Benkler, *supra* note 5, at 355-58; Pamela Samuelson, *Intellectual Property and the Digital Economy: Why the Anti-Circumvention Regulations Need to Be Revised*, 14 BERKELEY TECH. L. J. 519, 524 (1999).

102. *See* Samuelson, *supra* note 98, at 537-46.

103. *See supra* note 94.

To begin with, anti-circumvention technology will generally only protect information made available in digital form. Even as we enter the digital future, it is still almost certainly the case that the overwhelming amount of copyrighted information is not initially produced or distributed in digital form. More importantly, the DMCA only has the potential to fence off public domain material which is available exclusively in digital format. Thus, to the extent that a work is also available in a non-digital format such as a newspaper, analog tape, motion picture on film or videotape, painting in a gallery, etc., access to public domain material within the work will not be blocked by encryption backed by the DMCA's legal sanctions. Just as a large percentage of copyrighted works is made available in digital format, another large portion of those works that are available are not *exclusively* available in digital format. Even with respect to the works that are made available exclusively in digital format, it is unlikely that most of these will be protected by encryption either because it is not cost justified or because the owner does not care whether or not the work is copied. So, it should not be forgotten that the universe of works to which the DMCA effectively prevents access is likely to be a very small segment of copyrighted work, that is, work that has significant commercial value and is likely to be illegally copied and distributed on a large scale basis. This is not to say that there is no reason to be concerned that public access is being denied to public domain material contained in this category of copyrighted work, but we should be clear as to the limited scope of the threat posed by the DMCA. Even within this category, it is important to understand why material within a copyrighted work might be in the public domain. If it is within the public domain because it was originally created prior to the Copyright Act or because it was copyrighted but the copyright has expired, access to the work can almost certainly be obtained independent of the encrypted work. If the material in question falls within the public domain because it is trite or unoriginal, it can probably be readily recreated without access to the encrypted work.

Arguably the most serious threat of enclosure posed by the DMCA is with respect to idea, process, structure, or systems embodied in digital code that is neither patentable nor copyrightable. To the extent that access to such material is necessary or highly useful in advancing technological development and to the extent that a significant amount of it is being completely withheld from public access by the anti-circumvention provisions of the DMCA, then in the absence of statutory amendment, a case for a First Amendment right of access might be made, at least to the extent that it could be crafted in such a manner as to avoid creating a loop hole for large scale commercial piracy. As of yet, however, the factual justification for the necessity of such a right has not been satisfactorily established.

If this factual predicate is established, *Eldred* would not necessarily stand as a bar to the application of First Amendment principles in that the DMCA almost certainly would fall into the exception noted by the Court in *Eldred* of a law in which Congress has "altered the traditional contours of

copyright."[104] By its own terms, a violation of the DMCA is not infringement of copyright.[105] Moreover, traditional copyright law has never protected against anti-circumvention. The Supreme Court is obviously aware of the DMCA, and it almost certainly added this particular caveat to its general rejection of First Amendment analysis of copyright issues with the DMCA in mind. Consequently, possible enclosure of public domain material is the one area where it may still be possible to raise a First Amendment defense in the copyright domain after *Eldred*, at least on the right record. Indeed, in *Universal City Studios v. Corley*[106] (a pre-*Eldred* decision), the Second Circuit analyzed the issuance of an injunction against the posting of anti-encryption code on a website and ultimately rejected the First Amendment defense; the appeals court based its decision on the fact that the regulation was content-neutral and the effect on the speech component was merely incidental – thus failing to burden "substantially more speech than necessary to further the government's interests."[107]

CONCLUSION

As scholars like Nimmer and Goldstein recognized some thirty years ago, the conflict between copyright and free speech is more of a case of perception over reality. Copyright's speech–enhancement, taken together with the companion checks of idea/expression dichotomy and fair use – all inherent in copyright law – fundamentally relieves any real, intrinsic tension between the two areas of the law. The Supreme Court initially recognized this in *Harper & Row* and, despite a recent burst of academic criticism, correctly reaffirmed this principle understanding in *Eldred*. With the possible exception of DMCA challenges, it is quite unlikely that federal courts will begin to engage in First Amendment analyses of copyright issues within at least the foreseeable future; happily, it is equally true that freedom of speech will not suffer because of it.

104. *Eldred,* 537 U.S. at 221.

105. 17 U.S.C. § 1201(c)(1) (1999).

106. Universal City Studios v. Corley, 273 F.3d 429 (2d Cir. 2001).

107. *Id*. at 454-55.

Research Tax Credit: Statutory Construction, Regulatory Interpretation and Policy Incoherence[1]

by
*David L. Cameron**

I. Overview of the Research Tax Credit

Section 41 of the Internal Revenue Code establishes a research tax credit in connection with "qualified research expenses" and "basic research payments," frequently referred to as the incremental research credit and the basic research credit, respectively. The incremental research credit is equal to 20 percent of the qualified research expenses for the tax year in excess of a base amount, and the basic research credit is equal to 20 percent of any basic research payments in excess of a base amount.[2] The purpose of the credit is

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1. This paper is based in substantial part on portions of P. Postlewaite, D. Cameron & T. Kittle-Kamp, Federal Income Taxation of Intellectual Properties and Intangible Assets ¶¶ 1.03[1][b][ii] and 7.02[1][d] (Warren, Gorham & Lamont, 1997).

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2. I.R.C. § 41(a). *See* I.R.C. § 41(c), (e)(1)(A). The research credit was originally enacted in 1981 as part of the Economic Recovery Tax Act, Pub. L. No. 97-34, § 221, 95 Stat. 172, 241-247 (1981), and codified as § 44F of the Code. The credit was subsequently amended as part of the Tax Reform Act of 1984,

to provide an incentive for increased research activities in the private sector. According to the legislative history to the research credit as originally enacted in 1981, "Congress concluded that a substantial tax credit for incremental research and experimental expenditures was needed to overcome the reluctance of many ongoing companies to bear the significant costs of staffing and supplies, and certain equipment expenses such as computer charges, which must be incurred to initiate or expand research programs in a trade or business."[3] Congress cited statistics that demonstrated that annual research

PUB. L. NO. 98-369, §§ 471(c) and 474(i), 98 Stat. 494, 826 and 831-832 (1984) and recodified as section 30 of the Code. The credit was subsequently amended as part of the Tax Reform Act of 1986, PUB. L. NO. 99- 514, § 231, 100 Stat. 2085, 2173-2180 (1986) and recodified as section 41 of the Code. Because the research credit is part of the general business credit under section 38, consideration must be paid to the limitations applicable to the general business credit in addition to those contained in section 41. Importantly, because of the limitations applicable to the general business credit, the research tax credit cannot be used to offset any tax liability arising under the alternative minimum tax. For a discussion of the limitations applicable to the general business credit, *see generally* BORIS I. BITTKER & LAWRENCE LOKKEN, FEDERAL TAXATION OF INCOME, ESTATES AND GIFTS ¶ 27.1 (Warren, Gorham & Lamont, 3d ed. 1999).

For a discussion of section 41, see generally Phillip A. Stroffregen, *Giving Credit Where Credit Is Due: A Brief History of the Administration of the R&D Credit*, 66 TAX NOTES 403 (1995); Nina J. Crimm, *A Tax Proposal to Promote Pharmacologic Research, to Encourage Conventional Prescription Drug Innovation and Improvement, and To Reduce Product Liability Claims*, 29 WAKE FOREST L. REV. 1007 (1994); Janet S. Wong, Fairchild Industries, Inc.: *Was the Court Fair in Denying Research Credit?*, 64 TAX NOTES 1477 (1994); B. Anthony Billings & Gary A. McGill, *The Effect of Base Changes on the Incremental Research and Experimentation Tax Credit*, 54 TAX NOTES 1155 (1992); B. A. Billings & J. Schroeder, *Research and Experimentation as an Investment Alternative: The Effect of the Incremental Tax Credit*, 61 CPA J. 60 (1991); David L. Champi, *Tax Policy and National Security Strategy After Operation Desert Storm: The Role of the Research and Experimentation Credit in Enhancing Expenditures on Basic Research and Technology Development Made by the United States Defense Technology Base*, 45 TAX LAW. 195 (1991); David S. Hudson, *The Tax Concept of Research or Experimentation*, 45 TAX LAW. 85 (1991). See also Paul W. Oosterhuis, *International R&D and Technology Transfer Arrangements*, 73 TAXES 905 (1995).

3. Staff of the Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 120 (1981). *See also* Prop. Reg. § 1.41-1(a) (1998) (stating that the research credit "is intended to encourage business firms to perform the technological research necessary to increase innovative qualities and efficiency of the U.S. economy. The credit provides an incentive for business firms to increase their expenditures for research to obtain new knowledge through scientific process of experimentation."). For a discussion of the incentive effects created by the research tax credit, *see* B. Anthony Billings & Randolph Paschke, *Would H.R. 463 Improve the Competitiveness of U.S. R&D Tax*

and development activities between 1968 and 1979 had remained fairly stable at between $19 billion and $22.8 billion but had declined relative to gross national product, declining from 2.01 percent in 1968 to 1.58 percent in 1975.[4] Congress also noted that "civilian" research at 1.5 percent of GNP compared unfavorably to research in Japan and Germany at 1.9 percent and 2.3 percent of GNP, respectively.

Unfortunately, the research tax credit has been the subject of considerable controversy since its inception. Three major problems afflict the credit.[5] The first major problem is that the credit has never been a permanent fixture of the tax code. When Congress initially enacted the credit in 1981, it was scheduled to expire at the end of 1985.[6] Congress subsequently extended the

Incentives?, 99 TAX NOTES 1509 (2003); McGee Grigsby & John Westmoreland, *The Research Tax Credit: A Temporary and Incremental Dinosaur*, 93 TAX NOTES 1627 (2001); Gary Guenther, *Research Tax Credit: Policy Issues for the 107th Congress* (Congressional Research Service, 2001), available in LEXIS, 2001 TNT 222-10; Evan Wamsley, Note, *The Definition of Qualified Research Under the Section 41 Research and Development Tax Credit: Its Impact on the Credit's Effectiveness*, 87 VA. L. REV. 165 (2001); Martin A. Sullivan, *The Research Credit: A Perfect Example of an Imperfect Code*, 85 TAX NOTES 128 (1999); National Association of Manufacturers, *The R&D Tax Credit: Lasting Gains in Research and GDP*, (April 13, 1998), available in LEXIS, 98 TNT 167-22; Coopers & Lybrand Tax Policy Economics Group, *Economic Benefits of the R&D Tax Credit*, 78 TAX NOTES 1019 (1998); William A. Cox, *Research and Experimentation Tax Credits: Who Got How Much? Evaluating Possible Changes* (Congressional Research Service, 1996), available in LEXIS, 96 TNT 115-30; William A. Cox, *Tax Preferences for Research and Experimentation: Are Changes Needed?*, (Congressional Research Service, 1995); Harry Watson, *The 1990 R & D Tax Credit: A Uniform Tax on Inputs and a Subsidy for R & D*, 49 NAT'L TAX J. 93 (1993). *See also* Memorandum from Chuck Ludlam, Vice President for Governmental Relations, Biotechnology Industry Organization, to Gerii Gerardi, dated July 11, 2000, available in LEXIS, 2000 TNT 140-39 (urging Treasury Department support for non-tax credit incentives such as a zero capital gains tax rate for direct investments in the equities of entrepreneurial firms, because many research companies generate net operating losses for which a tax credit is irrelevant).

4. Staff of the Joint Comm.on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 119 (1981).

5. *See* McGee Grigsby & John Westmoreland, *The Research Tax Credit: A Temporary and Incremental Dinosaur*, 93 TAX NOTES 1627 (2001).

6. Economic Recovery Tax Act of 1981, PUB. L. NO. 97-34, § 221 (d)(1), 95 Stat. 172, 247 (1981). The asserted justification for the limited time frame was to provide Congress with an opportunity to evaluate the operation and efficacy of the credit.

   For example, the Congress will be able to evaluate whether the credit operates to stimulate additional research expenditures, or simply rewards increased research expenditures which would have been made in the absence of the credit; whether the categories of qualifying research expenditures should be

tax provisions allowing the credit, but never for more than five years, and most frequently for only one year at a time.[7] Businesses have complained that the uncertainty of whether the research tax credit will be available in future years has inhibited research planning. The research tax credit is currently set to expire on June 30, 2004.[8] Although efforts are underway to

broadened or narrowed; whether taxpayers and the Internal Revenue Service have been able accurately to distinguish qualifying research expenditures from nonqualifying research-related expenditures, such as indirect, overhead, or administrative wage expenditures, and from nonresearch expenditures, such as costs for market research, quality control, or production; whether the base period computation rules are appropriate; and whether the restrictions and limitations on the availability and use of the credit (e.g., the "carrying on" requirement) have been effective to accomplish the Congressional intent.

Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 121 (1981).

7. *See* Tax Reform Act of 1986, PUB. L. NO. 99-514, § 231(a)(1), 100 Stat. 2085, 2173 (1986) (extending the research tax credit for amounts paid or incurred between January 1, 1986 and December 31, 1988); Technical and Miscellaneous Revenue Act of 1988, PUB. L. NO. 100-647, § 4007(a), 102 Stat. 3342, 3652 (1988) (extending the research tax credit for amounts paid or incurred between January 1, 1989 and December 31, 1989); Omnibus Budget Reconciliation Act of 1989, PUB. L. NO. 101-239, § 7110(a)(1), 103 Stat. 2106, 2322-2323 (1989) (extending the research tax credit for amounts paid or incurred between January 1, 1990 and December 31, 1990); Omnibus Budget Reconciliation Act of 1990, PUB. L. NO. 101-508, § 11402 (a)(1), 104 Stat. 1388, 1388-473 (1990) (extending the research tax credit for amounts paid or incurred between January 1, 1991 and December 31, 1991); Tax Extension Act of 1991, PUB. L. NO. 102-227, § 102(a), 105 Stat. 1686 (1991) (extending the research tax credit for amounts paid or incurred between January 1, 1992 and June 30, 1992); Omnibus Budget Reconciliation Act of 1993, PUB. L. NO. 103-66, § 13111(a)(1) , 107 Stat. 312, 420 (1993) (extending the research tax credit for amounts paid or incurred between July 1, 1992 and June 30, 1995); Small Business Job Protection Act of 1996, PUB. L. NO. 104-188, § 1204(a), 110 Stat. 1755, 1773 (1996) (extending the research tax credit for amounts paid or incurred between July 1, 1996 and May 31, 1997); Taxpayer Relief Act of 1997, PUB. L. NO. 105-34, § 601(a)(1), 111 Stat. 788, 861 (1997) (extending the research tax credit for amounts paid or incurred between June 1, 1997 and June 30, 1998); Tax and Trade Relief Extension Act of 1998, PUB. L. NO. 105-277, § 1001, 112 Stat. 2681, *2681-888 (1998) (extending the research tax credit for amounts paid or incurred between July 1, 1998 and June 30, 1999); Tax Relief Extension Act of 1999, PUB. L. NO. 106-170, § 502(a), 113 Stat. 1918, 1919 (1999) (extending the research tax credit for amounts paid or incurred between July 1, 1999 and June 30, 2004). Because of a failure to extend the research tax credit, the credit does not apply to any research expenses incurred after June 30, 1995, and before July 1, 1996.

8. I.R.C. § 41(h).

make the credit permanent,[9] the revenue impacts of doing so will affect the political feasibility of any proposal.[10] In its fiscal year 2005 revenue proposals, the Treasury Department estimated that the permanent extension of the research tax credit would cost $30 billion dollars over fiscal years 2005 through 2009 and $78.3 billion over fiscal years 2005 through 2014.[11]

The second major problem concerns the definition of qualified research, the costs of which are used to determine the amount of the credit. As described below, the statutory language is vague and has required the interpretative intervention of the Internal Revenue Service through both regulatory and other administrative pronouncements and the courts. Despite the Congressional intent that the research credit encourage private-sector investment, the Service in issuing Proposed Regulations under section 41 in 1998 specifically noted in a statement of "basic principles" that the credit was to be applied neither too broadly nor too narrowly.

> [T]he credit is not to be applied too broadly or in a manner such that virtually any expense relating to the development of a product is eligible for the credit, even if some portion of the expense of developing the product does qualify for the credit. . . . On the other hand, the credit may be available even though the technological advance sought by the taxpayer is evolutionary, and, in certain

9. *See* United States Department of the Treasury, *Permanently Extend Research and Experimental (R&E) Tax Credit*, in General Explanations of the Administration's Fiscal Year 2005 Revenue Proposals, 165-166 (February, 2004). *See also* H.R. 463, 108th Cong., 1st Sess (2003); S. 41, 107th Cong. 1st Sess. (2001); S. 515, 107th Cong. 1st Sess. (2001); Letter from the Honorable Jeff Bingaman, United States Senate, to the Honorable Charles S. Grassley, Chairman, Senate Finance Committee, dated May 3, 2001, available in LEXIS, 2001 TNT 91-59 (endorsing efforts to make permanent the research tax credit); Letter from the R&D Credit Coalition to the Honorable Bill Thomas, Chairman, Committee on Ways & Means, et al., dated April 27, 2001, available in LEXIS, 2001 TNT 88-85 (same); Letters from Stephen Director, Chair, American Society of Engineering Education's Deans Council, to the Honorable Pete Domenici, United States Senate, the Honorable Jeff Bingaman, United States Senate, and the Honorable Heather A. Wilson, United States House of Representatives, dated March 12, 2001, available in LEXIS, 2001 TNT 49-22 (same).

10. *See* Martin A. Sullivan, *Research Credit Hits New Heights, No End in Sight*, 94 TAX NOTES 801, 802 (2002) (noting the growth of the research credit from $1.55 billion in 1990 to $5.21 billion in 1998 and noting that statutory and administrative changes since 1998 should accelerate that growth in future years); Sheryl Stratton & Robert Goulder, *Research Credit Costs Rise While Government Tries to Administer It*, 90 TAX NOTES 1139, 1140 (2001) (reporting on a preliminary Joint Committee on Taxation analysis that permanent extension of the research credit would cost about $47 billion through 2011; earlier estimates indicated that a permanent extension would cost only $23.8 billion over ten years).

11. United States Department of the Treasury, *supra* note 10, at 166.

> circumstances, even if another taxpayer previously achieved the same advance. Moreover, the credit is available regardless of whether the taxpayer succeeds or fails in achieving the desired advance.[12]

As indicated in statements contained in legislative history over the years, Congress itself has expressed a desire that the credit not apply too broadly yet has also indicated an intention that it not be applied so narrowly that only major advances in science and technology are eligible. The difficulty lies in finding, and expressing in administrable terms, the proper balance in this regard.

After over twenty years of controversy, a consensus is emerging over an acceptable definition of qualified research. The difficulty in reaching this consensus is illustrated by the somewhat circuitous and delayed process that has only recently culminated in the promulgation of final Regulations defining qualified research. The Service originally released Proposed Regulations (the "original Proposed Regulations") in December of 1998.[13] After extensive criticism, the Service promulgated final Regulations (the "original final

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12. Prop. Reg. § 1.41-1(a) (1998). This latter portion of the original Proposed Regulations was consistent with a statement contained in the legislative history to the Tax and Trade Relief Extension Act of 1998, PUB. L. NO. 105- 277, § 1001, 112 Stat. 2681, *2681-888 (1998), in which Congress retroactively extended the research credit for the period from July 1, 1998, through June 30, 1999. According to the legislative history,

> In extending the credit, the conferees wish to reaffirm the scope of the term "qualified research." . . . However, eligibility for the credit does not require that the research be successful–i.e., the research need not achieve its desired result. Moreover, evolutionary research activities intended to improve functionality, performance, reliability, or quality are eligible for the credit, as are research activities intended to achieve a result that has already been achieved by other persons but is not yet within the common knowledge (e.g., freely available to the general public) of the field (provided that the research otherwise meets the requirements of section 41, including not being excluded by subsection (d)(4)).

H.R. CONF. REP. NO. 825, 105th Cong., 2d Sess. 1548 (1998). *See also* Staff of the Joint Comm. on Tax'n, General Explanation of Tax Legislation Enacted in 1998, 238 (1998). When issuing the original final Regulations in 2001, however, the Service deleted the statement of basic principles as a result of comments that the statement could be interpreted as "impos[ing] additional and unwarranted conditions for credit eligibility." T.D. 8930, 66 Fed. Reg. 280, 281 (2001). The Service also concluded that, because the basic principles were adequately reflected in the provisions of the Regulations, the statement was unnecessary.

13. Notice of Proposed Rulemaking, 63 Fed. Reg. 66,503 (1998).

Regulations") in early January of 2001.[14] However, with a change of administrations later that month, the Service postponed the effective date of the final Regulations, announced that it would undertake a comprehensive review of all previously submitted comments concerning the original Proposed Regulations, and requested additional comments concerning the original final Regulations.[15] On December 17, 2001, the Service released revised Regulations in the form of Proposed Regulations (the "revised Proposed Regulations").[16] Most recently, the Service promulgated final Regulations (the "final Regulations") on December 22, 2003 that apply to taxable years ending on or after December 31, 2003.[17] Further reflecting the controversy surrounding the research tax credit, the Service decided not to finalize those provisions of the revised Proposed Regulations applicable to internal-use computer software, and the Service has requested further comments concerning the appropriate definition and treatment of such software.[18]

The third major problem afflicting the research tax credit concerns the calculation of the credit itself. Congress intended that the credit provide an incentive for increased private-sector investment on research activities. In order to effectuate this objective, Congress designed an incremental credit

14. T.D. 8930, 66 Fed. Reg. 280 (2001). The original final Regulations provided that they were to be effective for expenditures paid or incurred on or after January 3, 2001. Reg. § 1.41-4(e) (2001).

15. Notice 2001-19, 2001-1 C.B. 784. As part of its announcement, the Service noted that, on the completion of this review, any changes to the original final Regulations would be issued as Proposed Regulations. As a result of the decision to review the original final Regulations, the Service provided that the final Regulations, including any changes, would be effective no earlier than the date when the completion of the review was announced, except that the provisions related to internal-use computer software (including any revisions) generally would be applicable for taxable years beginning after December 31, 1985. Despite the pendency of the review, the Service assured taxpayers that they could continue to rely on the original final Regulations during this period. *See* Statement of Secretary Paul H. O'Neill on Review of New R&E Regulations (dated January 31, 2001), available in LEXIS, 2001 TNT 22-19. *See also* Sheryl Stratton & Robert Goulder, *Research Credit Costs Rise While Government Tries to Administer It*, 90 Tax Notes 1139 (2001); Sheryl Stratton, *Treasury Puts Breaks on Research Credit Regs; Practitioners Applaud*, 90 Tax Notes 713 (2001); *Final Rules on Research Credit Delayed Pending Review of Further Comments*, 69 US Law Week 2480 (2001).

16. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362 (2001). *See* David L. Lupi-Sher & Sheryl Stratton, *Practitioners Welcome New Proposed Research Credit Regulations*, 93 TAX NOTES 1662 (2001). The revised Proposed Regulations were intended to apply to taxable years ending on or after December 26, 2001. Prop. Reg. § 1.41-4(e) (2001).

17. Reg. § 1.41-4(e); T.D. 9104, 69 Fed. Reg. 25-26 (2004).

18. Advance Notice of Proposed Rulemaking, 69 Fed. Reg. 43 (2004). For a discussion of internal-use software, *see infra* text accompany notes 260-347.

that allows a credit for research expenditures in excess of a base amount. Although this base amount was originally determined as the average of the taxpayer's research expenditures over the three year period immediately prior to the current taxable year, the base amount is currently determined by multiplying the "fixed-base percentage" by the average annual gross receipts of the taxpayer for the four taxable years preceding the taxable year for which the credit is being determined.[19] The "fixed-base percentage" is the percentage that the taxpayer's aggregate qualified research expenses, for the taxable years between December 31, 1983 and January 1, 1989, is of the taxpayer's aggregate gross receipts for that same period.[20] The Congressional intent in designing the credit in this manner was to create an incentive for increased research expenditures with the smallest possible effect on government revenues and, at the same time, tailor the credit to the specific circumstances of each taxpayer. As described below, however, the calculation of the research tax credit is not without its problems that may undermine the incentive effects that Congress is attempting to create.

The following pages describe the research tax credit in some detail. Part II describes the statutory requirements that constitute the definition of qualified research. This discussion outlines the significant difficulty that the Treasury Department and the Service have encountered in providing content to such statutory terms as "discovering information," "technological in nature," and "process of experimentation" under a number of versions of Proposed and final Regulations. Part III provides a discussion of the judicial and administrative efforts to provide content to the statutory framework in the absence of regulatory guidance. Although these judicial decisions are not controlling now that final Regulations defining qualified research expenditures for purposes of section 41 have been promulgated, they do provide an alternative interpretation of the statutory language that illuminates the substantive content of the Regulations themselves. Part IV considers the problems arising from the application of the "high threshold of innovation" requirement applicable to internal-use computer software. Because final Regulations concerning internal-use computer software have yet to be promulgated, judicial decisions provide the principal source of guidance in this area. Together, Parts II, III, and IV serve to illustrate the complex interrelationship of Congress, the Treasury Department and the Service, and the courts in the regulatory process.

Finally, Part V describes the calculation of the research tax credit, including the incremental research tax credit, the alternative incremental research tax credit, and the basic research tax credit. The changes that Congress has introduced in this regard illustrate the challenges that exist in designing a tax provision that provides taxpayers with an economic incentive to increase research and development expenditures over time. Unfortunately,

19. I.R.C. § 41(c)(1).

20. I.R.C. § 41(c)(3)(A).

the precise formulation of such a credit remains elusive as the effectiveness of the two methods that Congress has enacted to calculate the incremental research tax credit since its introduction in 1981 have been the subject of significant debate. Currently, taxpayers can elect between two methods of calculating the research tax credit, the incremental research tax credit and the alternative incremental research tax credit. Because of the different economic and technological circumstances confronting taxpayers in various industries, the provision of alternative methods of obtaining tax benefits may be the only feasible means of realizing the policy objectives underlying the research tax credit.[21]

II. The Incremental Research Credit

The incremental research credit is equal to 20 percent of the qualified research expenses for the tax year in excess of a base amount.[22] The definition of qualified research expenses under section 41(b) is more narrow than the definition of research or experimental expenditures under section 174(a). This is reflected in the three-part definition of qualified research under section 41(d) as research

1. The expenditures for which may be treated as expenses under section 174;

2. That is undertaken for the purpose of discovering information that is technological in nature, the application of which is intended to be useful in the development of a new or improved business component of the taxpayer; and

3. In which substantially all of the activities constitute elements of a process of experimentation related to the development of a new or improved function, performance, reliability or quality of a business component.[23]

The distinction between research or experimental expenditures under section 174 and qualified research under section 41 is important. As originally enacted in 1981, the research tax credit defined qualified research as research that satisfied the requirements of section 174 with certain limited

21. Recent legislation has proposed that a second elective method, the alternative simplified credit, be made available under which taxpayers could determine the amount of the research tax credit. H.R. 463, 108th Cong., 1st Sess. (2003); H.R. 5658, 107th Cong., 2d Sess. (2002). *See* McGee Grigsby & John Westmoreland, *H.R. 463 Would Move Research Credit Even Closer to Bull's-Eye*, 98 Tax Notes 1608 (2003); B. Anthony Billings & Randolph Paschke, *Would H.R. 463 Improve the Competitiveness of U.S. R&D Tax Incentives?*, 99 Tax Notes 1509 (2003); Anthony Billings, *H.R. 463–The Right Approach and Just in Time*, 98 Tax Notes 1283 (2003).

22. I.R.C. § 41(a)(1).

23. I.R.C. § 41(d)(1), (3); Reg. § 1.41-4(a)(2), (5)(ii).

exceptions.[24] The amendments to the research credit under the Tax Reform Act of 1986 were intended to limit the scope of activities eligible for the research credit. According to the legislative history,

> [t]he committee believes that the definition has been applied too broadly in practice, and some taxpayers have claimed the credit for virtually any expenses relating to product development. According to early data on the credit, the Treasury has reported, many of these taxpayers are industries that do not involve high technology or its application in developing technologically new and improved products or methods of production.[25]

Consequently, the second and third parts of the three-part definition limit the range of activities that constitute qualified research as compared to those activities that constitute research or experimental activities for purposes of section 174.

A. Research and Experimental Expenditures under Section 174

Under section 174, a taxpayer may elect to deduct currently all research and experimental expenditures made in connection with the taxpayer's trade or business[26] or to amortize the expenditures over a period of not less than 60 months.[27] For purposes of section 174, research and experimental expenses

24. Economic Recovery Tax Act, PUB. L. NO. 97-34, § 221, 95 Stat. 172, 241-247 (1981).

25. H.R. REP. NO. 426, 99th Cong., 1st Sess. 178 (1985). *See also* S. REP. NO. 313, 99th Cong., 2d Sess. 694-695 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 130-131 (1987).

26. I.R.C. § 174(a); Reg. § 1.174-1. *See also* Reg. § 1.174-3. In Rev. Rul. 58-78, 1958-1 C.B. 148, the Service concluded that a taxpayer may deduct research or experimental expenditures under section 174 regardless of the method used to record such expenditures on its books and financial records. For purposes of calculating the alternative minimum taxable income of an individual, the amount allowable as a deduction under section 174(a) in determining the taxpayer's regular tax must be capitalized and amortized ratably over a ten-year period beginning with the taxable year in which the expenditures were made unless the taxpayer materially participates in the activity within the meaning of section 469(h). I.R.C. §§ 56(b)(2)(A)(ii) and 56(b)(2)(D). *See* Priv. Ltr. Rul. 9746002 (a Technical Advice Memorandum). However, a taxpayer may also elect to capitalize research or experimental expenditures and amortize all such costs over a ten-year period. I.R.C. § 59(e)(1). If a taxpayer makes such an election, the expenditures are not treated as adjustments applicable in determining alternative minimum taxable income. I.R.C. § 56(e)(6). In Private Letter Ruling 200117006, the Service concluded that, for purposes of determining gain or loss at the time of sale, the basis of property sold includes any unamortized expenditures deferred under section 59(e).

27. I.R.C. § 174(b); Reg. § 1.174-1. *See also* Reg. § 1.174-4. Importantly, section 174 is available to taxpayers who are not yet engaged in a trade or business. In

are limited to those expenditures incurred in connection with the taxpayer's trade or business that "represent research and development costs in the experimental or laboratory sense."[28] The Regulations expand on this definition

this way, the "in connection with" standard of section 174 is distinguishable from, and less stringent than, the "carrying on" standard of section 162. In Snow v. Comm'r, 416 U.S. 500 (1974), the Supreme Court held that section 174 does not require that the taxpayer actually be carrying on a trade or business in order to deduct otherwise qualified research and experimental expenditures. The Supreme Court based its decision on the different statutory language under sections 162 and 174 and on statements contained in the legislative history that section 174 was intended to equalize the tax treatment of "small and growing business" with their "large and well-established competitors." Id. at 503–504. As a result, a start-up business may deduct research and experimental expenditures under section 174. Nevertheless, the deductibility of such expenditures is not permitted under section 174 if the taxpayer does not have some realistic prospect of entering into a trade or business involving the technology under development or, in fact, never eventually enters into the active conduct of a trade or business. *See, e.g.*, Scoggins v. Comm'r, 46 F.3d 950 (9th Cir. 1995); Green v. Comm'r, 83 T.C. 667 (1984).

For a discussion of section 174, *see generally* David E. Hardesty & Teresa S. Hubbard, *Capitalizing, Deferring, or Deducting the Costs of New Business Intangibles*, 96 J. TAX'N 346 (2002); Bradley M. Seltzer, David A. Golden & Mary E. Monahan, *Maximizing Opportunities Under the New Research and Experimentation Regulations*, 47 TAX EXEC. 102 (1995); Joseph Bankman, *The Structure of Silicon Valley Start-Ups*, 41 UCLA L. REV. 1737 (1994); Fernando Murias, *New R&E Prop. Regs. Are More Rational Than Prior Rules, but Key Terms Need Clarification*, 80 J. TAX'N 44 (1994); Samuel P. Starr & Dina Stern Shapiro, *Current Tax Issues in Research and Experimentation*, 52 INST. ON FED. TAX'N 5 (1994); Wolosky, *IRS Eases Position on R&D*, 26 PRAC. ACCT. 43 (1993); David S. Hudson, *The Tax Concept of Research or Experimentation*, 45 TAX LAW. 85 (1991) ; Jon E. Bischel, *Deduction and Allocation of Research and Development Expenditures: The Final Chapter or Just Another Installment?* 16 INT'L TAX J. 225 (1990); Gerald Foreman, *Research and Experimental Expenditures Sec. 174 and Credit for Increasing Research Activities Sec. 41*, 60 CPA J. 69 (1990).

28. Reg. § 1.174-2(a)(1). *See* Kollsman Instrument Corp. v. Comm'r, T.C. Memo. 1986-66, 51 T.C.M. 463 , *aff'd on other grounds*, 870 F.2d 89 (2d Cir. 1989) (costs not deductible as research and experimental expenses because the contracts involved did not require the taxpayer to invent, develop the concept of, or design any product); Agro Science Co. v. Comm'r, T.C. Memo. 1989-687, 58 T.C.M 1093, *aff'd but opinion withdrawn*, 927 F.2d 213 (5th Cir. 1991) ("Scientific research and development costs for purposes of section 174 includes an attempt to discover or develop a product, or to develop a new technique or procedure. The goal of the research must be scientifically reasonable, but research is more than repeating what has already been done. It requires some element of experimentation."); Mayrath v. Comm'r, 41 T.C. 582 (1964), *aff'd on other grounds*, 357 F.2d 209 (5th Cir. 1966) (holding that the regulatory definition of research or experimental expenditures was reasonable and consis-

through the adoption of an "uncertainty test," conditioned on the quality of the information available to the taxpayer at the time that the expenditures are undertaken. The Regulations provide that

> [e]xpenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the product or the appropriate design of the product. Whether expenditures qualify as research or experimental expenditures depends on the nature of the activity to which the expenditures relate, not the nature of the product or improvement being developed or the level of technological advancement the product or improvement represents.[29]

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tent with Congress' intent to limit deductions to those expenditures of an investigative nature expended in developing the concept of a product).

In order to qualify as a deduction under section 174, the amount of any expenditure must be reasonable under the circumstances. I.R.C. § 174(e); Reg. § 1.174-2(a)(6). An expenditure will be deemed reasonable "if the amount would ordinarily be paid for like activities by like enterprises under like circumstances." Reg. § 1.174-2(a)(6). The reasonableness requirement was enacted following the decision in Driggs v. United States, 706 F. Supp. 20 (N.D. Tex. 1989), in which the district court concluded that no reasonableness limitation applied to the deduction of costs that otherwise fell within the definition of "research or experimental expenditures."

29. Reg. § 1.174-2(a)(1). The final Regulations under section 174 incorporated several changes to the Regulations as proposed in 1993. When proposed, the uncertainty test was formulated as follows: "Uncertainty exists if the information reasonably available to the taxpayer does not establish the capability or method for developing or improving the product." Prop. Reg. 1.174-2(a)(1) (1993). *See* Notice of Proposed Rulemaking, 58 Fed. Reg. 15,819 (1993). The final Regulations deleted the word "reasonably" in order to avoid any ambiguity that the uncertainty test is to be applied with reference to information actually available to the taxpayer. Under the Proposed Regulations, "[i]nformation could be considered to be *reasonably available* to a taxpayer if the taxpayer can obtain the information through procedures that, while not particularly involved, are nonetheless in the nature of research activities." T.D. 8562, 1994-2 C.B. 30, 31. The final Regulations also added the words "or the appropriate design of the product" in order to clarify that "a taxpayer's knowledge that a product development project will be successful does not preclude the process of determining the appropriate design of the product from qualifying as research." *See* Field Service Advice 200013013 (dated December 21, 1999), available in LEXIS, 2000 TNT 64-41 (describing product development process and concluding that expenditures incurred during the feasibility/design review process qualified as section 174 expenses).

The Service has indicated that the uncertainty test applies in the design and development of a product only in connection with technological or scientific uncertainty and not in connection with business or marketing uncertainty.

> [T]he term "uncertainty" must be limited to technological or scientific uncertainty in that a taxpayer must be uncertain as to whether it will be able to develop or improve its product in the scientific or laboratory sense. Put differently, the taxpayer must be uncertain as to whether it will be able to achieve its product development objective through its research activities. Conversely, uncertainty attributable to business or market concerns is not determinative of the existence of research and experimentation for purposes of section 174.[30]

In other words, the uncertainty confronting the taxpayer must arise from doubt concerning the technical feasibility of the product, or the manufacturing process to produce the product, and not from doubt concerning the marketability of the product.[31] For purposes of the uncertainty test, the term "product" includes "any pilot model, process, formula, invention, technique, patent, or similar property, and includes products to be used by the taxpayer in its trade or business as well as products to be held for sale, lease, or license."[32]

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30. Field Service Advice 200125019 (dated March 16, 2001), available in LEXIS, 2001 TNT 122-23 (considering the treatment of expenditures incurred in the design, development, modification, and improvement of athletic footwear).

31. The Service has noted, however, that the application of the uncertainty test does not distinguish between functional and nonfunctional aspects of the product. As originally proposed in 1993, the Regulations under section 174 excluded costs incurred in connection with activities not directed at the functional aspects of a product, including expenses relating to style, taste, cosmetic, or seasonal design factors. The final Regulations did not retain this exclusion. Consequently, costs incurred in the design and development of nonfunctional aspects of a product may qualify as research and experimental expenditures if they fall within the general definition of the term and are not covered by one of the existing exclusions. Field Service Advice 200125019 (dated March 16, 2001), available in LEXIS, 2001 TNT 122-23.

32. Reg. § 1.174-2(a)(2). In Priv. Ltr. Rul. 9538008 (a Technical Advice Memorandum), the Service determined that the expenditures incurred by the taxpayer in the redesign of various home and commercial appliances manufactured and sold by the taxpayer constituted research and experimental expenditures under section 174. According to the taxpayer, the redesign effort was undertaken in order to (1) produce a better, more competitive product, (2) increase reliability, (3) increase general product safety, and (4) respond to new federal restrictions. Following design completion, several of the projects resulted in applications for, and the granting of, patents. The Ruling noted that the taxpayer engaged in the engineering design activities "to determine the capability or method for developing or improving the product, as well as the appropriate design of the

While considerable uncertainty exists with respect to the precise contours of the definition of research and experimental expenditures, the Regulations are clear that the costs of obtaining a patent, including such expenditures as attorneys' fees expended to make and perfect a patent application, are included within the definition.[33] Because the costs of perfecting a patent are "inextricably a part of the research and development work," such costs reasonably fall within the definition of expenditures for research and experimentation.[34] Unfortunately, specific authority under section 174 with respect to development costs for other types of intellectual property is limited. Nevertheless, it is unlikely that a deduction under section 174 would be permitted for the costs incurred in the development of many intangible assets including copyrights, trademarks, or trade names. Section 174, then, has only limited applicability with regard to the majority of types of intangible assets.

The application of section 174 to the development of property protected by copyright law requires additional consideration, however. As previously described, research or experimental expenditures must "represent research

product." But see Field Service Advice 1999-1023 (dated October 22, 1993), available in LEXIS, 1999 TNT 81-49 (concluding that, because a manufacturer may only treat expenditures related to the development of a concept for a product as research or experimental expenditures, expenditures to develop generic drug products generally will not qualify under section 174).

33. Reg. § 1.174-2(a)(1). Despite the inclusion of the costs of obtaining a patent as research or experimental expenditures for purposes of section 174, the legal fees and other costs associated with preparing a copyright registration do not appear to be deductible under the Regulations to section 174. Although the treatment of these costs could be analogized to the treatment of the legal and other costs associated with preparing and prosecuting a patent application, the history of the Regulations under section 174 undercuts any such argument. As originally proposed, the Regulations under section 174 specifically excluded the costs of obtaining a patent or a copyright from the definition of "research or experimental expenditures." *See* Notice of Proposed Rulemaking, 21 Fed. Reg. 4344 (1956). As a result of significant criticism from the patent community, the definition of "research and experimental expenditures" was expanded to include the costs of making and perfecting a patent application. However, the reference to a copyright was deleted for the following reason:

> The reference to a "copyright" has been deleted for the reason that it suggests that the expenditures with respect to creating a product susceptible to a copyright would generally be within the definition. On the contrary, such costs would not be considered research or experimental costs in the experimental or laboratory sense.

Tech. Mem. R-356-12 (accompanying T.D. 6255, 1957-2 C.B. 180). However, this statement does not take into account the fact that copyright is an important means of protecting computer software, the development costs of which may be deductible under section 174.

34. G.C.M. 39527.

and development costs in the experimental or laboratory sense."[35] Because such expenditures are limited to the reasonable costs incident to the development or improvement of a product including any pilot model, process, formula, invention, technique, or similar property,[36] this definition by itself might exclude from section 174 any research and development costs typically incurred in creating a work subject to copyright protection. In addition, the Regulations explicitly state that expenditures incurred for "[r]esearch in connection with literary, historical, or similar projects" do not fall within the definition of research or experimental expenditures.[37] In Revenue Ruling 73-395,[38] the Service adopted this position and concluded that section 174 did not apply to permit the current deduction of the costs of writing and editing, as well as design and art work, for textbooks and visual teaching aids.[39]

Importantly, certain expenditures incurred in connection with the development of computer software are not subject to the exclusion for literary, historical, and similar projects despite the fact that, like these projects, computer software is frequently protected under the copyright laws.[40] Unfortunately, a precise definition of the types of software development costs that may constitute research or experimental expenditures for purposes of section 174 is not available.[41] Nevertheless, software development costs could fall

35. Reg. § 1.174-2(a)(1).

36. *See* Reg. § 1.174-2(a)(1)-(2).

37. Reg. § 1.174-2(a)(3)(vii). *See also* Rev. Rul. 71-363, 1971-2 C.B. 156 (denying deduction under section 174 for costs incurred in developing new advertising concepts); Hakim v. Comm'r, T.C. Memo. 1974-46, 33 T.C.M. 223, *aff'd*, 512 F.2d 1379 (6th Cir. 1975) (same with respect to campaign expenses).

38. 1973-2 C.B. 87.

39. *See also* Holmes F. Crouch, T.C. Memo. 1990-309, 59 T.C.M. 938; Anthony Quinn, T.C. Memo. 1974-64, 33 T.C.M. 310; Priv. Ltr. Rul. 7004169560A (a Technical Advice Memorandum); G.C.M. 39527.

40. In Yellow Freight Systems, Inc. of Delaware v. United States, 92-1 U.S.T.C. ¶ 50,029 (Cl. Ct. 1991), the Service admitted that there is no bright-line rule for determining whether software development costs fall within the definition of "research or experimental expenditures." Relying on the dictionary meaning of the words "research" and "experimental," the court found that the plain meaning of the statute should apply over a scientific definition of "research" formulated by an expert witness. The court concluded that a factual inquiry was necessary in connection with each software development project in order to determine if the costs qualified as research or experimental expenditures. Yellow Freight Sys., Inc. of Del. v. United States.

41. In 1989, the Treasury Department issued Proposed Regulations under section 174 specifically providing that software development costs were eligible for treatment as research or experimental costs. Notice of Proposed Rulemaking, 54 Fed. Reg. 21,224 (1989). The Proposed Regulations described the types of software development costs that would qualify as research or experimental expenditures and provided a number of examples attempting to illustrate when

within the definition of research or experimental expenditures in at least two instances.[42] First, costs incurred in an attempt to develop or improve a computer program using programming techniques, the capability of which were uncertain in the context employed, should constitute research or experimental expenditures. Second, costs incurred in designing a new computer program, even if the programming techniques to be used to create the software are known to perform successfully, should also constitute research or experimental expenditures.[43]

The importance of section 174 for the treatment of software development costs is somewhat undermined by the administrative approval of the

software development costs would qualify as research and experimental expenditures. In 1993, the Service withdrew the 1989 Proposed Regulations when issuing new Proposed Regulations. Notice of Proposed Rulemaking, 58 Fed. Reg. 15,819 (1993). The explicit regulatory inclusion of certain types of software development costs as research or experimental expenditures under the 1989 Proposed Regulations and accompanying examples were also withdrawn as part of 1993 proposed amendments. With respect to the proper treatment of computer software under the 1993 Proposed Regulations, the Service simply noted that the new Proposed Regulations did not subject computer software development costs to any additional conditions other than those generally applicable under the regulatory definition of research or experimental expenditures. Id. at 15,820. *See also* Notice 87-12, 1987-1 C.B. 432 (stating that, under section 174, software development costs qualify as research expenses under the same standards as apply to the costs of developing other products or processes).

42. Based on language contained in the report of the Joint Committee on Taxation issued after the original enactment of the research credit as part of the Economic Recovery Tax Act of 1981, PUB. L. NO. 97-34, 95 Stat. 172 (1981), one commentator has suggested that Congress implicitly codified Revenue Procedure 69-21, 1969-2 C.B. 303, as defining the scope of software development costs eligible for treatment as research or experimentation expenditures under section 174. Knowles & Parker, *Is the Deductibility of Costs of Developing Internal-Use Software Still an Issue?*, 83 J. TAX'N 82 (1995). This conclusion appears questionable, however, given the breadth of the definition of "computer software" under Revenue Procedure 69-21 and the application of Revenue Procedure 69-21 to "all of the costs properly attributable to the development of software by the taxpayer." In a decision considering the treatment of software development costs under the research credit of then section 44F, the Court of Claims rejected a similar argument and concluded that section 174 applied only with respect to software that was "either new or a significant improvement from that which existed previously." Yellow Freight Sys., Inc. v. United States, 24 Cl. Ct. 804 (1991) .

43. *See* Market Segment Specialization Program, *Computers, Electronics, and High Tech Industry* (March 15, 1997), available in LEXIS, 98 TNT 199-12 (describing the responsibilities of a software development engineer and a software test engineer whose salaries would constitute research or experimental expenditures under section 174).

current deduction of software development costs under Revenue Procedure 2000-50.[44] Revenue Procedure 2000-50 provides that the Service will not disturb a taxpayer's treatment of software development costs if the costs are (1) consistently treated as current expenses and deducted in full in accordance with rules similar to those applicable under section 174(a) or (2) consistently treated as capital expenditures and ratably recovered through amortization deductions in a manner similar to that required by section 174(b) over a period of 60 months from the date the development of the software was completed or over 36 months from the date the software is placed in service. In an earlier Revenue Procedure, the Service had concluded that software development costs, regardless of whether the software is patented or copyrighted, so closely resemble research and experimental expenditures under section 174 that similar treatment is warranted.[45]

Importantly, Revenue Procedure 2000-50 applies rules analogous to those under section 174 but does not require that the software development costs satisfy the uncertainty test of section 174. This raises the question whether the costs incurred in connection with software development activities that are deductible under Revenue Procedure 2000-50 automatically satisfy the requirement under section 41 that such costs be treated as expenses under section 174 or whether such costs must be independently evaluated as satisfying the uncertainty test under section 174. The Service has taken the position that software development costs must be independently evaluated under section 174 and that deductibility under the Revenue Procedure is not equivalent to deductibility under section 174.[46] In *Norwest Corp.,*[47] the Tax

44. 2000-2 C.B. 601, superceding Rev. Proc. 69-21, 1969-2 C.B. 303.

45. Rev. Proc. 69-21, 1969-2 C.B. 303. In the past, the General Counsel's Office was critical of Revenue Procedure 69-21, concluding that software development costs are not analogous to research or experimental expenditures under section 174 because many development costs "are not experimental or investigative in a laboratory sense." G.C.M. 38618. See also G.C.M. 36053 and G.C.M. 34681. The General Counsel's Office maintained that, except for those costs incurred in connection with the development of prototype computer software or with respect to recurring costs of short-lived computer software, software development costs should be capitalized under section 263 and amortized over the life of the software under section 167 without reference or analogy to section 174. Nevertheless, in 1983, the General Counsel's Office acquiesced in the treatment of all software development costs in a manner analogous to research or experimental expenditures under section 174 stating that, "from the standpoint of administrative policy," Revenue Procedure 69-21 was justified "because of the peculiar nature of the software industry." G.C.M. 38996.

46. *See* Market Segment Specialization Program, *Computers, Electronics, and High Tech Industry* (March 15, 1997), available in LEXIS, 98 TNT 199-12 (stating that a deduction for software development costs under Revenue Procedure 69-21 does not constitute a deduction under section 174); Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998), available in

Court acknowledged that the requirement under section 41 that "'the research expenditures may be treated as expenses under section 174' is meant to require the taxpayer to satisfy all the elements for a deduction under section 174"[48] but concluded that the Service had conceded the section 174 issue in that case with respect to the software development costs that had been deducted in accordance with the Revenue Procedure.

Finally, the Regulations under section 174 are clear that certain costs incurred in the development of a product do not qualify as research or experimental expenditures. For example, costs incurred for ordinary testing or inspection of materials for purposes of quality control, in addition to costs incurred for efficiency surveys, management studies, consumer surveys, advertising, or promotions, do not qualify as research or experimental expenditures.[49] The Regulations also specify that research or experimental expenditures do not include the acquisition costs of another's "patent, model, production or process."[50]

The costs of materials or labor used in the construction, installation, acquisition, or improvement of property are also excluded from the definition of "research or experimental expenditures."[51] In addition, section 174 does

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LEXIS, 1999 TNT 81-23 (same). In Private Letter Ruling 8614004 (a Technical Advice Memorandum), the Service determined that, although certain costs were currently deductible under Revenue Procedure 69-21 as having been incurred in the development of computer software, the taxpayer had to establish that "the software system is new or significantly improved software whose operational feasibility is seriously in doubt" to take advantage of the research tax credit. *See also* Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 132-137 (1987).

47. Norwest Corp. v. Comm'r, 110 T.C. 454 (1998).

48. *Id.* at 491.

49. Reg. § 1.174-2(a)(3). Quality control testing involves "testing or inspection to determine whether particular units of materials or products conform to specified parameters" but does not include testing to determine if the design of a product is appropriate. Reg. § 1.174-2(a)(4). *See* Utah Jojoba I Research, T.C. Memo. 1998-6, 75 T.C.M. 1524 (concluding that attempts to farm jojoba commercially do not represent research and development in the experimental or laboratory sense; activities performed on the taxpayer's plantation properly characterized as field testing or field trials); Cactus Wren Jojoba, Ltd., T.C. Memo. 1997-504, 74 T.C.M. 1133 (concluding that the taxpayers activities to develop commercial plantations for the farming of jojoba were "at most, field trials" and "no more than what any farmer would do in the ordinary course of preparing to grow a crop for commercial harvesting").

50. Reg. § 1.174-2(a)(3)(vi).

51. Reg. § 1.174-2(b)(4). The Regulations provide the following example:

> [A] taxpayer undertakes to develop a new machine for use in his business. He expends $30,000 on the project of which $10,000 represents the actual costs of material, labor, etc., to construct the machine, and $20,000 repre-

not apply to expenditures for the acquisition or improvement of land or depreciable property.[52] However, allowances for depreciation may be considered research or experimentation expenditures under section 174 to the extent that the property is used in connection with research or experimentation.

B. Discovering Information that is Technological in Nature

The second part of the three-part definition of qualified research requires that the research be designed to discover information that is technological in nature. The legislative history provides that qualified research is "technological in nature" only if the research is within the physical or biological sciences, engineering, or computer science:

> The determination of whether new or improved characteristics of a business item are technological in nature depends on whether the

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> sents research costs which are not attributable to the machine itself. Under section 174(a) the taxpayer would be permitted to deduct the $20,000 as expenses not chargeable to capital account, but the $10,000 must be charged to the asset account (the machine).

Id. *See* Rev. Rul. 73-275, 1973-1 C.B. 134 (concluding that costs attributable to the development and design of an automated manufacturing system, as distinguished from costs attributable to the production of the manufacturing system itself, are deductible under section 174).

52. Reg. § 1.174-2(b)(1). *See* Ekman v. Comm'r, T.C. Memo. 1997-318, 74 T.C.M. 72, *aff'd*, 99-1 U.S.T.C. ¶ 50,580 (6th Cir. 1999) (denying a deduction under section 174 for the acquisition cost of a Porsche 928 S4 engine, purchased with the intent to modify the engine to increase its horsepower, because the asset was depreciable); Patrick F. Sheehy, T.C. Memo. 1996-334, 72 T.C.M. 178 (denying deductions under section 174 for costs incurred to acquire thoroughbred racehorses, since racehorses are depreciable property under section 167); Field Service Advice 200125019 (dated March 16, 2001), available in LEXIS, 2001 TNT 122-23 (concluding that, if rough prototypes produced by the taxpayer's design department constitute depreciable property, the cost of the component materials and labor incurred to create these prototypes is not deductible under section 174). In Private Letter Ruling 199927001 (a Technical Advice Memorandum), the Service concluded that the exclusion under section 174 for expenditures attributable to the construction of depreciable property did not require that the property be depreciable in the hands of the taxpayer but only that the property be of a character subject to the allowance for depreciation. The Ruling involved a manufacturer of plastic injection molded products for customers in a variety of different industries. The manufacturer incurred expenses in the design and construction of injection mold dies. Although the dies were depreciable by the customers and not by the taxpayer/manufacturer, the Service denied the taxpayer's claimed deductions under Regulation section 1.174-2(b). For criticism of the Service's position in Private Letter Ruling 199927001, *see* Letter from David S. Hudson, Ernst & Young, to Pamela F. Olson, Acting Assistant Secretary (Tax Policy), dated July 18, 2002, available in LEXIS, 2002 TNT 158-19.

> process of experimentation to develop or improve such characteristics fundamentally relies on principles of the physical or biological sciences, engineering, or computer science–in which case the characteristics are deemed technological–or on other principles, such as those of economics–in which case the characteristics are not to be treated as technological. For example, new or improved characteristics of financial services or similar products (such as new types of variable annuities or legal forms) or advertising do not qualify as technological in nature.[53]

In discussing the requirement that research be undertaken for the purpose of discovering information that is technological in nature, a footnote in the legislative history also stated:

> Research does not rely on the principles of computer science merely because a computer is employed. Research may be treated as undertaken to discover information that is technological in nature, however, if the research is intended to expand or refine existing principles of computer science.[54]

As described below, this reference to research, "intended to expand or refine existing principles of computer science," led to considerable controversy whether the statute imposes a separate "discovery requirement" and, if so, the precise contours of the standard.

Fortunately, the final Regulations under section 41 expand on the language of the legislative history and provide definitions for the terms "discovering information" and "technological in nature." With respect to the requirement that research be undertaken for the purpose of discovering information, the final Regulations adopt the uncertainty test of section 174:

> Research is undertaken for the purpose of discovering information if it is intended to eliminate uncertainty concerning the development or improvement of a business component. Uncertainty exists if the information available to the taxpayer does not establish the capability or method for developing or improving the business component, or the appropriate design of the business component.[55]

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53. H.R. REP. NO. 426, 99th Cong., 1st Sess. 180 (1985). *See also* S. REP. NO. 313, 99th Cong., 2d Sess. 696 (1986); H.R. REP. NO. 841 (Part II), 99th Cong., 2d Sess. 71 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 133 (1987).

54. H.R. REP. NO. 841 (Part II), 99th Cong., 2d Sess. 71, n.3 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 133 n.23 (1987).

55. Reg. § 1.41-4(a)(3)(i). *See also* Reg. § 1.174-2(a)(1). This provision is one of several important distinctions between the final Regulations and the original final Regulations, the latter of which explicitly provided that research was not undertaken for the purpose of discovering information merely because an ex-

Relying on the previously quoted language from the legislative history, the final Regulations also provide that information is "technological in nature" if "the process of experimentation used to discover such information fundamentally relies on principles of physical or biological sciences, engineering, or computer science."[56] A taxpayer may employ existing technologies and rely on existing principles of the physical or biological sciences, engineering, or computer science to satisfy this requirement. However, research does not rely on principles of computer science merely because a computer is employed.[57] Finally, the purpose of the discovering information requirement may be satisfied even though the taxpayer is unsuccessful in developing a new or improved business component.

The revised final Regulations recognize a safe harbor under which the issuance of a patent is conclusive evidence that a taxpayer discovered information that is technological in nature and that was intended to eliminate uncertainty concerning the development or improvement of a business component.[58] However, the issuance of such a patent is not a precondition for credit availability.[59]

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penditure would be treated as an expense under section 174. Reg. §§ 1.41-4(a)(3)(i) and 1.41-4(a)(8) example (2) (2001).

56. Reg. § 1.41-4(a)(4).

57. Reg. § 1.41-4(a)(7) (providing that "[t]he employment of computers or information technology, or the reliance on principles of computer science or information technology to store, collect, manipulate, translate, disseminate, produce, distribute, or process data or information, and similar uses of computers and information technology does not itself establish that qualified research has been undertaken"). *See also* H.R. REP. NO. 841 (Part II), 99th Cong. 2d Sess. 71, n.3 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 133, n.23 (1987).

58. Reg. § 1.41-4(a)(3)(iii). Because the research and development tax credit is not available for research related to style, taste, cosmetic, or seasonal design factors under section 41(d)(3)(B), the patent safe harbor does not include design patents under 35 USC § 171. Prop. Reg. § 1.41-4(a)(3)(iii). *See* T.D. 8930, 66 Fed. Reg. 280, 284 (2001). In addition, the issuance of a patent does not establish that the discovery requirement is satisfied with respect to all of the research undertaken in connection with the patentable invention. For example, the issuance of a patent would not permit the use of the credit in connection with research relating to style or taste under section 41(d)(3)(B). T.D. 8930, 66 Fed. Reg. 280, 284 (2001). Finally, in issuing the final Regulations, the Service rejected the suggestions of commentators that the patent safe harbor be expanded to cover all of the general eligibility requirements for qualified research under sections 41(d)(1) and 41(d)(3). T.D. 9104, 69 Fed. Reg. 25 (2004).

59. Reg. § 1.41-4(a)(3)(iii). According to the Preamble to the original final Regulations, although the absence of a patent will not affect credit eligibility, any factors underlying the denial of a patent application may be relevant to the determination of whether the discovery requirement is satisfied. T.D. 8930, 66 Fed. Reg. 280, 284 (2001).

Most importantly, the final Regulations are clear that, to satisfy the requirement that research be undertaken for the purpose of discovering information, the taxpayer need not seek to obtain information that "exceeds, expands or refines the common knowledge of skilled professionals in the particular field of science or engineering in which the taxpayer is performing the research."[60] This provision was intended to eliminate the so-called "discovery test" as articulated under the original final Regulations. The original final Regulations specifically required that research would be deemed undertaken for the purpose of discovering information only if it was undertaken "to obtain knowledge that exceeds, expands or refines the common knowledge of skilled professionals in the particular field of science or engineering" in which the taxpayer was performing the research.[61] As previously noted,[62] the Service postponed the effective date of the original final Regulations within a month of their release, announced that it would undertake a comprehensive review of all previously submitted comments concerning the original Proposed Regulations, and requested additional comments concerning the original final Regulations.[63] Based on further review of the legislative history and comments received on the original Proposed Regulations and original final Regulations, the Service concluded when issuing the revised Proposed Regulations that "there should be no 'discover' requirement in the research credit regulations separate and apart from that already required under [section 174]."[64]

Despite the stringency of the discovery requirement under the original final Regulations, the discovery requirement did not require that the advance

60. Reg. § 1.41-4(a)(3)(ii).

61. Reg. § 1.41-4(a)(3)(i).

62. *See supra* text accompanying notes 14-19.

63. Notice 2001-19, 2001-1 C.B. 784. The discovery test had been criticized as placing at risk 75 percent of the research credits claimed since 1981. Amy Hamilton, *New Case on Credit for Internal Software Tops High Tech Agenda*, 77 TAX NOTES 769 (1997). *See also* Letter from David S. Hudson, Ernst & Young L.L.P., to the Honorable Donald C. Lubick, Acting Assistant Secretary for Tax Policy, dated January 23, 1998, available in LEXIS, 98 TNT 83-13; Letter from James R. Shanahan, Jr., to the Honorable Donald C. Lubick, Acting Assistant Secretary for Tax Policy, dated December 19, 1997, available in LEXIS, 98 TNT 19-17; Letter from James R. Shanahan, Price Waterhouse LLP, to Robert H. Miller, Deputy Tax Legislative Counsel, dated December 2, 1997, available in LEXIS, 97 TNT 243-13.

64. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,363 (2001). The Service noted that the footnote in the legislative history, referring to research intended to expand or refine existing principles of computer science (*see supra* text accompanying note 55), did not set forth a rule of general application but was intended simply as an illustration of the type of research that would satisfy the requirement that research be technological in nature.

sought be more than evolutionary.[65] In addition, the original final Regulations recognized that research undertaken by a taxpayer would constitute qualified research even if the taxpayer abandoned the project because attempts to develop the technology proved unsuccessful.[66] Finally, the original final Regulations also recognized that research would constitute qualified research when the information was known to others but remained a closely guarded secret and was beyond the common knowledge of skilled professionals in the relevant fields.[67]

To provide additional guidance to taxpayers with respect to the definition of "discovering information," the original final Regulations expanded on the definition of "common knowledge" and contained several presumptions upon which taxpayers could rely.[68] According to the original final Regula-

65. Reg. § 1.41-4(a)(3)(i) (2001). This provision of the original final Regulations was influenced by Congressional statements contained in the legislative history to the Tax and Trade Relief Extension Act of 1998, PUB. L. NO. 105-277, § 1001, 112 Stat. 2681, *2681-888 (1998), in which Congress retroactively extended the research credit for the period from June 30, 1998, through June 30, 1999. According to the legislative history,

> [i]n extending the credit, the conferees wish to reaffirm the scope of the term "qualified research." . . . However, eligibility for the credit does not require that the research be successful–i.e., the research need not achieve its desired result. Moreover, evolutionary research activities intended to improve functionality, performance, reliability, or quality are eligible for the credit, as are research activities intended to achieve a result that has already been achieved by other persons but is not yet within the common knowledge (e.g., freely available to the general public) of the field (provided that the research otherwise meets the requirements of section 41, including not being excluded by subsection (d)(4)).

H.R. CONF. REP. NO. 825, 105th Cong., 2d Sess. 1548 (1998). *See also* Staff of the Joint Comm. on Tax'n, General Explanation of Tax Legislation Enacted in 1998, 236 (1998).

66. Reg. § 1.41-4(a)(3)(i) and 1.41-4(a)(8) example (3) (2001).

67. Reg. § 1.41-4(a)(3)(ii) and 1.41-4(a)(8) example (4) (2001).

68. As part of the legislative history to the Tax Relief Extension Act of 1999, PUB. L. NO. 106-170, 113 Stat. 1918 (1999), the Conference Committee had urged the Secretary to consider the comments received concerning the definition of qualified research under the original Proposed Regulations, particularly regarding the "common knowledge" standard.

> The conferees wish to reaffirm that qualified research is research undertaken for the purpose of discovering new information which is technological in nature. For purposes of applying this definition, new information is information that is new to the taxpayer, is not freely available to the general public, and otherwise satisfies the requirements of section 41. Employing existing technologies in a particular field or relying on existing principles of engineering or science is qualified research, if such activities

tions, "common knowledge" was that level of information available to skilled professionals in a particular field of science or engineering.[69] There was no requirement, however, that the taxpayer actually conduct such an investigation in order to claim the credit.[70] Because certain types of information, such as trade secrets, would not be available through a reasonable investigation of the existing level of information in the field, common knowledge would not include such information. Consequently, research could, in certain circumstances, exceed, expand, or refine the common knowledge of skilled professionals in a particular field of science or engineering even though such knowledge had previously been obtained by other persons.[71] Finally, the reference to the common knowledge of skilled professionals was not intended to impose qualification requirements on the personnel that the taxpayer might use to conduct qualified research.[72]

The original final Regulations also recognized two presumptions under which the "discover information" requirement would be deemed satisfied. First, the issuance of a patent was deemed conclusive evidence that a taxpayer had obtained knowledge that exceeds, expands, or refines the common knowledge of skilled professionals.[73] This provision was substantially adopted in the revised Proposed Regulations and in the revised final Regulations.[74] Second, a rebuttable presumption applied if the taxpayer demonstrated with credible evidence that the research activities were undertaken to obtain certain information and the evidence set forth the basis for the taxpayer's belief that obtaining this information would exceed, expand, or refine the common knowledge of skilled professionals in the particular field of science or engineering.[75] The credible evidence was to take the form of documentation prepared before or during the early stages of the research.[76] The Service could rebut the presumption by demonstrating that the information described in the taxpayer's documentation was within the common knowledge of skilled professionals or that the research activities were not under-

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> are otherwise undertaken for purposes of discovering information and satisfy the other requirements of section 41.
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> H.R. CONF. REP. NO. 106-478, 106th Cong., 1st Sess. 132 (1999). In issuing the original final Regulations, the Service acknowledged that the clarification of the definition of common knowledge was the result of this Congressional directive. T.D. 8930, 66 Fed. Reg. 280, 283 (2001).

69. Reg. § 1.41-4(a)(3)(ii) and 1.41-4(a)(8) example (1) (2001).

70. T.D. 8930, 66 Fed. Reg. 280, 283 (2001).

71. Reg. § 1.41-4(a)(3)(ii) (2001).

72. T.D. 8930, 66 Fed. Reg. 280, 283 (2001).

73. Reg. § 1.41-4(a)(3)(iv) (2001).

74. *See supra* text accompanying notes 59-60.

75. Reg. § 1.41-4(a)(3)(v) and 1.41-4(a)(8) example (5) (2001).

76. Reg. § 1.41-4(d)(1) (2001). *See also* T.D. 8930, 66 Fed. Reg. 280, 283 (2001).

taken to obtain the information described in the taxpayer's documentation.[77] Finally, the presumption applied only if the taxpayer cooperated with reasonable requests by the Commissioner for witnesses, information, documents, meetings, and interviews. The introduction of this rebuttable presumption in the original final Regulations was in response to comments that the original Proposed Regulations imposed a substantial burden on taxpayers to "prove a negative" in demonstrating that the research undertaken satisfied the discovery requirement.[78]

In issuing the original final Regulations, the Service recognized that its definition of "discovering information" was controversial. In reviewing the original Proposed Regulations, numerous commentators claimed that the statutory language contained no indication that Congress intended to impose a requirement that qualified research be limited to that which "exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of science or engineering." According to these commentators, the phrase "discover information" was intended simply to limit the types of research for which the credit would be available.[79] Nevertheless, in promulgat-

77. Reg. § 1.41-4(a)(3)(v) (2001).

78. T.D. 8930, 66 Fed. Reg. 280, 283 (2001). Because the revised Proposed Regulations and the final Regulations have dispensed with an independent discovery requirement, this presumption was unnecessary.

79. *See* Letter from Kenneth J. Kies and James R. Shanahan, Jr., PricewaterhouseCoopers, to Jonathan Talisman, Acting Assistant Secretary for Tax Policy, dated December 15, 1999, available in LEXIS, 1999 TNT 246-10 (arguing that Congress has never imposed a "technological advancement" standard because such a test would raise overwhelming administrative issues); Letter from David S. Hudson, Ernst & Young L.L.P., to the Honorable Donald C. Lubick, Acting Assistant Secretary for Tax Policy, dated January 23, 1998, available in LEXIS, 98 TNT 83-13 (maintaining that any "discovery requirement" under the legislative history was not intended to measure technological advancement, "but merely to ensure that the research is in an appropriate discipline"); Letter from James R. Shanahan, Jr., to the Honorable Donald C. Lubick, Acting Assistant Secretary for Tax Policy, dated December 19, 1997, available in LEXIS, 98 TNT 19-17 (maintaining that there is no basis in section 41 or its legislative history to require that research must result in actual scientific or technological advancement in order to qualify for the credit); Letter from James R. Shanahan, Jr., to the Office of the Chief Counsel dated November 6, 1996, available in LEXIS, 96 TNT 219-10 (criticizing the statement contained in a research tax credit audit plan used in connection with the development of internal-use software suggesting that such a condition was necessary). *See also* Tax and Accounting Software Corp. v. United States, 111 F. Supp. 2d 1153 (N.D. Okla. 2000) (concluding that the Service and prior decisions erred in focusing on the "discovery" aspect of the requirement rather than the "technology" requirement:"[t]he purpose of the 'technology' requirement of section 41 is to eliminate the 'soft sciences' from contention for the credit, not to focus on the word 'discovery' "), *rev'd and remanded*, 301 F.3d 1254 (10th Cir. 2002).

ing the original final Regulations, the Service asserted that its position was supported by the legislative history to section 41.[80] As previously described, the Service re-evaluated and retreated from its position on this matter in releasing the revised Proposed Regulations.[81]

C. A Process of Experimentation

The third part of the three-part definition of qualified research requires that the research constitute a process of experimentation. In defining the term "process of experimentation," the legislative history referred to

> a process involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result is uncertain at the start. This may involve developing one or more hypotheses, testing and analyzing those hypotheses (through, for example, modeling or simulation), and refining or discarding the hypotheses as part of a sequential design process to develop the overall component.[82]

80. T.D. 8930, 66 Fed. Reg. 280, 282-283 (2001).

81. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,363 (2001).

82. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 133 (1987). *See also* H.R. REP. NO. 426, 99th Cong., 1st Sess. 180-181 (1985); S. REP. NO. 313, 99th Cong., 2d Sess. 696 (1986). Interestingly, the focus on uncertainty in defining a process of experimentation is similar to the uncertainty test under section 174. *Compare* H.R. REP. NO. 426, 99th Cong., 1st Sess. 181 (1985) (stating that "costs of developing a new or improved business item are not eligible for the credit if the method of reaching the desire objective (the new or improved product characteristics) is readily discernable and applicable as of the beginning of the research activities, so that true experimentation in the scientific or laboratory sense would not have to be undertaken to develop, test, and choose among viable alternatives") *with* Reg. § 1.174-2(a)(1) (stating that "[e]xpenditures represent research and development costs in the experimental or laboratory sense if they are for activities intended to discover information that would eliminate uncertainty concerning the development or improvement of a product"). *See* Letter from David S. Hudson, Ernst & Young L.L.P., to the Honorable Donald C. Lubick, Acting Assistant Secretary for Tax Policy, dated January 23, 1998, available in LEXIS, 98 TNT 83-13 (maintaining that neither section 41 nor its legislative history supports the conclusion that the threshold of uncertainty under section 41 is higher than that under section 174). Nevertheless, the Service believes that the requirements for a process of experimentation under section 41 are more stringent than the requirements for research and development in the experimental or laboratory sense under section 174. Notice of Proposed Rulemaking, 66 Fed. Reg. 33,362, 33,364 (2001). Certainly, a distinction existed under the original final Regulations, which required a process of experimentation intended to obtain knowledge that exceeds, expands, or refines the common knowledge of skilled professionals in a particular field of science or engineering. Reg. § 1.41-a(a)(3)(i) (2001); T.D. 8930, 66 Fed. Reg. 280, 282-

As examples of processes of experimentation, the legislative history referred to experiments undertaken by chemists or physicians in developing and testing a new drug and the work of engineers in designing a new computer system or an improved or new integrated circuit. The legislative history specifically noted that such work constituted a process of experimentation "because the design of those items is uncertain at the outset and can only be determined through a process of experimentation relating to specific design hypotheses and decisions as described above."[83] Finally, to constitute a process of experimentation, substantially all of the activities that are involved in the process must relate to the function, performance, reliability, or quality of a business component.[84]

The final Regulations under section 41 follow the legislative history, in part, in describing a process of experimentation.[85] Specifically, the final Regulations provide that a process of experimentation is "a process designed to evaluate one or more alternatives to achieve a result where the capability or the method of achieving that result, or the appropriate design of that result, is uncertain as of the beginning of the taxpayer's research activities."[86] Nev-

283 (2001). Any such distinction has been significantly blurred by the adoption of the uncertainty test of section 174 under the final Regulations to section 41. Prop. Reg. § 1.41-4(a)(3)(i).

83. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 133 (1987). *See also* H.R. REP. NO. 426, 99th Cong., 1st Sess. 181 (1985); S. REP. NO. 313, 99th Cong., 2d Sess. 696 (1986).

84. I.R.C. § 41(d)(1)(C), (3)(A). The final Regulations provide that the "substantially all" requirement is satisfied only if 80 percent or more of the research activities, measured on a cost or other consistently applied basis, constitute elements of a process of experimentation. Reg. § 1.41-4(a)(6)(i). This requirement is applied separately to each business component. The final Regulations explicitly acknowledge that the "substantially all" requirement is satisfied if 20 percent or less of the taxpayer's research activities do not constitute elements of a process of experimentation and, thus, are not undertaken for a qualified purpose under section 41(d)(3) as long as these remaining activities satisfy the requirements of section 41(d)(1)(A) and are not excluded under section 41(d)(4). *See* Reg. § 1.41-4(a)(8) example (4).

85. Reg. § 1.41-4(a)(5).

86. Reg. § 1.41-4(a)(5)(i). Importantly, the requirement that research be undertaken to eliminate uncertainty can be satisfied in connection with research to eliminate uncertainty concerning the means to reach a particular result as well as research to eliminate uncertainty concerning a particular result itself. Reg. § 1.41-4(a)(5)(i). According to the legislative history to the Tax and Trade Relief Extension Act of 1998, PUB. L. NO. 105-277, § 1001, 112 Stat. 2681, *2681-888 (1998), in which Congress retroactively extended the research credit for the period from July 1, 1998, through June 30, 1999,

> [a]ctivities constitute a process of experimentation, as required for credit eligibility, if they involve evaluation of more than one alternative to

ertheless, the final Regulations do not require that the taxpayer engage in a particularized process in order to satisfy the process of experimentation requirement.[87] Rather the final Regulations simply delineate the three "core elements" that constitute a process of experimentation.[88] First, the taxpayer

> achieve a result where the means of achieving the result are uncertain at the outset, even if the taxpayer knows at the outset that it may be technically possible to achieve the result. Thus, even though a researcher may know of a particular method of achieving an outcome, the use of the process of experimentation to effect a new or better method of achieving that outcome may be eligible for the credit (provided that the research otherwise meets the requirements of section 41, including not being excluded by subsection (d)(4)).

H.R. CONF. REP. NO. 825, 105th Cong., 2d Sess. 1548-1549 (1998). *See also* Staff of the Joint Comm. on Tax'n, General Explanation of Tax Legislation Enacted in 1998, 236 (1998).

The original final Regulations had provided that a process of experimentation did not include the evaluation of alternatives to establish the appropriate design of a business component if the capability and method for developing or improving the business component was not uncertain. Reg. § 1.41-4(a)(5) (2001). In response to comments objecting to any distinction between a process of experimentation to resolve uncertainty concerning the capability and method of achieving a result and a process of experimentation to resolve uncertainty concerning the appropriate design of a business component, the Service decided to eliminate this distinction under the revised Proposed Regulations. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,364 (2001). As a result, the final Regulations provide that "a taxpayer may undertake a process of experimentation if there is no uncertainty concerning the taxpayer's capability or method of achieving the desired result so long as the appropriate design of the desired result is uncertain as of the beginning of the taxpayer's research activities." Reg. § 1.41-4(a)(5)(i). Nevertheless, the final Regulation specifically state that uncertainty concerning the appropriate design of a business component does not establish that all activities undertaken by the taxpayer in that regard constitute a process of experimentation. Although this proposition is implicit in the existence of a separate process of experimentation requirement, the Service believed that an explicit statement was necessary because taxpayers had not been giving "sufficient weight" to the process of experimentation requirement.

> [M]erely demonstrating that uncertainty has been eliminated (e.g., the achievement of the appropriate design of a business component when such design was uncertain as of the beginning of a taxpayer's activities) is insufficient to satisfy the process of experimentation requirement. A taxpayer bears the burden of demonstrating that its research activities additionally satisfy the process of experimentation requirement.

T.D. 9104, 69 Fed. Reg. 24 (2004).

87. Reg. § 1.41-4(a)(5)(i).

88. *See* Reg. § 1.41-4(a)(8) example (3) (in which the taxpayer's research activities in developing a new shredding blade for the manufacture of food products sat-

must identify the uncertainty that exists in the development or improvement of a business component that is the object of the taxpayer's research efforts. Second, the taxpayer must identify one or more alternatives intended to eliminate that uncertainty. Third, the taxpayer must identify and conduct a process of evaluating the alternatives.[89] The process of evaluation can consist of modeling, simulation, or systematic trial and error.[90] The Service has recognized that the manner in which a particular taxpayer's research activities reflect the core elements of a process of experimentation will depend on the facts and circumstances of each situation.[91] In addition, the core elements of a process of experimentation will not necessarily occur in a strict, sequential order but may be encompassed within an iterative process.

> A process of experimentation is an evaluative process, and as such, often involves refining throughout much of the process the taxpayer's understanding of the uncertainty that taxpayer is trying to address, modifying the alternative being evaluated to eliminate that uncertainty, or modifying the process used to evaluate those alternatives.[92]

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isfied the process of experimentation requirement). *See* Reg. § 1.41-4(a)(8) example (4) (in which the taxpayer's research activities undertaken to improve the aerodynamic aspects of an automobile it manufactures satisfied the process of experimentation requirement).

89. *See* Reg. § 1.41-4(a)(8) example (2) (in which the taxpayer did not engage in a process of evaluating alternatives in order to eliminate uncertainty regarding the modification of a painting process). Although the final Regulations provide that a process of experimentation must be "an evaluative process and generally should be capable of evaluating more than one alternative" (Reg. § 1.41-4(a)(5)(i)), the Service recognized that the identification and evaluation of more than a single alternative is not required in order to satisfy the process of experimentation requirement. T.D. 9104, 69 Fed. Reg. 24 (2004).

90. The final Regulations provide that, like the requirement that the information sought be technological in nature, the process of experimentation must rely on principles of the physical or biological sciences, engineering, or computer science. In the preamble to the final regulations, the Service noted that, although this concept was explicitly stated in the legislative history, it had not been accorded appropriate or necessary weight in the prior versions of the Regulations in connection with the process of experimentation requirement. T.D. 9104, 69 Fed. Reg. 24 (2004).

91. The Service recognized that application of the process of experimentation requirement "will depend on the specific activities being claimed by the taxpayer as qualified research, the nature of the taxpayer's business and industry, and the uncertainties being addressed by the taxpayer's research activities." T.D. 9104, 69 Fed. Reg. 24 (2004). The Service noted that the provision of additional industry-specific guidance may be appropriate and requested comments on the form that such guidance should take.

92. T.D. 9104, 69 Fed. Reg. 24 (2004).

Thus, the final Regulations adopt an extremely flexible approach in allowing taxpayers to satisfy the process of experimentation requirement.[93]

Finally, the final Regulations provide that a process of experimentation must be undertaken for a qualified purpose.[94] To satisfy this requirement, a process of experimentation must relate to "a new or improved function, performance, reliability or quality of the business component."[95] Research is not conducted for a qualified purpose if it relates to style, taste, cosmetic, or seasonal design factors.[96]

The revisions to the definition of the process of experimentation requirement under the final Regulations represents a progressive relaxation of the definition as compared with that in the original versions of the Proposed and final Regulations. The original Proposed Regulations had provided that a taxpayer would satisfy the process of experimentation requirement only by engaging in the following four-step process of experimentation:

(1) Developing one or more hypotheses designed to achieve the intended result;

(2) Designing an experiment (that, where appropriate to the particular field of research, is intended to be replicable with an established experimental control) to test and analyze those hypotheses (through, for example, modeling, simulation, or a systematic trial and error methodology);

(3) Conducting the experiment; and

(4) Refining or discarding the hypotheses as part of a sequential design process to develop or improve the business component.[97]

The original final Regulations had provided that a taxpayer would, but was not required to, satisfy the process of experimentation requirement by engaging in such a process.[98] Commentators criticized the original Proposed Regulations as accurately describing the pure scientific method of conducting

93. T.D. 9104, 69 Fed. Reg. 23 (2004) (stating that the process of experimentation requirement is not intended to be "inflexible or overly narrow").

94. Reg. § 1.41-4(a)(5)(ii).

95. *Id.*

96. *See* Reg. § 1.41-4(a)(8) example (1) (in which the taxpayer's activities to change the color of its blue widget to green did not constitute qualified research).

97. Prop. Reg. § 1.41-4(a)(5) (1998). *See also* Eustace v. Comm'r, 312 F.3d 905 (7th Cir. 2002) (concluding that a process of experimentation requires that the taxpayer formulate and test hypotheses and not simply engage in a process of trial and error; "[a]lthough the word 'experiment' has many shadings in common speech, . . . as used in § 41 it has the scientific sense of forming and testing hypotheses rather than the lay (or even engineering) sense of trial and error").

98. Reg. § 1.41-4(a)(5) (2001).

experiments but failing to appreciate that commercial and industrial practice does not always conform to such a precise methodology.[99]

The revised Proposed Regulations relaxed the process of experimentation requirement under the original final Regulations. Like the final Regulations, the revised Proposed Regulations provided that a process of experimentation was "a process designed to evaluate one or more alternatives to achieve a result where the capability or the method of achieving that result, or the appropriate design of that result, is uncertain as of the beginning of the taxpayer's research activities."[100] The revised Proposed Regulations then provided that such a process may include developing one or more hypotheses designed to achieve a desired result, designing and conducting an experiment to test and analyze those hypotheses, and refining or discarding the hypotheses in an effort to develop or improve the business component. This illustration was not intended as the sole description of a process of experimentation, however, because the revised Proposed Regulations also provided that the determination whether a taxpayer has undertaken a process of experimentation is based on all of the facts and circumstances with respect to the taxpayer's research activities.[101] Furthermore, the revised Proposed Regulations cited the following factors, none of which was dispositive, as tending to indicate that the taxpayer has engaged in a process of experimentation:

(1) The taxpayer tests and analyzes numerous alternative hypotheses to develop a new or improved business component;

(2) The taxpayer engages in extensive, comprehensive, intricate or complex scientific or laboratory testing; or

(3) The taxpayer evaluates numerous or complex specifications related to the function, performance, reliability or quality of a new or improved business component.[102]

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99. T.D. 8930, 66 Fed. Reg. 280, 284 (2001). Commentators also claimed that the description of such a four-step process in the legislative history in 1986 was for illustrative purposes and not intended by Congress as a comprehensive definition of the process of experimentation requirement.

100. Prop. Reg. § 1.41-4(a)(5)(i) (2001).

101. Prop. Reg. § 1.41-4(a)(5)(iv) (2001).

102. *Id.* The revised Proposed Regulations further provided that "it is not intended that only the factors described in this paragraph are to be taken into account in making the determination. Thus, no inference should be drawn from the taxpayer's failure to satisfy any or all of the factors." *See also* Prop. Reg. § 1.41-4(a)(8) example (3) (in which the taxpayer was engaged in a process of experimentation in the development of a shredding blade for the manufacture of a fine-shred food product), 1.41-4(a)(8) example (6) (in which the taxpayer was engaged in a process of experimentation in connection with the development of a more fuel-efficient automobile), and 1.41-4(c)(10) example (6) (concluding that the modification of rail cars to meet a particular customer's requirements did not involve the "complex testing that is indicative of a process of experimentation") (2001).

The revised Proposed Regulations also expanded on the definition of a process of experimentation and provided that a process of experimentation did not include an evaluation of alternatives to achieve a desired result if the capability and method of achieving the desired result, or the appropriate design of the desired result, were "readily discernable and applicable" at the beginning of the taxpayer's research activities.[103] The revised Proposed Regulations further provided that the capability and method of achieving a desired result, or the appropriate design of a desired result, were "readily discernible and applicable" if "true experimentation in the scientific or laboratory sense would not have to be undertaken to test, analyze, and choose among viable alternatives."[104] Finally, the revised Proposed Regulations provided that a process of experimentation did not include any activities to select among several alternatives that were readily discernible and applicable. Commentators criticized the "readily discernable" standard in the revised Proposed Regulations as unnecessarily vague and subjective, the same criticism that led to the elimination of the discovery test and the common knowledge standard under the original final Regulations.[105] As a result of this criticism and the revisions made to the definition of a process of experimentation, the Service eliminated the "readily discernable" standard from the revised final Regulations.[106]

103. Prop. Reg. § 1.41-4(a)(5)(i) (2001).

104. Prop. Reg. § 1.41-4(a)(5)(ii) (2001). *See* Prop. Reg. §§ 1.41-4(a)(8) example (2) (concluding that the activities of selecting new paint nozzles and modifying the taxpayer's manufacturing process to paint blue widgets green did not constitute qualified research as the changes necessary were readily discernable and applicable to the taxpayer at the beginning of his activities), 1.41-4(a)(8) example (4) (concluding that the operator of a wireless network did not engage in qualified research in resolving a service problem where the operator knows, based on previous experience, that the installation of a new type of gateway will eliminate the problem), and 1.41-4(a)(8) example (5) (where the solution to a complaint of rattling noises coming from the exhaust system of a new model vehicle was readily discernible and applicable to the manufacturer of the vehicle as of the beginning of his activities) (2001). *See also* Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,364 (2001) (stating that "[t]he fact that a taxpayer conducts only rudimentary or non-technological testing in order to develop or improve a business component tends to indicate that the appropriate design of the business component was readily discernible and applicable at the outset within the meaning of these rules").

105. *See* Sheryl Stratton, *Discovery Test Resurfaces at Research Credit Hearing*, 95 TAX NOTES 22 (2002). *See also* Janet S. Wong & Susan Ryan, *The New Research Credit Proposed Regulations: Will the Third Time Be the Charm?*, 96 J. TAX'N 198 (2002); James Eberle & Arthur Andersen, *A Guide to the Latest Research Credit Regulations*, 94 TAX NOTES 221 (2002); Letter from Robert M. Brown, KPMG LLP, to the Commissioner of Internal Revenue, dated March 6, 2002, available in LEXIS, 2002 TNT 56-11.

106. T.D. 9104, 69 Fed. Reg. 24 (2004).

One area that generated extensive taxpayer commentary during the evolution of the Regulations under section 41 concerned record keeping requirements on the part of taxpayers prior to, and during, the process of experimentation. Under the original final Regulations, taxpayers were required to prepare and retain written documentation before or during the early stages of the research project that described the principal questions to be answered and the information the taxpayer sought to obtain that would exceed, expand, or refine the common knowledge of skilled professionals in the relevant field of science or engineering.[107] However, taxpayers were not required to maintain written records of the results of the process of experimentation. These requirements were in addition to the general recordkeeping requirements of section 6001. Commentators criticized these recordkeeping requirements as particularly burdensome and not necessarily inherent in a *bona fide* process of experimentation in the commercial or industrial setting.[108] As a result, the Service largely eliminated any recordkeeping requirements under section 41 when issuing the revised Proposed Regulations.

> Treasury and the IRS have re-evaluated whether a research credit-specific documentation requirement is warranted and have concluded that the high degree of variability in the objectives and conduct of research activities in the United States compels a conclusion that taxpayers must be provided reasonable flexibility in the manner in which they substantiate their research credits. Accordingly, Treasury and the IRS have concluded that the failure to keep records in a particular manner (so long as such records are in sufficiently usable form and detail to substantiate that the expenditures claimed are eligible for the credit) cannot serve as a basis for denying the credit. Treasury and the IRS have decided that the rules generally applicable under section 6001 provide sufficient detail about required documentary substantiation for purposes of the research credit. Consequently, no separate research credit-specific documentation requirement is included in these proposed regulations.
>
> Section 1.6001-1 requires the keeping of records "sufficient to establish the amount of . . . credits, . . . required to be shown . . . ." The consequence of failing to keep sufficient records substantiating a claimed credit may be denial of the credit. To address any ongoing recordkeeping concerns regarding the research credit, Treasury and the IRS propose to use pre-filing processes, including industry issue resolution, pre-filing agreements, determination letters, and record retention agreements, to provide certainty to taxpayers about the records that must be kept and to ensure the

107. Reg. § 1.41-4(d) (2001).

108. T.D. 8930, 66 Fed. Reg. 280, 284 (2001).

> availability to the IRS of the records necessary to examine taxpayers' returns expeditiously.[109]

The final Regulations follow the revised Proposed Regulations in this regard. Consequently, the general requirements of section 6001 are the only formal recordkeeping requirements with which taxpayers must comply under the final Regulations.[110] Nevertheless, the final Regulations provide that the Service and taxpayers may agree to guidelines for the keeping of specific records for purposes of substantiating the research credit.

D. Business Component

Importantly, the test of whether particular research is to be treated as qualified research is determined with respect to each business component. A "business component" is defined to include any "product, process, computer software, technique, formula, or invention" held by the taxpayer for sale, lease, or license or used by the taxpayer in its trade or business.[111] The tests to establish eligibility for the credit are applied to each business component or subcomponent under the so-called "shrinking back" rule.

> [T]he requirements for credit eligibility are applied first at the level of the entire product, etc. to be offered for sale, etc. by the taxpayer. If all aspects of such requirements are not met at that level, the test applies at the most significant subset of elements of the product, etc. This shrinking back of the product is to continue until either a subset of elements of the product that satisfies the

109. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,322, 66,366 (2001). In connection with the recordkeeping requirements under section 41, the Service plans to introduce a pilot program that would allow taxpayers to enter into prior agreements with the Service regarding the extent of the recordkeeping necessary to claim the research and development tax credit. Alison Bennett, *IRS Launching Research Credit Initiative for Recordkeeping Agreements, Rosen Says*, BNA Daily Tax Reporter G- 5 (March 26, 2003); Amy Hamilton, *IRS to Pilot Research Credit Recordkeeping Agreement Program*, 98 TAX NOTES 1937 (2003).

110. Reg. § 1.41-4(d).

111. I.R.C. § 41(d)(2); Reg. § 1.41-4(b)(1). Except for its explicit reference to computer software, the statutory definition of "business component" under section 41 is strikingly similar to the regulatory definition of "product" under section 174. *See* Reg. §§ 1.174-2(a)(1) and 1.174-2(a)(2) (defining research or experimental expenditures to include all costs incident to the development or improvement of a product, defined as "any pilot model, process, formula, invention, technique, patent, or similar property" to be used by the taxpayer in its trade or business or "held for sale, lease, or license.")

> requirements is reached, or the most basic element of the product is reached and such element fails to satisfy the test.[112]

This "shrinking back" concept allows the taxpayer to obtain the benefits of the credit with respect to any portion of its research activities undertaken in the development of a business component that satisfy the requirements of section 41.[113]

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112. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 134 (1987). A plant process, machinery, or technique for commercial production of a business component is treated as a separate component from the product being produced. The requirements for the credit are to be satisfied with respect to each component. *Id*. For an illustration of the application of the shrinking back concept, see Internal Revenue Service, Industry Specialization Program Coordinated Issue Paper (All Industries) Research Tax Credit–Qualified Research (Aug, 26, 1999), available in LEXIS, 1999 TNT 168-19 (concluding that the requirements of section 41 were not satisfied when applied to an improved toaster developed by the taxpayer but were satisfied when applied to the new heating element alone).

    The Regulations under section 41 provide that the research credit is not available for research activities relating to the development of a manufacturing or other commercial production process unless the activities satisfy the requirements of section 41 without taking into account the research activities related to the development of the product. Reg. § 1.41-4(b)(1). Similarly, the research credit is not available for research activities relating to the development of a product unless the activities satisfy the requirements of section 41 without taking into account the research activities related to the development of the manufacturing or other commercial production process. *See also* Reg. § 1.41-4(c)(2)(iii) (providing that the exclusions of certain activities apply separately to the development of the product and the development of the production process). The Regulations under section 41 as originally proposed contained an example illustrating the fact that the exclusion of costs incurred after a product is ready for commercial production does not automatically disqualify the costs incurred to develop the manufacturing or commercial production process. Prop. Reg. § 1.41-4(c)(10) example (3) (1998). This example was deleted from the original final Regulations, the revised Proposed Regulations, and the final Regulations. Nevertheless, the final Regulations contain an example in which research undertaken in connection with the manufacturing process for an already developed product may constitute qualified research. Reg. § 1.41-4(c)(10) example (1). *See infra* note 121.

113. Reg. § 1.41-4(b)(2). The shrinking-back rule is applied only if a taxpayer does not satisfy the requirements of section 41 with respect to the overall business component. In addition, the shrinking-back rule is not itself applied as a reason to exclude research activities from credit eligibility. The Regulations provide the following example of the application of the shrinking-back concept.

> X, a motorcycle engine builder, develops a new carburetor for use in a motorcycle engine. X also modifies an existing engine design for use with the new carburetor. Under the shrinking-back rule, the requirements of section 41(d)(1) and paragraph (a) of this section are applied first to the

E. Excluded Activities

Costs incurred in connection with several types of research activities are statutorily excluded from the scope of section 41. The following paragraphs describe the statutory categories of activities for which the research tax credit is not available.

1. Expenditures related to style and taste

Expenditures are excluded if the research relates to style, taste, cosmetic, or seasonal design changes.[114] As an example of this exclusion, the Service concluded that expenditures related to design changes to make a toaster appear more "high tech" were not eligible for the research tax credit.[115] Nevertheless, the Service has made clear that costs incurred in developing new food products and improving existing food products are eligible for the credit and that the term "taste" as used in this exclusion refers to individual or consumer preference rather than to the functional aspects, including flavor and sensory taste, of a business component.

2. Research conducted after commercial production

The credit is also not allowed for expenses incurred in connection with research conducted after commercial production of a component has started.[116] According to the legislative history, "commercial production" is

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> engine. If the modifications to the engine when viewed as a whole, including the development of the new carburetor, do not satisfy the requirements of section 41(d)(1) and paragraph (a) of this section, those requirements are applied to the next most significant subset of elements of the business component. Assuming that the next most significant subset of elements of the engine is the carburetor, the research activities in developing the new carburetor may constitute qualified research within the meaning of section 41(d)(1) and paragraph (a) of this section.

Reg. § 1.41-4(b)(3). *But see* Priv. Ltr. Rul. 9346006 (a Technical Advice Memorandum) (in which the Service rejected the taxpayer's application of the shrinking back concept in connection with the development of the inactive ingredients of a generic drug product; because the inactive ingredients alone have no therapeutic value to consumers, they do not constitute a "separately identifiable subset[ ] of elements with independent significance in the Taxpayer's generic drug products").

114. I.R.C. § 41(d)(3)(B); Reg. § 1.41-4(a)(5)(ii) (providing that "[r]esearch will not be treated as conducted for a qualified purpose if it relates to style, taste, cosmetic, or seasonal design factors").

115. Internal Revenue Service, Industry Specialization Program Coordinated Issue Paper (All Industries) Research Tax Credit–Qualified Research (Aug. 26, 1999), available in LEXIS, 1999 TNT 168-19.

116. I.R.C. § 41(d)(4)(A); Reg. § 1.41-4(c)(2)(i). *See also Norwest Corp.*, 110 T.C. 454 (1998) (determining that the taxpayer's activities in connection with the development of subsequent releases of internal-use computer software follow-

achieved when "the component has been developed to the point where it either meets the basic functional and economic requirements of the taxpayer for such component or is ready for commercial sale or use."[117] As examples of research undertaken after commercial production, the legislative history referred to "preproduction planning for a finished business component, tooling-up for production, trial production runs, trouble-shooting involving detecting faults in production equipment or processes, accumulation of data relating to production processes, and the cost of debugging product flaws."[118] The final Regulations reiterate the activities listed in the legislative history and treated such activities as conclusively presumed to occur after the beginning of commercial production.[119]

The final Regulations are clear, however, that research to produce a new or improved product, even after the taxpayer is engaged in the manufacture and sale of a particular type of the same product, is not excluded from the definition of qualified research.[120] The final Regulations are also clear that in cases involving the development of both a product and a manufacturing or other commercial production process for the product, the exclusion applies separately for the activities relating to the development of the product and the activities relating to the development of the process.[121]

> For example, even after a product meets the taxpayer's basic functional and economic requirements, activities relating to the development of the manufacturing process still may constitute qualified

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ing installation of the first release did not constitute qualified research); Field Service Advice 200013017 (dated December 23, 1999), available in LEXIS, 2000 TNT 64-39 (considering the treatment of costs incurred in "debugging" and "trouble-shooting" the design of silicon chips); Letter from Paul W. Oosterhuis and Roseann M. Curtron, Skadden, Arps, Slate, Meagher & Flom LLP, to Mark Hoffenberg, Department of the Treasury, dated December 15, 1999, available in LEXIS, 1999 TNT 246-11 (suggesting several examples for the application of the exclusion for post-commercial production under section 41(d)(4)(A)).

117. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 136 (1987).

118. *Id.*

119. Reg. § 1.41-4(c)(2)(ii). *See also* Reg. § 1.41-4(c)(10) example (1) (in which the costs to manufacture, install, and test certain belts developed by the taxpayer for use in its manufacturing process were incurred after the belts met the taxpayer's functional and economic requirements and, thus, were excluded as research conducted after the beginning of commercial production).

120. Reg. § 1.41-4(c)(10) example (2) (in which the taxpayer's research activities to develop a new or improved widget after having manufactured and sold widgets for several years are not considered as activities conducted after the beginning of commercial production.)

121. Reg. § 1.41-4(c)(2)(iii).

> research, provided that the development of the process itself separately satisfies the requirements of section 41(d) and this section, and the activities are conducted before the process meets the taxpayer's basic functional and economic requirements or is ready for commercial use.[122]

The final Regulations contain an example of research undertaken in connection with the manufacturing process for an already developed product may constitute qualified research.[123]

Importantly, the legislative history stated that the credit was not available for the costs of additional clinical testing of a pharmaceutical product after the product was made commercially available except when the testing was necessary to establish new functional uses for the existing product. For example, "testing a drug currently used to treat hyper-tension for a new anti-cancer application, and testing an antibiotic in combination with a steroid to

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122. *Id*. The original Proposed Regulations under section 41 contained an example illustrating the fact that the exclusion of costs incurred after a product is ready for commercial production does not automatically disqualify the costs incurred to develop the manufacturing or commercial production process. Prop. Reg. § 1.41-4(c)(10) example (3) (1998). This example was deleted from the original final Regulations, the revised Proposed Regulations, and the final Regulations.

123. According to the final Regulations:

> (i) Facts. X, a tire manufacturer, develops a new material to use in its tires. X conducts research to determine the changes that will be necessary for X to modify its existing manufacturing processes to manufacture the new tire. X determines that the new material retains heat for a longer period of time than the materials X currently uses for tires, and, as a result the new tire material adheres to the manufacturing equipment during tread cooling. X evaluates several alternatives for processing the treads at cooler temperatures to address this problem, including a new type of belt for its manufacturing equipment to be used in tread cooling. Such a belt is not commercially available. Because X is uncertain of the belt design, X develops and conducts sophisticated engineering tests on several alternative deigns for a new type of belt to be used in tread cooling until X successfully achieves a design that meets X's requirements. X then manufactures a set of belts for its production equipment, installs the belts, and tests the belts to make sure they were manufactured correctly.
>
> (ii) Conclusion. X's research with respect to the design of the new belts to be used in its manufacturing of the new tire may be qualified research under section 41(d)(1) and paragraph (a) of this section. However, X's expenses to implement the new belts, including the costs to manufacture, install, and test the belts were incurred after the belts met the taxpayer's functional and economic requirements and are excluded as research after commercial production under section 41(d)(4)(A) and paragraph (c)(2) of this section.

Reg. § 1.41-4(c)(10) example (1).

determine its therapeutic value as a potential new anti-inflammatory drug, are eligible for the credit."[124] Clinical testing of a pharmaceutical product prior to its commercial production in the United States is not treated as occurring after the beginning of commercial production even if the product is commercially available in other countries.[125]

3. Research designed to adapt an existing business component to a particular customer's needs

Research designed to adapt an existing business component to a particular customer's needs is also excluded from the definition of qualified research.[126] As examples of this provision, both the legislative history and the final Regulations refer to the costs of modifying an existing computer software item for a particular customer.[127] However, both the legislative his-

124. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 136 (1987). *See also* Reg. § 1.41-4(c)(2)(iv) (providing that "[a]dditional clinical testing of a pharmaceutical product after a product has been approved for a specific therapeutic use by the Food and Drug Administration and is ready for commercial production and sale is not treated as occurring after the beginning of commercial production if such clinical tests are undertaken to establish new functional uses, characteristics, indications, combinations, dosages, or delivery forms for the product. A functional use, characteristic, indication, combination, dosage or delivery form shall be considered new only if such functional use, characteristic, indication, combination, dosage or delivery form must be approved by the Food and Drug Administration.").

125. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 136 (1987). The original Proposed Regulations contained two examples of the application of this exception to the context of clinical trials of a drug. Prop. Reg. § 1.41-4(c)(10) examples (1) and (2) (1998). These examples were deleted from the original final Regulations, the revised Proposed Regulations, and the final Regulations.

126. I.R.C. § 41(d)(4)(B); Reg. § 1.41-4(c)(3).

127. *See* H.R. REP. NO. 841 (Pt. II), 99th Cong., 2d Sess. 75 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 136 (1987). The final Regulations expand on the legislative history in this regard and provide three examples involving the development of computer software. In these examples, the taxpayer, a computer software development firm, owns all substantial rights in a general ledger accounting software core program that it markets and licenses to customers. In the first example, the taxpayer incurs expenditures in adapting the core software program to the requirements of one of its customers. Because the development activities represent an attempt to adapt an existing software program to a particular customer's requirements, the taxpayer's activities are excluded from the definition of qualified research. Reg. § 1.41-4(c)(10) example (3). This conclusion is not altered if the customer pays the taxpayer to engage in the same activities or if the customer pays its own employees to engage in the same activities.

tory and the final Regulations also note that the fact that a business component is intended for a specific customer does not disqualify otherwise qualified research costs.[128]

4. Research designed to reproduce an existing business component

Research designed to reproduce an existing component is also excluded from the definition of qualified research.[129] This provision is intended to exclude the costs of "reverse engineering" activities from eligibility for the credit.[130] The Code and legislative history specifically refer to the reproduction of an existing component by another person from physical examination of the component or from plans, blueprints, detailed specifications, or publicly available information. The final Regulations contain an example excluding from the definition of qualified research the costs incurred to reproduce the ingredients in a gasoline additive where any differences between the ingredients are insignificant.[131] The Regulations make clear, however, that the exclusion does not apply where a process of experimentation is undertaken to discover possible alternative formulations of the additive. In addition, the exclusion does not apply if a taxpayer merely examines a competitor's product in developing its own component through a process of otherwise qualified experimentation.[132]

Reg. § 1.41-4(c)(10) examples (4) (the customer's payments do not constitute contract research expenses under section 41(b)(3)(A)) and (5) (the wages paid by the customer to its own employees do not constitute in-house research expenses under section 41(b)(2)(A)). *See also* Reg. § 1.41-4(c)(10) example (6) (concluding that the modification of rail cars to meet a particular customer's requirements represented "merely an adaptation of an existing business component" to a particular customer's needs). *But see* Reg. § 1.41-4(c)(10) example (7) (concluding that research undertaken to modify robotic equipment to satisfy the taxpayer's manufacturing specifications was not excluded from the definition of qualifying research under section 41(d)(4)(B)).

128. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 136 (1987) (stating that the exclusion under section 41(d)(4)(B) does not apply merely because a business component is intended for a specific customer); Reg. § 1.41-4(c)(3) (same).

129. I.R.C. § 41(d)(4)(C); Reg. § 1.41-4(c)(4).

130. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 137 (1987). *See also* Market Segment Specialization Program, "Manufacturing Industry" (May 1, 1998), available in LEXIS, 1999 TNT 81-23 (excluding the costs of activities related to an examination of a competitor's products (i.e., reverse engineering) from the definition of qualified research expenses).

131. Reg. § 1.41-4(c)(10) example (8).

132. Reg. § 1.41-4(c)(4) (providing that "[t]his exclusion does not apply merely because the taxpayer examines an existing business component in the course of

In Private Letter Ruling 9346006 (a Technical Advice Memorandum), the Service invoked this exclusion to deny the taxpayer's claimed research credit in connection with the development of the generic form of certain drugs that had previously received FDA approval and for which information concerning active and inactive ingredients was publicly available.[133] This ruling has been the subject to significant criticism.[134] The Service subsequently suggested, however, that no per se rule applies to exclude the development of generic drugs from qualifying under the research tax credit.[135]

5. Research in preparing surveys or studies

Research undertaken in the preparation of surveys or studies is also excluded from the definition of qualified research.[136] This provision applies to efficiency surveys; activities related to management functions or techniques, market research, market testing, or market development (including advertising or promotions); routine data collections; or routine or ordinary testing or

developing its own business component"). *See also* Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 137 (1987).

133. *See also* Field Service Advice 1999-1023 (dated October 22, 1993), available in LEXIS, 1999 TNT 81-49 (because the development of a generic drug is the duplication of an existing business component, expenditures incurred in such activities are excluded from the definition of qualified research under section 41(d)(4)(C)); Market Segment Specialization Program, "Manufacturing Industry" (May 1, 1998), available in LEXIS, 1999 TNT 81-23 (same).

134. *See* Letter from Reps. Ken Calvert and Alan Mollohan, Co-Chair, Generic Drug Caucus, to Jonathan Talisman, Acting Assistant Secretary for Tax Policy, dated July 27, 2000, available in LEXIS, 2000 TNT 165-14 (claiming that generic drug products are developed through a rigorous process of experimentation and do not represent mere duplication of an existing drug component); Letter from Kenneth J. Kies and James R. Shanahan, PricewaterhouseCoopers LLP, to Jonathan Talisman, Acting Assistant Secretary for Tax Policy, dated June 23, 2000, available in LEXIS, 2000 TNT 140-38 (although generic drug products duplicate the effect of a brand drug product, section 41(d)(4)(C) was not intended to preclude taxpayers from claiming the research tax credit for activities undertaken to develop new products that have the same effect as other products).

135. *See* Sheryl Stratton, *Generic Drug Research May Now Qualify for Research Credit*, 90 TAX NOTES 1604 (2001). *See also* Letter from Kenneth J. Kies, Federal Policy Group, and James R. Shanahan, PricewaterhouseCoopers, LLP, on behalf of a group of generic pharmaceutical drug developers and manufacturers, to the Internal Revenue Service, dated March 7, 2002, available in LEXIS, 2002 TNT 61-20 (recommending that the revised Proposed Regulations under section 41, when finalized, contain explicit guidance regarding the eligibility of costs incurred in the development of generic drugs for the research tax credit).

136. I.R.C. § 41(d)(4)(D); Reg. § 1.41-4(c)(5).

inspection of materials or business components for quality control.[137] Management functions and techniques include the preparation of financial data and analysis, development of employee training programs and management organization plans, and management based changes in production processes (such as rearranging work stations on an assembly line).[138] The final Regulations contain an example in which research efforts to restructure the taxpayer's manufacturing organization, involving the taxpayer's employees and outside management consultants and requiring studies of current operations, interviews with the taxpayer's employees, and studies of the structure of other manufacturing facilities, were excluded from the definition of qualified research under this provision.[139]

6. Research involving internal-use computer software

Section 41 provides that research involved in the preparation of certain types of computer software, frequently referred to as internal-use computer software is also excluded from the definition of qualified research.[140] In defining internal-use computer software, the legislative history referred to software that is used for internal purposes of the taxpayer, "for example, in

137. In *Norwest Corp*., 110 T.C. 454 (1998), the Service maintained that the taxpayer's installation, customization, and testing activities relating to the development of internal-use computer software did not constitute qualified research under section 41(d)(4)(D) because such efforts constituted routine or ordinary testing procedures in the software field. Although agreeing that certain customization activities related only to style, taste, cosmetic, and seasonal design factors and, thus, did not constitute qualified research under section 41(d)(4)(B) and other activities were performed after the beginning of commercial production and, thus, did not constitute qualified research under section 41(d)(4)(A), the Tax Court concluded that the remaining aspects of the installation process were critical to the success of the product and should be considered part of the research process unaffected by section 41(d)(4)(D). *Id*. at 520.

138. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 136-137 (1987). The original Proposed Regulations contained an example in which certain activities involving the rearrangement of employee work stations in a manufacturing assembly line and the development of a new employee training program to train employees for the rearranged work stations were excluded under section 41(d)(4)(D) as management functions or techniques. Prop. Reg. § 1.41-4(c)(10) example (6) (1998). This example was deleted from the original final Regulations, the revised Proposed Regulations, and the final Regulations.

139. Reg. § 1.41-4(c)(10) example (9).

140. I.R.C. § 41(d)(4)(E); Prop. Reg. § 1.41-4(c)(6). Because of on-going controversy with taxpayers, the Service decided not to finalize that portion of the revised Proposed Regulations concerning the definition and treatment of internal-use computer software. T.D. 9104, 69 Fed. Reg. 22 (2004). Instead, the Service has requested additional comments on this topic. Advance Notice of Proposed Rulemaking, 69 Fed. Reg. 43 (2004).

general and administrative functions (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting, or banking services) . . . ."[141] This provision is discussed in detail below.[142]

7. Research conducted outside the United States

The definition of qualified research excludes research conducted outside the United States.[143] For this purpose, the United States includes the United States, the Commonwealth of Puerto Rico, and other possessions of the United States.[144]

8. Research in the social sciences or humanities

Research in the social sciences or humanities is also excluded from the definition of qualified research.[145] The final Regulations specifically provide

141. S. REP. NO. 313, 99th Cong., 2d Sess. 697 (1986); H.R. REP. NO. 841 (Pt. II), 99th Cong., 2d Sess. 73 (1986). *See also* H.R. REP. NO. 426, 99th Cong., 1st Sess. 182 (1985); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, at 135 (1987).

142. *See infra* text accompanying notes 260-347.

143. I.R.C. § 41(d)(4)(F); Reg. § 1.41-4(c)(7). *See also* Field Service Advice 200013017 (dated December 23, 1999), available in LEXIS, 2000 TNT 64-39 (to the extent that services provided by an overseas third-party manufacturer to produce silicon wafers and mask sets would otherwise constitute qualified research, research conducted outside the United States is specifically excluded from the term qualified research). In-house research expenses paid or incurred for qualified services performed both in the United States and outside the United States must be apportioned between the services performed in the United States and the services performed outside the United States. Only the in-house research expenses apportioned to the services performed within the United States are eligible to be treated as qualified research expenses, unless the in-house research expenses are wages and the 80 percent rule of Regulation section 1.41-2(d)(2) applies. Reg. § 1.41- 4(c)(7)(ii). With respect to contract research performed partly in the United States and partly outside the United States, only 65 percent (or 75 percent in the case of amounts paid to qualified research consortia) of the portion of the contract amount that is attributable to the research activity performed within the United States may qualify as a contract research expense even if 80 percent or more of the contract amount is for research performed within the United States. Reg. § 1.41-4(c)(7)(iii).

144. *See* Reg. § 1.41-4A(b). The legislative history accompanying the amendments to section 41 under the Tax Reform Act of 1986 state that the provisions of section 41(d)(4)(F) through (H) are the same as under prior law. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 137 (1987).

145. I.R.C. § 41(d)(4)(G); Reg. § 1.41-4(c)(8). *See also* Reg. § 1.41-4A(c) (providing that "research in the social sciences or humanities" encompasses "all areas of research other than research in a field of laboratory science (such as physics

that qualified research does not include research in economics, business management, and behavioral sciences, as well as the arts and humanities.[146] As an example of this provision, the final Regulations exclude from the definition of qualified research the costs incurred for certain types of research in connection with the development of a new life insurance product.[147] The research undertaken had considered the effect of pricing and tax consequences on demand for the product, the expected volatility of interest rates, and the expected mortality rates based on published data and prior insurance claims. Other examples of such research include "the development of a new economic model or theory, a new accounting procedure, or a new cookbook."[148]

9. Research that is fully funded by another entity

Finally, section 41 excludes from the definition of qualified research any research that is fully funded by another entity.[149] Under the Regulations, research does not constitute qualified research to the extent that it is funded by a grant, contract, or otherwise by another person, including any governmental entity. However, amounts payable under any agreement that are contingent on the success of the research are considered as paid for the results of the research and are not treated as funding.[150] In addition, research is consid-

or biochemistry), engineering or technology"). A similar requirement existed under section 41 prior to amendments introduced by the Tax Reform Act of 1986. The research credit under section 44F as originally enacted (see Economic Recovery Tax Act, PUB. L. NO. 97-34, § 221, 95 Stat. 172, 241- 247 (1981)) permitted a credit in connection with "qualified research" defined as research that satisfied the requirements of section 174 but excluding research conducted outside the United States, research in the social sciences or humanities, and research funded by another person. In TSR Inc., 96 T.C. 903 (1991), the Tax Court considered the scope of the credit and the exclusion of research in the social sciences and humanities. In order to ensure the historical and technical accuracy of its games such as "Dungeons and Dragons," TSR conducted extensive historical and technical research and claimed the credit in connection with such expenses. However, in determining that such research was not qualified, the court looked to the plain meaning of the words in the statute and Regulations. The court concluded that by specifically excluding research in the "humanities" and "social sciences," Congress intended that the credit be limited to "technical and analytical areas of natural and physical sciences." *Id*. at 915. Because TSR's research did not satisfy these criteria, it was not eligible for the research credit.

146. Reg. § 1.41-4(c)(8).

147. Reg. § 1.41-4(c)(10) example (10).

148. Reg. § 1.41-4A(c).

149. I.R.C. § 41(d)(4)(H); Reg. § 1.41-4(c)(9). *See also* Reg. § 1.41-4A(d).

150. Reg. § 1.41-4A(d)(1). *See also* Reg. § 1.41-2(e)(2) (concerning contract research expenses).

ered fully funded if the taxpayer retains no substantial rights in the products of the research under the terms of the agreement providing for the performance of the research.[151]

In Technical Advice Memorandum 9410007, the United States government engaged the taxpayer in fixed price contracts to conduct research and develop certain types of equipment.[152] Under the contracts, the taxpayer retained title and rights to any inventions developed as a result of the research, including patents and copyrights, subject to a "non-exclusive, nontransferable, irrevocable" license in favor of the government.[153] The Service rejected the taxpayer's claimed tax credit under section 41 for research expenditures incurred pursuant to the contract. Because the contract provided for progress payments and was subject to little risk of termination or withholding of payments, the Service viewed the contracted research payments as "expected and likely in the normal course of events."[154] As a result, the Service concluded that payment was not contingent on the taxpayer's research success and, thus, fully funded.[155] In addition, the Service concluded that the taxpayer retained no substantial rights in the research because the taxpayer's rights to use and transfer the technology, copyrights, and technical data resulting from the research were subject to "significant restriction" by the United States government.[156]

The Federal Circuit's decision in *Fairchild Industries, Inc. v. United States* significantly undermined the Service's position that taxpayers engaged in governmentally-funded research retained no substantial rights in their research.[157] In its decision, that court permitted a research credit, in connection with expenses incurred by a taxpayer under a government defense contract, where the taxpayer bore the economic risk of loss.[158] According to the Court, "[t]he inquiry turns on who bears the research costs upon failure, not on whether the researcher is likely to succeed in performing the project."[159] As a result of this decision, the Service appears to have modified its position as

151. Reg. § 1.41-4A(d)(2). *See also* Field Service Advice 200018026 (dated February 1, 2000), available in LEXIS, 2000 TNT 89-59 (payments contingent on the success of the research will be treated as fully funded if the taxpayer retains no substantial rights to the research; whether a retained right is substantial depends on the circumstances and the commercial or practical value of the retained right).

152. Tech. Adv. Mem. 9410007 (Mar. 11, 1994).

153. *Id*.

154. *Id*.

155. *Id*.

156. *Id*.

157. Fairchild Indus., Inc. v. United States, 71 F.3d 868 (Fed. Cir. 1995).

158. *Id*. at 874.

159. *Id*. at 873.

expressed in Technical Advice Memorandum 9410007, concluding that the credit is available to the party who bears the economic risk of failure, regardless of the expectation or likelihood of success.[160] The Service has also acknowledged that determining who is at economic risk for unsuccessful research "should be based upon the contractual events by which the parties choose to measure success or failure" and that the contractual allocation of risk may shift between the parties "depending upon the level of progress and completion achieved."[161] Finally, "the allocation of risk is established by the terms of the contract and is present for the contract's duration regardless of whether the outcome is success or failure."[162]

Research that is considered fully funded, and thus excluded from the qualified research definition, was recently subject to review in *Lockheed Martin Corp. v. United States*.[163] As previously noted, the Regulations provide that research will be treated as fully funded where the taxpayer retains no substantial rights in the research under the agreement to provide the research.[164] In *Lockheed*, the taxpayer performed research under a number of defense contracts with the federal government and claimed a tax refund of over $63 million pursuant to section 41.[165] The Court of Federal Claims rejected the taxpayer's claim that the "substantial rights" requirement under the Regulations was invalid and that the Regulation applied only to pre-1986 tax years.[166] The court also rejected the claim that a taxpayer fails to satisfy the "substantial rights" requirement only when the taxpayer retains *no* rights to the research.[167] Instead, the court looked to section 1235 for guidance and concluded that the government's unlimited right to use and disclose the research results, as well as the considerable restrictions on the taxpayer's ability to use the research results in the form of security classifications and export restrictions, prevented the taxpayer from claiming that it retained "substantial rights" in the research.[168] Consequently, the court concluded that none of the taxpayer's research expenses qualified for the research credit.[169]

160. Field Service Advice 200128013 (dated April 6, 2001), available in LEXIS, 2001 TNT 136-67.

161. *Id.*

162. *Id.*

163. Lockheed Martin Corp. v. United States , 42 Fed. Cl. 485 (1998), *aff'd in part, rev'd in part, and remanded*, 210 F.3d 1366 (Fed. Cir. 2000) (Lockheed I).

164. Reg. § 1.41-4A(d)(2) (as amended in 2001).

165. *Lockheed I*, 42 Fed. Cl. at 487.

166. *Id.* at 495-96.

167. *Id.* at 496.

168. *Id.* at 499.

169. *Id.* at 500.

The Court of Appeals for the Federal Circuit subsequently reversed the Court of Federal Claims decision.[170] The court reviewed the Regulations under section 41 and concluded that the party performing the research need not retain exclusive rights in the research in order to retain "substantial rights."[171] Rather, that party need only retain the right to use the results of the research in its trade or business without payment to satisfy the regulatory requirement.[172]

> We therefore must reject the government's argument that "substantial rights" only includes the scenario in which the taxpayer retains the right to exclude others (including the government) from its research and in which other parties do not also have the right to use or disclose the taxpayer's research, including patented inventions. Nothing in the statute or the regulations supports such an interpretation. The right to use the research results, even without the exclusive right, is a substantial right.[173]

The court also concluded that the trial court's analogy to patent cases was "unsound."[174] The court refused to equate section 1235's "substantial rights" test with section 41's regulatory requirement because of the "different language and different concepts" under the two provisions.[175] The court then concluded that determining substantial rights must be made with reference to the research agreements alone and not in conjunction with other restrictions, such as security classifications and export control laws.[176] Finally, the court rejected the government's argument that a cost recovery provision in the research agreements required that Lockheed pay for the retention of its rights in the research.[177] The court distinguished this provision, that, in effect, was to reimburse the government for certain nonrecurring, one-time costs related to the research, from a typical royalty payment based on a percentage of product sales.[178] In addition, the cost recovery provision did not restrict Lockheed's use of the research so as to render the retained rights less than

170. Lockheed Martin Corp. v. United States, 210 F.3d 1366 (Fed. Cir. 2000) (*Lockheed II*).

171. *Id.* at 1375.

172. *Id.*

173. *Id.*

174. *Id.*

175. *Id.*

176. *Lockheed II*, 210 F.3d at 1375-76.

177. *Id.* at 1376.

178. *Id.* at 1377.

substantial.[179] Consequently, the court concluded that, because the research was not funded, the research tax credit was available.[180]

III. Judicial and Administrative Decisions Defining Qualified Research

Although written without the assistance of final Regulations under section 41, a number of judicial decisions have considered the definition of qualified research. Interestingly, the Seventh Circuit Court of Appeals in *Eustace v. Commissioner* acknowledged that neither its decision nor that of the other courts represented the last word on the standards applicable to the definition of qualified research because of the on-going regulatory process at the time.[181] Nevertheless, a review of these decisions provides the judicial perspective on qualified research against which the various versions of the Proposed and final Regulations can be measured.

In *United Stationers, Inc. v. United States*, a United States magistrate judge denied the taxpayer's claim that the development of certain internal-use computer programs—including invoice, record keeping, and inventory control systems—designed to automate and computerize the taxpayer's business operations satisfied the definition of qualified research.[182] The court relied principally on the statutory language and statements contained in the legislative history to conclude that the computer programs met neither the research tax credit's general eligibility requirements nor the specific requirements relating to internal-use software.

First, the court concluded that computer program development did not satisfy section 41's general eligibility requirements: that the purpose of the project be technological in nature or that the taxpayer's research activities involve a process of experimentation.[183] According to the court,

> [the term] "technological in nature" encompasses research that benefits aspects of the country's economy by changing the way machines, and therefore businesses, operate. Here, Plaintiff's research merely altered the productivity of its own marketing scheme and inventory control. . . . [T]his Court finds that merely adding a new program to a computer so that it becomes a more efficient tool for a particular business does not amount to a development which is technological in nature.[184]

179. *Id*. at 1378.

180. *Id*. at 1379.

181. Eustace v. Comm'r, 312 F.3d 905, 908 (7th Cir. 2002).

182. United Stationers, Inc. v. United States, 1997 WL 159526, *5 (N.D. Ill. 1997), *aff'd*, 982 F. Supp. 1279 (N.D. Ill. 1997), *aff'd*, 163 F.3d 440 (7th Cir. 1998) (hereinafter *United Stationers I*).

183. *Id*. at *3.

184. *Id*.

The court also rejected the taxpayer's contention that its development activities involved a process of experimentation because there was no uncertainty concerning the technological feasibility of the taxpayer's activities:

> The requirement of a process of experimentation dovetails the requirement that the research be technological in nature, and supports the Court's conclusion that Congress envisioned the tax credit for ventures into uncharted territory. The activities undertaken by Plaintiffs in developing the [computer programs] do not rise to the required level of experimentation. First, it is not even clear what "hypotheses" Plaintiff was "researching." Furthermore, Plaintiff's research did not venture into an uncertain field, nor did it provide the technology to utilize computers in a manner that was never before available. To the contrary, computers and computer software had long been used as a device to increase business efficiency. The capacity of computers to be utilized as a tool for bookkeeping was not uncertain, nor was there uncertainty as to whether a computer could perform these functions. Finally, the goal of Plaintiff's "research" was to enable greater utilization of the computer for its *own* business purposes, by utilizing already established technology, not to develop a new realm of computer science.[185]

In a subsequent decision, the district court adopted the magistrate's report and concluded that the taxpayer was not entitled to claim a tax credit under section 41 in connection with the computer software development.[186] Unlike the magistrate, the court accepted the characterization of the taxpayer's projects as "technological in nature" but concluded that they were not undertaken to "discover information" that was technological in nature.[187] The court determined that the taxpayer "merely applied, modified, and at most, built upon, pre-existing, technological information already supplied to it. This is a far cry from what Congress contemplated when it spoke of research directed at the 'principles of computer science.'"[188]

Additionally, the district court followed the magistrate's report with respect to whether the taxpayer's activities constituted elements in a process of experimentation.[189] Relying on section 41's legislative history, the court determined that a process of experimentation exists only if the taxpayer faces a measure of technical uncertainty at the project's commencement.[190] While

185. *Id*. at *4.

186. United Stationers, Inc. v. United States, 982 F. Supp. 1279, 1288 (N.D. Ill. 1997), *aff'd*, 163 F.3d 440 (7th Cir. 1998) (hereinafter *United Stationers II*).

187. *Id*. at 1284.

188. *Id*.

189. *Id*. at 1286.

190. *Id*. at 1285.

acknowledging that the development project's financial benefits were in doubt at the outset, the court concluded that the means of achieving the benefits were not.[191]

The Seventh Circuit Court of Appeals subsequently affirmed the District Court's decision.[192] In its decision, the Court of Appeals addressed whether the information sought was technological in nature and whether the software development activities involved a process of experimentation.[193] With respect to the "technological in nature" requirement, the Court of Appeals, like the District Court, emphasized that the research be undertaken to discover information, rather than simply be technological in nature.[194] The court specifically refused to adopt "an interpretation which equates discovery with mere newness."[195] The court concluded that the taxpayer failed to satisfy the first test because the research undertaken failed to refine or expand existing computer science principles and was not of "broad economic effect."[196]

The Court of Appeals also agreed with the district court that the taxpayer had not legally or factually engaged in a process of experimentation.[197] The court concluded that the taxpayer's activities, in debugging the software–"a process of testing and correcting computer programs,"–did not, as a matter of law, constitute a process of experimentation.[198] In addition, the court found no error in the district court's factual determination that the development activities did not involve technical uncertainty from the outset.[199]

In *WICOR, Inc. v. United States*, the district court applied the *United Stationers* section 41 interpretation to reject the taxpayer's claimed credit for expenses incurred in "computerized integrated customer information system" (CIS) development.[200] The taxpayer in *WICOR* was a gas utility, and the purpose of the CIS project was to improve customer service and company performance in the areas of automated meter reading, computer aided dispatch, and online cash posting.[201] WICOR eventually spent more than $30

191. *Id.*

192. United Stationers, Inc. v. United States, 163 F.3d 440, 448 (7th Cir. 1998) (hereinafter *United Stationers III*).

193. *See id.*

194. *Id.* at 444.

195. *Id.*

196. *Id.* at 445.

197. *Id.* at 446.

198. *United Stationers III*, 163 F.3d at 445.

199. *Id.* at 446.

200. WICOR, Inc. v. United States, 116 F. Supp. 2d 1028 (E.D. Wis. 2000), *aff'd*, 263 F.3d 659 (7th Cir. 2001) (hereinafter *WICOR I*).

201. *Id.* at 1030.

million on the CIS project.[202] The parties agreed that the CIS project constituted the development of internal-use software. There were four tests at issue in this case: two tests applicable to research and development tax credits generally and two tests applicable only to internal-use software.[203] The district court concluded that the *WICOR* taxpayer failed to show that the research was undertaken with the purpose of discovering information that was technological in nature[204] or that the research activities constituted a process of experimentation.[205]

Unfortunately, the court broke no new ground in interpreting and applying the legal requirements under section 41; instead, it based its decision on the expert testimony presented by the parties. Nonetheless, the court made an interesting statement in reaching its decision. With respect to the test requiring that the purpose of the research be the discovery of information that is technological in nature, the court was clear that the relevant field of knowledge was that of computer science generally and not just computer science within the taxpayer's particular industry.[206] The taxpayer's evidence that its research expanded the knowledge of computer science principles within the gas utility industry was deemed insufficient. The court also chided the taxpayer that it was seeking to use the research and development tax credit simply to reduce its own business costs: "Market competition, not the qualified research tax credit, should motivate companies to reduce their costs, become more efficient and improve service. In that way, they will gain more customers."[207] The court rejected the taxpayer's claim that the credit's requirements should be liberally interpreted to provide taxpayer incentives to engage in research resulting in the development of new products that will thereby stimulate the economy.

In affirming the district court's decision, the Seventh Circuit focused solely on the taxpayer's failure to satisfy the discovery test.[208] The court was impressed that Andersen Consulting, whom the taxpayer hired to develop the software and who retained the rights to the source code under the development agreement, had abandoned the software at the conclusion of the project.

> Since without the source code it would be very difficult to modify the system to make it usable by other utilities, Andersen apparently didn't think the system *would* be usable by any other utility. Andersen's abandonment of the source code was pretty telling ev-

202. *Id*. at 1032.

203. *Id*. at 1033.

204. *Id*. at 1035.

205. *Id*. at 1036.

206. *WICOR I*, 116 F. Supp. 2d at 1035.

207. *Id*. at 1037.

208. WICOR, Inc. v. United States, 263 F.3d 659 (7th Cir. 2001) (hereinafter *WICOR II*).

> idence that the project had involved merely adapting existing computer technology to the special needs of the gas company rather than inventing a new technology, embodied in the source code, that would have a broader applicability. Existing technology had to be customized to the particular needs and specifications of a particular customer of Andersen's; that was all. Genuine innovation portable to other customers would have motivated Andersen to take the source code, the key to the use of the innovation by other customers, with it when it completed the project for the gas company. So the district court did not commit a clear error in finding that the plaintiff had flunked the discovery test, at least; nothing more was required to deny the section 41 tax credit[.][209]

In *Norwest Corporation*, the Tax Court entered the debate and considered the requirements applicable to qualified research, again in the context of internal-use software development. The court interpreted section 41(d) as imposing the following four separate tests:

(1) The Section 174 Test (Test 1), that requires that the research expenditures qualify as expenses under section 174;

(2) The Discovery Test (Test 2), that limits the type of information discovered to that which is technological in nature;

(3) The Business Component Test (Test 3), that requires that the taxpayer's activities provide some level of functional improvement to a business component of the taxpayer; and

(4) The Process of Experimentation Test (Test 4), that requires that initial uncertainty concerning the taxpayer's technical ability to develop the product be eliminated through the development, testing, and analyzing of one or more hypotheses as part of a sequential design process to develop the overall component.[210]

The Tax Court provided content to each of these tests by relying on the legislative history to section 41 and the research tax credit's policy objectives. With respect to Test 2, the Discovery Test, the court concluded that an objective of the taxpayer's activities must be the creation of new knowledge in the field in which the taxpayer is working in order to be eligible for the credit:

> The legislative history of section 41 dictates that the knowledge gained from the research and experimentation must be that which exceeds what is known in the field in which the taxpayer is performing the research and experimentation–in this case, the computer science field. The fact that the information is new to the taxpayer, but not new to others, is not sufficient for such informa-

209. *Id.* at 661. *See also* Eustace v. Comm'r, 312 F.3d 905 (7th Cir. 2002).

210. *Norwest Corp.*, 110 T.C. at 479.

> tion to come within the meaning of discovery for purposes of this test. The purpose of the R&E credit was to stimulate capital formation and improve the U.S. economy–not merely the taxpayer's business.[211]

The court referred to section 41's legislative history to conclude that the information discovery must concern hard science principles that could result by either "expanding" or "refining" those principles.[212]

The Court also concluded that the Discovery Test of section 41 differs from the uncertainty test of section 174.[213] The court pointed out that the uncertainty test under the section 174 Regulations was not adopted until 1994, eight years after introducing the discovery test under section 41. In addition, the court cited to section 41's legislative history to suggest that, in amending section 41 in 1986, "Congress sought to tighten the requirements for obtaining the R&E credit."[214] Because Congress did not change section 174's requirements at that time, the Congressional purpose could only be achieved by viewing the two tests as different. Finally, the court viewed section 174's uncertainty test and section 41's discovery test as relating to the discovery of different types of information.[215] According to the court, the Regulations under section 174 refer to "uncertainty concerning the development or improvement of a product" while section 41 relates to information that is "technological in nature" and that "fundamentally relies on principles of the hard sciences."[216] Unfortunately, the Tax Court only provided a limited description of Test 3, the Business Component Test. The court simply noted that the taxpayer's activities must provide some level of functional improvement, at a minimum, to a taxpayer's business component.[217]

Finally, the court considered Test 4, the Process of Experimentation Test. After quoting from the legislative history, the court stated that this test requires "a more structured method of discovery" than that required under section 174, a process in which one or more hypotheses must be developed, tested, and analyzed.[218] The court also expanded on the statutory requirement that "substantially all" of the taxpayer's activities must constitute elements of a process of experimentation.[219] According to the court, this requirement is satisfied only if at least 80 percent of the taxpayer's activities

211. *Id.* at 493.

212. *Id.*

213. *Id.*

214. *Id.*

215. *Id.*

216. *Id.*

217. *Id.*

218. *Id.*

219. *Id.*

constitute elements of a process of experimentation.[220] According to the court, this requirement should only be applied in concert with the "shrinking back" test until: 1) the 80 percent standard is satisfied or 2) the most basic element of the product is reached and that element fails to satisfy the standard.[221] The court concluded by noting that the "shrinking back" test must be examined on a case-by-case basis to determine which activities are part of the same process or product and which are sufficiently discrete as to warrant separate evaluation.[222]

The approach adopted by the Tax Court in *Norwest* was the subject of some criticism in *Tax and Accounting Software Corporation v. United States*.[223] Tax and Accounting Software Corporation (TAASC) engaged in the development and marketing of four computer software products to satisfy the tax and accounting needs of both businesses and professional accounting firms.[224] Unlike the internal-use software at issue in *Norwest*, the computer software developed by TAASC was intended for commercial sale and licensing. Early in its opinion, the court noted that, although the decision in *Norwest* was helpful in describing section 41's requirements, the court did not believe the *Norwest* decision complied with the Congressional intent of section 41 or that the decision was applicable to cases involving software development for the commercial market.[225] Based on the court's own view of section 41's requirements, TAASC's software development satisfied all four of the tests applicable to qualified research.

The *Tax and Accounting Software Corporation* decision focused on the interpretation and application of Test 2, the Discovery Test, and Test 4, the Process of Experimentation Test.[226] With respect to the Discovery Test, the court rejected the Service's contention, adopted in the Proposed Regulations and the *Norwest* decision, that "newness or expansion of existing knowledge" is required.[227] According to the court, the Service and the prior decisions erred in focusing on the "discovery" aspect of the test rather than the "technology" aspect of the test:

> The IRS and the Court[ ] in *Norwest* . . . have erroneously tried to divide this requirement into two tests with the first being whether the taxpayer's actions can be considered a "discovery" in the sci-

220. *Id*.

221. *Id*.

222. *Id*.

223. Tax and Accounting Software Corp. v. United States, 111 F. Supp. 2d 1153 (N.D. Okla. 2000), *rev'd and remanded*, 301 F.3d 1254 (10th Cir. 2002) (*TAASC I*).

224. *Id*. at 1155.

225. *Id*. at 1157.

226. *Id*. at 1158-61.

227. *Id*. at 1158-59.

> entific sense (the "Discovery Test"). However, that construction of the statutory language would be a strained and improper reading without any support in the legislative history to back it up. The emphasis should be on whether the information qualifies as being "technological in nature" (the Technology Test), not whether the work could be considered a revolutionary discovery in the scientific sense. The statutory language was intended to differentiate between information that is technologically based from that which is non-technologically based.[228]

In reaching that conclusion, the court was heavily influenced by 1999 Congressional statements concerning the debate over the Proposed Regulations.[229] These statements emphasized that credit eligibility does not require that the research be successful and that the research need only result in information that is new to the taxpayer and not otherwise freely available to the general public.[230] Accordingly, the court rejected the Service's statutory interpretation as inconsistent with Congressional intent.[231] Furthermore, the court concluded that the research activities fully satisfied the Discovery Test requirements when properly interpreted.[232]

With respect to the Process of Experimentation Test, the *Tax and Accounting Software Corporation* court recognized that a process of experimentation is defined as "a process involving the evaluation of more than one alternative designed to achieve a result where the means of achieving that result is uncertain at the outset."[233] Again, however, the court turned to 1998 Congressional statements concerning the debate over the Proposed Regulations.[234] These statements emphasized that the uncertainty required by the Process of Experimentation Test applies to the means of achieving a particular result, even in those cases in which the taxpayer knows at the outset that the result is technically possible. In addition, the court recognized that evaluating more than one alternative may occur through the modeling and simulation of one or more hypotheses and the testing and analyzing of those hypotheses, but that it was not necessary for the taxpayer to adopt a formal experimentation methodology.[235] In other words, the court rejected the Service's interpretation of a process of experimentation as too technical and formalistic.

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228. *Id.* at 1158.

229. *Id.* at 1159.

230. *Id.*

231. *Id.* at 1160.

232. *Id.* at 1159-60.

233. *Id.* at 1160 (emphasis omitted).

234. *Id.*

235. *Id.*

> The credit was established as an incentive to encourage taxpayers to incur the cost of research in developing new products and stimulating the economy. The IRS is proposing standards that would be suitable for academic research where the research is going to be published and replicated under the peer review process. However, the IRS is completely missing the fact that Congress intended to encourage commercial research, not academic research. In the commercial environment, time and secrecy are of the essence if the product is going to succeed. The highly structured definition of research which is proffered by the IRS in its regulations makes it virtually impossible for commercial research to qualify for the section 41 credit, which was clearly not the intention of Congress. TAASC has proven that it followed a "process of experimentation" where it evaluated more than one alternative to achieve its intended result, where the process of achieving that result was uncertain at the outset. TAASC had a goal of developing certain integrated suites of software applications that were not available to the public in that form, and which operated within certain limitations of available memory and processing power. TAASC knew at the outset that there were many alternative methods of designing the programming of each component and such would need to be tested, redesigned, refined and maybe eliminated in order to reach the final satisfactory product. TAASC followed a "process of experimentation" in order to reach their final product.[236]

As a result, the research activities undertaken by TAASC in its software product development fully satisfied the qualified research definition.

The taxpayer's victory in *TAASC* was short-lived, however, when the Tenth Circuit overturned the district court's decision on appeal.[237] With respect to the existence of a separate discovery requirement, the Court of Appeals noted that, although the government had consistently asserted the existence of such a requirement in prior litigation, the fact that the revised Proposed Regulations specifically rejected the discovery requirement meant that the government's position was not entitled to substantial deference.[238] Nevertheless, the court concluded that section 41's plain meaning imposed a discovery requirement and that the information discovered must be "something new or previously unknown."[239] According to the court, this standard

236. *TAASC I*, 111 F. Supp. 2d at 1160-61.

237. Tax & Accounting Software Corp. v. United States, 301 F.3d 1254 (10th Cir. 2002) (hereinafter *TAASC II*).

238. *Id.* at 1261.

239. *Id.*

was not as demanding as the government contended, nor as relaxed as the taxpayer asserted.[240]

> Contrary to TAASC's arguments, mere evidence that the taxpayer has developed a new and useful product in and of itself will not qualify. Contrary to the government's argument, the new information need not 'expand, or refine, principles of the physical or biological sciences, engineering, or computer science.' . . . In other words, each of the positions of the parties is incorrect.[241]

The Court of Appeals ultimately concluded that the district court's grant of summary judgment for the taxpayer on this issue was inappropriate because the record regarding the type of information discovered by TAASC, as a result of its research, had not been developed,

With respect to the process of experimentation test, the Court of Appeals considered two questions, whether: 1) the test allows a taxpayer to use methods that are generally known and 2) the test requires the taxpayer initially to believe that there is uncertainty as to whether the final result is feasible.[242] The Court of Appeals addressed the first question based on a review of the statutory language, the legislative history, the evolving Regulations, and the government's position in prior litigation, and concluded that the process of experimentation test did not prohibit the taxpayer from using methods that are commonly known if it is uncertain which of the methods will allow the taxpayer to achieve a particular result.[243] With respect to the second question, whether the process of experimentation test requires the taxpayer initially to believe there is uncertainty as to whether there is the final result is feasible, the court recognized that the government's position had been upheld in prior judicial decisions.[244] In addition, the court rejected the taxpayer's reliance on statements contained in subsequent legislative history, from 1998 when Congress extended the term of section 41, to the effect that the process of experimentation test includes research even when at the outset the taxpayer knows the results are technically possible.[245] The court concluded that uncertainty concerning the final result's feasibility was required by the very policy basis for section 41's enactment.

> [A]t least part of the goal of the tax credit is to provide incentives for companies to invest in research that might not otherwise be undertaken because of its high risks. . . . Thus, the very uncer-

240. *Id*.

241. *Id*. at 1262.

242. *Id*. at 1262-63.

243. *Id*. at 1264.

244. *TAASC II*, 301 F.3d at 1265 (citing the decisions by the Seventh Circuit in *United Stationers* and the Tax Court in *Norwest*).

245. *Id*.

> tainty of the research is a rationale for the tax credit in the first place. Allowing experimentation to qualify for the tax credit where the feasibility of the final result was certain would undermine that rationale, and might encourage companies to be more conservative in their allocation of resources, concentrating on problems with a solution that is evident from the outset.[246]

Because the taxpayer conceded that it knew the results of its research were technically feasible, the court concluded that TAASC could not satisfy the process of experimentation test as a matter of law.[247]

Finally, in *Eustace v. Commissioner*, the Tax Court revisited the qualified research definition.[248] The *Eustace* taxpayers were shareholders of an S corporation that produced computer software for independent insurance agencies. The software performed such administrative functions as processing client and insurance policy information, invoices, insurance claims, standard insurance forms, word processing, marketing, and accounting. The Tax Court relied on both the Seventh Circuit's decision in *United Stationers* and its own *Norwest* decision and had little difficulty in concluding that the taxpayers had failed to satisfy the requirements that the research seek to discover information that is technological in nature and that the research involve a process of experimentation. The court specifically noted that the problems and solutions involved in the taxpayers' software development activities were "commonly known in the computer science field and did not present significant programming challenges."[249] As a result, the development activities did not go "beyond the current state of knowledge in the computer science field," and the taxpayers did not "conduct a process of experimentation aimed at eliminating uncertainty about the technical ability to develop the software."[250]

On appeal before the Seventh Circuit,[251] the taxpayers argued that strict standards applied by the Tax Court were not required under section 41; "section 41 does not set so high a standard . . . that industrious development of software through a process of trial and error [should fail to] meet the statutory standard."[252] The taxpayers relied on the Tenth Circuit's *TAASC* decision that had determined section 41 did not impose the heightened standards articulated by the court in *United Stationers*, with respect to the discovery and the process of experimentation requirements. Although the court refused to overturn its decision in *United Stationers*, it had little difficulty concluding

246. *Id.* at 1266.

247. *Id.* at 1268.

248. *See* Eustace v. Comm'r, 81 T.C.M. (CCH) 1370 (2001).

249. *Id.*

250. *Id.*

251. Eustace v. Comm'r, 213 F.3d 905 (7th Cir. 2002).

252. *Id.* at 907.

that the taxpayers could not satisfy either set of standards. The court also refused to apply the standards under the revised Proposed Regulations where the Service had rejected an independent discovery requirement under section 41. The court concluded that, even if the revised Proposed Regulations standards were applied, the taxpayer would fail to satisfy the process of experimentation requirement that the court viewed as essentially tracking the standard applied in *United Stationers*.[253]

Although the Seventh Circuit did not provide any significant new guidance with respect to the discovery test, beyond that provided in *United Stationers*, it did expand on the process of experimentation requirement. In *United Stationers*, the court had concluded that section 41 requires that the taxpayer formulate and test hypotheses in order to reduce uncertainty about the possibility of success.[254] Indeed, relying on legislative history statements, the court had suggested that the taxpayer must engage in a "systematic–almost scientific– methodology" to satisfy the process of experimentation requirement.[255] In *Eustace*, the court explicitly stated that section 41 required that the taxpayer engage in the scientific method; a methodology involving trial and error would not suffice.[256]

> Although the word "experiment" has many shadings in common speech, we held that as used in § 41 it has the *scientific* sense of forming and testing hypotheses rather than the lay (or even engineering) sense of trial and error. Galileo engaged in experiments about acceleration when he rolled balls down an inclined plane. An auto manufacturer trying different nozzles from those on hand to find the one that applies the smoothest coat of paint is not engaged in "experimentation" under this view, nor is a software developer trying different methods to implement a feature accompanied by maximum execution speed and minimum demand on system resources such as RAM. Tinkering differs from experimentation in the vocabulary of research–and § 41 is about research, and thus about use of the scientific method. Authors and movie makers playing with sentences and scenes to find what most impresses the public are not doing scientific research using "experimentation." Just so with software. Developers are authors too; that they write lines of code readable by machines rather than lines of words readable by people does not fundamentally change the nature of the task and make one form of writing "experimentation" when the other is not. Experimentation is a subset of all

253. *Id*. at 908.

254. *United Stationers III*, 163 F.3d at 445-46.

255. *Id*. at 446.

256. *Eustace*, 312 F.3d at 907.

> steps taken to resolve uncertainty; otherwise searching for a place to park a car would be a "process of experimentation."[257]

Having failed to satisfy the process of experimentation requirement, the taxpayers in *Eustace* were ineligible to claim the research tax credit.

Based on their review of the statutory language and section 41's legislative history, the courts were in almost unanimous agreement that section 41 imposes an exacting standard with respect to the qualified research definition. Significantly, the Tax Court in *Norwest*, the Seventh Circuit in *United Stationers*, and the Tenth Circuit in *TAASC* each concluded that section 41 imposes an independent discovery test. Although the Tenth Circuit differed from the Tax Court and the Seventh Circuit in its articulation of the test, the courts determined that, at a minimum, the objective of the research must be the discovery of "something new or previously unknown." The Tax Court and the Seventh Circuit required more, that the objective of the research refine or expand existing principles of science or technology. Regardless of the correct view, section 41's judicial view differs markedly from that of the Treasury Department under the final Regulations.

Similarly, the courts were unanimous that a taxpayer can only satisfy the process of experimentation requirement when he adopts a structured and methodical means of investigation. Although one may question whether Congress intended that a taxpayer must engage in research on a level similar to that of Galileo, as the Seventh Circuit suggested in *Eustace*, the courts recognized that, in adopting the term "process of experimentation," Congress intended that qualified research could only occur through a process akin to the scientific method.[258] Again, section 41's judicial view differs markedly from that of the Treasury Department under the final Regulations.

IV. Internal-Use Computer Software

The statutory definition of qualified research specifically excludes the development of certain types of computer software, denominated as "internal-use computer software," except to the extent provided by Regulation. Section 41 also states that computer software developed by or for the taxpayer's benefit, primarily for internal use, is not to be considered qualified research unless it is used in an activity that is itself qualified research or as part of a production process that meets the credit requirement.[259] In defining internal-use computer software, the legislative history only refers to those situations in which "the software is used internally, for example, in general and administrative functions (such as payroll, bookkeeping, or personnel

257. *Id.*

258. *Id.* at 907.

259. 26 U.S.C. § 41(d)(4)(E) (2004); Prop. Reg. §§ 1.41-4(c)(6)(i) and 1.41-4(c)(6)(iv).

management) or in providing non-computer services (such as accounting, consulting, or banking services) . . . ."[260]

Although the definition of qualified research generally excludes research involving internal-use computer software, the Code and legislative history recognize two partial exceptions. First, the legislative history is clear that the exclusion of development activities in connection with internal-use software is not intended to apply to product development that combines both hardware and software.[261] Second, the development of internal-use software will be considered qualified research if, in addition to satisfying the research tax credit's general eligibility requirements, the taxpayer can demonstrate that:

(1) The software is innovative (i.e., the software results in a reduction in cost, or improvement in speed, that is substantial and economically significant);

(2) The software development involves significant economic risk (i.e., the taxpayer commits substantial resources to the development of the software and, because of technical uncertainty, substantial risk exists that such resources would not be recovered within a reasonable period); and

(3) The software is not commercially available for the taxpayer's use (i.e., the software cannot be purchased, leased, or licensed and used for its intended purpose without modifications that would satisfy the two requirements stated above).[262]

The purpose of the second exception to the general internal-use software exclusion, under the "qualified research" definition, is to allow the credit's use in connection with internal-use computer software development where such software meets a "high threshold of innovation."[263]

There has been considerable controversy over exactly what types of computer software constitute internal-use computer software. This is because computer software advances and developments since 1986 somewhat blur the distinction between internal and external computer software use.

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260. S. REP. NO. 313, 99th Cong., 2d Sess. 697 (1986); H.R. REP. NO. 841 (Pt. II), 99th Cong., 2d Sess. 73 (1986). *See also* H.R. REP. NO. 426, 99th Cong., 1st Sess. 182 (1985); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, at 135 (1987).

261. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, at 135 (1987). *See also* Prop. Reg. § 1.41-4(c)(6)(iii)

262. H.R. REP. NO. 841 (Pt. II), 99th Cong., 2d Sess. 73-74 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 134-135 (1987). *See* Prop. Reg. §§ 1.41-4(c)(6)(ii)(C)(4), 1.41-4(c)(6)(vi), and 1.41-4(c)(6)(vii).

263. H.R. REP. NO. 426, 99th Cong., 1st Sess. 178 (1985); S. REP. NO. 313, 99th Cong., 2d Sess. 695 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, at 131 (1987). *See also* Prop. Reg. §§ 1.41-4(c)(6)(vi) and 1.41-4(c)(6)(vii).

The controversy is particularly intense in the financial services industry, where financial services are being offered directly to customers via computer and the Internet. In addition, taxpayers and the Service are aware that a narrow internal-use computer software definition will assist taxpayers in claiming the research tax credit by avoiding the necessity of satisfying the additional requirements under the high threshold of innovation test.

In *United Stationers, Inc. v. United States*,[264] the court addressed the issue of whether the development of certain invoice, record keeping, and inventory control systems to which the taxpayer's customers had limited access involved internal-use software development.[265] The taxpayer claimed that the internal-use software definition did not apply to software development activities that concerned the taxpayer's core revenue-generating activities, that the taxpayer claimed have, by definition, an external impact. The court rejected this argument, concluding that, under the totality of the circumstances, the software that the taxpayer developed was designed principally to track its inventory, which is an internal use.[266] Even with respect to software to which the taxpayer's customers had limited access, the court concluded that the software's primary use was to streamline the taxpayer's operations.[267] "The services these software programs expedite–marketing, ordering, invoicing, shipping, receiving, pricing, etc.–even though they may have a direct impact on customers, suppliers, and third parties do not rescue the programs from the internal-use exclusion."[268]

The Service has also considered the circumstances under which computer software will be considered internal-use software. In a Coordinated Issue Paper, the Service considered a situation in which the taxpayer incurred costs in the installation, customization, enhancement, and maintenance of a commercially available administrative software package.[269] After reiterating passages from the legislative history and referring to the decisions of the Seventh Circuit in *United Stationers* and the Tax Court in *Norwest*, the Service concluded that the software fell within the definition of internal-use software largely because the taxpayer's purpose when incurring the software expenditures was to increase corporate efficiency and reduce costs, because the software "included an extensive list of standard features and provided basic functionality that [the taxpayer] needed," and because the software "was developed for use within the confines of [the taxpayer's] business." The Service stated that its conclusion was appropriate even if the use of the

264. *United Stationers III*, 163 F.3d 440 (7th Cir. 1999).

265. *Id.*

266. *Id.*

267. *Id.*

268. *Id.* at 447.

269. I.R.S. Industry Specialization Program Coordinated Issue Paper, LEXIS, 1999 TNT 168-18.

software had a direct impact on the taxpayer's customers, suppliers, or other third parties.

Section 41's revised Proposed Regulations expand on the internal-use computer software definition provided in the legislative history.[270] According to the revised Proposed Regulations, internal uses include the taxpayer's general and administrative functions as well as the provision of non-computer services.[271] "General and administrative functions include, but are not limited to, functions such as payroll, bookkeeping, financial management, financial reporting, personnel management, sales and marketing, fixed asset accounting, inventory management and cost accounting."[272]

270. As previously noted, the Service decided not to finalize those provisions of the revised Proposed Regulations applicable to internal-use computer software and has requested further comments concerning the appropriate definition and treatment of such software. Advance Notice of Proposed Rulemaking, 69 Fed. Reg. 43 (2004). For commentary on the revised Proposed Regulations in connection with internal-use software, *see* J. R. Oliver, *Research Credit Potentially Available for Internal-Use Software*, 69 PRAC. TAX STRATEGIES 153 (Sept. 2002); Matthew A. Melone, *IRS Experiments Again With Research Credit and Issues New Proposed Rules*, 4 BUS. ENTITIES 40 (May/June 2002).

271. Prop. Reg. § 1.41-4(c)(6)(iv).

272. *Id.* The original Proposed Regulations as well as the original final Regulations reiterated statements contained in the legislative history and provided that "[s]oftware is developed primarily for the taxpayer's internal use if the software is to be used internally, for example, in general administrative functions of the taxpayer (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting or banking services)." Reg. § 1.41-4(c)(6)(iii) (2001). *See* Prop. Reg. § 1.41-4(e)(1) (1997). The specific reference to banking services was criticized because "financial institutions are on the leading edge of technology investment," particularly with respect to "customer focused products and processes [which] include state of the art imaging technology, SMART cards, home banking, on-line brokage services, [and] banking by phone. . . ." Letter from Norma J. Lauder, First Chicago NBD Corporation, to the Internal Revenue Service dated May 30, 1997, available in LEXIS, 97 TNT 113-29; Gerald Robinson, Jr., Barnett Banks, Inc., to Robert B. Hanson, Internal Revenue Service, dated May 21, 1997, available in LEXIS, 97 TNT 113-28. *See also* Brief of the Amicus Curiae American Bankers Association in Norwest Corp. v. Commissioner, available in LEXIS, 98 TNT 79-40 (maintaining that the reference in the legislative history to banking services was intended to provide broad examples by way of illustration only and not to exclude the entire industry from section 41). Another commentator critical of the original Proposed Regulations suggested that the statements contained in the legislative history regarding internal-use software and banking services "must be viewed within the context of both the thrust of the Committee Reports and the state of technological development of the banking industry in 1986." Letter from Dina S. Shapiro, Citigroup, Inc., to Mark Hoffenberg, Department of the Treasury, dated Dec. 28, 1999, available in LEXIS, 2000 TNT 9-28. See also Letter from Saul M. Rosen, Securities

The revised Proposed Regulations also provide that computer software that is not developed to be commercially sold, leased, licensed, or otherwise marketed for separately stated consideration to unrelated third parties, is presumed to be developed primarily for the taxpayer's internal use.[273] According to the Service,

> [t]his distinction reflects the view that software that is sold, leased, licensed, or otherwise marketed, for separately stated consideration to unrelated third parties is software that is intended to be used primarily by the customers of the taxpayer, whereas software that does not satisfy this requirement is software that is intended to be used primarily by the taxpayer for its internal use or in connection with a noncomputer service provided by the taxpayer.[274]

Industry Association, to the Honorable Charles O. Rossotti, dated May 17, 2001, available in LEXIS, 2001 TNT 126-30 (suggesting that software integrally related to the provision of a product or service to a customer not be deemed internal-use software); Donna Fisher, American Bankers Association, to Jonathan Talisman, Acting Assistant Secretary (Tax Policy), dated March 7, 2000, available in LEXIS, 2000 TNT 67-22 (maintaining that software "integrally related" to the delivery of a product or service to a customer that is intended to create a "competitive advantage" for the taxpayer should not be considered internal-use software); Letter from Anthony J. Cetta, Securities Industries Association, to Jonathan Talisman, Acting Assistant Secretary for Tax Policy, dated Feb. 25, 2000, available in LEXIS, 2000 TNT 57-18 (suggesting that software developed to provide customers with the ability to trade and communicate via the Internet with a financial services firm should not constitute internal-use software).

Despite these criticisms, the Service retained the reference to banking services in the definition of internal-use software as part of the original final Regulations. However, in promulgating the original final Regulations, the Service attempted to address the criticisms of the commentators by adopting a new exception from the special requirements applicable to internal-use software for the development of internal-use software incorporating features not yet offered by the taxpayer's competitors that is used to deliver noncomputer services to customers. Reg. § 1.41- 4(c)(6)(v) (2001); T.D. 8930, 66 Fed. Reg. 280, 286 (2001). *See infra* note 277.

273. Prop. Reg. § 1.41-4(c)(6)(iv). *See* Prop. Reg. § 1.41- 4(c)(6)(viii) example (1) (concluding that computer software developed by an insurance company to compute actuarial reserves in a more timely and cost- effective manner was internal-use software).

274. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,365 (2001). The definition of internal-use software under the revised Proposed Regulations differs from that under the original final Regulations. The original final Regulations did not contain the presumption that computer software that is not developed to be commercially sold, leased, licensed, or otherwise marketed for separately stated consideration to unrelated third parties is internal-use software. Reg. § 1.41-4(c)(6)(iii) (2001). Instead, the original Proposed Regulations and the original final Regulations followed the legislative history and provided that

If the software is developed primarily for internal use, the restrictions credit availability will apply even though the taxpayer subsequently sells, leases, or licenses the software.[275]

The revised Proposed Regulations incorporate an exception for certain types of internal-use computer software from the high threshold of innovation test. Provided the research tax credit's general requirements are otherwise satisfied, the credit is available for software the taxpayer develops for use in providing computer services to its customers.[276] A computer service is

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"[s]oftware is developed primarily for the taxpayer's internal use if the software is to be used internally, for example, in general administrative functions of the taxpayer (such as payroll, bookkeeping, or personnel management) or in providing noncomputer services (such as accounting, consulting or banking services)." Prop. Reg. § 1.41-4(e)(1) (1997); Reg. § 1.41-4(c)(6)(iii) (2001). Several commentators have suggested that the approach adopted in the revised Proposed Regulations is a step in the wrong direction. *See* Letter from Mark Canter, American Council of Life Insurers, to the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 54-35; Letter from Michael Goldbas, Deloitte & Touche LLP, to the Honorable Charles Rossotti, Commissioner of the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 48-29; Letter from J. Robert Vastine, Coalition of Service Industries, to the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 56-12.

Although it is unclear whether the Regulations as originally proposed, judicial decisions to date, or both were the intended target, the legislative history to the Tax and Trade Relief Extension Act of 1998, PUB. L. NO. 105-277, § 1001, 112 Stat. 2681, *2681-888 (1998) (in which Congress retroactively extended the research credit for the period from July 1, 1998, through June 30, 1999) contained a curious statement concerning internal-use software. According to the legislative history,

> the conferees observe the lack of clarity in the interpretation of the distinction between internal-use software, the costs of which may be eligible for the credit if additional tests are met, and other software. The conferees emphasize that application of the definition of internal-use software should fully reflect Congressional intent.

H.R. CONF. REP. NO. 825, 105th Cong., 2d Sess. 1549 (1998). *See also* Staff of the Joint Comm. on Tax'n, General Explanation of Tax Legislation Enacted in 1998, 236-237 (1998).

275. Prop. Reg. § 1.41-4(c)(6)(iv).

276. Prop. Reg. § 1.41-4(c)(6)(ii)(C)(3). In releasing the revised Proposed Regulations, the Service noted that commentators were critical of the distinction between computer and noncomputer services. Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,365 (2001). *See, e.g.,* Letter from Saul M. Rosen, Securities Industry Association, to the Honorable Charles O. Rossotti, dated May 17, 2001, available in LEXIS, 2001 TNT 126-30 (suggesting that software integrally related to the provision of a service to a customer not be deemed internal-use software regardless of the type of service provided). In particular,

commentators suggested that the definition of internal-use computer software exclude any software that includes an interface with customers or the public. The Service concluded, however, that such an exclusion "would entail substantial administrative difficulties and may inappropriately permit certain categories of costs (e.g., certain web site development costs) to constitute qualified research expenses without having to satisfy the high threshold of innovation test." Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,365 (2001). Nevertheless, the distinction between computer and non-computer services remains controversial. *See* Letter from Michael Goldbas, Deloitte & Touche LLP, to the Honorable Charles Rossotti, Commissioner of the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 48-29; Letter from Mark R. Baran, American Bankers Association, to the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 51-29; Letter from J. Robert Vastine, Coalition of Service Industries, to the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 56-12; Letter from Joseph L. Schiffhouer and Michael D. Fryt, FedEx Corporation, to the Internal Revenue Service, dated March 6, 2002, available in LEXIS, 2002 TNT 54-39.

The original final Regulations contained a second exception from the high threshold of innovation test for certain types of internal-use computer software. Provided the general requirements of the credit were otherwise satisfied, the credit was available for software that the taxpayer developed for use in providing noncomputer services to its customers if (1) the software was designed to provide customers a new feature with respect to a noncomputer service; (2) the taxpayer reasonably anticipated that customers would choose to obtain the noncomputer service from the taxpayer (rather than from the taxpayer's competitors) because of the new feature provided by the software; and (3) the new feature was not available (at the time the research is undertaken) from any of the taxpayer's competitors. Reg. §§ 1.41-4(c)(6)(v) and 1.41-4(c)(6)(viii) example (2) (2001). A noncomputer service was a service offered by a taxpayer to customers who conduct business with the taxpayer primarily to obtain a service other than a computer service, even if such other service is enabled, supported, or facilitated by computer or software technology. Reg. § 1.41-4(c)(6)(iv)(B) (2001). *See also* Prop. Reg. § 1.41-4(c)(6)(v)(B). In the preamble to the original final Regulations, the Service stated that no inference was intended with respect to whether or not software that satisfied the requirements of this exception was not internal-use software or whether or not such software would fail the three-part test:

> No inference should be drawn that software described within the foregoing exception is not internal-use software or that internal-use software not described within the exception would fail the three-part test. Rather, the exception reflects a determination by IRS and Treasury that it is appropriate to exercise the regulatory authority in section 41(d)(4)(E) to exempt certain internal-use software from having to fulfill additional conditions for credit eligibility. This exercise of regulatory authority is based on a determination that the development of software containing features or improvements that are not available from a taxpayer's competitors and that provide a demonstrable competitive advantage is more likely to increase

a service offered by a taxpayer to customers who conduct business with the taxpayer primarily for the use of the taxpayer's computer or software technology.[277] Importantly, the taxpayer does not provide a computer service merely because customers interact with the taxpayer's software.

Although most of the controversy involving internal-use computer software has focused on its definition, the standards applicable under the high threshold of innovation test also remain important. Section 41's revised Proposed Regulations provide some additional guidance on applying the high threshold of innovation test and depart, in some ways, from legislative history.[278] To satisfy the high threshold of innovation test, internal-use computer software must be innovative.[279] Although section 41's legislative history provides that this requirement is satisfied if the software development efforts resulted in a substantial and economically significant reduction in cost or improvement in speed, the Service decided to exercise its regulatory authority under section 41(d)(4)(E) and provided that software will be deemed innovative if it is "intended to be unique or novel and is intended to differ in a significant and inventive way from prior software implementations or

> the innovative qualities and efficiency of the U.S. economy (by generating knowledge that can be used by other service providers) than is the development of software used to provide noncomputer services containing features or improvements that are already offered by others. IRS and Treasury believe that drawing such a line is an appropriate way to administer the credit with a view to identifying and facilitating the credit availability for software with the greatest potential for benefitting the U.S. economy, an important rationale for the research credit.

T.D. 8930, 66 Fed. Reg. 280, 286 (2001). The Service did not incorporate this exception under the revised Proposed Regulations, noting that commentators had criticized the exception as "too limited and subjective in its application to have significant value to taxpayers." Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,365 (2001). However, because of modifications in the definition of internal-use software and the requirements applicable to internal-use software under the revised Proposed Regulations, the Service believes that software eligible for the credit under the exception will remain eligible under the revised Proposed Regulations even without the exception.

277. Prop. Reg. § 1.41-4(c)(6)(v)(A).

278. The revised Proposed Regulations also contain a number of examples illustrating the application of the high threshold of innovation test. *See* Prop. Reg. § 1.41-4(c)(6)(viii) examples (2), (6), (7), and (8) (in which the taxpayer fails to satisfy the high threshold of innovation test because the software was not unique or novel), example (9) (in which the taxpayer fails to satisfy the high threshold of innovation test because the software did not involve significant economic risk), and examples (3), (4), (5), (10), (11), (12), and (13) (in which the taxpayer satisfies the high threshold of innovation test).

279. Prop. Reg. § 1.41-4(c)(6)(vi)(A).

methods."[280] The Service claimed that this change in the definition of the term innovative was necessary to reflect changes in software technology.[281]

To satisfy the high threshold of innovation test, internal-use computer software developments must also involve significant economic risk and not otherwise be commercially available.[282] The revised Proposed Regulations

280. Prop. Reg. § 41.1-4(c)(6)(vi)(A).

281. Under the original final Regulations, the definition of innovative followed the legislative history but was intimately tied to the "common knowledge" standard applicable to the discovery test under the general requirements of section 41. Reg. §§ 1.41- 4(c)(6)(vi)(A) (adopting the definition of innovative from the legislative history) and 1.41-4(c)(6)(vii) (providing that the determination whether the software is innovative is based on a comparison of the intended result with software that is within the common knowledge of skilled professionals in the relevant field of science or engineering) (2001). Because the Service significantly modified the requirements of the discovery test under the revised Proposed Regulations (*see supra* text accompanying notes 54-82), a change in the definition of innovative was necessary but, according to the Service, this change of definition was also appropriate in order to update the definition in terms of current technology.

This change is being proposed pursuant to the authority provided in section 41(d)(4)(E) and the legislative history thereunder in order to update the definition of innovative contained in T.D. 8930. The T.D. 8930 definition was derived from the legislative history to the 1986 Act and required that the software be intended to result in a reduction in cost, improvement in speed, or other improvement, that is substantial and economically significant. Treasury and the IRS became concerned that the elements of the T.D. 8930 definition, while perhaps reflecting innovations in computer software in the mid-1980s, did not adequately reflect the factors that indicate that software is innovative today. The proposed change, therefore, is an attempt both to update the definition of innovative, and to provide a more flexible definition with continuing application.

Notice of Proposed Rulemaking, 66 Fed. Reg. 66,362, 66,365 (2001). Although generally receptive toward the significant modifications of the discovery requirement under the revised Proposed Regulations (particularly the elimination of the common knowledge standard in the original final Regulations which provided that research would be deemed undertaken for the purpose of discovering information only if it was undertaken "to obtain knowledge that exceeds, expands or refines the common knowledge of skilled professionals in the particular field of science or engineering" in which the taxpayer was performing the research), commentators have criticized the new definition of the term "innovative" as re-introducing the discredited common knowledge standard and have suggested a return to the language contained in the legislative history. *See* Janet S. Wong & Susan Ryan, *The New Research Credit Proposed Regulations: Will the Third Time Be the Charm?*, 96 J. TAX'N 198 (2002); James M. Eberle, *A Guide to the Latest Research Credit Regulations*, 94 TAX NOTES 221 (2002). *See also* Sheryl Stratton, *Discovery Test Resurfaces at Research Credit Hearing*, 95 TAX NOTES 22 (2002).

282. Prop. Reg. § 1.41-4(c)(6)(vi)(B)-(C).

follow legislative history in this regard and provide that research will involve significant economic risk if "the taxpayer commits substantial resources to the development and there is substantial uncertainty, because of technical risk, that such resources would be recovered within a reasonable period."[283] Software is not commercially available if it cannot be purchased, leased, or licensed and used without modifications that would otherwise satisfy the requirements of the high threshold of innovation test.[284] In determining whether the high threshold of innovation test is satisfied, activities to develop the software are considered independently from the effect of any modifications to related hardware or other software.[285] Finally, the test is to be applied without regard to whether or not the taxpayer succeeds in achieving the intended results.[286]

In addition to regulatory authority concerning the internal-use software definition and the research tax credit application to such software, the courts have provided significant guidance with respect to these issues. Although all of these legal judicial interpretations were issued prior to the release of the current revised Proposed Regulations under section 41, and must be read in light of that fact, they expand on aspects of the statutory language and legislative history that are incorporated in the Proposed Regulations. Consequently, these decisions may provide some insight into the expected regulatory requirements applicable in the future.

In *United Stationers, Inc. v. United States*, a United States magistrate judge, relying principally on the statutory language and statements contained in the legislative history, concluded that the taxpayer's computer programs met neither the research tax credit's general eligibility requirements nor the specific requirements for internal-use software to be considered qualified research.[287] With respect to the internal-use software exception, the court concluded that the taxpayer's computer programs did not meet the "high threshold of innovation" to satisfy the more specific requirements under which internal-use software development will be eligible for the research tax credit. Although acknowledging that the types of computer programs developed by the taxpayer were not commercially available, the court concluded that the programs were not sufficiently innovative and the taxpayer's activities did not involve significant economic risk as required under section 41.[288]

In undertaking its analysis, the court reiterated the definition of "innovative" and "significant economic risk" provided in legislative history. Apply-

283. Prop. Reg. § 1.41-4(c)(6)(vi)(B).

284. Prop. Reg. § 1.41-4(c)(6)(vi)(C).

285. Prop. Reg. § 1.41-4(c)(6)(vii).

286. Prop. Reg. § 1.41-4(c)(6)(viii) example (3).

287. United Stationers, Inc. v. United States, 97-1 U.S.T.C. ¶ 50,457 (N.D. Ill. 1997), *aff'd*, 982 F. Supp. 1279 (N.D. Ill. 1997), *aff'd*, 163 F.3d 440 (7th Cir. 1998).

288. *Id.*

ing these terms as described by the court, however, suggested that internal-use software development would seldom constitute qualified research.

> [The computer programs] were not innovative, nor did they create a *revolutionary new way to organize businesses*, such that the efficiency and productivity *of the market* would be greatly affected. Rather, the [programs] simply increased efficiency and revenues for the Plaintiff. Further, the development of the [programs] did not involve an economic risk, since the ability to implement them was clear from the outset. The only risk of uncertainty was whether the [programs] would produce the desired efficiency, not whether they could, in fact, be developed. Moreover, inventory control, bookkeeping, order processing and marketing strategies are all internal, "behind the scenes" functions of a business. Although improved efficiency "behind the scenes" is traceable to a more productive business environment, this does not elevate internal use software into a *market enhancing product*.[289]

Given the internal-use software definition, as developed by or for the taxpayer's benefit primarily for general internal or administrative use, the court's focus on the external effects resulting from the software, particularly when considering the innovation requirement, imposes an almost insurmountable barrier for such software in qualifying for the research tax credit.

The district court later adopted the magistrate's report and concluded that the taxpayer was not entitled to claim the research tax credit in connection with the development of the computer software.[290] The court accepted the magistrate's finding that the taxpayer's software satisfied the internal-use software definition. Focusing on the high threshold of innovation test standards, the court disagreed with the magistrate that the software was not "innovative." Although the development project's benefits were limited to the taxpayer, the court concluded that they satisfied "innovative" definition contained in the legislative history as "result[ing] in a reduction in cost, or improvement in speed, that is substantial and economically significant."[291] Nevertheless, the court agreed with the magistrate that the software failed to qualify for the internal-use software exception because the projects did not involve sufficient economic risk.[292] Like the magistrate, the district court concluded that the existence of economic risk is tied directly to the existence of technical risk.[293]

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289. *Id.* (emphasis added)

290. *United Stationers II*, 982 F. Supp. at 1279.

291. *See id.* at 1287-88.

292. *Id.*

293. *Id.*

> Granted, Stationers invested considerable sums of money for the development of its projects. However, Stationers' claim that "[i]t is the uncertainty of success that creates the risk" is simply not persuasive. Of course, spending over a million dollars ordinarily has inherent risks, but the amount of the expenditure is not a dispositive factor. The proper inquiry is on the technical risk, which refers to the ability of Stationers to develop the projects. Here, there was not substantial uncertainty because the technical risk was minimal, if at all.[294]

The Seventh Circuit Court of Appeals subsequently affirmed District Court's decision.[295] In its decision, the Court of Appeals addressed two general eligibility tests for qualified research and two internal-use software tests: (1) the information sought must be technological in nature; (2) the research activities must involve a process of experimentation; (3) the internal-use software must be innovative; and (4) the software development activities must involve significant economic risk.[296]

First, the court concluded that the taxpayer failed to show that the information sought was technological in nature or that the taxpayer had engaged in a process of experimentation.[297] Then, with respect to internal-use software's specific requirements,[298] the court upheld the district court's conclusion that the programs were innovative because the software development activities resulted in improvements in speed and reductions in cost.[299] Nevertheless, the court rejected the government's attempt to quantify this test when it claimed that 65 percent of the taxpayer's original investment in the projects did not produce the anticipated economic returns. Rather, the court stated that every case was necessarily different.[300]

Finally, with respect to the substantiality of the economic risk surrounding the development activities, the court did not attempt to define the contours of this requirement in upholding the district court's decision that the taxpayer had failed to satisfy this requirement as well, but relied solely on the earlier conclusion that the research failed to satisfy the general requirement under section 41 that the development activities involve technical risk. This conclusion demonstrates the interrelated characteristics of technical and economic risk for section 41 purposes.

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294. *Id*. at 1288.

295. *See United Stationers III*, 163 F.3d at 448.

296. *Id*.

297. *Id*.

298. *Id*.

299. *Id*.

300. *Id*.

In *WICOR, Inc. v. United States*[301], the parties agreed that the taxpayer's project constituted the development of internal-use software and that all seven of the tests under section 41 were applicable. However, only four of the tests were actually at issue in this case – two tests applicable to the research and development tax credit generally and two tests applicable only to internal-use software – not surprisingly the same tests addressed by the Court of Appeals in *United Stationers*. The district court concluded that the taxpayer failed to show that (1) the research was undertaken with the purpose to discover information that was technological in nature, (2) the research activities constituted a process of experimentation, (3) the software was innovative, or (4) the project involved significant economic risk.[302] With respect to the third test, the court agreed with the government that WICOR failed to prove that the reduction in cost and improvement in efficiency resulting from its development efforts substantially contributed to technological advances in computer science, which would be necessary to meet the innovativeness requirement.

> Intuitively, a computer software project cannot meet the "high threshold of innovation" without discovering some new principle of computer science. Also for consideration is that WICOR did not seek a patent for its project. Although a research tax credit need not meet the same standard of innovativeness as is required for issuance of a patent, the fact that WICOR did not consider seeking a patent raises a reasonable inference that WICOR personnel did not consider this project highly innovative to the field of computer science. More to the point, the plaintiff offered no evidence that its software had been marketed to or used by other utility companies. Even though the project resulted in lower operating costs for WICOR, this was not sufficient to satisfy the test for innovativeness, which required a high degree of innovation, not just a reduction in operating expenses.[303]

In *Norwest Corporation*,[304] the Tax Court considered the application of section 41 to the costs incurred in the development of internal-use software. Norwest Corporation had spent over $22.6 million between 1983 and 1991 in development activities associated with eight types of internal-use software,

301. *WICOR I*, 116 F. Supp. 2d at 1028 (E.D. Wis. 2000), *aff'd*, 263 F.3d 659 (7th Cir. 2001).

302. *Id.*

303. *WICOR I*, 116 F. Supp 2d at 1036-37.

304. Norwest Corp. v. Comm'r, 110 T.C. 454 (1998); s*ee* Matthew D. Barton, et al., *Recent Developments Significantly Affect All Taxpayers Claiming the Research Credit*, 90 J. TAX'N 166 (1999); Janet S. Wong, *Research Credit Allowed for Some Internal-Use Computer Software*, 80 TAX NOTES 851 (1998); Burgess J.W. Raby & William L. Raby, *Seven Tests for Software Development Research Projects*, 80 TAX NOTES 583 (1998).

over $20.5 million of which it claimed as qualified research expenses.[305] The Tax Court concluded that only one of the activities, the development of the Strategic Banking System, satisfied all of the requirements of section 41 applicable to internal-use software.[306]

As stated previously, in structuring its analysis, the Tax Court first considered the general definition of qualified research under section 41(d) and concluded that this section of the Code imposed the following four separate tests:

(1) The Section 174 Test (Test 1), which requires the research expenditures to qualify as expenses under section 174;

(2) The Discovery Test (Test 2), which limits the type of information discovered to that which is technological in nature;

(3) The Business Component Test (Test 3), which requires the taxpayer's activities to provide some level of functional improvement to a business component of the taxpayer; and

(4) The Process of Experimentation Test (Test 4), which requires the elimination of initial uncertainty concerning the technical ability of the taxpayer to develop the product through the development, testing, and analyzing of one or more hypotheses as part of a sequential design process to develop the overall component.[307]

The Court then considered the language of the legislative history concerning internal-use software as itself creating the following three additional tests:

(5) The Innovativeness Test (Test 5), which requires the software to result in a reduction in cost or improvement in speed that is substantial and economically significant;

(6) The Significant Economic Risk Test (Test 6), which requires that, because of technical risk, substantial uncertainty exists that the taxpayer's investment would not be recovered within a reasonable time; and

(7) The Commercial Availability Test (Test 7), which requires that the software not be available without modifications that would satisfy the Innovativeness and Significant Economic Risk Tests.[308]

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305. Norwest actually claimed the research tax credit in connection with sixty-seven of 118 internal-use software development activities in which it was engaged during that period. However, for purposes of trial, briefing, and opinion, the parties selected eight of the sixty-seven development activities as representative to determine the outcome of the other fifty-nine.

306. The other projects included the Trust TU system, the Success equipment leasing system, the General Ledger system, the Money Transfer system, the Cyborg Payroll software, the Trust Payment system, and the Debit Card software system.

307. *See supra* text accompanying notes 211-23.

308. With respect to the Commercial Availability Test, the court rejected the Service's argument that vendor releases of commercially available software can

Although the court considered each test as independent of the others, the court's description of Tests 5 and 6 indicated that these two tests were related to Tests 3 and 4. According to the court, Test 5 requires the objective of the research to satisfy a higher standard of functional improvement of a business component than that applicable under Test 3,[309] while Test 6 requires that the initial level of technical uncertainty be greater than that under Test 4.[310] Consequently, the taxpayer's failure to satisfy the requirements of Tests 3 or 4 should also result in the failure of Tests 5 or 6, respectively. Such an approach is consistent with the court's recognition of the statement in the legislative history that only internal-use software that meets a "high threshold of innovation" is eligible for the research tax credit.[311]

Unfortunately, the Tax Court provided little guidance in its opinion concerning the requirements of Tests 5, 6, or 7. With respect to Test 5, the court rejected the taxpayer's argument that the terms "substantial" and "significant" required a 5 to 20% improvement in the product or process.[312] The court only stated that the improvement necessary for internal-use software was greater than that required in other fields, comparing the requirement of Test 3 (that the objective of the research be a "new or improved" function) with that of Test 5 (that the improvement be "substantial and economically significant").[313] Similarly, with respect to Test 6, the court refused to quantify the requirement of "substantial" uncertainty, stating only that a higher threshold of technological advancement is necessary in the development of internal-use software than in other fields.[314] The court did note, however, that in determining whether the taxpayer's investment could be recovered within a reasonable period of time for purposes of Test 6, a reasonable period of time for the development of software "does not relate to self-imposed

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never satisfy this requirement. Rather, the court recognized that the modification of commercially available software, "including any modifications resulting from the implementation of commercially available software," which also satisfies Tests 5 and 6 can satisfy Test 7 when examined on a case-by-case basis.

309. *Norwest*, 110 T.C. at 499.

310. *Id*. at 500.

311. *Id*. at 488. Viewing the law as imposing seven separate tests suggested by the Tax Court, the decisions of the various courts in *United Stationers* can be seen as relying on Tests 2, 4, 5, and 6. Although the magistrate viewed the taxpayer in *United Stationers* as failing each of these tests, the District Court and the Court of Appeals concluded that the taxpayer had satisfied Test 5. Under the pairing of tests suggested by the Tax Court's analysis in *Norwest*, the determination that the taxpayer satisfied Test 5 indicates that the taxpayer satisfied Test 3 as well.

312. *Norwest*, 110 T.C. at 498-99.

313. *Id*. at 499.

314. *Id*. at 500.

business time constraints, but rather to the reasonable time for those in the field of computer science."[315]

Applying this framework to each of the eight research projects, the court concluded that only one satisfied the requirements of section 41. According to the court, the development activities in connection with the customer module of the Strategic Banking System satisfied the requirements of Test 2 as involving the discovery of information that is technological in nature; the taxpayer's activities attempted to create a customer-based system that could integrate with other banking systems and handle large volumes of data.[316] The court noted that section 41 is not limited to the development of new technology but "encompasses the use of technology in new and dynamic ways."[317] The court also determined that the research would, if successful, result in improved functionality of a business component and sufficient economic benefit to satisfy Tests 3 and 5.[318] Finally, the court found that the project's 50% chance of failure, due to its size, complexity, and significant investment costs to the taxpayer, met the requisite technical uncertainty to satisfy Tests 4 and 6.[319]

In reviewing each of the remaining seven development activities that failed to qualify for the research tax credit, the court did not specify exactly which of the tests the taxpayer failed to satisfy, and, in particular, whether the activities satisfied the lesser standards of Tests 3 and 4 but failed the more rigorous standards of Tests 5 and 6. Although the court treated the seven tests separately for descriptive purposes, the court's application of the tests to specific development activities in this context demonstrated the tests are highly related. Five of the seven activities failed Tests 2, 4, and 6. More importantly, perhaps, six of the seven activities failed the basic definition of qualified research under section 41 without resort to the higher standards under Tests 5, 6, and 7 applicable to internal-use software. In only one instance, that involving the Trust Payment System, the court suggested that the development activity had satisfied the lower standards of Tests 1 through 4 but failed the higher standards of Tests 5 through 7.

In its Coordinated Issue Paper, the Service addressed the tests applicable to internal-use software and largely followed but also expanded upon the decisions in *Norwest* and *United Stationers*.[320] The facts of the Paper involved a taxpayer who incurred costs in the installation, customization, en-

315. *Id.* at 528.

316. *Id.* at 515.

317. *Id.*

318. *Id.* at 515-16.

319. *Id.*

320. I.R.S. Industry Specialization Program Coordinated Issue Paper, LEXIS 1999 TNT 168-18. *See also* I.R.S. Legal Mem. 200038013 (dated June 16, 2000) LEXIS 2000 TNT 186-61 (concluding that the Regulations applicable to internal-use software as originally proposed were consistent with the statutory lan-

hancement, and maintenance of a commercially available administrative software package.[321] In applying section 41, the Service assumed that the software development costs satisfied the generally applicable requirements for qualified research.[322] Consequently, the Service focused on Tests 5, 6, and 7 as described in the *Norwest* decision. In addition, because the software was commercially available, the taxpayer's satisfaction of Test 7, the Commercial Availability Test, hinged on the satisfaction of Tests 5 and 6. Unfortunately, the stringent interpretation of Tests 5 and 6 articulated by the Service makes it unlikely that any taxpayer will be able to satisfy these tests.

With respect to Test 5, the Innovativeness Test, the Service focused on whether the resulting reduction in costs attributable to the software development effort, rather than the improvement in the speed of the software itself, was substantial and economically significant.[323] While admitting that there is no bright-line test in determining substantiality, the Service conceded that this aspect of the test was satisfied where the software resulted in an 80% reduction in monthly processing costs (from $5 to $1 per account per month).[324] However, the Service did not find this reduction in costs economically significant.[325] Economic significance, according to the Service, is equivalent to competitive advantage.

> In general, [economic significance] can be shown if the development of the software results in a competitive advantage where the software provides cost savings and improvements in speed relative to software performing similar functions elsewhere in the industry.[326]

As an example, the Service suggested that cost savings may be substantial but not economically significant where a company is reducing a competitive disadvantage resulting from the current use of substandard software.[327] In addition, where the software is commercially available, the cost savings may be the result of the "core package" acquired from the vendor and not the result of functional improvements made by the taxpayer.[328] Thus, the taxpayer apparently must prove that any expenditures incurred in the develop-

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guage, legislative history, and judicial decisions in *United Stationers* and *Norwest*).

321. *Id.* ¶ 4-5.

322. *Id.* ¶ 23.

323. *Id.* ¶¶ 19-30.

324. *Id.* ¶ 28.

325. *Id.* ¶¶ 29-30.

326. *Id.* ¶ 29.

327. *Id.*

328. *Id.*

ment of internal-use software result in a "significant" competitive advantage and are not incurred simply to mitigate a competitive disadvantage.[329]

With respect to Test 6, the Significant Economic Risk Test, the Service required the taxpayer to commit substantial resources to the development activity and to show existing substantial uncertainty, because of technical risk, that the resources could not be recovered within a reasonable period.[330] The Service first addressed the substantial resources issue, recognizing that the determination would depend on the overall resources of the taxpayer and the extent of the taxpayer's other software development efforts.[331] More specifically, the Service stated that all facts and circumstances must be considered, including the following factors:

(1) The amount that the taxpayer spent on the specific software project as compared to the taxpayer's net assets;

(2) The number of hours that the taxpayer's computer programmers spent on the specific software project as compared to the number of hours that the programmers spent on all overall software development per year;

(3) The amount paid or budgeted for the development of the specific software project as compared to the taxpayer's total information technology budget;

(4) The amount that the taxpayer paid or budgeted for the specific software project as compared to the amount paid or budgeted for all of the taxpayer's research projects for the same period; and

(5) The level of management approval, if any, required under the taxpayer's budgetary procedures before it committed funds to a software project to the extent that the approval process defines the taxpayer's own assessment of what it considers to be a substantial commitment of resources.[332]

Although the Service again recognized that there is no bright-line test in making this determination, it concluded that the taxpayer failed to devote

329. The Service also recognized that Test 5 could be satisfied if the software is innovative, in the sense of being novel or unique. In light of the Congressional directive that internal-use software satisfy a "high threshold of innovation," the Service stated that greater innovation than that required for the general requirements of qualified research be demonstrated. Because the facts did not disclose anything "strikingly different, unusual, new or unique" about the software, the Service concluded that the taxpayer failed to satisfy this formulation of Test 5 as well.

330. I.R.S. Industry Specialization Program Coordinated Issue Paper, LEXIS 1999 TNT 168-18, ¶ 33. The Service noted that Test 6, as compared to Test 4, the Process of Experimentation Test, requires "substantial" uncertainty rather than mere uncertainty.

331. *Id.* ¶ 34.

332. *Id.* In addressing the substantial resources issue, the Service also noted that a number of development projects must represent a single interrelated research activity or business component if the costs of the projects are to be considered in the aggregate.

substantial resources to the development activity because its total economic outlay of $450,000 ($75,000 per year for a six-year period) represented less than one percent of its $50 million in net assets.[333]

The Service then addressed the substantial uncertainty aspect of Test 6. The Service stressed that this aspect of the test concerns technical risk and not business risk.[334] The Service noted that uncertainty as to whether the taxpayer can complete the development activity on time and within budget represents a business risk, not a technical risk.[335] In addition, technical risk concerns whether the software can even be developed, not whether it will produce the desired efficiency.[336] Providing a more general and objective definition of technical risk, the Service stated that technical risk arises when "the solution, or method of arriving at the solution, is not readily apparent to skilled and experienced programmers after they have analyzed the problem using known software development techniques and parameters."[337] The fact that the taxpayer does not have a sufficiently qualified staff to complete a programming effort does not give rise to technical risk.[338]

In assessing the existence of technical risk, the Service provided a list of the following factors:

(1) The size and complexity of the programming task and the project as a whole;

(2) Whether the programming task utilized existing technologies and known programming methods;

(3) Whether similar programming tasks had been completed before;

(4) Whether the software provided functionality not offered in any other software;

(5) Whether the taxpayer attempted to employ existing technology in a new and dynamic way;

(6) Whether the programming task was successfully completed;

(7) If the project failed, was abandoned, or was significantly delayed, whether technical risks, as opposed to business-related risks, contributed to the outcome; and

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333. *Id.* ¶ 36.

334. *Id.* ¶ 37.

335. *Id.*

336. *Id.* ¶ 39. I.R.S. Industry Specialization Program Coordinated Issue Paper, LEXIS 1999 TNT 168-18 ("For example, a software system's design may be premised upon the assumption that orders will be filled in the same order that they are received. The possibility that this may not be the best way to satisfy customer demand is a business risk. Conversely, the possibility that reasonably competent software developers cannot build a system that fills orders in the order they are received is a technical risk.").

337. *Id.* ¶ 38.

338. *Id.*

(8) Whether the taxpayer considered and accounted for technical risk in deciding to fund the software system development activities and in monitoring the progress of the development activities.[339]

In applying these factors to the facts at hand, the Service concluded that the taxpayer's development activities did not entail substantial uncertainty.[340] The fact that the taxpayer was uncertain whether its programmers could complete the development project within time and resource constraints was a business risk, not a technical risk.[341] In addition, the development activities were successfully completed using known techniques and existing technology.[342] Finally, although the taxpayer's computing environment (i.e., operating system software, applications, and hardware) was different from that of its competitors who were already using the commercially available software package, the fact that the programmers could not copy the work of other programmers because of these differences did not constitute technical risk.[343]

The Service also addressed the issue of whether the taxpayer's resources could be recovered within a reasonable period. Because resources cannot be recovered until the development is completed and the software deployed, the determination of a "reasonable period" requires the taxpayer to be able to predict the time needed to complete the development project or ascertain a completion date.[344] Where technical risk prevents this determination from being made, however, the taxpayer's resources cannot be said to be recoverable within a reasonable period. "In other words, technical risk must be so great that it would prevent a reasonably competent software developer from confidently predicting a completion date for a project. This requirement is an objective standard."[345] Based on the facts at hand, the Service concluded that it was unlikely that the taxpayer could not have predicted a completion date for its software development activities.[346]

V. Calculation of the Research Tax Credit

As previously noted, the incremental research tax credit is 20% of the qualified research expenses for the tax year in excess of a base amount, while the basic research credit is equal to 20% of any basic research payments in excess of a different base amount.[347] A taxpayer can elect to calculate the

339. *Id.* ¶ 40.

340. *Id.* ¶ 41.

341. *Id.*

342. *Id.*

343. *Id.* ¶ 42.

344. *Id.* ¶ 43.

345. *Id.*

346. *Id.* ¶ 44.

347. I.R.C. § 41(a); *see* I.R.C. § 41(c), (e)(1)(A).

incremental research tax credit under an alternative method if the alternative method results in a larger credit, but the election, once made, is irrevocable without the consent of the Service.[348] The following discussion describes the types of expenses that can be used in determining the amount of the credit and explains the calculation of the incremental research tax credit, the alternative incremental research tax credit, and the basic research tax credit.

The incremental and alternative incremental research tax credits are available in connection with the costs of any qualified research activities incurred in carrying on the trade or business of the taxpayer.[349] The "carrying on" standard of section 41 generally corresponds to the same requirement found in section 162 and, thus, is more restrictive than the "in connection with" standard of section 174.[350] However, a taxpayer will be treated as sat-

348. I.R.C. § 41(c)(4).

349. I.R.C. § 41(b). The credit is not available to taxpayers who merely fund research activities, typically of their wholly owned corporations, and do not acquire rights to the product of that research. *See* Safstrom v. Comm'r, 64 T.C.M. (CCH) 971, *aff'd*, 42 F.3d 1401 (9th Cir. 1994) (payments made by sole shareholder for research activities undertaken by corporation treated as capital contributions to the corporation where shareholder had no ownership rights in the resulting technology; incremental research tax credit denied).

350. According to the legislative history, it is intended that to be eligible for the credit, research expenditures must be paid or incurred in a particular trade or business being carried on (within the meaning of section 162) by the taxpayer; no credit is available for expenditures for research relating to a potential trade or business which the taxpayer is not carrying on at the time the research expenditures are made. Thus, the credit is not available (either for current or carryover use) to a new entity which undertakes research to use the resulting technology for future production and sales, and is not available to an ongoing business which undertakes research in order to enter a new trade or business. Staff of the Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 97th Cong., *reprinted in* Internal Revenue Acts, 1980-1981, at 1441 (1982). *See also* Reg. § 1.41-2(a)(1); Ben-Avi v. Comm'r, 55 T.C.M. (CCH) 199 (1988) *cf.* Allen v. Comm'r, 55 T.C.M. (CCH) 641 (1988). *See also supra* note 28 (discussion of the "in connection with" standard under section 174).

Nevertheless, the legislative history instructed the Service to issue Regulations that would allow the credit in connection with the creation of joint ventures in which the parties participants themselves satisfied the carrying-on requirement. As the only exception to the rule that the "carrying on" test for the purposes of the new credit is the same as for purposes of section 162, Congress intended for the Treasury Department to issue regulations, for credit purposes only, which will allow the credit in the case of a research joint venture between taxpayers when (1) each individually satisfies the carrying on test (e.g., the research must be in a particular trade or business already being carried on by the taxpayer) and also (2) each individually is entitled to the research results. Staff of the Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 97th Cong., *reprinted in* Internal Revenue

isfying the carrying-on and trade-or-business requirements with respect to in-house research expenses if, at the time the expenses are paid or incurred, the principal purpose of the taxpayer in making the expenditure is to use the results of the research in the active conduct of a future trade or business of the taxpayer or of another member of the same controlled group.[351]

In determining the amount of the research credit, members of the same controlled group of corporations are to be treated as a single taxpayer, and the credit, if any, is to be allocated among the members in proportion to their respective increase in qualified research expenses.[352] Similar aggregation

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Acts, 1980-1981, at 1441 (1982). The Treasury Department has implemented this exception. See Reg. § 1.41-2(a)(4).

351. Importantly, any member of a controlled group of corporations is deemed to be carrying on a trade or business if any other member of that group is carrying on any trade or business. Reg. § 41-8(a)(2). In addition, if one member performs qualified research for another member, the member performing the research is to treat as qualified research expenses any in-house research expenses and is not to treat any amount received as funding for the research. Reg. § 41-8(e)(2). *See* Tech. Adv. Mem. 8643006. Conversely, the member for whom the research is performed is not to treat any amount paid as contract research expenses. Finally, if a member pays or incurs contract research expenses with a party outside of the group that is unrelated to the trade or business in which that member is engaged, the expenses may still be taken into account as contract research expenses if another member of the group is engaged in a trade or business to which the research relates and that member reimburses the member paying or incurring the expenses. Reg. § 1.41-8(e)(3).

352. I.R.C. § 41(f)(1)(A); Reg. § 1.41-6. For purposes of the research credit, a controlled group of corporations has the same meaning as that under section 1563(a), except that (1) a 50% threshold standard is substituted for the 80% threshold in section 1563(a)(1); and (2) the determination is to be made without regard to sections 1563(a)(4) and 1563(e)(3)(C); I.R.C. § 41(f)(5); Tech. Adv. Mem. 8643006 (the Service determined that the exclusion of certain members of a controlled corporation under section 1563(b)(2) does not apply for purposes of section 41. Specifically, the Ruling concluded that a foreign parent of two domestic corporations engaged in research activities constituted a member of the controlled group of corporations for purposes of section 41.) *See also* I.R.S. Legal Mem. 200233011 (dated May 1, 2002), available in LEXIS, 2002 TNT 161-26 (concluding that foreign subsidiaries and their domestic parent should be treated as a single taxpayer for purposes of determining the amount of the research tax credit).

The Service has issued Proposed Regulations further clarifying the aggregation and allocation rules. Credit for Increasing Research Activities, 68 Fed. Reg. 44499 (proposed July 29, 2003). As previously noted, all members of a controlled group are treated as a single taxpayer, and the group credit is then allocated among the members of the group based on each member's proportionate share of the qualified research expenses and basic research payments giving rise to the credit. I.R.C. § 41(f)(1)(A). Consequently, all of the computational rules of section 41 are applied on an aggregate basis under the Pro-

posed Regulations. Prop. Reg. §§ 1.41-6(a)(1)(i) and 1.41-6(b)(1). *See also* Tech. Adv. Mem. . 200330001 (providing that a consolidated group that acquires another group of companies in a reverse merger may not include the premerger qualified research expenses of the acquired group in its calculation under section 41); I.R.S. Legal Mem. 200234063 (dated May 24, 2002), LEXIS 2002 TNT 165-86 (requiring that a consolidated group include 100% of the corporation's base year qualified research expenses, base year gross receipts, and average annual gross receipts for the four taxable years preceding the credit year in computing its base amount after the parent's acquisition of the corporation); I.R.S. Field Service Advice 200227013 (dated March 22, 2002), LEXIS 2002 TNT 130-12 (describing the determination of the research tax credit of a parent corporation and its subsidiary for the taxable year of, and the taxable year following, the distribution of the subsidiary shares to the shareholders of the parent corporation); I.R.S. Legal Mem. 200233011 (dated May 1, 2002), LEXIS 2002 TNT 161-26 (whether a controlled group of corporations may disregard intra-group sales when computing aggregate gross receipts for purposes of determining the base amount under section 41(c) depends on the facts and circumstances involved). The statutory requirement that the credit be allocated according to each member's proportionate share of the qualified research expenses "giving rise to" the credit supports the rule under the Proposed Regulations that allocates the group credit by first computing the credit that would be allowable for each member without regard to section 41(f)–the member's "stand-alone entity credit"–and then multiplying the group credit by the ratio that each member's stand-alone entity credit bears to the sum of the stand-alone entity credits of all the members of the controlled group. Prop. Reg. § 1.41-6(c)(1). The allocation rule under the Proposed Regulations ensures that the amount of the group credit that is allocated to each member of the controlled group will be proportionate to the amount of the credit that each member would have been entitled to claim had it not been part of a controlled group. Credit for Increasing Research Activities, 68 Fed. Reg. 44502 (proposed July 29, 2003). For taxpayer reaction to the allocation method under the Proposed Regulations, *see* Sheryl Stratton, *Witnesses Ask IRS to Give Up Incremental Allocation of Research Credit*, LEXIS 2003 TNT 220-4 (2003); Constance Parten, *Practitioners Ask IRS to Withdraw, Rethink Proposed Research Credit Rules*, BNA Daily Tax Report G-9 (November 14, 2003); James M. Eberle & Steve Arkin, *Calculation and Allocation of Research Credit for Members of a Controlled Group*, BNA Daily Tax Report J-1 (August 13, 2002).

The Proposed Regulations under section 41(f) issued in 2003 replace an earlier set of Proposed Regulations issued in 2000. Credit for Increasing Research Activities, 68 Fed. Reg. 44,499 (proposed July 29, 2003) (withdrawing the Proposed Regulations issued in a Credit for Increasing Research Activities, 65 Fed. Reg. 258 (proposed January 4, 2000)). *See* Constance Parten, *IRS Issues New, Withdraws Old Proposed R&D Tax Credit Rules*, BNA Daily Tax Report G-4 (July 29, 2003). Both the 2000 and Proposed Regulations required the computation of the credit amount on an aggregate basis, but the 2000 version allocated the group credit only those members whose share of current year qualified research expenses exceeded their share of the base amount. Thus, the 2000 Proposed Regulations provided that the group research credit (if any) was allocated to each member of the controlled group based on the ratio that the

and allocation rules apply in connection with the research credit available to S corporations, partnerships, estates, and trusts that are under common control.[353]

A. The Incremental Research Credit

Provided that the taxpayer's research activities satisfy the definition of qualified research, section 41 allows an incremental research credit for 20% of the qualified research expenses for the taxable year in excess of a base amount.[354] Expenses that may be considered in determining the amount of the qualified research expenses for the taxable year include both in-house and contract research expenses.[355] In-house research expenses include wages

member's increase (if any) in its qualified research expenses over its base amount bore to the sum of each member's increase in qualified research expenses over its base amount. The member's base amount was computed by multiplying the group fixed-base percentage by the member's average annual gross receipts for the four preceding tax years. Prop. Reg. § 1.41-8(a)(1) (2000). The incremental approach adopted under the 2000 Proposed Regulations was the subject of vigorous criticism. *See* Sheryl Stratton, *Practitioners, Treasury Clash Over Proposed Research Credit Rules*, 87 TAX NOTES 604 (2000).

353. I.R.C. § 41(f)(1)(B), (g); Reg. § 1.41-6, -7; *See* I.R.S. Field Service Advice 199908004 (dated November 17, 1998), LEXIS 1999 TNT 39-72 (concluding that an amended return to pass through to partners qualified research expenditures rather than the research credit calculated at the partnership level does not constitute a change in accounting method). The legislative history notes that the purpose of these rules was "[t]o ensure that the new credit will be allowed only for actual increases in research expenditures [and] to prevent artificial increases in research expenditures by shifting expenditures among commonly controlled or otherwise related persons." Staff of the Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 97th Cong., *reprinted in* Internal Revenue Acts, 1980-1981, at 1441 (1982).

354. I.R.C. § 41(a). As originally enacted, the research credit under section 44F permitted a credit for 25% of the excess of qualified research expenses over base period research expenses. Economic Recovery Tax Act of 1981, PUB. L. NO. 97-34, 95 Stat. 172 (1981). Subject to certain transition rules, base period research expenses for the current taxable year were equal to the average research expenses incurred over the immediately preceding three taxable years. In no case, however, were base period research expenses to be less than 50% of the current year's research expenses. Reg. § 1.41-3A(c). Staff of the Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 97th Cong., *reprinted in* Internal Revenue Acts, 1980-1981, at 1441 (1982).

355. I.R.C. § 41(b)(1). In order to avoid disputes between the Service and taxpayers regarding in-house research expenses, the Service has explicitly made in-house research expenses one of the categories of issues eligible for resolution through the Pre-filing Agreement Program. Rev. Proc. 2001-22, 2001-1 I.R.B. 745.

paid to employees engaged in qualified research or directly supervising or supporting activities that constitute qualified research.[356] The Service has

The Pre-filing Agreement Program is available to all taxpayers under the jurisdiction of the Large and Mid-Size Business Division of the Service for issues involving the current taxable year or any prior taxable year for which a return is not yet due and is not yet filed. Some practitioners have reported positive experiences in the program. *See* Sheryl Stratton & Robert Goulder, *Research Credit Costs Rise While Government Tries to Administer It*, 90 TAX NOTES 1139 (2001); *See also* Ann. 2001-38, 2001-1 C.B. 1138 (annual report relating to the operation of the Pre-Filing Agreement program for the preceding calendar year).

356. I.R.C. § 41(b)(2)(i), (b)(2)(B); Reg. § 1.41-2(c)-(d); *See* Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998), LEXIS 1999 TNT 81-23 (providing that only the wages paid to managers performing first-line supervision of qualified research may be included in the computation of the research credit). The term "engaged in qualified research" means the actual conduct of qualified research. Reg. § 1.41- 2(c)(1). For this purpose, wages include all compensation subject to withholding under section 3401(a) except to the extent that the work opportunity credit of section 51(a) is applicable. I.R.C. § 41(b)(2)(D); Reg. § 1.41-2(d). Because income resulting from an employee's exercise of stock options acquired from a non-qualifying plan constitutes wages for purposes of section 3401(a), the Service has concluded that an employer's deductions associated therewith under section 83(h) may be included in the determination of the research credit as wages paid to an employee. *See* I.R.S. Market Segment Specialization Program, *Computers, Electronics, and High Tech Industry* (March 15, 1997), LEXIS 98 TNT 199-12. In addition, the Service has concluded that deductions resulting from a non-employee's exercise of stock options acquired from a non-statutory plan may be included in the determination of the research credit as contract research expenses. However, relying on Rev. Rul. 71-52, 1971-1 C.B. 278, in which income earned on an employee's disposition of stock from a qualified stock plan in a disqualifying disposition was held not to constitute wages under section 3401(a), the Service has concluded that an employer's deductions associated therewith may not be included in the determination of the research credit as wages paid to an employee. *See also* Apple Computer, Inc. v. Comm'r, 98 T.C. 232 (1992) (income generated on exercise of stock options constitutes wages for purposes of the research credit); Sun Microsystems, Inc. v. Comm'r, 69 T.C.M. (CCH) 1884; Tech. Adv. Mem. 9018003 (May 4, 1990) (concluding that incentive compensation bonus payments made to employees engaged in qualified research constitute wages); I.R.S., Industry Specialization Program Coordinated Issue Paper, *Data Processing Industry* (October 6, 1996), LEXIS 96 TNT 199-12 (following the interpretation of section 3401(a) and excluding both elective contributions from an employee and matching contributions from an employer to a qualified profit-sharing plan under section 401 from the definition of "wages" for purposes of the research credit); I.R.S. Industry Specialization Program Coordinated Issue Paper (February 16, 1999), LEXIS 1999 TNT 74-86; I.R.S. Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998), LEXIS, 1999 TNT 81-23 (same); I.R.S. Industry Spe-

concluded that the wages paid to patent attorneys, agents, engineers, illustrators, and coordinators who work to obtain patents for the taxpayer's products do not constitute qualified research expenses because such individuals are not engaged in the actual conduct of, the direct supervision of, or the direct support of qualified research.[357] To the extent that "substantially all" of the services performed by an employee during the taxable year consist of services that satisfy the requirements of section 41, then all the services performed by such an individual may be treated as wages for qualified research under section 41.[358] In-house research expenses also include the cost of supplies used in the conduct of qualified research as well as the cost of computers and computer time used in qualified research efforts.[359]

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cialization Program Settlement Guidelines, (September 1, 1998), available in LEXIS, 2000 TNT 105-10; I.R.S. Market Segment Specialization Program, *Computers, Electronics, and High Tech Industry* (March 15, 1997), LEXIS 98 TNT 199-12.

357. I.R.S Field Service Advice 200131007 (dated April 23, 2001) LEXIS 2001 TNT 151-14. The Service has also concluded that, because such activities do not constitute qualified research, the wages paid to technical writers, editors, illustrators, and others who assist in the preparation of user manuals, do not constitute qualified research expenses. Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998), available in LEXIS, 1999 TNT 81-23.

358. I.R.C. § 41(b)(2)(B); Reg. § 1.41-2(d). The Regulations provide that the term "substantially all" requires that least 80% of the services performed by the individual must constitute qualified research. Reg. § 1.41-2(d)(2). See Market Segment Specialization Program, *Computers, Electronics, and High Tech Industr*y (March 15, 1997), LEXIS 98 TNT 199-12 (cautioning examiners to verify the time that managers spend performing services constituting qualified research and requiring an allocation of wages when the "substantially all" standard is not satisfied). *See* I.R.S. Field Service Advice 1997-36 (dated September 17, 1997) LEXIS, 2000 TNT 170-20, the Service concluded that an employee's hours attributable to paid holiday, vacation, or sick leave are not included as time spent in the performance of either qualified or nonqualified services. However, the amounts paid for leave are included as wages for purposes of determining the amount of in-house research expenses.

359. I.R.C. § 41(b)(2)(ii)-(iii); Reg. § 1.41-2(b). The term "supplies" refers to any tangible property but excludes land or improvements to land and depreciation on such property even if used exclusively for qualified research activities. I.R.C. § 41(b)(2)(C); Reg. § 1.41-2(b). *See* Fudim v. Comm'r, 67 T.C.M. 3011 (1994) (allowing the incremental research credit in connection with wages and supplies incurred in rendering qualified services); Tech Adv. Mem. 88-35-002 (finding the incremental research credit applicable to wages and supplies incurred in conducting tests involving the installation and modification of taxpayer's product). *See also* Lockheed Martin Corp. v. United States, 49 Fed. Cl. 241 (2001) (although materials received from subcontractors may be tangible property, taxpayer must demonstrate that such materials were used in the conduct of qualified research); I.R.S. Field Service Advice 200211401 (dated Sep-

Contract research expenses, on the other hand, include 65% of any amount paid or incurred by the taxpayer to a person other than an employee for qualified research.[360] In addition, contract research expenses include 75% of any amounts paid or incurred by the taxpayer to a qualified research consortium for qualified research on behalf of the taxpayer and one or more unrelated taxpayers.[361] A qualified research consortium is a tax-exempt organization structured and operated primarily to conduct scientific research,

tember 21, 2001) LEXIS, 2002 TNT 92-52 (depreciation allowances, overhead expenses, general and administrative expenses, and indirect expenses allocable to drug products manufactured at taxpayer's plant and used in clinical trials are not "in-house research expenses" eligible to be included in the research credit computation); I.R.S. Field Service Advice 200204008 (dated October 17, 2001) LEXIS, 2002 TNT 18-17 (utility expenses for research space in excess of utility expenses for non-research space do not qualify as in-house research expenses in absence of evidence that the special character of the qualified research required additional extraordinary expenditures for utilities under Regulation section 1.41-2(b)(2)); I.R.S. Field Service Advice 200013017 (dated December 23, 1999) LEXIS, 2000 TNT 64-39 (because silicon wafers and mask sets are tangible property of a character subject to the allowance for depreciation, expenses for the manufacture of these items are not eligible for the research tax credit); Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998) LEXIS, 1999 TNT 81-23 (excluding from the definition of "supplies" and, thus, from the determination of qualified research expenses the cost of small tools, purchased software, and other capital assets expensed by the taxpayer pursuant to a corporate expensing policy because such property is subject to the allowance for depreciation or amortization). Finally, expenditures for the use of computers or computer time are not considered as qualified research expenses to the extent that the taxpayer receives any amount from another person for the right to use substantially identical property. I.R.C. § 41(b)(2).

360. I.R.C. § 41(b)(3); Reg. § 1.41-2(e). *See also* I.R.S. Field Service Advice 200103010 (dated October 5, 2000) LEXIS, 2001 TNT 14-91 (portion of fees paid by the taxpayer to the Department of Energy for the disposal of nuclear wastes does not constitute contract research expenses because the contract was for the performance of services and not research, despite the fact that DOE engaged in research activities to study and select an appropriate disposal site; any research performed by DOE was conducted pursuant to the Nuclear Waste Policy Act and not the contract with the taxpayer); I.R.S. Field Service Advice 200013017 (dated December 23, 1999) LEXIS, 2000 TNT 64-39 (contract with foreign manufacturer to produce silicon wafers and mask sets does not constitute services to qualify as contract research expenses).

361. I.R.C. § 41(b)(3)(C)(i); *See also* I.R.S., Industry Specialization Program Coordinated Issue Settlement Guideline (Utilities) (January 16, 1997) LEXIS, 2001 TNT 222-22 (permitting that portion of any payments made by members of a nonprofit organization formed to promote, engage in, conduct, and sponsor research and development activities that are allocable to qualified research to be treated as contract research expenses). All persons treated as a single employer under section 52(a) or section 52(b) are treated as related taxpayers.

and does not include private foundations.[362] Contract research expenses that are prepaid are considered as paid or incurred during the period in which the qualified research is actually conducted.[363]

With respect to contract research expenses, the Regulations specifically provide that the contractor of any qualified research must perform that research "on behalf of the taxpayer," and that the payments must not be contingent on the success of the research.[364] The contractor is considered to have performed the research "on behalf of the taxpayer" even if the taxpayer only has a nonexclusive right to the research results.[365] In *Norwest Corp.*,[366] the Service argued that the taxpayer's right under a software development agreement to a "perpetual, nontransferable, nonexclusive and . . . royalty-free license" to use the developed software did not satisfy the regulatory requirements.[367] The Service suggested that a difference existed between rights to research results and rights to any final product.[368] The court rejected this argument, stating that "the right to use the results of the research without paying for that right is at least a right to the research results as that term is applied in [under the Regulations]–although it may or may not constitute 'substantial rights in the research' within the purview of the regulations."[369] The Service also asserted that the taxpayer's ability to terminate the development agreement at selected times violated the regulatory requirement that payments not be contingent on the success of the research.[370] The court rejected this argument as well, noting that the taxpayer had no ability under the agreement to recover any previously made payments.[371]

In light of the Tax Court's decision on the contract research issue in *Norwest Corp.*, the Service announced that it would closely scrutinize taxpayers' classifications of certain expenses as contract research. According to the Service,

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362. I.R.C. § 41(b)(3)(C)(ii).

363. I.R.C. § 41(b)(3)(B); Reg. § 1.41-2(e)(4).

364. Reg. § 1.41-2(e)(2). *See* Lockheed Martin Corp. v. United States, 49 Fed. Cl. 241 (2001) (the fact that the taxpayer could not claim payments to subcontractors as contract research expenses because the payments were contingent on the success of the research does not demonstrate that the payments are costs of supplies for which the credit is available).

365. Reg. § 1.41- 2(e)(3).

366. Norwest Corp. v. Comm'r, 110 T.C. 454 (1998).

367. *Id.* at 518-19.

368. *Id.*

369. *Id.* at 519 n15.

370. *Id.* at 520.

371. *Id.*

> [a] contract research credit expense is incurred when amounts are paid or incurred for the performance of research by an unrelated party for the benefit of another. Both parties are not entitled to the credit on the same research. Only the taxpayer that has a right to the research results and that bears the ultimate responsibility for paying for the research can claim the research. . . . Taxpayers' claims concerning contract research should be closely scrutinized to determine: 1) whether the contractor also took the credit on the same activities, 2) whether the taxpayer has a right to the research results, and 3) whether the taxpayer bore the risk of loss if the research was not successful.[372]

The Service is developing other cases in order to establish additional precedent in the Tax Court on the contract research issue.[373]

Importantly, a contract research expense will not be a qualified research expense if the product or result of the research is intended to be transferred to another in return for a license or royalty and the taxpayer does not use the product of the research in the taxpayer's trade or business.[374] In such a situation, the taxpayer will not be deemed to be engaged in a trade or business to satisfy the "carrying on" requirement of section 41.[375]

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372. I.R.S. Chief Counsel Notice (May 14, 1999) LEXIS, 1999 TNT 103-25, ¶ 6.

373. *Id.* ¶ 7. *See also* Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998) LEXIS, 1999 TNT 81-23 (cautioning examiners concerning the misclassification of contract research expenses as supplies to increase the research credit); Market Segment Specialization Program, "Computers, Electronics, and High Tech Industry" (March 15, 1997) LEXIS, 98 TNT 199-12 (same).

374. Reg. § 1.41-2(a)(1).

375. The legislative history was emphatic about this point:

> [U]nder the trade or business test of new section [41], the credit generally is not available with regard to a taxpayer's expenditures for "outside" or contract research intended to be transferred by the taxpayer to another in return for license or royalty payments. (Receipt of royalties does not constitute a trade or business under present law, even though expenses attributable to those activities are deductible from gross income in arriving at adjusted gross income.) In such a case, the nexus, if any, between research expenditures of the taxpayer and activities of the transferee to which research results are transferred (e.g., any use by an operating company, that is a general partner in a limited partnership which make the research expenditures, of the research results in the operating company's trade or business) generally will not characterize the taxpayer's expenditures as paid or incurred in carrying on a trade or business of the taxpayer. (Under appropriate circumstances, nevertheless, the nexus might be deemed adequate for purposes of the section 174 deduction elections.) If, however, the taxpayer used the product of the research in a trade or business of the taxpayer, as well as licensing use of the product by others, the

As previously noted, the incremental research tax credit is 20% of the qualified research expenses for the tax year in excess of a base amount. The taxpayer's base amount is determined by multiplying the "fixed-base percentage" by the average annual gross receipts of the taxpayer for the four taxable years preceding the taxable year for which the credit is being determined.[376] In no event, however, may the base amount be less than 50% of

> relationship between the research expenditures of the taxpayer (i.e., those research expenditures paid or incurred after such time as the taxpayer is considered to be carrying on the trade or business in which such expenditures are paid or incurred) and the taxpayer's trade or business in which the research expenditures are paid or incurred generally would be sufficient for credit purposes.

Staff of the Joint Comm. on Tax'n, General Explanation of the Economic Recovery Tax Act of 1981, 97th Cong. 122-23, *reprinted in* Internal Revenue Acts, 1980-1981(1982).

376. I.R.C. § 41(c)(1). With certain limited exceptions, the term "gross receipts" means "the total amount, as determined under the taxpayer's method of accounting, derived by the taxpayer from all its activities and from all sources (e.g., revenues derived from the sale of inventory before reduction for cost of goods sold). Reg. §§ 1.41-3(c)(1) and 1.41-3(c)(2). Gross receipts are to be reduced by any returns and allowances made during the taxable year. I.R.C. § 41(c)(5); Prop. Reg. § 1.41-3(c)(1).

The Service adopted a broad definition of gross receipts in the final Regulations despite the criticisms of commentators that the use of the term "sales growth" in the legislative history suggested that gross receipts should be limited to sales income. As stated by the Service in the preamble to the original final Regulations,

> any expected income stream may be taken into account in determining a business' research budget, regardless of the source of the income. Moreover, IRS and Treasury believe that a subjective narrowing of the term gross receipts, as suggested by these commentators, could leave the definition of the term, and thus the computation of the base amount, vulnerable to manipulation.

66 Fed. Reg. 280, 282 (2001). According to the Service, some commentators also suggested that the definition of "gross receipt[s]"created an administrative burden because taxpayers would be obligated to apply the definition of the term for the four years preceding the determination year as well as to the 1984 through 1988 base years. Credit for Increasing Research Activities, 66 Fed. Reg. 66362, 66366 (proposed December 26, 2001). *See, e.g.,* Letter from Philip A. McCarty and Robert Feldgarden, Attorneys, McDermott, Will & Emery, to the I.R.S. (July 26, 1999) LEXIS, 1999 TNT 152-105. In promulgating the revised Proposed Regulations, the Service decided to retain the definition of gross receipts under the original final Regulations.

The Treasury and the IRS continue to believe that the definition of gross receipts should be construed broadly and that the definition of gross receipts in T.D. 8930 is appropriate for purposes of computing the research credit. Further, Treasury and the IRS believe that the administrative burden referred to by

the qualified research expenses for the current taxable year.[377] The "fixed-base percentage" is the ratio of the taxpayer's aggregate qualified research expenses for the taxable years between December 31, 1983, and January 1, 1989, to the taxpayer's aggregate gross receipts for that same period.[378] Special rules for the determination of the fixed base percentage apply with respect to start-up companies; start-up companies begin with a fixed-base percentage of 3% for the first five taxable years with a phase-in of the taxpayer's fixed-base percentage over the next five taxable years.[379] In no

commentators is due to the incremental nature of the credit and the statutorily determined base years, and not to the definition of gross receipts. Credit for Increasing Research Activities, 66 Fed. Reg. 66362, 66366 (proposed December 26, 2001). Nevertheless, the definition of gross receipts remains a subject of controversy. *See* Letter from Richard Weiss, Verizon, to Ms. Pamela Olson, Office of Tax Policy (August 2, 2002) LEXIS, 2002 TNT 177-4; Letter from Philip A. McCarty, PricewaterhouseCoopers LLP, to Jeffrey H. Paravano, Senior Advisor to the Assistant Secretary-Tax Policy (October 7, 2002) LEXIS, 2002 TNT 211-37; Letter from Stephen Elkins, American Chemistry Council, and Kenneth R. Petrini, Air Products and Chemicals, Inc., to the I.R.S. (April 10, 2002) LEXIS, 89-24; Letter from Gary Gasper and Nick Giordano, Washington Counsel Ernst & Young on behalf of the R&D Tax Credit Regulations Coalition, to the I.R.S. (March 6, 2002) 2002 TNT 54-37; Letter from William T. Archey, American Electronics Association, to the Honorable Charles O. Rossotti, Commissioner of the I.R.S. (March 6, 2002) LEXIS, 2002 TNT 56-13. See also Sheryl Stratton, *Discovery Test Resurfaces at Research Credit Hearing*, 95 TAX NOTES 22 (2002).

377. I.R.C. § 41(c)(2).

378. I.R.C. § 41(c)(3)(A). Qualified research expenses taken into account in computing the fixed-base percentage are to be determined on a basis consistent with the determination of qualified research expenses for the current taxable year. I.R.C. § 41(c)(4)(B); Reg. § 1.41-3(d). This consistency requirement is to be applied without regard to the law in effect for the taxable years taken into account in computing the fixed-base percentage or the base amount. *See* Reg. § 1.41-3(d)(2) examples (1) and (2). See also Tech. Adv. Mem. . 9040002; I.R.S. Field Service Advice 1999-1060 (undated) LEXIS, 1999 TNT 91-24; Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998) LEXIS, 1999 TNT 81-23 (each considering the application of the consistency doctrine within the context of the research tax credit prior to the promulgation of the Proposed Regulations). *See* Research, Inc. v. United States, 95-2 U.S.T.C. ¶ 50,407 (D. Minn. 1995) (denying a research credit because taxpayer unable to substantiate base period research expenses under former section 30(c)(1) in same manner as research expenses for current year).

For examples of the calculation of the research tax credit, see Market Segment Specialization Program, *Manufacturing Industry* (May 1, 1998) LEXIS, 1999 TNT 81-23; Market Segment Specialization Program, *Computers, Electronics, and High Tech Industry* (March 15, 1997) LEXIS, 98 TNT 199-12.

379. I.R.C. § 41(c)(3)(B). *See* Tech. Adv. Mem. 200016004 (concluding that, following a divisive reorganization under sections 355 and 368(a)(1)(D), a corpo-

event, however, may the taxpayer's fixed-base percentage exceed a maximum of 16%.[380]

The computation of the base amount as a function of the taxpayer's average annual gross receipts for the prior four taxable years was introduced as part of the Omnibus Budget Reconciliation Act of 1989.[381] Prior to this time, the research credit was 25% of the excess of qualified research expenses over base period research expenses. Base period research expenses for the then current taxable year were equal to the average research expenses incurred over the immediately preceding three taxable years. However, this formulation was problematic because the taxpayer's research tax credit was reduced in future years if the taxpayer increased research expenditures in the current year. Thus, Congress enacted this change in response to criticism concerning the incentive effects of the credit calculation.

> [T]he committee wished to respond to the criticism that the incentive effect of the present-law research credit was diminished as a result of the method of computing the taxpayer's base amount. Critics have noted that although an increase in research expenditures resulted in a taxpayer receiving a larger credit for that year, it also resulted in higher base period amounts (and therefore smaller credits) in the following three years. As a consequence, the present-law credit's marginal incentive effect provided in the first year was largely offset in the following three years. The committee, therefore, modified the method of calculating a taxpayer's base amount in order to enhance the credit's incentive ef-

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ration be deemed a major portion of a separate unit of a trade or business under section 41(f)(3)(A) requiring the carryover of the corporation's fixed-base percentage, rather than treatment of the corporation as a start-up company requiring the determination of the corporation's fixed-base percentage under section 41(c)(3)(B)). As part of the Small Business Job Protection Act, Congress expanded the definition of a start-up company to include any taxpayer if the first taxable year in which the taxpayer had both gross receipts and qualified research expenses began after December 31, 1983. PUB. L. NO. 104-188, § 1204(b), 110 Stat. 1755, 1773-1774 (1996). Before this amendment, the definition of a start-up company included only those taxpayers who had both gross receipts and qualified research expenses in fewer than three taxable years after December 31, 1983, and before January 1, 1989. With respect to the application of either prong of this dual definition, the legislative history accompanying the Small Business Job Protection Act stated that "the test is whether a taxpayer, in fact, incurred both research expenses (which under the present-law rules would be qualified research expenses) and had gross receipts in a particular year, not whether the taxpayer claimed a research tax credit for that year." S. REP. NO. 104-281, at 40 (1996); H.R. CONF. REP. NO. 104-737, at 210(1996).

380. I.R.C. § 41(c)(3)(C).

381. PUB. L. NO. 101-239, § 7110, 103 Stat. 2106, 2322-2326 (1989).

> fect. The committee did wish, however, to retain an incremental credit structure in order to maximize the credit's efficiency by not allowing (to the extent possible) credit for research that would have been undertaken in any event.[382]

Congress responded to this criticism by introducing the fixed-base percentage. As previously mentioned, the fixed-base percentage is the ratio of the taxpayer's aggregate qualified research expenses for the taxable years between December 31, 1983, and January 1, 1989, and the taxpayer's aggregate gross receipts for that same period.[383] Thus, Congress avoided the existing problem in which increased research expenditures in the current year would result in reduced tax credit in future years. Congress explained that its intent in making this change was to preserve the incremental nature of the research tax credit in order to create an incentive for increased research expenditures with the smallest possible effect on government revenues and, simultaneously, tailor the credit to the specific circumstances of each taxpayer.

> Although the committee believes it is important to readjust the base amount annually in a way that does not undercut the incentive effect of the credit (which occurs when a firm's base is adjusted solely by reference to its own prior levels of research spending), the committee also determined it was appropriate that the base adjustment reflect firm-specific factors. By adjusting each taxpayer's base to its own experience, the committee wanted to make the credit widely available at the lowest possible revenue cost.
>
> Because businesses often determine their research budgets as a fixed percentage of gross receipts, it is appropriate to index each taxpayer's base amount to average growth in its gross receipts. By so adjusting each taxpayer's base amount, the committee believes the credit will be better able to achieve its intended purpose of rewarding taxpayers for research expenses in excess of amounts which would have been expended in any case. Using gross receipts as an index, firms in fast-growing sectors will not be unduly rewarded if their research intensity, as measured by their ratio of qualified research to gross receipts, does not correspondingly increase. Likewise, firms in sectors with slower growth will still be able to earn credits as long as they maintain research expenditures commensurate with their own sales growth.
>
> Adjusting a taxpayer's base by reference to its gross receipts also has the advantage of effectively indexing the credit for inflation

382. H.R. REP. NO. 247 101-1199 (1989).

383. I.R.C. § 41(c)(3)(A).

> and preventing taxpayers from being rewarded for increases in research spending that are attributable solely to inflation.[384]

As other commentators have observed, however, the current method of calculating the amount of the research tax credit is not without its own problems.[385] First, the fixed-base percentage is based on the ratio of the taxpayer's research expenditures and gross revenues for the five taxable years between December 31, 1983, and January 1, 1989. Whether this ratio remains relevant under current economic and technological conditions is highly questionable.[386] Second, a taxpayer may not be entitled to the research tax credit despite increases in research expenditures as compared to the period from 1984 through 1988 if the taxpayer's gross revenues have increased at a greater rate.[387] Third, because the base amount cannot be less than 50% of the qualified research expenses for the current taxable year, the maximum credit cannot exceed 10% of the qualified research expenditures. This percentage is further reduced because, as described below, the taxpayer must typically reduce its deduction under section 174 for research and experimental expenditures by the amount of any research tax credit.[388] Assuming that the taxpayer is in the 35% tax bracket, the net benefit of the research tax credit is limited to only 6.5% of the taxpayer's qualified research expenditures.[389] As a result, any actual incentive effect attributable to the research

384. H.R. REP. NO. 101-247, 1199-1200 (1989).

385. *See, e.g.,* Grigsby & Westmoreland, *supra* note 6.

386. *See id*. at 1633-34 (comparing conditions the aerospace/defense and the semiconductor industries in the years of 1984 to 1989 to those of the present day).

387. For example, assume that a taxpayer had a fixed-base percentage of 10% because gross receipts for the taxable years between December 31, 1983, and January 1, 1989, were $10 million and qualified research expenses $1 million. If the taxpayer's average annual gross receipts for the four years prior to the taxable year for which the credit is being claimed increased by 20% over the average of the taxpayer's annual gross receipts for the 1984 through 1988 taxable years ($2.4 million = 120% x [$10 million / 5 years]), but the taxpayer's qualified research expenses for the taxable year increased by only 10% as compared to the average annual qualified research expenses over the 1984 through 1988 period ($220,000 = 110% x [$1 million / 5 years]), no credit would be available because the taxpayer's qualified research expenses of $220,000 would not exceed the base amount of $240,000 (10% of $2.4 million).

388. I.R.C. § 280C(c)(1).

389. For example, assume that the taxpayer incurs $1 million of qualified research expenditures in the current taxable year. Without sections 41 and 280C(c)(1), the taxpayer would be entitled to deduct the qualified research expenditures under section 174, thereby reducing the taxpayer's tax liability by $350,000 (35% tax rate times the qualified research expenditures of $1 million). Now assume that the taxpayer is entitled to a research tax credit for 20% of the amount by which the qualified research expenditures exceed the base amount. If the base amount is 50% of the qualified research expenditures, the taxpayer

tax credit is open to question. Due to concerns that the existing features of the research tax credit limit its incentive effect, the Treasury Department recently announced that it would undertake a study of the credit to determine ways to improve its effectiveness.[390]

B. The Alternative Incremental Research Credit

As part of the Small Business Job Protection Act,[391] Congress enacted an alternative incremental research credit that a taxpayer may elect in lieu of the incremental research tax credit.[392] As described above, the incremental

will be entitled to a research tax credit of $100,000 (20% times (qualified research expenditures of $1 million minus a base amount of $500,000). Without section 280C(c)(1), the taxpayer would be entitled to deduct the qualified research expenditures under section 174, which would reduce the taxpayer's tax liability by $350,000 (35% tax rate times the qualified research expenditures of $1 million); the taxpayer would also be entitled to a tax credit of $100,000, for a total tax savings of $450,000. Because of section 280C(c)(1), however, the taxpayer will only be entitled to deduct $900,000 of the qualified research expenditures under section 174, which will reduce the taxpayer's tax liability by only $315,000 (35% tax rate times the qualified research expenditures of $900,000); the taxpayer will also be entitled to a tax credit of $100,000, for a total tax savings of $415,000. As limited by section 280C(c)(1), the research tax credit under section 41 saves the taxpayer only $65,000 ($415,000 minus $350,000,) or 6.5% of the taxpayer's qualified research expenditures.

390. *See* United States Department of the Treasury, *Permanently Extend Research and Experimental (R&E) Tax Credit*, in General Explanations of the Administration's Fiscal Year 2005 Revenue Proposals, at 166 (February, 2004). Recent legislation has proposed a second elective method, the alternative simplified credit, under which taxpayers could determine the amount of the research tax credit. H.R. 463, 108th Cong. (2003); H.R. 5658, 107th Cong. (2002). Interestingly, the alternative simplified credit would permit a credit for 12% of the current year's qualified research expenditures in excess of 50% of average qualified research expenditures for the preceding three taxable years. Thus, the new proposal would resurrect as an elective method an approach similar that which existed prior to the enactment of the Omnibus Budget Reconciliation Act of 1989. *See* McGee Grigsby & John Westmoreland, *H.R. 463 Would Move Research Credit Even Closer to Bull's-Eye*, 98 TAX NOTES 1608 (2003) (for a discussion of H.R. 463); Anthony B. Billings & Randolph Paschke, *Would H.R. 463 Improve the Competitiveness of U.S. R&D Tax Incentives?,* 99 TAX NOTES 1509 (2003); Anthony Billings, *H.R. 463–The Right Approach and Just in Time*, 98 TAX NOTES 1283 (2003).

391. PUB. L. NO. 104-188, § 1204(c), 110 Stat. 1755, 1774 (1996). *See* S. REP. NO. 104-281, at 40 (1996); H.R. CONF. REP. NO. 104-737, at 211-212 (1996).

392. I.R.C. § 41(c)(4). The method of making this election is described in Regulation § 1.41-8. An election may not be revoked without the consent of the Commissioner. Under the Small Business Job Protection Act as originally enacted, taxpayers could elect the alternative incremental research credit for the first taxable year after June 30, 1996. However, as part of the Taxpayer Relief Act

research credit is 20% of the qualified research expenses in excess of a base amount. The base amount is determined by multiplying the fixed-base percentage by the taxpayer's average annual gross receipts for the four taxable years preceding the taxable year for which the credit is being determined. Because the fixed-base percentage is the ratio of the taxpayer's aggregate qualified research expenses for the taxable years from December 31, 1983, through January 1, 1989, to the taxpayer's aggregate gross receipts for that same period, a taxpayer may not be entitled to the incremental research credit if the growth in the taxpayer's gross receipts has been significantly greater than the growth in its qualified research expenses.

To alleviate this problem, the alternative incremental research credit dispenses with the fixed-base percentage of the standard incremental research credit; instead, it determines the amount of the credit based on the extent to which the qualified research expenses for the taxable year exceed fixed percentages of the taxpayer's average annual gross receipts for the four taxable years preceding the taxable year for which the credit is being determined (the "section 41(c)(1)(B) amount").[393] Under newly enacted section 41(c)(4), the alternative incremental research credit is equal to the sum of the following three amounts:

1. 2.65% of the qualified research expenses for the taxable year to the extent that the expenses exceed 1% of the section 41(c)(1)(B) amount but do not exceed 1.5% of such amount;

2. 3.2% of the qualified research expenses for the taxable year to the extent that the expenses exceed 1.5% of the section 41(c)(1)(B) amount but do not exceed 2% of such amount; and

3. 3.75% of the qualified research expenses for the taxable year to the extent that the expenses exceed 2% of the section 41(c)(1)(B) amount.[394]

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of 1997 (PUB. L. NO. 105-34, § 601(b), 111 Stat. 861-862 (1997)), Congress retroactively modified this election by providing that the alternative incremental research credit would apply to the taxable year in which the election was made and to all succeeding taxable years unless revoked with the consent of the Secretary. I.R.C. § 41(c)(4)(B).

393. I.R.C. § 41(c)(4)(A).

394. Prior to the enactment of the Tax Relief Extension Act of 1999 (PUB. L. NO. 106-170, 113 Stat. 1918 (1999)), the percentages applicable in calculating the alternative incremental research credit were 1.65%, 2.2%, and 2.75% of the qualified research expenses as limited by each of the bracket amounts described above. In increasing the percentages by one percent, the House Ways and Means Committee stated that the incremental research tax credit should be strengthened because, as a general matter, it was providing less of an incentive for research than the regular research tax credit. H.R. REP. NO. 106-344, at 12-13 (1999) (describing the terms of H.R. 2923, § 102(b), 106th Cong. (1999)). Recent legislation has proposed that the percentages applicable in calculating the alternative incremental research credit be increased to 3%, 4%, and 5% of

Thus, a taxpayer who is not entitled to a credit under the standard incremental research credit may be entitled to relief under the alternative incremental research credit.

C. The Basic Research Credit

Section 41 also permits a basic research credit for 20% of any "basic research payment" made during the taxable year in excess of a base amount.[395] The basic research credit was enacted in its current form to provide incentives for corporate support of basic scientific research.

> By contrast to other types of research or product development, where expected commercial returns attract private investment, basic research typically does not produce sufficiently immediate

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the qualified research expenses as limited by each of the bracket amounts described above. H.R. 463, 108th Cong. (2003).

Adopting the figures in note 388 of $2.4 million for the taxpayer's average annual gross receipts for the four years prior to the taxable year for which the credit is being claimed and $220,000 for the qualified research expenses incurred for the taxable year, the taxpayer would be entitled to an alternative incremental tax credit of $7,152 calculated as follows:

1. $318, which is equal to ($12,000 x 2.65%). The $12,000 figure is equal to the section 41(c)(1)(B) amount ($2.4 million) times 0.5% (1.5% - 1.0%);

2. $384, which is equal to ($12,000 x 3.2%). The $12,000 figure is equal to the section 41(c)(1)(B) amount ($2.4 million) times 0.5% (2.0% - 1.5%); and

3. $6,450, which is equal to ($172,000 x 3.75%). The $172,000 figure is equal to the qualified research expenses of $220,000 in excess of 2 percent of the section 41(c)(1)(B) amount or $48,000 ($2.4 million times 2.0%).

(Using the percentages applicable prior to the Tax Relief Extension Act of 1999, the taxpayer would have been entitled to an alternative incremental research credit of $5,192, which is equal to $198 ($12,000 x 1.65%) plus $264 ($12,000 x 2.2%) plus $4,730 ($172,000 x 2.75%). As a result, the taxpayer is entitled to an increased credit of $1,960, which is equal to one percent of the qualified research expenses in excess of one percent of the taxpayer's section 41(c)(1)(B) amount.) As demonstrated above, the alternative incremental research credit will entitle the taxpayer to a credit when the standard incremental tax credit would not, provided the taxpayer has qualified research expenses in excess of one percent of its section 41(c)(1)(B) amount.

395. I.R.C. § 41(a)(2), (e)(1)(A). Basic research payments that do not exceed the base amount may be treated as contract research payments for purposes of section 41(b)(3). I.R.C. § 41(e)(1)(B). With respect to these basic research payments, the amounts are to be treated as contract research payments when paid and not when the qualified research is actually conducted. I.R.C. § 41(e)(7)(D) (waiving the requirement of section 41(b)(3)(B)). Except to the extent that basic research payments are treated as contract research payments, basic research payments are excluded from treatment as qualified research expenses or in the computation of the base amount for purposes of the incremental research credit. I.R.C. § 41(e)(7)(C).

> commercial applications to make investment in such research self-supporting. Because basic research typically involves greater risks of not achieving a commercially viable result, larger-term projects, and larger capital costs than ordinary product development, the Federal Government traditionally has played a lead role in funding basic research, principally through grants to universities and other nonprofit scientific research organizations. In addition, the research credit as modified by the [Tax Reform Act of 1986] provides increased tax incentives for corporate funding of university basic research to the extent that such expenditures reflect a significant commitment by the taxpayer to basic research.[396]

For purposes of the credit, "basic research" is defined as "any original investigation for the advancement of scientific knowledge not having a specific commercial objective. . . ."[397] A "basic research payment" is defined as any amount paid in cash by a corporation to a qualified organization for basic research provided (1) the basic research is performed by the qualified organization, and (2) the payment is made pursuant to a written agreement.[398] Qualified organizations include colleges and universities, tax-exempt scientific research organizations, and certain tax-exempt organizations operated primarily to promote scientific research by colleges and universities.[399]

As previously noted, the credit is for 20% of the basic research payments in excess of a base amount. This base amount is referred to as the "qualified organization base period amount" and is equal to the minimum basic research amount plus the maintenance-of-effort amount.[400] The pur-

396. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 131 (1986). Prior to the Tax Reform Act of 1986, the basic research credit treated 65% of a corporate taxpayer's expenditures for basic research performed by a university or scientific research organization as contract research expenses. Economic Recovery Tax Act of 1981, PUB. L. NO. 97-34, § 221, 95 Stat. 172, 241-247 (1981).

397. I.R.C. § 41(e)(7)(A). The definition of "basic research" excludes basic research conducted outside the United States and that in the social sciences, arts, or humanities.

398. I.R.C. § 41(e). The requirement that the basic research be performed by the qualified organization does not apply when the basic research is to be performed by tax-exempt organizations operated primarily to promote scientific research by colleges and universities. I.R.C. § 41(e)(2)(B). For purposes of the basic research credit, the term "corporation" does not include S corporations, personal holding corporations under section 542, or service organizations under section 414(m)(3). I.R.C. § 41(e)(7)(E). See Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 138 n.26 (1987).

399. I.R.C. § 41(e)(6).

400. I.R.C. § 41(e)(3).

pose of the base amount is to ensure that the credit is used to increase taxpayer support of basic research and not to encourage taxpayers simply to switch donations from general university giving to forms of support for which the credit is available.[401]

In determining the qualified organization base period amount, the minimum basic research amount is an amount equal to the greater of (1) one percent of the average amount of any in-house and contract research expenses paid or incurred over the base period or (2) the amount of basic research payments treated as contract research expenses during the base period.[402] For calendar-year taxpayers, the base period is the three-year period from 1981 to 1983.[403] For taxpayers not in existence during the base period, the minimum basic research amount is not to be less than 50% of the basic research payments for the taxable year.[404]

The maintenance-of-effort amount is the average of the non-designated university contributions paid by the taxpayer during the base period in excess of the non-designated university contributions paid by the taxpayer during the taxable year.[405] Non-designated university contributions are any amount paid by the taxpayer to a qualified organization as defined under section 41 for which a charitable contribution deduction was allowable under section 170 and which was not taken into account in determining the basic research credit or as a basic research payment.[406] Consequently, any reduction in the amount of charitable contributions to qualified organizations from the average amount of contributions made during the base period will offset basic research payments eligible for the basic research credit.

D. Limitation on Section 174 Deductions.

Because qualified research expenses and basic research payments under section 41 may also be deductible as research and experimental expenditures under section 174, the Code requires section 174 deductions to be reduced by

401. H.R. REP. NO. 99-426, at 178 (1985); S. REP. NO. 99-313, at 695 (1986); Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 131 (1987).

402. I.R.C. § 41(e)(4)(A).

403. I.R.C. § 41(e)(7)(B). For non-calendar-year taxpayers, the base period is the three-taxable-year period ending with the taxable year that ends in 1984. *Id.*

404. I.R.C. § 41(e)(4)(B). If the taxpayer was in existence for one or two of the base period years, the base amounts are to be computed with respect to those years. Staff of the Joint Comm. on Tax'n, General Explanation of the Tax Reform Act of 1986, 184 (1987).

405. I.R.C. § 41(e)(5)(A). The average nondesignated university contributions paid by the taxpayer during the base period are subject to a cost of living adjustment in calculating the maintenance-of-effort amount. I.R.C. § 41(e)(5)(C).

406. I.R.C. § 41(e)(5)(B).

the amount of any credit taken under section 41.[407] The legislative history provides the following example of this requirement:

> For example, assume that a taxpayer makes credit-eligible research expenditures of $1 million during the year, and that the base period amount is $600,000. The taxpayer is allowed a tax credit equal to 20 percent of the $400,000 increase in research expenditures, or $80,000. . . . Under the provision, the taxpayer's deduction is reduced by the $80,000 credit, leaving a deduction of $920,000.[408]

In addition, if research and experimental expenditures are capitalized rather than currently deducted, the capitalized amount must be similarly reduced by the amount of any research credit available under section 41.[409]

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407. I.R.C. § 280C(c)(1). As originally enacted, section 280C required deductions under section 174 to be reduced by only 50% of the credit amount. Technical and Miscellaneous Revenue Act of 1988, PUB. L. NO. 100-647, § 4008, 102 Stat. 3342, 3652-3653 (1988). Section 280C was subsequently amended to require deductions under section 174 to be reduced by the full amount of the credit. Omnibus Budget Reconciliation Act of 1989, PUB. L. NO. 101- 239, § 7110, 103 Stat. 2106, 2322-2326 (1989). Thus, the 50% limitation was effective only for taxable years after 1988 and before 1990.

    Prior to 1989, taxpayers could claim deductions under section 174 and the credit under section 41 in connection with the same research expenditures. In amending section 280C in 1988 to require that deductions under section 174 be reduced if a credit was also taken under section 41, Congress stated:

    > [t]he allowance of the section 41 credit, which reduces the taxpayer's Federal income tax liability by an amount equal to 20% of the taxpayer's research expenditures to which the credit applies, is equivalent to a Federal payment to a taxpayer of the credit amount. Accordingly, since the taxpayer in effect does not pay for its research expenditures to the extent of the credit, the taxpayer's deduction for research expenditures should be reduced by that amount.

    H.R. REP. NO. 100-795, at 452 (1988). The legislative history also noted that the statutory change was consistent with the treatment of depreciation deductions, which were reduced by the amount of the investment tax credit and research and experimental expenditures which were reduced by the amount of the orphan drug credit.

408. H.R. REP. NO. 100-795, at 453 (1988).

409. I.R.C. § 280C(c)(2). Because the research credit is subject to the limitations of the general business credit under section 38, section 280C may require taxpayers to reduce their deductions under section 174 despite the fact that full amount of the credit may not be available. To alleviate this problem, taxpayers may elect to take a reduced credit under section 41 and take the full deduction under section 174. I.R.C. § 280C(c)(3). Under this election, the amount of the credit under section 41 is determined by reducing the full credit amount by the product of the full credit amount and the highest marginal corporate tax rate.

Section 280C's effect is a reduction in the amount of tax savings generated by the research tax credit. As previously described, the maximum tax credit available under section 41 cannot exceed 10% of the qualified research expenditures.[410] This percentage is further reduced under section 280C. Assuming that the taxpayer is in the 35% tax bracket, the net benefit of the research tax credit is limited to only 6.5% of the taxpayer's qualified research expenditures.[411] Consequently, the incentive that the research tax credit creates is reduced by the application of section 280C.

VI. CONCLUSION

Each of the three problems that afflict the current version of the research tax credit–its lack of permanence, the difficulty in articulating the very definition of qualified research, and the calculation of the credit itself–evidence an underlying policy incoherence. Although the temporary nature of the credit when originally enacted in 1981 was justified because of uncertainties concerning its effectiveness, the fact that the credit has not become a permanent part of the tax code in the past twenty-plus years suggests that those uncertainties remain. It is possible that Congress is not convinced that the tax credit is sufficiently effective in satisfying its policy goals or justified as a use of federal funds.

The controversy surrounding the definition of qualified research is further evidence of policy confusion and uncertainty underlying the research tax credit. In reformulating the credit as part of the Tax Reform Act of 1986, Congress explicitly required that qualified research for purposes of section 41 had to satisfy a higher standard than research and experimentation for purposes of section 174. Nevertheless, under the current Regulations, the uncertainty test of section 174 is virtually identical to the discovery requirement under section 41. Furthermore, the requirement that the research be technological in nature for purposes of section 41 imposes little, if any, substantive limitation compared to the types of research and experimentation that qualify under section 174. Although the process of experimentation requirement under section 41 could provide a significant distinction between research and experimentation under section 174 and qualified research under section 41, the final Regulations provide such a vacuous definition of the requirement as to render it largely one of form and not substance.

The regulatory requirements under the high threshold of innovation test applicable to internal-use computer software also suggest that no clear definition of qualified research has been articulated. In permitting internal-use computer software that satisfies the high threshold of innovation eligible for the research tax credit, Congress clearly intended that the research efforts in

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I.R.C. § 280C(c)(3)(B). The election, once made, is irrevocable. *See* Reg. § 1.280C-4.

410. *See supra* text accompanying note 388.

411. *See supra* note 390.

developing such software must go beyond those incurred in connection with qualified research. An examination of the requirements under the high threshold of innovation test–i.e., that the software be innovative and that its development effort involve significant economic risk because of technical uncertainty–provides little, if any, insight into how these requirements differ from the discovery and process of experimentation requirements under the general definition of qualified research. Although the *Norwest Corp.* Tax Court compared the requirement that internal-use computer software be innovative–that it result in a reduction in cost or improvement in speed that is substantial and economically significant–with the general requirement that qualified research need only result in a "new or improved" business component, this distinction is merely a difference in degree rather than kind. Similarly, the Tax Court compared the general eligibility requirement (that the taxpayer engage in a process of experimentation which requires the existence of uncertainty) with the significant economic risk test applicable to internal-use computer software (which requires the existence of substantial uncertainty). Again, a difference in degree rather than kind suggests that, at a minimum, taxpayers and the Service will continue to be ensnared in controversy.

The difficulty in articulating the very definition of qualified research also evidences deep policy differences—this time between Congress and the Treasury Department. Taxpayers were highly critical of the original Proposed and final Regulations issued during the Clinton administration, both of which imposed strict standards with respect to the discovery and the process of experimentation requirements under the definition of qualified research. These standards were effectively endorsed by the Tax Court and two Courts of Appeals based on the legislative history and independent interpretations of the statutory language. However, the revised Proposed Regulations and the final Regulations promulgated under the Bush administration have significantly relaxed the applicable standards, resulting in a greater range of research eligible for the credit. The significant differences between the original version of the Regulations and the revised version of the Regulations, each of which claimed to reflect the intent of Congress, again suggest that the policy basis for the research tax credit is significantly uncertain.

Finally, the calculation of the research tax credit itself evidences uncertainty regarding the extent to which government revenues should be reduced to support research and development. The underlying purpose for the research tax credit is to create an incentive for increased investment in research and development. However, because of the manner in which the base amount is currently formulated, the research tax credit may not be available to taxpayers who have increased their expenditures for research and development but whose gross revenues have risen even faster. Commentators have suggested that this aspect of the research tax credit penalizes those taxpayers whose earlier research and development efforts have been most successful. In addition—this time because of the use of the fixed-base percentage—eligibility for the research tax is related to economic and technological factors from the mid-1980s that may be irrelevant under current economic and tech-

nological conditions. Consequently, it is unsurprising that doubts persist concerning the effectiveness of the current research tax credit.

Due to wide political approval of government support for research and development and continuously raised claims that additional support is necessary if private industry in the United States is to remain competitive in a global economy, pressures will be exerted to find a mechanism to provide that support. In addition, because direct government expenditures to support research and development involve their own political difficulties, the tax code will undoubtedly be viewed as an appropriate vehicle through which to provide that support. Congress must do a better job of articulating a coherent policy on which statutory and regulatory language can be based in order to avoid the difficulties that have arisen under the current research tax credit.

Trademark Challenges

by
*John M. Cone**

I. Trade Dress Functionality After *TrafFix*

The proponent of a product design trade dress must show that the trade dress is non-functional.[1] In 2001, the Supreme Court considered functionality in the context of a patented, dual-spring mechanism for temporary road signs, which were designed to withstand strong gusts of wind.[2] In reversing the lower court's summary judgment, the Sixth Circuit held that the availability of spring mechanisms, functionally equivalent but with a different appearance, rendered the dual-spring mechanism non-functional.[3] The Supreme Court reversed, finding instead that the TrafFix dual-spring design was functional as a matter of law. The Court thus held that the availability of functionally equivalent, alternative designs of differing appearance was immaterial.[4]

The previously-used *Inwood* test for functionality stated that "[i]n general terms, a product feature is functional and cannot serve as a trademark, if it is essential to the use or purpose of the article or if it affects the cost or quality of the article."[5] Subsequently, in *Qualitex*, the Court supplemented the *Inwood* test by explaining that, in the context of a single-color trade dress, a "functional feature" is one where "the exclusive use of [the feature] would put competitors at a significant non-reputation-related disadvantage."[6] Some courts, like the Sixth Circuit in *TrafFix*, interpreted this to exclude designs as functional only if it could be shown that use of the design was a competitive necessity.[7] Nonetheless, the Court's decision in *TrafFix* limits the *Qualitex* competitive necessity test to cases where the alleged functionality of the feature is merely aesthetic functionality, rather than utilitarian in function.

Moving forward, one issue courts should consider in future cases is the clarification of the of the term "essential" in the phrase "essential to the use or purpose of the article." Thus far, "essential" in this instance does not mean that no alternatives exist to the exact feature claimed as trade dress. Rather, the term seems to refer to the fact that the feature claimed as trade

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1. 15 U.S.C. § 1125(a)(3) (2003).
2. TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23, 24 (2001).
3. *Id.* at 27.
4. *Id.* at 33-34.
5. Inwood Labs., Inc. v. Ives Labs., Inc., 456 U.S. 844, 850 n.10 (1982).
6. Qualitex Co. v. Jacobson Prods. Co., 514 U.S. 159, 165 (1995).
7. Mktg. Displays, Inc. v. TrafFix Devices, Inc., 200 F.3d 929, 940 (6th Cir. 1999), *rev'd*, 532 U.S. 23.

dress is used to make the product work, as opposed to being an extraneous feature added for no known purpose, or merely to identify the product's source. As the Seventh Circuit explained, "[a]lthough the three possibilities we have mentioned do not show that roundness is 'essential' to a thermostat, that's not required."[8] The *TrafFix* Court rejected an equation of functionality with necessity – finding it enough that the design merely be useful.[9]

In *Eppendorf-Netheler-Hinz*, the Fifth Circuit held that product trade dress in disposable pipette tips was functional.[10] The alleged trade dress in that case was comprised of eight design features incorporated into Eppendorf's disposable pipettes: (1) the flange on top of the tip; (2) the fins connecting the flange to the body of the tip; (3) the plunger head; (4) the plunger; (5) the length of the tips; (6) the eight sizes of the tips; (7) the coloring scheme on the tips; and (8) the angle of the stump on the tips. Ritter's tips were substantially identical in design and were marketed as a "direct replacement" for Eppendorf's. Eppendorf relied on evidence showing that many different designs could be used to produce a pipette that functioned well and did not resemble Eppendorf's. The Fifth Circuit deemed Eppendorf's evidence irrelevant, concluding that the evidence conclusively established that each of the claimed trade dress elements served a functional purpose in making Eppendorf's pipettes work.[11]

Despite the aforementioned decision, the availability of alternative designs has been considered to be probative of functionality.[12] Even after *TrafFix*, the Federal Circuit in *Valu Eng'g* held that alternative designs could be considered in determining the functionality of a product design.[13] On appeal from a Trademark Trial and Appeal Board (T.T.A.B.) decision refusing to register three cross-sectional designs for conveyor guide rails as trademarks, the Federal Circuit held that the designs were functional, upholding the decision not to grant the registrations.[14] The Federal Circuit recognized *TrafFix* as authoritative on the issue of non-distinctiveness of product design trade dress, but ultimately concluded that its previously adopted test for functionality in *In re Morton-Norwich Products, Inc.* was consistent with *TrafFix*.[15]

Under *Morton-Norwich*, courts should consider a number of factors in determining functionality including: (1) the existence of a utility patent disclosing the utilitarian advantages of the design; (2) any advertising materials

8. Eco Mfg. LLC v. Honeywell Int'l Inc., 357 F.3d 649, 654 (7th Cir. 2003).

9. *TrafFix Devices, Inc*., 532 U.S. at 24.

10. Eppendorf-Netheler-Hinz GmbH v. Ritter GmbH, 289 F.3d 351, 358 (5th Cir. 2002).

11. *Id.*

12. Valu Eng'g, Inc. v. Rexnord Corp., 278 F.3d 1268, 1276 (Fed. Cir. 2002).

13. *Id.*

14. *Id.* at 1279.

15. *Id.*; *In re Morton-Norwich Prods., Inc*., 671 F.2d 1332, 1343 (C.C.P.A. 1982).

by the design's originator touting its utilitarian advantages; (3) the availability to competitors of functionally equivalent designs; and (4) facts indicating that the design results in a comparatively simple or cheap method of manufacturing the product.[16] According to *Valu Eng'g*, a court may still consider the existence of alternative designs in deciding whether a design is functional, but cannot give trademark protection to a functional design merely because there are alternative designs available.[17]

The Ninth Circuit has issued several post-*TrafFix* opinions on functionality.[18] In one case, that court rejected the alternative-designs evidence along with the notion that a combination of functional features could result in a distinctive, non-functional trade dress.[19]

In Clicks Billiards, a later opinion, the Ninth Circuit found that functional elements that are separately unprotectable can be combined to form a protectable trade dress, and considered the availability of alternative designs.[20] An earlier opinion contends that Clicks involved trade dress in the interior appearance of billiard halls. The trade dress was said to consist of the following individual features, taken collectively:

1. Large floral print carpet pattern and style;

2. Dark mahogany wood finishes;

3. Ceiling and wall covers;

4. Appearance, color, and design of custom lighting fixtures;

5. Millwork details on woodwork;

6. Layout and arrangement of pool tables;

7. Various electrical details as well as air conditioning features to the extent they are part of the look, feel, and appearance of the décor of Clicks;

8. Tile color, pattern, and use;

9. Color, shape and appearance of mahogany-stained top and bottom portions of bar;

10. Acoustical wall treatment on lower third of perimeter walls and drink rails;

11. Light to medium colored oak cocktail tables;

12. Drink rails;

13. Signage at front door, including color, content, and font;

14. Standardized appearance of the Clicks entry area, including the black and white tile on the floor;

15. Drink rails, cue racks, and wood trim on top of the dark green acoustical wall;

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16. *In re Morton-Norwich Prods., Inc*., 671 F.2d at 1343, 1340-41.

17. *Valu Eng'g*, 278 F.3d at 1276 (citing J. Thomas McCarthy, 1 McCarthy on Trademarks and Unfair Competition, § 7:75, 7-180-1 (4th ed. 2001)).

18. *See* sources cited *infra* notes 19-20 and accompanying text.

19. Tie Tech, Inc. v. Kinedyne Corp., 296 F.3d 778, 786 (9th Cir. 2001).

20. Clicks Billards, Inc. v. Sixshooters, Inc. 251 F.3d 1252, 1259 (9th Cir. 2001).

16. Spatial and layout arrangements between the drink rails and pool tables;

17. Neon beer signs placed on the off-white fur down or soffit above the dark, mahogany-stained wall;

18. The design, color, shape, and placement of the lights over the pool halls, as well as the number and spacing between them;

19. The design of the bar edge and the raised motifs on the bar;

20. The coordinated color scheme relating to the acoustical tile ceilings, the light fixtures, and the drink railings;

21. The color, shape, and location of the ceiling fans;

22. The location of the bartender relative to the entry way;

23. Design, including shape, material, stain, and structural aspects, of cue racks;

24. Placement of match books on upside-down ash trays;

25. Vinyl flooring;

26. Appearance of ceiling loudspeaker baffles, as painted over to match ceiling tile sections;

27. Wall or pole-mounted juke boxes;

28. Oak chairs surrounding drink tables;

29. Black vinyl bar chairs;

30. Location and existence of promotional materials, stacked talcum powder containers, and boxed cue chalk squares at the register;

31. Wooden stools at perimeter drink tables and interior aisle tables;

32. Uniforms of bartender and servers;

33. Size, shape, and color of trash cans;

34. Existence, shape, and appearance of bar-top video games;

35. Handles of draft-taps;

36. Internal layout of bar and laminate top of bar; and

37. The type, shape, configuration, and color of the drop ceiling.[21]

The Clicks court acknowledged the functionality of many of the listed features, and yet – reversing a summary judgment dismissing the action – held that the combination could still be non-functional.[22] In so holding, the court applied a four-part test for functionality previously used in its pre-Traf-Fix decision, Disc Golf: (1) whether the design yields a utilitarian advantage; (2) whether alternative designs are available; (3) whether advertising touts the utilitarian advantages of the design; and (4) whether the particular design results from a comparatively simple and inexpensive method of manufacture.[23]

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21. *Id.* at 1261-62, 1263.

22. *Id.*

23. *Id.* at 1260 (citing Disc Golf Ass'n, Inc. v. Champion Discs, Inc., 158 F.3d 1002, 1005-06 (9th Cir. 1998)).

The Clicks court was aware of TrafFix, which it cites early in its opinion, yet the court not only considered the existence of alternative designs in its analysis, but also appeared to reject the existence of aesthetic functionality, noting that "trade dress cannot, however, be both 'functional and purely aesthetic.'"[24] This apparent denial of aesthetic functionality as a limitation on trade dress rights is difficult to square with the Supreme Court's reference in TrafFix to aesthetic functionality existing as the "central question" in Qualitex.[25]

The Ninth Circuit also suggested in Clicks that in some cases, such as for restaurant trade dress, safeguarding against an improper monopoly was less important, for example, than in cases of product design; the court instead compared restaurant trade dress to product packaging. In so doing, the court cited the Fifth Circuit's comments on functionality in Taco Cabana Int'l, Inc. v. Two Pesos, Inc., approving that court's earlier functionality test as applied in Sicilia Di R. Biebow v. Cox.[26] Paradoxically, in Eppendorf-Netheler-Hinz the Fifth Circuit had deemed the Sicilia test as having been overruled by the Supreme Court's opinion in TrafFix.[27]

Considering whether a certain fashion design (SNOPANTS) qualified for trade dress protection, the Southern District of New York held in Maharishi Hardy Blechman Ltd. v. Abercrombie & Fitch Co. that trade dress cannot protect an idea, concept, or generalized appearance.[28]

That court also noted that trade dress must be articulated with specificity; factors affecting specificity included whether: (1) jurors may view the same trade dress differently; (2) jurors or courts may have trouble determining issues of functionality and secondary meaning; (3) the imprecision may indicate that the trade dress is over-broad; and (4) that courts may have trouble issuing a narrowly-tailored injunction.[29] The plaintiff initially defined the SNOPANTS trade dress as follows:

> The design of SNOPANTS incorporates a number of elements that either alone or in combination are inherently distinctive and non-functional, including: the embroidered Asian themed embroidery on the rear side of the pant legs; the roll-up feature of the pant legs; the visible triple-stitched waist band; the narrow pocket

24. *Id.* at 1260.

25. *See* discussion of the Court's opinion in *TrafFix*, *supra*.

26. Clicks Billiards, Inc., 251 F.3d at 1260-1261 (citing Taco Cabana Int'l Inc. v. Two Pesos, Inc., 932 F.2d 1113, 1119 (5th Cir. 1991), aff'd, 505 U.S. 763 (1992)); *see* Sicilia Di R. Biebow & Co. v. Cox, 732 F.2d 417, 425 (5th Cir. 1984).

27. *See* Eppendorf-Netheler-Hinz GmbH, 289 F.3d at 356.

28. Maharishi Hardy Blechman Ltd. v. Abercrombie & Fitch Co., 292 F. Supp. 2d 535, 542 (S.D.N.Y. 2003).

29. *Id.* at 539.

> near the right-hand pant hem; the eccentric use of elasticized cord to cinch the waist and hems; the eccentric placement of double cord locks for waist and/or hem adjustment toward the center front of the waist; the slanted and curved front pockets with contrasting pocket lining; and the double knee dart with buttons on the side seams.[30]

During motion practice, it had restated the trade dress as:

> 1. Roll-up pant legs utilizing buttons and epaulettes; and 2. Visible triple-stitched waist band; and 3. Small, flat pocket near the right-hand pant hem; and 4. Elasticized cord to cinch the waist and hems; and 5. Use of double cord locks on the waist and hem; and 6. Placement of two double cord locks along the waist, each in a non-centered position between the fly and each side seam of the pants; and 7. Slanted and curved front pockets, with pocket lining of a contrasting color; and 8. Double knee darts located approximately halfway down the front of the pant legs and between buttons on the side seams; and 9. Sometimes Asian-themed embroidery on the rear side of the pant legs.[31]

The court accepted that the latter was sufficiently specific to qualify as a protectable trade dress, if it passed the other requirements.

Opposing Abercrombie's contention that Maharishi failed to establish that the trade dress was non-functional, Maharishi proffered expert testimony regarding the existence of alternative designs. In refusing to exclude the testimony, the court espoused the Federal Circuit's Valu Eng'g opinion – that a court may properly admit into evidence and take into account the availability of alternative designs in making decisions as to "whether a feature is functional in the first place."[32]

To the extent the trade dress was vulnerable to attack as aesthetically functional, Qualitex and TrafFix clearly allow the consideration of alternatives. On the issue of design functionality in the aforementioned Maharishi case, the court resolved doubts and ambiguities in favor of non-movant Maharishi and held that a fact issue prevented a finding of summary judgment that the trade dress in question was, in fact, functional. Nonetheless, the court went on to enter summary judgment for the defendant on another point, thus dismissing the trade dress claim, based upon plaintiff Maharishi's failure to bring forth evidence that was sufficient to support the court's finding an issue of fact as to whether the SNOWPANTS design had acquired secondary meaning.[33]

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30. *Id.* at 539.

31. *Id.* at 545.

32. *Id.* at 548.

33. *Id.* at 549.

Like the Maharishi court, the Sixth Circuit has also acknowledged the Value Eng'g rule (availability of alternative designs as probative of design functionality) but has also held that it was not required to consider such evidence, at least when the design is functional under the traditional Inwood test.[34]

In a recent case, the Ninth Circuit noted TrafFix's holding that once functionality is established, "[t]here is no need [to speculate] about other design possibilities"; thus, the existence of alternative designs cannot negate a trademark's functionality.[35] The court in that case still contended, however, that the existence of alternatives designs may indicate whether the trademark itself embodies functional or merely ornamental aspects of the product.[36]

TrafFix, however, clearly holds that the Inwood test is the test for courts to properly apply in functionality of trade dress cases. The Inwood test does not include a consideration of possible alternative designs; only cases of a design's aesthetic functionality merit a court's taking into account the possibility of alternative designs, and then only in the context of whether competitors were placed at significant disadvantage – unrelated to reputation – by a specific trade dress protection. TrafFix suggests that whether the design in question is "functional" depends solely upon the reasons why particular elements are incorporated into the product that embodies the trade dress, as well as the issue of what, if anything, those elements contribute to the product's intended function. It seems clear that, in general, evidence of some other products' design is not likely to help produce answers to these questions.

Undoubtedly, difficult questions related to functionality as well as inherent distinctiveness will present themselves in cases where the asserted trade dress is not plainly either design or packaging, and particularly in cases concerning the amorphous type of trade dress asserted in Maharishi and Clicks. As of yet, no court appears to have considered whether, in the context of a service provider, the arrangement and appearance of the venue where the services are provided is part of the "product".

Initial Interest Confusion

In recent years, frequently in cases involving use of marks in connection with Internet web sites, courts have made reference to "initial interest confusion."[37] As typified in Brookfield, when a defendant uses a similar mark to

34. Antioch Co. v. W. Trimming Corp., 347 F.3d 150, 156 (6th Cir. 2003).

35. Talking Rain Beverage Co. v. S. Beach Beverage Co., 349 F.3d 601, 603 (9th Cir. 2003) (describing the form of a certain bicycle-type water bottle as functional; merely showing that other existing designs were capable of achieving the same functionality did not designate that specific design as non-functional).

36. *Id.*

37. *See, e.g.*, Checkpoint Sys., Inc. v. Check Point Software Techs., Inc., 269 F.3d 270, 292 (3d Cir. 2001); Brookfield Communications, Inc. v. W. Coast Entm't Corp., 174 F.3d 1036, 1057 (9th Cir. 1999); Interstellar Starship Servs., Ltd. v.

that of the plaintiff's, it may cause consumers to mistakenly access the defendant's site – giving rise to the related risk that a consumer, while realizing that she has not reached the intended trademark owner's site, may conduct business with the defendant without any further search. This type of trademark use is actionable because the defendant has captured the attention, and possibly the business of, a customer who originally intended to patronize the plaintiff's site.[38] According to the Ninth Circuit, "[i]nitial interest confusion is customer confusion that creates an initial interest in a competitor's product. Although dispelled before an actual sale occurs, initial interest confusion impermissibly capitalizes on the goodwill associated with a mark and is therefore actionable trademark infringement."[39]

The concept of initial interest confusion dates back at least to 1973, with a case involving competing vendors of grand pianos, selling under the respective marks of STEINWAY and GROTRIAN-STEINWEG.[40] In finding that GROTRIAN-STEINWEG infringed on STEINWAY's mark, the district court used the well-known Polaroid test to determine the likelihood of confusion.[41] The court found that actual confusion had occurred and, in considering the "degree of care" factor, noted that although buyers of the expansive pianos in question could be considered sophisticated, confusion as to a possible past or present relationship between the parties could still occur.[42] "Mislead by an initial interest, a potential Steinway buyer may satisfy himself that the less expensive Grotrian-Steinweg is at least as good [as], if not better, than a Steinway. Deception and confusion thus work to appropriate defendant's good will."[43] In that case, the Second Circuit Court of Appeals affirmed the lower court's finding of likelihood of confusion and its use of the Polaroid test. Rejecting Grotian-Steinweg's argument that the district court placed insufficient weight on the degree of care factor, the Court of Appeals noted that

> [t]he harm to Steinway . . . is the likelihood that a consumer, hearing the 'Grotian-Steinweg' name and thinking it had some connection with 'Steinway', would consider it on that basis. The 'Grotian-Steinweg' name therefore would attract potential customers based on the reputation built by Steinway. The harm to

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Epix Inc., 184 F.3d 1107, 1110 (9th Cir. 1999), *cert. denied*, 528 U.S. 1155 (2000); GoTo.com v. Walt Disney Co., 202 F.3d 1199 (9th Cir. 2000).

38. *Brookfield Communications*, 174 F.3d at 1062.

39. Playboy Enters., Inc. v. Netscape Communications Corp., 354 F.3d 1020, 1025 (9th Cir. 2004).

40. Grotrian, Helfferich, Schultz, Th. Steinweg Nachf. v. Steinway & Sons, 365 F. Supp. 707 (S.D.N.Y. 1973), *aff'd as modified*, 523 F.2d 1331 (2d Cir. 1975).

41. *Id.* at 712.

42. *Id.* at 717.

43. *Id.*

> Steinway in short is the likelihood that potential piano purchasers will think that there is a connection between the Grotian-Steinweg and Steinway pianos. Such initial confusion works as an injury to Steinway."[44]

More than ten years later, the Southern District of New York cited the Grotrian Steinweg decision as its justification for recognizing "initial confusion" as a special type of confusion, likely to arise among even sophisticated purchasers when an established trademark has been intentionally copied.[45] In the Mobil Oil case before the Second Circuit, Mobil Oil claimed that use of the name "Pegasus Petroleum" by a company that engaged in oil trading, though not to the general public, was likely to cause confusion as a result of Mobil Oil's longstanding and extensive use of the "flying horse" symbol. The Second Circuit affirmed the district court's finding of actual confusion as one factor of the Polaroid analysis based on the likelihood of confusion because Pegasus Petroleum could gain credibility and access to a customer's attention during the initial phases of a deal, not on the basis that a third party would conduct business with Pegasus Petroleum believing it related to Mobil.[46]

In Internet cases, trademark owners have urged the concept of "initial interest confusion," arguing that where use of an accused domain name or metatag leads a consumer looking for the plaintiff to the defendant's website, a finding of infringement is warranted. In Brookfield, the Ninth Circuit considered the hypothetical "situation in which B erects signs purporting to lead the buying public to A's store, but actually directs them to B's. [When they arrive] at B's store, the customers are fully aware that the store is B's not A's, but [nonetheless] buy from [B, anyway]".[47] Despite the lack of confusion at the time of purchase, the district court in that case observed that B is still liable for misappropriating A's acquired goodwill – in violation of federal trademark law.[48] In deciding Brookfield, the court suggested that both parties' use of the world wide web to reach customers increased the likelihood of confusion, and that in such cases the three most important factors in the likelihood of confusion analysis are: (1) similarity of the marks, (2) similarity of respective goods or services, and (3) simultaneous use of the web.[49]

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44. *Grotrian, Helfferich, Schultz, Th. Steinweg Nachf.*, 523 F.2d at 1342.

45. Mobil Oil Corp. v. Pegasus Petroleum Corp., 818 F.2d 254, 259 (S.D.N.Y. 1987).

46. *Id.*; *see also* Dr. Seuss Enters. L.P. v. Penguin Books USA, Inc., 109 F.3d 1394, 1405 (9th Cir. 1997).

47. The Network Network v. CBS, Inc., 2000 WL 362016, at *8 (C.D. Cal. Jan. 18, 2000).

48. *Brookfield Communications*, 179 F.3d at 1042.

49. *Id.* at 1056-57.

In its subsequent Interstellar Starship decision, the Ninth Circuit appears close to suggesting that when identical marks are used on the Internet, a finding of likelihood of confusion is nearly a necessity.[50] Building on Brookfield, subsequent plaintiffs have argued that where the defendant has obtained the domain name "[plaintiff's trademark].com", their trademark rights are diminished because customers type in that domain name and when they reach the defendant's site may fail to continue surfing and will likely not ever successfully locate plaintiff's site.[51]

Since Brookfield, in terms of initial interest confusion in the context of the Internet, some other courts (to be discussed in detail in the paragraphs below) have restricted that doctrine to only those cases in which the defendant's goods or services directly compete with the plaintiff's. In the absence of a possible substitution or diversion, the "capitalizing on the trademark owner's goodwill" rationale cited in Brookfield does not apply. Under this rationale, in one case the owner of the CLUE mark used in connection to a board game could not establish likelihood of confusion merely by showing that another company – Clue Computing – used the domain name "clue.com" as part of its business operation. The admittedly very likely result that consumers searching for the CLUE board game might instead end up at Clue Computing's website was not a usurping or diversion of the CLUE trademark's goodwill; in that case the potential confusion was merely an innocent result of Internet search engine use.[52] As in the CLUE case, the disparity between CBS's The Nashville Network cable television programming, which is distributed under the mark TNN, and the consultancy and training for IT managers that The Nashville Network promoted on its website at tnn.com precluded reliance on initial interest confusion.[53] The key difference when looking for initial interest confusion is this: in cases where the parties are not business competitors, an initial interest confusion necessarily fails to place the trademark owner's goodwill at risk to harm the mark; this is true since there is no risk that a confused consumer will somehow procure substitute products or services from the defendant in a way that is detrimental to the plaintiff.[54]

In a case rejecting the application of initial interest confusion, the court, quoting Chatham stated, "Internet surfers are inured to the false start and excursions awaiting . . . and are unlikely to be dissuaded or unreserved if

50. Interstellar Starship Servs., 184 F.3d at 1110; *see also* GoTo.com, 202 F.3d at 1206 (noting the particular likelihood of confusion present in cyberspace).

51. *See, e.g.*, Playboy Enters., Inc., 55 F. Supp. 2d at 1070.

52. Hasbro, Inc. v. Clue Computing, Inc., 66 F. Supp. 2d 117, 125 (D. Mass. 1999).

53. *The Network Network*, 2000 WL 362016, at *5.

54. Chatam Int'l, Inc. v. Bodum, Inc., 157 F. Supp. 2d 549, 558 (E.D. Pa. 2001) (stating that defendant's use of "chambord.com" was not actionable under initial interest confusion theory because of the degree of dissimilarity between coffee makers and plaintiff's CHAMBORD raspberry liqueur).

their first stab at guessing the relevant domain name brings up the wrong website."[55] When the defendant is not cyber squatting and offers goods or services that make confusion unlikely, courts have rejected an attempt to turn senior trademark rights into a guarantee of domain name ownership, reasoning that although the need to search for the plaintiff's site may involve "inconvenience", said inconvenience is not cognizable as a legal harm.[56] Nothing in trademark law requires that title to domain names which incorporate trademarks or portions of trademarks be provided to trademark holders.[57]

In a recent case discussing Brookfield, the Ninth Circuit pointed out that its finding of infringement of the trademark MOVIE BUFF by use of the domain name moviebuff.com was premised on the fact that the second level domain name was identical to the mark. In Entrepreneur Media, the Ninth Circuit declined to find the use of the domain name entrepreneurpr.com infringed the mark ENTREPRENEUR because the factor of precise identity was not present.[58]

Although courts in different circuits have recognized "initial interest confusion" as probative in Lanham Act cases,[59] the broad statement that initial interest confusion "is actionable under the Lanham Act" found in some decisions[60] warrants careful consideration. The standard for trademark infringement is likelihood of confusion, typically determined by a multifactor test, such as the Polaroid test.[61] In these tests, actual confusion and the care exercised by purchasers are factors to evaluate in determining likelihood of confusion.[62] Courts need to articulate more clearly the role that "initial interest confusion" plays in their analysis.

Is "initial interest confusion" part of the multifactor test which, if found, supports a finding of infringement? Recent cases have considered it as pro-

55. Strick Corp. v. Strickland, 162 F. Supp. 2d 372, 377 (E.D. Pa. 2001).

56. *Hasbro, Inc.*, 66 F. Supp. 2d at 125.

57. HQM, Ltd. v. Hatfield, 71 F. Supp. 2d 500, 508 (D. Md. 1999).

58. Entrepreneur Media, Inc. v. Smith, 279 F.3d 1135 (9th Cir. 2002).

59. Eli Lilly & Co. v. Natural Answers, Inc., 233 F.3d 456, 464 (7th Cir. 2000); *see* Syndicate Sales, Inc. v. Hampshire Paper Corp., 192 F.3d 633, 638 (7th Cir. 1999); Forum Corp. v. Forum Ltd., 903 F.2d 434, 442 n.2 (7th Cir. 1990); Television Enter. Network, Inc. v. Entm't Network, Inc., 630 F. Supp. 244, 247 (D.N.J. 1986).

60. *Checkpoint Sys*., 269 F.3d at 293.

61. Polaroid Corp. v. Polaroid Elecs. Corp., 287 F.2d 492, 495 (2d Cir.), cert. denied, 368 U.S. 820 (1961); Smith Fiberglass Prods., Inc. v. Ameron, Inc., 7 F.3d 1327, 1329 (7th Cir. 1993); AMF Inc. v. Sleekcraft Boats, 599 F.2d 341, 347 (9th Cir. 1979).

62. *See, e.g.*, Elvis Presley Enters. v. Capece, 141 F.3d 188, 203-04 (5th Cir. 1998).

bative of one of the confusion factors, such as actual confusion,[63] proximity of products,[64] similarity of mark,[65] and degrees of customer care.[66] Alternatively, is "initial interest" a type of confusion, or that if found likely to occur constitutes trademark infringement? Traditionally, likelihood of confusion requires a showing that "an appreciable number of ordinarily prudent purchasers are likely to be misled or confused as to the source of [the defendant's] goods. . . .[67] Courts have rejected as instances of actual confusion misdirected phone calls and mail.[68] But does "initial interest confusion" relax this standard?

Courts have not differentiated, with regard to actual confusion, between the infringement section, 15 U.S.C. § 1114(a), and the false representation section, 15 U.S.C. § 1125(a), despite the fact that the latter still refers to confusion, mistake, or deceit "as to the origin, sponsorship, or approval of . . . goods or services" whereas a similar reference to "source of origin" was removed from § 1114 in 1962. Indeed, the 1962 amendment to § 1114 deleted the words "purchasers as to the source of origin of goods and services" originally found after "or to deceive" in § 1114(a). Despite this change, most courts and practitioners accept that likelihood of confusion still focuses on the reaction of the ordinary purchaser of the defendant's goods in normal market circumstances. Some courts, in recent years, have argued that the 1962 amendment broadens both the type of confusion that is actionable and the class of persons whose confusion is pertinent, taking note of confusion among people other than the customers, such as investors and service providers.[69] Moreover, courts have cited the deletion of "source of origin" as authority for finding infringement based on initial interest confusion.[70] The

63. *Playboy Enter., Inc.*, 354 F.3d at 1026; 1-800 Contacts, Inc. v. WhenU.com, 309 F. Supp. 2d 467, 490 (S.D.N.Y. 2003); *see* Trans Union LLC v. Credit Research, Inc., 142 F. Supp. 2d 1029, 1043 (N.D. Ill. 2001).

64. *See* Northland Ins. Cos. v. Blaylock, 115 F. Supp. 2d 1108, 1119 (C.D. Minn. 2000).

65. *See* BigStar Entm't, Inc. v. Next Big Star, Inc., 105 F. Supp. 2d 185, 192 (S.D.N.Y. 2000).

66. *See* PACCAR Inc. v. TeleScan Techs., LLC, 319 F.3d 243, 249 (6th Cir. 2003).

67. *See, e.g.*, Vitarroz Corp. v. Borden, Inc., 644 F.2d 960 (2d Cir. 1981) (quoting Mushroom Makers, Inc. v. R.G. Barry Corp., 580 F.2d 44, 47 (F.2d 1979)).

68. Allstate Ins. Co. v. Allstate Inv. Corp., 210 F. Supp. 25, 29 (N.D. La. 1962), *aff'd*, 328 F.2d 608 (5th Cir. 1964).

69. Koppers Co. v. Krupp-Koppers GmbH, 517 F. Supp. 836, 843 (W.D. Pa. 1981); *see* Acxiom Corp. v. Axiom, Inc., 27 F. Supp. 2d 478, 499 (D. Del. 1998).

70. *Interstellar Starship*, 184 F.3d at 1111 (holding that use of domain name epix.com infringes trademark EPIX because visitor to website might purchase defendant's services despite knowing they were not the trademark owners, thus defendant benefits from trademark owners' goodwill); Dorr-Oliver, Inc. v.

Federal Circuit, however, observing that the reason for the amendment was to ensure that the section relates to potential purchasers as well as actual purchasers, has indicated that in the case of most trademarks or service marks, the relevant person to consider in likelihood of confusion is the present or future purchaser.[71] Certainly the concept of infringement based on likelihood of confusion among subsequent purchasers of the goods is now well established.[72]

If the law now accepts as infringement conduct shown not likely, under market conditions, to result in purchase of the merchant's goods or services in the mistaken belief that they are the trademark owner's, there has been a quantum increase in the scope of trademark rights. The proponents of initial interest confusion trademark infringement explain that it prevents misappropriation of the goodwill of the mark,[73] and prevents a competitor using the trademark to get its foot in the door".[74] If a trademark owner is now protected against defendant's use of a mark that is not likely to result in a mistaken purchase of its goods, the law is recognizing a property interest in the mark beyond that traditionally considered to exist.

Notably absent from the cases is any discussion of the public interest. Provided that the customer clearly understands that the offered good or service does not originate with the trademark owner, is he or she harmed? If a customer asks for a Mont Blanc® pen, is the store infringing the Mont Blanc® trademark if it responds by indicating that it does not have any Mont Blanc® pens, but suggests a Pelikan® pen which it does carry?

Reverse Confusion Based On Claims of Authorship

The obvious result of the Supreme Court's decision in Dastar was to close a Hollywood cottage industry in which an individual involved in the creation of an artistic work sued under § 43(a) claiming reverse passing off of her contribution to the work because her contribution was not accurately credited when the work was distributed or displayed.[75]

Fluid-Quip, Inc., 94 F.3d 376, 382 (7th Cir. 1996) (equating initial interest confusion to 'bait and switch' tactics designed to allow the defendant to 'get its foot in the door'); *Eli Lilly & Co.*, 233 F.3d at 464 (observing that initial interest confusion should not be evaluated under the 'actual confusion' element of the circuit's digits of confusion test servs.); *Checkpoint Sys.*, 269 F.3d at 295.

71. Elec. Design & Sales, Inc. v. Elec. Data Sys. Corp., 954 F.2d 713, 716 (Fed. Cir. 1992).

72. Esercizio v. Roberts, 944 F.2d 1235, 1245 (6th Cir. 1991); Rolex Watch USA v. Canner, 645 F. Supp. 484, 492-93 (S.D. Fla. 1986); Lois Sportswear, U.S.A., Inc. v. Levi Strauss & Co., 799 F.2d 867, 872 (2d Cir. 1986).

73. *Brookfield Communications*, 174 F.3d at 1057.

74. *Dorr-Oliver*, 94 F.3d at 382.

75. Dastar Corp. v. Twentieth Century Fox Film Corp., 539 U.S. 23, 25 (2003); *see* Smith v. Montoro, 648 F.2d 602, 606-07 (9th Cir. 1981).

Dastar produced a video set entitled "World War II Campaigns in Europe" ("Campaigns"). It included footage copied verbatim from an earlier TV series entitled "Crusade in Europe" ("Crusade"). Because the copyright in Crusade had not been renewed, the content of the TV series was in the public domain. Fox sued claiming that Dastar's sale of the Campaigns videos "without proper credit" to the Crusade television series constituted "reverse passing off" in violation of § 43(a). The district court granted summary judgment in Fox's favor and the Ninth Circuit affirmed. The Supreme Court, however, reversed, holding that the "origin" of goods in § 43(a) referred to the producer of the tangible goods sold in the marketplace, and did not extend to a person who originated ideas or communications embodied in the goods.[76]

Dastar, written by Justice Scalia, provides further insight into the Court's view of the different roles of patents, copyrights, and trademarks, as well as, its desire to confine each right to protect only the interests that the Court has traditionally associated with that right. In TrafFix, the Court admonished the lower courts to respect the difference between the purposes of trademark and patent law: trademark law aims to protect consumers from confusion in the marketplace as to a product's source of manufacture or distribution; patent law exists as an incentive to encourage progress through invention and innovation by individuals. The Court has also mentioned that trade dress law must be applied without trespassing on patent law.[77]

Section 43(a), as the Court explained in its unanimous Dastar opinion, intends to protect both consumers against deception, and the goodwill of a trademark itself. The statute's text should not, however, be interpreted or "stretched" in order to apply to those "matters that are typically of no consequence to purchasers."[78] Moreover, using trademark law to protect the right of an author to be accurately identified as the creative source of a work would bring trademark law into conflict with copyright law and, in particular, the right that once copyright has expired for anyone to copy the work and to publish it without attribution.[79] Justice Scalia, citing Sears Roebuck[80] and Kellogg,[81] equates this to the right that once a patent has expired to manufacture the patented article, including the right to make it in precisely the shape it carried when patented.[82] Again the Court emphasizes that trademark law must not be extended into areas traditionally occupied by patent and copy-

76. *Dastar Corp*., 539 U.S. at 37.

77. *See, e.g*., *Abercrombie & Fitch Stores, Inc*., 280 F.3d at 640; *Eppendorf-Netheler-Hinz*, 289 F.3d at 355.

78. *Dastar Corp*., 539 U.S. at 33.

79. *Id.* at 32.

80. Sears, Roebuck Co. v. Stiffel Co., 376 U.S. 225, 230 (1964).

81. Kellogg Co. v. Nat'l Biscuit Co., 305 U.S. 111, 121-22 (1938).

82. *Dastar Corp*., 539 U.S. at 33.

right. The Dastar decision expressed the Court's reluctance to allow trademark law application where it would maintain an exclusive right over a previously-protected work that has already passed into the public domain. In so doing, the Dastar Court's opinion, properly applied the principle of stare decisis and remained consistent with its precedent that even pre-dates the Shredded Wheat case cited by Justice Scalia.[83]

The Federal District Court in Los Angeles recognized the demise of reverse passing-off claims in a failure-to-credit case involving film authorship. Kevin Williams, a self-described film director/writer/editor, claimed that Cash Money's failure to credit him as a contributor to a film entitled "Baller Blockin", constituted reverse passing-off in violation of section 43(a).[84] Reconsidering an earlier, pre-Dastar decision, the Court held that William's complaint that he was not credited as author and director of the film cannot, as a matter of law, constitute a valid claim of reverse passing-off by way of false designation of "origin" as the term is intended to mean under the statute.

Focusing on a different aspect of Dastar, the Illinois Federal District Court also subsequently revisited a holding of reverse passing-off.[85] Smith submitted a table to the Dallas Independent School District ("DISD") as a sample to support a bid to supply tables to the district. The sample table used a leg from a table manufactured by Brentford. The Court initially held that this act constituted reverse passing-off under the statute. Upon Smith's motion for reconsideration after Dastar, the Court reversed, holding that Dastar was not limited to "communicative products" and that there was no misrepresentation of the origin of the tables that Smith had offered to supply in his bid.[86] The "origin" of the proffered sample was Smith, despite its use of Brentford's table leg. The Court observed that DISD's interest and concern did not involve the ultimate "source of the [tables'] component parts"; instead, DISD was simply "interested in a table that conformed to bid specifications."[87]

Federal Dilution After Victoria's Secret

The Supreme Court held that the federal anti-dilution statute, 15 U.S.C. § 1125(c), requires a showing of actual dilution, as opposed to likelihood of dilution.[88] Since that decision, a claim of federal dilution has proved difficult

83. *See* Singer Mfg. Co. v. June Mfg. Co., 163 U.S. 169, 199-200 (1896).

84. Williams v. UMG Recordings, Inc., 281 F. Supp. 2d 1177, 1181 (C.D. Cal. 2003).

85. Bretford Mfg., Inc. v. Smith Sys. Mfg. Co., 286 F. Supp. 2d 969, 971 (N.D. Ill. 2003).

86. *Id.* at 972.

87. *Id.*

88. Mosely v. V Secret Catalogue, Inc., 537 U.S. 418, 433 (2003).

to establish. Measuring actual dilution – harmful to the economic value of a famous mark caused by use of a closely similar mark – appears to be a nearly impossible feat. The solution that is preferred by a significant portion of the trademark community is an amendment to the statute that would expressly require showing a mere likelihood of dilution. This standard is used in opposition proceedings before the T.T.A.B. Because an opposition may be filed against a mark that has not yet been used, and since dilution is expressly stated to be a ground for opposition, the T.T.A.B. has adopted a likelihood of dilution standard, noting that a successful opponent cannot get an injunction against use of the diluting mark, only refusal of an application for registration of that mark.[89] Dilution claims, as well as infringement and unfair competition claims, failed in two cases involving use of trademarks in motion pictures. Wham-O, owners of the mark SLIP 'N SLIDE for a plastic water slide, sued the producers of the film "Dickie Roberts: Former Child Star" on the basis of a 70-second scene in the movie in which Dickie Roberts, played by actor and comedian David Spade, tries to use the slide before it has been inflated and without lubricating it with water. The product is verbally identified as a "Slip 'n Slide" by one of the film's other characters. Wham-O claimed that this reference adversely blurred and tarnished the SLIP 'N SLIDE trademark. Denying Wham-O's motion for a temporary restraining order, the court held that the aforementioned use of the product and the mark in the film did not constitute a dilution of the mark.[90]

In a similar case, Caterpillar sued Walt Disney in connection with the depiction of CATERPILLAR bulldozers in its film entitled "George of the Jungle 2". In that movie, "bad guy" associates of the film's main antagonist, are shown driving CATERPILLAR bulldozers as part of an attempt to destroy Ape Mountain. The CATERPILLAR and CAT marks are clearly visible on the bulldozers in the depiction. The film's narrator describes the bulldozers as "deleterious dozers" and "maniacal machinery." Caterpillar claimed that this characterization of the machines effectively tarnished the trademarks. Despite the film's colorful language, the court was not convinced; it was clear, the court said, that the bulldozers in the scene are being "operated by humans and [that the bulldozers] are merely [the] inanimate implements of Lyle's environmentally unfriendly schemes."[91]

89. NASDAQ Stock Market, Inc v. Antartica, 2003 TTAB Lexis 391 (2003).

90. Wham-O, Inc. v. Paramount Pictures Corp., 286 F. Supp. 2d 1254, 1261 (C.D. Cal. 2003).

91. Caterpillar, Inc. v. Walt Disney Co., 287 F. Supp. 2d 913, 922 (C.D. Ill. 2003).

Research and Development Deliverables under Government Contracts, Grants, Cooperative Agreements and CRADAs: University Roles, Government Responsibilities and Contractor Rights

by
*Danielle Conway-Jones**

I. INTRODUCTION

More than anything, the United States Government is committed to research and development that will ensure America's position as the leader of nations. Nowhere is this truer than in the development of weapons and weapons systems, for these have, until recently, been the tools of superiority. From the tanks of World Wars I and II, to the guided weapons systems of today, to the unmanned fighting and space exploration vehicles of tomorrow, continued superiority of this nation will depend heavily upon the research and development of new technologies and innovation that must have dual uses for both the military and commercial sectors.

In the first half of the twentieth century, the United States Government was the single largest source of funding for research and development.[1] During this period, the Government conducted extensive research and development in its own laboratories and in Government-owned laboratories run by

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1. Jack E. Kerrigan & Christopher J. Brasco, *The Technology Transfer Revolution: Legislative History and Future Proposals*, 31 PUB. CONT. L.J. 277, 279 (2002) (citing James V. Lacy et al., *Technology Transfer Laws Governing Federally Funded Research and Development*, 19 PEPP. L. REV. 1, 3 (1991)).

contractors.[2] The Government oversight agency, the General Accounting Office (renamed the Government Accountability Office under the George W. Bush Administration), estimated that Government laboratories spent $16.225 billion in Fiscal Year 1990 alone.[3] Despite this investment in research and development and the immense productivity of these labs in developing patentable inventions, the United States Government began to lose its position as the leader in funding technology research and development.[4] In fact, during the last decade of the twentieth century, technology leadership and funding shifted to private industry, where most research and development dollars are now spent.[5] Representative Tom Davis cited statistics that the military's share of research and development has declined from 53% to 16% of the country's total spending from 1960 to 1999, while private sector research and development spending rose from one-third to two-thirds of the country's total spending during this time.[6]

The reasons for the shift in leadership in research and development are myriad and complex. One factor contributing to this shift in leadership was the end of the Cold War. With the weapons draw-down following the break up of Soviet Russia, the military found itself pressured to reduce its budget, particularly in the areas of research and development.[7] Another factor was the thriving economies of the 1980s and 1990s. Many private sector companies started underwriting their own efforts in research and development and delivering new technologies and innovations for commercial use, all this without consideration of military uses, or reliance on Government procurement or Government research and development dollars.[8] Yet another factor contributing to the Government's decline in its leadership role in funding research and development is the way in which private companies view rights in their assets, particularly in their intellectual property assets. By no mea-

2. Ralph C. Nash & John Cibinic, *Transfer of Technology from the Government to the Private Sector: Can it be Effectively Accomplished?*, 6 No. 7 NASH & CIBINIC REP. 40 (1992).

3. *Id.*

4. Nancy O. Dix et al., *Fear and Loathing of Federal Contracting: Are Commercial Companies Really Afraid to do Business with the Federal Government? Should They Be?*, 33 PUB. CONT. L.J. 5, 7 (2003).

5. *Id.*

6. *Id.*

7. W. Bruce Shirk, *Technology Transfer and Technology Reinvestment—A Comparison of Two Statutory Frameworks*, 41 FED. B. NEWS & J. 64, 72 (1994).

8. *See* UNDER SEC'Y OF DEF. FOR ACQUISITION, TECH. AND LOGISTICS, INTELLECTUAL PROPERTY: NAVIGATING THROUGH COMMERCIAL WATERS: ISSUES AND SOLUTIONS WHEN NEGOTIATING INTELLECTUAL PROPERTY WITH COMMERCIAL COMPANIES, iii-iv (Version 1.1 Oct. 15, 2001) *available at* http://www.acq.osd.mil/dpap/Docs/intelprop2.pdf (last visited Oct. 8, 2004) [hereinafter "DoD IP GUIDE"].

sure is this last factor subservient or less important than any of the other factors that have contributed to the Government's decline as the leader in funding research and development for dual use purposes. Instead, this last factor is, in large measure, the reason why the private sector has distanced itself from research and development relationships, either under contracts or through grants, with the Federal Government.[9]

Realizing that global leadership requires achieving an intersection between military and defense leadership, research and development leadership, and information and technology leadership, the United States Government has embarked on a mission to redefine its own rhetoric and philosophy about free markets, intellectual property protection, innovation, and the roles of various constituents, including Federal contractors, universities, and the private commercial sector, in the research and development industry. The United States Government is keenly aware that it must look to the private commercial sector, including small businesses, for leadership in technology innovation. To ensure that technology innovation retains the characteristic of dual use, the Federal Government must be in a position to partner with the private commercial sector as well as universities to ensure that its military needs are considered during the research and development process.

With a significant amount of research and development funding being led by the private sector, the Federal Government has had to repackage itself to be a more attractive candidate for partnership. To support its "re-branding" efforts, the Government has enacted legislation that reduces the economic risks historically encountered by Federal contractors when doing business with the Government.[10] In addition, the Federal Government has adjusted its procurement regulations and their underlying rationales to provide more balanced protection for intellectual property produced by contractors.[11] Finally, the Federal Government has determined that standard procurement contract vehicles will not entice the best and brightest minds in universities and the private sector to partner with the Government; so in place of the these standard vehicles, the Government has initiated greater use of non-traditional, flexible binding instruments to facilitate mutually beneficial partnerships for the development of dual use technologies.[12]

9. *See generally* Dix et al., *supra* note 4, at 8-9 (explaining the Government's view about why technically oriented contractors are reluctant to do business with the Federal Government).

10. *Id.*

11. *Id.* at 36.

12. *Id.* at 8.

II. Government, Private Sector, and Universities

A. Government's Role in Supporting Research and Development

The United States Government's responsibility to govern and protect the nation is a primary reason for the spending of taxpayer dollars to acquire goods, services, and construction for the continued optimal operation of the American infrastructure. More pointedly, the Department of Defense has the responsibility to protect and defend the nation and the democratic ideology. Because of its significant defense role, the Department of Defense has been a dominant agency in the procurement of research and development as well as of intellectual property and technology deliverables.[13] In acquiring items ranging from prototypes to software to weapons systems, the Department of Defense has played a significant role in developing an industry. In the United States, technological innovations and a high level of advanced development create new industries and sustain existing ones.[14] Government and military needs and requirements create a catalyst for the creation of technology intensive industries, which in turn provide a wide range of professional, technical, and manufacturing jobs, increase economic productivity, and strengthen national competitiveness.[15]

There are also other government policies that affect advanced development indirectly. The Federal Government affects the levels of advanced technology investment in certain areas by both creating incentives for private firms to invest and in supporting advanced technology in key areas where private participation is inadequate.[16] The Federal Government's policies for protecting intellectual property are major engines in promoting innovation. Similarly, the Department of Defense's revised outlook on intellectual property protection for contract deliverables and research and development also stimulate to some degree dual use innovations.[17] Finally, the Federal Government's ability to open markets overseas impacts American firms' willingness and ability to invest in research and development.[18] Thus, at the policy level, the role of the Federal Government as well as the Department of Defense in the facilitation of increased research and development is to ensure an attractive legislative and regulatory climate for investment in innovation and advanced technologies.

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13. *See* DoD IP Guide, *supra* note 8, at iii.

14. *See* DoD IP Guide, *supra* note 8, at 2-1.

15. DoD IP Guide, *supra* note 8, at 2-1.

16. *See* Dix et al., *supra* note 4, at 26.

17. *See* DoD IP Guide, *supra* note 8, at 2-1.

18. *Id.*

B. Private Industry's Role in Supporting Research and Development

Like the Federal Government, the private commercial sector plays an important role in advancing research and development as well as new technologies and innovations. The private sector is responsible for bringing mid-level, applied research and product development to market for maximum profitability to shareholders.[19] Private sector capitalization influences the growth and development of "start-up" companies.[20] The private sector provides much needed capital to smaller companies that tend to operate in the absence of any revenues for extended periods of time.[21] The private sector's ability to provide original capital facilitates small company pursuits of basic research that often eventually leads to profitability.[22] All of these activities take capital and investment. Like the Federal Government, private sector industry recognizes the benefit of collaborations for the purposes of sharing facilities, sharing ideas, and building on existing research. Accordingly, the private sector's role is to identify investment opportunities with other business or government sectors to develop new or existing technologies to create further developments of products, processes, materials, or services that will enhance the nation's industrial competitiveness.

C. Higher Education's Role in Supporting Research and Development

Before World War II, universities were peripheral to the research and development enterprise of the United States.[23] Today research universities are at the center of American research activities, thanks in large measure to an extraordinarily successful partnership with the Federal Government.[24] The vital role research universities have played in the American economy is one of the greatest accomplishments of the American economy.[25] As with the Federal Government and private industry, America's world-renowned research universities have been a driving force behind the nation's primacy in science and technology.[26] The American research university is unquestiona-

19. *See* Dix et al., *supra* note 4, at 24.

20. STAFF OF HOUSE COMM. ON SCIENCE, 105TH CONG., REPORT ON UNLOCKING OUR FUTURE TOWARD A NEW NATIONAL SCIENCE POLICY, pt. 3, at 38-45 (Comm. Print 105-B 1998), *available at* http://www.access.gpo.gov/congress/house/science/cp105-b/prsecrol.html#40 (last visited Oct. 5, 2004).

21. *Id.*

22. *Id.*

23. *Id.*

24. *See id.*

25. *Id.*

26. PRESIDENT'S COMMITTEE OF ADVISORS ON SCIENCE AND TECHNOLOGY (PCAST), STATEMENT OF PRINCIPLES (1995), *available at* http://www.ostp.gov/pcast/principles.html (last visited on Oct. 5, 2004).

bly the best in the world.[27] It has successfully combined cutting-edge research and education, yielding an unmatched scientific and engineering workforce as well as the scientific breakthroughs in numerous critical technologies.[28] In fulfilling its role as a catalyst for creating basic research, universities rely on government contracts, grants, and cooperative agreements to attract the best faculty and students to their institutions to conduct this necessary research.[29] In addition, universities remain competitive in research by building intellectual property portfolios that generate capital for future research and development.[30] Furthermore, universities spur philanthropy and endowments by generating intellectual property portfolios that capture the imaginations of institutional, corporate, and individual donors. Thus, universities have the significant role of spurring educational and investment excitement in the research and development of new technologies and innovations.

D. Historical Review of Government Acquisition of Inventions and Technology

Prior to the 1960s, the Federal Government and very large contractors, like AT&T and Bell Laboratories, drove the train of research and development and innovation.[31] This model of innovation was extremely centralized and top down in terms of innovative direction. The areas of research and development that received attention were those areas that specifically interested the Federal Government and its list of large contractors. Thus, to accomplish technological and innovative research, a company had to be willing to submit to the centralized regime. Under the historical centralized system of innovation, the Federal Government often insisted upon taking commercial rights to inventions developed during the performance of government contracts.[32] In return for contract performance, contractors received royalty-free, non-exclusive licenses for the benefit of the inventors or the inventors' employers.[33] In a time when large contractors received the equivalent of the benefit of a monopoly environment, such assignments of title to inventions were not repulsive because market entrants and competitors to these busi-

27. *Id*.

28. *Id*.

29. Dix, *supra* note 17.

30. *Id.*

31. *See generally* LAWRENCE LESSIG, THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD (Random House 2001) (describing that during its time, AT&T's monopoly in communications was not all bad and, in fact, did lots of good by producing an extraordinary telephone system, linking 85% of American homes, and spending billions of dollars to support telecommunications research. AT&T succeeded during its monopoly to attract the very best telecommunications researchers.).

32. Kerrigan & Brasco, *supra* note 1.

33. *See* DOD IP GUIDE, *supra* note 8, at Appendix E.

nesses were inconsequential. Historically, the Federal Government allowed its respective executive agencies to determine when the allocation of rights or title to inventions had to inure to the Government and usually these determinations varied depending on the needs of the acquiring agency.[34] While most agencies, including the Department of the Defense, allowed title to remain in contractors, these agencies reserved for themselves irrevocable, non-exclusive, non-transferable and royalty-free licenses to practice the inventions for the benefit of the Government.[35]

In the late 1960s and early 1970s, the Government's policy on patent rights came under severe attack by private industry. In various studies, the Government was seen as a detractor to the full commercialization of inventions for the benefit of the American economy.[36] Observers concluded that the Government was either not developing technologies or not funding such development in a proper fashion.[37] Likewise, private industry refused to develop technologies in which there would be no control incentive in the commercialization of applied research and development.[38] Government and congressional studies indicated that the Government's research and acquisition policies were incompatible with the development and commercialization of innovative technologies.[39]

As evidence of this incompatibility, one need only look at the Federal Government's posture with respect to ownership of inventions as compared to industry's posture. Prior to the passage of the Bayh-Dole Act of 1980, various statutes and regulations concerning patents established the Government's right to take title to federally funded patents developed during the performance of government contracts.[40] In addition, the Government retained the right to distribute the information resulting from these federally funded projects to the general public.[41] The Government premised its right to release information from these federally funded patents on the theory that taxpayer dollars paid for the research and its outcomes; therefore, the results

34. Diane M. Sidebottom, *Intellectual Property in Federal Government Contracts: The Past, The Present, and One Possible Future*, 33 PUB. CONT. L. J. 63, 67 (2003).

35. *See* DoD IP GUIDE, *supra* note 8.

36. Kerrigan & Brasco, *supra* note 1, at 279.

37. *See id.* at 282-83.

38. *Id.* at 279.

39. *See* U.S. CONG., OFFICE OF TECH. ASSESSMENT, FED. TECH. TRANSFER & THE HUMAN GENOME PROJECT, OTA-GP-HER-162, at 47 (Wash. D.C.: U.S. Gov't Printing Office, Sept. 1995), *available at* http://www.wws.princeton.edu/cgi-bin/byteserv.prl/~ota/disk1/1995/9526/952608.PDF (last visited Oct. 21, 2004) [hereinafter "FEDERAL TECHNOLOGY TRANSFER LEGISLATION"].

40. *See id*. at 46.

41. *Id*. at 45.

should inure to the general public.[42] Thus, patents from these sponsored projects were freely published or provided to anyone requesting access to the materials for unrestricted purposes.[43] Contractors during this time period were competing without the benefit of government sponsored or approved monopolies as this was the era of free market competition.[44] Accordingly, free and open access to patents developed during the performance of government contracts presented insurmountable problems to private industry. Contractors wanted to retain the benefits of commercial applications of new technologies for themselves and any economic benefits that flowed from their research.[45] The thought that the Government would give away freely what seemed proprietary convinced contractors, universities, and research centers not to develop potentially commercially viable technologies.[46]

In response to critical observations and reports about the dysfunctional nature of Government use and deployment of technology to the market, Congress enacted crucial legislation to balance government and industry interests in developing and commercializing new technologies.[47] Congress enacted a series of laws to promote technology transfer and to provide technology transfer mechanisms and incentives.[48] The intent of these laws is to encourage partnerships in the use of resources and in the development of dual use technologies. Three legislative initiatives inspired the decentralization of the research and development industry – The Stevenson-Wydler Technology Innovations Act of 1980;[49] the Bayh-Dole Act of 1980;[50] and the Federal Technology Transfer Act of 1986.[51] With these three pieces of legislation, Congress began its trek to enhance private sector development and application of results from federally funded research previously ongoing at universities, research institutions, and federal laboratory facilities.

E. Technology Transfer History

With the passage of the Stevenson-Wydler Technology Innovation Act, Congress for the first time made the transfer of technology from federal labo-

42. *Id.*

43. *See* DoD IP Guide, *supra* note 8, at Appendix E-1.

44. *See* Federal Technology Transfer Legislation, supra note 39, at 45.

45. *See* DoD IP Guide, *supra* note 8, at Appendix E-1.

46. *Id.*

47. *Id.*

48. *See* Federal Technology Transfer Legislation, *supra* note 39, at 45.

49. 15 U.S.C.A. § 3701 (West Supp. 1980).

50. Bayh-Dole Act, Pub. L. No. 96-517, 94 Stat. 3015 (1980) (codified as amended in various sections of 35 U.S.C.).

51. 15 U.S.C.A. § 3710 (West Supp. 1986).

ratories to the private or commercial sector a national priority.[52] Primarily a vehicle to introduce the concept of technology transfer, the Stevenson-Wydler Act stated broad policies to generate previously waning industry interest in dealings with the Government in the areas of research and development. The Act focused on disseminating research information from federal laboratories and universities to private industries in order to facilitate technical cooperation.[53] While the Act was a permissive statute that encouraged technology transfer of Government owned inventions as opposed to a requirement to transfer such information, the Act did require the establishment of an Office of Research and Technology Applications at all Government-owned-Government operated or Government-owned, Contractor-operated laboratories with annual budgets greater than $20 million.[54] Although technically the impetus for future technology transfer, the Stevenson-Wydler Act was widely criticized because its permissive, non-authoritative scope generated very little movement within the Federal Government to begin actual technology transfers for the benefit of exploiting the commercial benefits of dual use technologies.[55]

In an effort to promote the policies of the Stevenson-Wydler Act and to entice contractors, universities, and research centers back into the government industrial base, Congress passed the Bayh-Dole Act of 1980.[56] Focused on generating dual use technologies from basic and applied research, the Bayh-Dole Act allowed small businesses, non-profit scientific and educational organizations, and universities to retain title to their respective inventions even though those inventions resulted from work performed during the course of a government contract, grant, or cooperative agreement.[57] Congress viewed Bayh-Dole as providing a set of broad federal rules governing patent law that would encourage industry to develop federally funded research into marketable, commercial products.[58] As mentioned previously, the Federal Government, specifically the Department of Defense, generally maintained the policy that contractors retained title to their inventions, but the Bayh-Dole Act was the first instance in which legislation clearly articulated this policy. In a contextual view, this mandate is critical when read against the incentives and limited monopoly provisions of intellectual prop-

52. *See* DoD IP GUIDE, *supra* note 8, at Appendix E-1.

53. *See* Barbara A. Duncombe, *A Look at the Benefits and Pitfalls of One of the Country's Best Kept Secrets*, 37 FED. B. NEWS & J. 608 (1990).

54. *See* W. Bruce Shirk, *Technology Transfer and Technology Reinvestment—A Comparison of Two Statutory Frameworks*, 41 FED. B. NEWS & J. 64 (1994).

55. *See* Duncombe, *supra* note 53.

56. *See* FEDERAL TECHNOLOGY TRANSFER LEGISLATION, *supra* note 39, at 46.

57. *See* Kerrigan & Brasco, *supra* note 1, at 279.

58. *See id.*

erty legislation, particularly the Patent Act,[59] the Copyright Act,[60] and the Lanham Act.[61]

In its original form, the Bayh-Dole Act did not include large businesses and government-owned, contractor-operated facilities as beneficiaries of the mandate to recognize title to inventions in the contractor.[62] This exclusion was remedied by President Reagan's "Memorandum to the Heads of Executive Department and Agencies: Government Patent Policy," dated February 19, 1983.[63] President Reagan's Memorandum directs the heads of all departments and agencies to extend the benefits of Bayh-Dole to all research and development contractors, including large businesses and profit-making organizations.[64] The President's rationale for this sweeping inclusion results from the view that more often than not "allowing inventing organizations to retain title to inventions made with Federal support is the best incentive to obtain risk capital necessary to develop technological innovations."[65] The President and his administration further supported the extension of Bayh-Dole benefits to large businesses by citing that "the new products and processes that result will improve the productivity of the United States economy, create new jobs, and improve the position of the United States in world trade."[66]

The 1980 legislative attempts at launching technology transfer received a significant boost by the passage of the Federal Technology Transfer Act of 1986 ("FTTA").[67] The FTTA authorized the promotion of economic competitiveness in research and development by recognizing that applied research would be a significant factor to achieve success in the global marketplace. The Act also required federal agencies to work closely with industry to accomplish technology transfer of research from federal laboratories; and it tied significant government employee and laboratory incentives to any government-industry relationship that became commercially profitable.[68] The crowning features of the FTTA include placing responsibility of technol-

59. 35 U.S.C. § 101, *et seq*. (1952).

60. 17 U.S.C. § 101, *et seq*. (2000).

61. 15 U.S.C. § 1051, *et seq*. (2000).

62. *See* Kerrigan & Brasco, *supra* note 1, at 280.

63. Memorandum to the Heads of Executive Departments and Agencies, 19 Weekly Comp. Pres. Doc. 252, 253 (Feb. 18, 1983).

64. *Id*.

65. President's Memorandum to the Heads of Executive Departments and Agencies: Government Patent Policy Fact Sheet, *at* http://www.hq.nasa.gov/ogc/intellectual_property/memotoheads.html (last visited Oct. 15, 2004).

66. *Id*.

67. Federal Technology Transfer Act of 1986, Pub. L. No. 99-502, 100 Stat. 1785 (codified as amended in scattered sections of 15 U.S.C.).

68. Duncomb, *supra* note 52, at 609.

ogy transfer success with federal laboratory scientists and engineers, creating a reward system for government employees, providing funding for technology transfer initiatives, providing for the exchange of personnel, services, and equipment with industry partners, and authorizing federal laboratory directors to enter into cooperative research and development agreements ("CRADAs") with private industry.

Arguably, the proactive authority for federal laboratory directors to enter into CRADAs is groundbreaking and transformative. Federal laboratories have broad authority to fashion CRADAs in any way that permits a maximum exchange of technology.[69] However, this authority expressly stops short of allowing a federal laboratory to turn over its appropriated funds to a private company as an incentive to enter into a CRADA.[70] This limitation is necessary in order to comply with the Competition in Contracting Act.[71] Without the limitation, federal laboratories could circumvent the requirement of full and open competition—the overarching principle that promotes the integrity of the federal procurement system.

Technology transfer legislation has the potential of renewing old ties between government, private industry, and universities. The broad authority that permits federal laboratories to enter into CRADAs for research and development in areas of technology consistent with the laboratory's mission has been credited with enticing private industry and universities to seek out advantageous relationships with particular government laboratories.[72] The deployment and use of CRADAs allow for arm's length negotiations of research and development agreements with user-defined provisions related to title and ownership interests, free flow of information, use of state of the art laboratories and equipment, access to personnel with unique experiences and technical capabilities, and profit sharing arrangements following the successful commercial exploitation of applied research.

The future success of technology transfer largely depends on the public's awareness of the importance of science and technology to market economies, education, national security, and government acquisitions. Also, the success of technology transfer equally depends on public perceptions of fairness and integrity regarding the exercise of government functions. To increase public awareness about technology transfer, it is imperative that government agencies, private industry, and universities, both large and small, appreciate the Federal Government's methods for obtaining goods and services with aspects of intellectual property or new technologies. How the Government categorizes goods and services will determine the required approach to contract vehicles or cooperative agreements used to establish mutu-

69. *See* Shirk, *supra* note 5, at 65.

70. Shirk, *supra* note 5, at 66.

71. *See generally* Competition in Contracting Act, Pub. L. No. 98-369, 98 Stat. 1175, (codified as amended in scattered sections of 31 U.S.C. & 41 U.S.C.).

72. *See* Dix et al., *supra* note 3, at 30.

ally beneficial relationships. The vehicles that define and balance contractual relationships have different characteristics, purposes, and outcomes. For each vehicle to accomplish its respective goals, all users of the various vehicles must have some working knowledge of the instrument's scope and effectiveness. Accordingly, the remainder of this article will describe when certain vehicles, ranging from procurement contracts to CRADAs, should be used to accomplish a particular goal of the Government in receiving research and development.

F. Procurement Contracts

The major statute governing competition requirements in federal contracting is the Competition in Contracting Act of 1984 ("CICA").[73] The CICA requires executive agencies to seek full and open competition in all sealed bid or negotiated procurements, except as specifically permitted by statute.[74] "Full and open competition" is defined as permitting all responsible sources to submit sealed bids or competitive proposals in response to Government solicitations.

The Government's policy regarding competition has been revised with the enactment of the Federal Acquisition Streamlining Act ("FASA")[75] and the Clinger-Cohen Act of 1996.[76] These revisions allow the Government to

73. *See* 41 U.S.C. § 253 (2000), Pub. L. 98-369, 98 Stat. 1175 (1984). The Competition and Contracting Act of 1984 amended Title III of the Federal Property and Administrative Services Act of 1949 to establish a statutory preference for the use of competitive procedures in awarding federal contracts for property or services. It also requires the use of competitive procedures by federal agencies when purchasing goods or services with sealed or competitive bids. And, it directs the head of each agency to appoint an advocate who will challenge barriers to competition in the procurement of property and services by the agency and review the agency's procurement activities. Division D of Public Law 104-106 contains language that retains the current statutory competition standard, but it also requires that the standard be applied consistently with the government's need to "efficiently" fulfill its requirements. Further provisions allow competition officials more discretion in determining the number of proposals in the "competitive range," to provide for pre-award debriefings of unsuccessful offerors, and to authorize the use of special two-phase procedures for design and construction of public buildings.

74. *See* 10 U.S.C. § 2304 (2000); 41 U.S.C. § 253 (2000).

75. *See* Federal Acquisition Streamlining Act, Pub. L. No. 103-355, 108 Stat. 3243 (1994). In the FASA, Congress made various changes that encourage and reward innovation in acquisition, increase the procurement of commercially-available items in more streamlined procedures, place more emphasis on past contractor performance and best value contracting in making source selections, and encourage greater professional development of the government's procurement workforce.

76. *See* Clinger-Cohen Act of 1996, Pub. L. No. 104-106, § 5202, 110 Stat. 186 (1996). The Clinger-Cohen Act encourages agencies to use modular con-

procure goods and services with greater ease by placing the government in a position similar to a commercial buyer. While the government evolves into a quasi-commercial entity in certain procurements, it still remains responsible for ensuring competition to the maximum extent practicable. The Federal Acquisition Regulation continues to set forth the government's requirements in the area of competition.[77] Thus, to satisfy competition requirements, not every prospective bidder need be afforded the opportunity to bid. This interpretation is based upon the Government's efforts to reasonably inform prospective bidders of work, not requiring the Government to inform all prospective bidders.[78] This adequacy of competition can be challenged if a bidder or offeror can show that the Government had a conscious and deliber-

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tracting by stating that they "should, to the maximum extent practicable, use modular contracting for an acquisition of a major system of information technology." *Id.* It further directs that the FAR provide that acquisitions of major systems of information technology may be divided into several smaller acquisition increments that: (1) are easier to manage individually than in one comprehensive acquisition; (2) address complex information technology objectives incrementally in order to enhance the likelihood of achieving workable solutions for attainment of those objectives; (3) provide for delivery, implementation, and testing of workable systems or solutions in discrete increments each of which comprises a system or solution that is not dependent on any subsequent increment in order to perform its principal functions; and (4) provide an opportunity for subsequent increments of the acquisition to take advantage of any evolution in technology or needs that occur during performance of earlier increments. *See id.* The statute additionally states that modular contract increments should be awarded to the maximum extent practicable within 180 days after the date on which the solicitation is issued, and if the contract for that increment cannot be awarded within that time, it should be considered for cancellation. *See id.* It also states that the information technology provided for in the modular contract should be delivered within 18 months after the date on which the solicitation was issued. *See id.*

77. *See* 48 C.F.R. § 6.000 (1995) (setting forth "policies and procedures to promote full and open competition in the acquisition process and to provide for full and open competition, full and open competition after exclusion of sources, other than full and open competition, and competition advocates").

78. *See* 48 C.F.R. § 6.101 (1995). The policy of this regulation appears as follows:

> 10 U.S.C. 2304 and 41 U.S.C. 253 require, with certain limited exceptions (see subparts 6.2 and 6.3), that contracting officers shall promote and provide for full and open competition in soliciting offers and awarding Government contracts.

Contracting officers shall provide for full and open competition through use of the competitive procedure(s) contained in this subpart that are best suited to the circumstances of the contract action and consistent with the need to fulfill the Government's requirements efficiently. *Id.*

ate intent to impede the participation of prospective bidders.[79] The Federal Government's acquisition of deliverables that contain features or components of intellectual property are subject to the Federal Acquisition Regulation and the Defense Federal Acquisition Regulation. Practically, what that means is that the Federal Government's standard boilerplate language is the starting point for such solicitations. Typically, the procurement of technology will subject government contractors and others performing under government contracts to the data rights provisions of the Government's acquisition regulations.[80] For purposes of this article, the Defense Federal Acquisition Regulation will be the primary reference because most technology in this area is procured by the Department of Defense. These regulations are constantly evolving and, thus, create a landmine for the unwary. The task of analyzing and applying these regulations is not made any easier when the Government procures research and development.

When the Government contracts for research and development, it will frequently require the contractor to deliver technical information in a form that is usable to the Government in the future. This information typically consists of specifications, drawings, technical reports, maintenance and operating manuals, parts lists, computer software, and other types of recorded information. This compilation of information is referred to as technical data. Often, the drafters of the regulations as well as the contracting agencies have conflated the data submission requirements for research and development contracts with rights in data that represent the actual deliverable sought by the agency. The former information can be characterized as instructions that assist the Government in understanding and using the deliverable, while the latter is the actual deliverable. Obviously, these fine distinctions can create problems for contractors and the Government in the event of a dispute. There are also substantial difficulties in assessing how much information the contractor should turn over to the Government and what protection the Government will afford to the information or the deliverable that the contractor submits pursuant to the requirements of the procurement contract. The problems emanate from the distinct interests of the Government versus the contractor. The Government is concerned with acquiring a deliverable, but also operating and maintaining the deliverable from many points around the globe, while the contractor is concerned with protecting its competitive edge or know-how within the industry. Contractors are also much more aware of their intellectual property and proprietary rights, especially with respect to achieving maximum commercial exploitation of that intellectual property.

The Federal Government, especially the Department of Defense, is keenly aware that its past practices in the realm of procurements involving

79. *See* Abel Converting Inc. v. United States, 679 F. Supp. 1133, 1139 (D.D.C. 1988).

80. For the purposes of this article, the Government's license rights in both technical data as well as computer software shall be simply referred to as "data rights."

intellectual property garnered very few fans in various segments of the procurement community, much less truly commercial businesses. In an effort to woo these contractors and businesses back to the Federal research and development sector, the Federal Government, specifically, the Department of Defense, revised its regulations to try to seek a balance between the competing interests of the contractor on one hand and the Government on the other. The new regulations explicitly provide that the Government obtains rights in technical data under an irrevocable license granted or obtained for the Government by the contractor.[81] The contractor on the other hand retains all rights in the data not granted to the Government, which means that the contractor is the owner of the technical data in the event that national security, export controls, or prior Government rights do not limit the contractor's ownership interest.[82] The Government's license or use rights fall into three categories and one outlying category. The three categories include a limited rights license,[83] a Government purpose rights license,[84] and an unlimited rights license.[85] The outlying category is called a special negotiated license,[86] which is formed under special circumstances. The categories determine what uses the Government can make of the technical data that it receives from a particular contractor. The category of license that will apply to the Government is determined by the source of funding the contractor received in performing the Government contract.[87]

The Government is entitled to unlimited use rights in technical data in various situations, notably when the data pertaining to items, components, or processes have been or will be developed exclusively with Government funds or when technical data is generated directly from the performance of experimental, developmental, or research work specified as an element of performance under a government contract or subcontract.[88] The broad scope of this use right entitles the Government to use or disclose technical data to anyone for any purpose.[89] Moreover, the Government retains the right to permit others to use or to disclose the technical data with few restrictions.[90] Notably, this license permits the Government to disclose technical data to a contractor's competitor. The scope and breadth of the unlimited use rights stabs at the heart of all things proprietary. While the disclosure of technical

81. 48 C.F.R. § 227.7103-4 (1995).

82. *Id*.

83. *Id*. § 252.227-7013(a)(13).

84. *Id*. § 252.227-7013(a)(12).

85. *Id*. § 252.227-7013(a)(15).

86. *Id.* § 252.227-7013(b)(4).

87. *Id*. § 252.227-7013(b)(1)-(b)(4).

88. *Id*. § 252.227-7013(b)(1)(iii).

89. *Id*. § 252.227-7013(a)(15).

90. *Id*.

data under the government contract does not destroy the nature of a contractor's information as a trade secret or as proprietary information, the future right of another to disclose the trade secret obtained from the Government will destroy the proprietary and secret character of the information. For this reason alone, private industry contractors interested in research and development will shy away from doing research under government contracts. To encourage commercial utilization of technologies developed under government contracts, the provisions instruct that the Government may agree to accept technical data subject to Government purpose license rights.[91] This reduction in use rights is an example of the Department of Defense's compromise in recognizing the intellectual property and proprietary interests of private industry.

The Government is entitled to only Government purpose license rights in technical data associated with an item, component, or process developed in part with Government funds and in part at private expense whenever a contractor provides notice of such mixed funding with respect to such data.[92] This type of license anticipates a prior negotiation between the Government and the contractor. The Government purpose rights license grants the Government a right to use, modify, disclose, or release technical data within the Government without restriction, but limits similar conduct to only Government purposes when the technical data will be released outside of the Government to a third party who must agree to a use and non-disclosure agreement that limits the third party's use to the same Government purposes.[93] The time period for the life of a Government purpose rights license is five years, after which the license converts to an unlimited use rights license.[94] Examples of Government purposes include competitive procurement and foreign military sales.[95] Government purposes obviously do not include disclosure of technical data for commercial purposes. The problem that the private industry has identified with Government purpose rights is that the five-year window of time to commercialize a dual use technology may not be long enough to recoup the private portion of the mixed-funding investment in the item, component, or process before the Government purpose

91. 48 C.F.R. § 252.227-7013(a)(13) (1995).

92. *Id.* § 252.227-7013(b)(1)(ix)(B)(2)(i)(A).

93. Dix, *supra* note 4, at 16.

94. 48 C.F.R. § 252.227-7013(b)(2)(ii) (1995).

95. *See generally id.* § 252.227-7013(a)(11) (2004) (defining Government purpose as any activity in which the United States Government is a party, including cooperative agreements with international or multi-national defense organizations, or sales or transfers by the United States Government to foreign governments or international organizations. Government purposes include competitive procurement, but do not include the rights to use, modify, reproduce, release, perform, display, or disclose technical data for commercial purposes or authorize others to do so.).

rights license converts into an unlimited rights license for the benefit of the Government.

The Government obtains only a limited rights license in unpublished technical data pertaining to items, components, or process developed exclusively at private expense, provided that the contractor properly marks the technical data with the appropriate limited rights legends before submitting the technical data to the Government.[96] The limited rights license allows the Government to use or disclose technical data only within the Government.[97] The Government cannot use the data to manufacture the item, component, or process, except in the event that an emergency repair or overhaul is required.[98] The Government may, however, with the contractor's consent, disclose the technical data to third parties who may need to provide service and support for the item, component, or process.[99]

Finally, the Government can enter into negotiations with a contractor to develop a special license.[100] The standard rights referred to above may not satisfy either the contractor's needs or the Government's needs. In rare situations, the Government may even be willing to accept lesser rights in technical data. The purpose for specially negotiated rights is to allow the Government to assess its true minimum needs. If the Government can take lesser rights than it is entitled to under a particular procurement, then the Government should take such an opportunity to develop goodwill amongst its contractors. Several provisions may be the subject matter of a specially negotiated license, including escrowing technical data with third parties unless and until an actual Government contingency is encountered, limiting the particular use of technical data to a certain agency instead of allowing full disclosure within the entire Government, and extending the time limit when Government purpose rights license converts to unlimited license rights.

G. Other Transaction

The Other Transaction vehicle is not a procurement contract, grant or cooperative agreement, or a cooperative research and development agreement ("CRADA"), but it is a legal instrument to be used when it is not appropriate or feasible to use a procurement contract or a cooperative agreement.[101] Often referred to as "freedom of contract" instruments, Other

96. *Id.* § 252.227-7013(b)(3)(A).

97. *Id.* § 252.227-7013(a)(13).

98. *Id.* § 252.227-7013(a)(13)(i).

99. MATTHEW S. SIMCHAK & DAVID A. VOGEL, LICENSING SOFTWARE & TECHNOLOGY TO THE U.S. GOVERNMENT: THE COMPLETE GUIDE TO RIGHTS TO INTELLECTUAL PROPERTY IN PRIME CONTRACTS AND SUBCONTRACTS 133 (CCH Inc. 2000).

100. 48 C.F.R. § 227.7103-5 (1995).

101. 10 U.S.C. § 2371(e)(2) (2000).

Transaction vehicles are subject to fewer laws and regulations than procurement contracts and CRADAs.[102] The Department of Defense is one of the few agencies authorized to use the Other Transaction instrument, which may be of two types.

The first type is the Science and Technology Other Transaction, which can be used to accomplish basic research, applied research, or advanced research projects.[103] The characteristics of a Science and Technology Other Transaction include a funds out mechanism in which the Government pays funds for the research, but the Government seeks, when practicable, a 50% cost share agreement.[104] In addition, the Government cannot duplicate already existing research.[105] Finally, the Government must report the use of the Science and Technology Other Transaction instrument to Congress.[106]

The second type of Other Transaction is the Prototype Other Transaction, which is directly relevant for the development of weapons or weapons systems that the Department of Defense plans to acquire.[107] The characteristics of this type of Other Transaction are again flexibility, the proscription that prototype research cannot already be ongoing under another contract mechanism, the contractor is paid according to a funds out method from the Government, cost sharing by the contractor is not required, a fee or profit is available for the contractor, the Government uses competitive procedures when practicable, and the agency must provide a report to Congress annually when the instrument is used to acquire a prototype.[108] In essence, the use of an Other Transaction instrument is akin to allowing the Government and the contractor to write a contract beginning with a blank sheet of paper as opposed to incorporating myriad contract clauses required by the Defense Federal Acquisition Regulation or the many regulations of the Office of Management and Budget. The Other Transaction vehicle is probably the closest the Government will ever come to negotiating agreements like market participants in private industry. Negotiating terms from the inception of a relationship allows the contractor to maintain a competitive advantage in the commercial marketplace while permitting the Government to have access to cutting-edge technologies.

H. Grants and Cooperative Agreements

Most Government activities are carried out directly by the Government or under funds out agreements with other parties for the benefit of the Gov-

102. Dix, *supra* note 4, at 26.

103. *Id.* at 25.

104. *See id.*

105. *See id.*

106. *See id.*

107. Dix, *supra* note 4, at 24.

108. *Id.* at 25.

ernment. Grants and cooperative agreements, while funds out mechanisms, are not procurement instruments and, therefore, these instruments cannot be used to acquire goods and services for the direct benefit of the Government.[109] Despite this restriction, the Government can use a grant or cooperative agreement vehicle if the Government's primary purpose in doing so is to provide technical assistance or promote assistance relationships for the public. A Federal agency may use a grant or cooperative agreement instead of a procurement contract when

> the principal purpose of the relationship is to transfer a thing of value to the State or local government or other recipient to carry out a public purpose of support or stimulation authorized by a law of the United States instead of acquiring (by purchase, lease, or barter) property or services for the direct benefit or use of the United States Government. . .[110]

The choice between using a grant or a cooperative agreement depends on whether the Government intends to be substantially involved in the project. If there is substantial Government involvement, then the appropriate instrument for use is a cooperative agreement; otherwise, when Government involvement is less than substantial, then the appropriate instrument for use is a grant.[111] Federal grants and cooperative agreements are relatively flexible in that they are only subject to the Office of Management and Budget's informal advisories and agency regulations.[112]

I. Cooperative Research and Development Agreements

A Cooperative Research and Development Agreement ("CRADA") is defined as any agreement between one or more Federal laboratories and one or more non-Federal parties under which the Government, through its laboratories, provides personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts that are consistent with the missions of the laboratory.[113]

The primary purpose of a CRADA is to encourage the transfer of commercially useful technology from Federal laboratories to the private sector. Unlike funds out agreements where the Government distributes appropriated

109. Dix, *supra* note 4, at 27.

110. 31 U.S.C. §§ 6304(1), 6305(1) (2000).

111. *Id.* § 6304(2).

112. *See* Kurt M. Rylander, *Scanwell Plus: Challenging the Propriety of a Federal Agency's Decision to Use a Federal Grant and Cooperative Agreement*, 28 PUB. CONT. L. J. 69, 70-71 (1998).

113. 15 U.S.C. § 3710a(d)(1) (2000).

funds to a contractor, grantor, or collaborator, CRADAs expressly prohibit the distribution of appropriated funds to a non-Federal CRADA party.[114]

Cooperative Research and Development Agreement authority emanates from the Stevenson-Wydler Act.[115] All Federal Government-owned laboratories, which are operated either by Government personnel or contractor personnel, have flowed down CRADA authority.[116] Unlike garden-variety procurement contracts, there are no government-wide standard clauses or regulations for CRADAs. In fact, CRADAs are distinguishable from procurement contracts in one major respect – the transfer of funds for CRADA collaboration flows, if at all, from the contractor or private entity to the Federal laboratory, and not the other way. In addition, Federal laboratory directors do not enter CRADAs for research and development that are inconsistent with that particular laboratory's mission. Furthermore, CRADA relationships are typically characterized by a private non-Federal entity directing the research and development of a project as opposed to the Government directing the research and development. With such a relationship, the private entity is bearing more of the risk as compared to the Government laboratory. Thus, the protection afforded by strict contract clauses and regulations for the benefit of the Government and for the taxpayer is relatively unnecessary to achieve during the performance of a CRADA because the risks of nonperformance are borne, at least financially, by the private entity partner to the CRADA.

Because there are no strict requirements for contract clauses and provisions, a director of a laboratory may negotiate terms including licensing agreements, payment of funds into the Government, the availability of personnel and services, intellectual property agreements, the granting of presumptive rights to inventions, and the waiver of Government rights to inventions except for a Government purpose license. The CRADA mechanism is a very flexible approach to maintaining a relationship with the Government and directing Government research and development without many of the risks of loss of intellectual property or proprietary interests. The benefits of CRADAs are myriad and the private industry can take advantage of the opportunity to partner with the Federal Government to develop and then commercialize dual use technologies.

III. Conclusion

There are many roles to be played in the research and development of technology for the 21st Century. Innovation depends on industry players performing these roles under optimal circumstances. The Government has the role of setting policy, promoting leadership in innovation, and providing

114. Carl L. Vacketta et al., *Technology Transfer*, 94-12 Briefing Papers 1, 3 (1994).

115. Shirk, *supra* note 7, at 65-66.

116. *See id.*

the means and the mechanisms to accomplish research and development at the basic research, applied research, and advanced research levels of science and technology. A significant role for the Government is to train its agencies, departments, and personnel about supporting innovation efforts through correct identification and uses of contractual vehicles to form lasting and productive relationships with private industry and universities to ensure continued leadership in research and development. Likewise, private industry and universities have distinct roles to play in providing resource capital investment and human capital investment, respectively. In addition, private industry and universities must seek out opportunities to collaborate with Federal, State, and local governments to advance research and development for the continued growth of community as well as national infrastructures.

Finally, there may be times when the Government, private industry, and universities must also balance the national interest in promoting knowledge innovation with the conveyance of individual proprietary interests. There may be circumstances in which the national public interest must prevail over individual property rights in order to achieve strong leadership in the research and development of technology and innovation. Procurement laws and policies were established to balance the very interests of fair competition with social and economic interests of the nation-state. This balancing is no less important in the various segments of the entire procurement community. One thing is clear: successful collaboration for optimal research and development outcomes is only assured when all parties are well versed in the mechanisms applicable to building contractual and special relationships with the Government for the advancement of technology and innovation.

Entrepreneurial Open Source Software Hackers: MySQL and Its Dual Licensing

by
*Robert W. Gomulkiewicz**

I. Introduction

Hackers[1] often quibble about commercializing software, yet most will readily sell their programming services. Richard Stallman, the father of free software,[2] has always recognized that hackers have a right to make money.[3] Aside from selling programming services, however, Stallman's disciples seem to frown upon commercializing software.[4] Other hackers, labeling themselves "open source" developers, have warmed to the possibility that free software may be profitable.[5]

This article describes one of the most promising business models for hackers, called "dual licensing." In this model, hackers offer the same code under two different licenses: a commercial license and an open source license. Licensees who are willing to give up trade secret protection for their source code and re-license their derivatives for further modification and distribution choose the no charge open source option; other licensees pay a fee for a commercial license. The article concludes by analyzing the issues that the MySQL development team experienced in its dual licensing program.

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1. Software developers who have a passion for programming call themselves "hackers." Hackers distinguish themselves from "crackers"—those who use their programming skills for mischief or malicious purposes. Eric S. Raymond, The New Hacker's Dictionary 233-34 (3d ed. 1996).

2. "Free software" refers to software which comes with the freedom to do certain things with it. *See* Free Software Foundation, *The Free Software Definition*, *at* http://www.fsf.org/philosophy/free-sw.html (visited Aug. 6, 2004).

3. Peter Wayner, Free For All: How Linux and the Free Software Movement Undercut the High-Tech Titans 85 (Harper-Collins 2000), http://www.wayner.org/books/ffa/ffa-2002-12-13.pdf.

4. *See* Frank Hecker, *Setting Up Shop: The Business of Open-Source Software*, *at* http://www.hecker.org/writings/setting-up-shop.html (visited July 23, 2004) [hereinafter Hecker, *Setting Up Shop*].

5. *Id.* Advocates of the "free software" philosophy take issue with the change in focus suggested by the "open source" philosophy. *See* Free Software Foundation, *Why "Free Software" is better than "Open Source"*, http://www.gnu.org/philosophy/free-software-for-freedom.html (visited Dec. 20, 2002). While recognizing the differences, for purposes of this article I use the term "open source" as shorthand to refer to both philosophies.

II. A Brief Introduction to Open Source Software

Software comes in two basic forms: object code and source code.[6] Software in object code form runs the computer hardware.[7] Object code comes from software in source code form.[8] In other words, source code is the source of object code. Source code is written by programmers in a computer language such as Basic, C, or Java, which then gets converted (using a tool called a complier or interpreter) into object code to run the computer.[9]

The difference between most commercial software developers and open source software developers is best characterized by their attitudes toward access to source code and derivative works licensing. Many commercial developers hold their source code as a trade secret, but open source developers make their source code available for anyone to examine.[10] In addition, many commercial developers grant the right to create derivatives of their software on a relatively limited basis, while open source developers grant broad derivative works rights.[11]

III. Open Source Hackers as Software Entrepreneurs

Although it is unfair to say that hackers have never been interested in commercializing their software, it *is* fair to make two historical observations about the free software movement. First, rhetoric about the "*free*-ness" of free software gave hackers the general reputation of being hostile to software entrepreneurship.[12] Second, commercial successes in the free software movement were rare.[13]

Hacker Eric S. Raymond deserves credit for taking a leadership role in changing hackers' "anti-commercial" reputation. To begin with, he was among those who coined the term "open source" software[14] to convey the

6. *See* Apple Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1243 (3d Cir. 1983); Robert W. Gomulkiewicz, *How Copyleft Uses License Rights to Succeed in the Open Source Software Revolution and the Implications for Article 2B*, 36 Hous. L. Rev. 179, 180-81 (1999) [hereinafter Gomulkiewicz, *How Copyleft Uses License Rights*].

7. *Apple Computer, Inc.*, 714 F.2d at 1243.

8. *Id.*

9. *Id.*; Gomulkiewicz, *How Copyleft Uses License Rights*, *supra* note 6, at 180-81.

10. *Id.* at 181.

11. *See id.* at 186-89 (describing the principles of open source licensing). *See also* Bruce Perens, *The Open Source Definition*, *in* Open Sources: Voices from the Open Source Revolution 171 (Chris DiBona et al. eds., O'Reilly 1999), http://www.oreilly.com/catalog/opensources/book/perens.html.

12. *See* Open Source Initiative, *History of the OSI, at* http://www.opensource.org/docs/history.html (last visited June 21, 2004).

13. *See* Gomulkiewicz, *How Copyleft Uses License Rights*, *supra* note 6, at 183.

14. *History of the OSI*, *supra* note 12.

message of programming openness without the anti-commercial tinge of the "free software" label.[15] Raymond also wrote papers explaining various ways for open source hackers to profit financially from their software.[16]

Now, hackers are experimenting with a variety of business models to commercialize their code. Commercial software companies are also finding ways to profit from using open source code. Below, I describe some of these efforts.[17]

IV. Open Source Business Models

• *Sell hardware, give away software*

In this business model, the company makes money by selling its hardware and giving away the accompanying open source software.[18] For example, I.B.M. sells servers pre-loaded with Linux-based operating systems and the Apache web server. Similarly, Intel sells more processors because they work effectively in computer systems running Linux-based operating systems. Not surprisingly, I.B.M. and Intel are two major supporters of open source software.

• *Sell services, give away software*

Most open source software is difficult for novices to use. Much of this software is complex, such as web server software (e.g., Apache) and operating system software (e.g., the Linux kernel), and must therefore be accompanied by software services. I.B.M., RedHat, and others have engaged in a lucrative business of selling such services for open source software. These services include training, installation, support (helping when things break), and maintenance (keeping the software up-to-date with the current bug fixes and versions).

In a related model, a company might license its software on an open source basis to establish a reputation as an excellent software development shop. To put it a different way, open source licensing becomes a powerful advertisement for the company's programming services. Digital Creations

15. *Id.*

16. Raymond's writings include *The Cathedral and the Bazaar, The Magic Caldron, and Homesteading the Noosphere*, among other works. See his website at http://www.catb.org/~esr/writings.

17. *See generally* Hecker, *Setting Up Shop*, *supra* note 4; Eric. S. Raymond, *The Magic Cauldron*, *at* http://www.catb.org/~esr/writings/magic-cauldron (last visited June 21, 2004); Patricia Krueger, *Tour de Source: A Guide to the Start-Ups*, *at* http://www.wired.com/wired/archive/7.05/tour_pr.html (visited July 23, 2004); *Jobs for Hackers: Yes You Can Eat Open Source*, *at* http://www.opensource.org/advocacy/jobs/php (visited July 23, 2004).

18. Raymond calls this "widget frosting." *See* http://www.opensource.org/advocacy/case_for_business.php (visited July 23, 2004).

decided to license its Zope software in this manner as a way to bring in consulting business.[19]

• *Charge for a branded version of the software*

Although open source software is readily available on the Web, some users are willing to get the software from trusted vendors whom they rely on to choose a stable version of the software, test the software with various hardware configurations, and support the software once it is on site. RedHat and Novell apply this model.

• *Charge for applications, give away the systems software*

Though some in the open source community feel that that systems software should be distributed free of charge, they believe that it is acceptable to charge for applications software. So, some open source publishers specialize in applications that run on open source systems software platforms.

• *Sell a value-added package*

Open source software "products" are often collections of open source code called "packages." These packages come with various open source components, chosen and often customized by the hacker. Hacker entrepreneurs can also add value by including documentation, media, or utilities. This model is often related to the branded version model used by RedHat.[20]

• *Give away low-end version of software, charge for high-end version*

SendMail is the most popular Internet e-mail router. SendMail began as a free product ("free" as in freedom and "free" as in price). Now, SendMail publishes a high end commercial version but continues to offer the basic version of SendMail for free download.[21] Netscape also had this business model in mind when it licensed its Communicator code on an open source basis.[22]

• *Give away standard version of software, charge for customized version*

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19. *See* Paul Everitt, *How We Reached the Open Source Business Decision*, *at* http://www.zope.org/Members/paul/BusinessDecision (visited July 23, 2004) (describing companies decision to open source its Zope software).

20. *See* ROBERT YOUNG, *Giving it Away: How Red Hat Stumbled Across a New Economic Model and Helped Improve an Industry*, *in* OPEN SOURCES: VOICES FROM THE OPEN SOURCE REVOLUTION 113-25 (Chris DiBona et al. eds., O'Reilly 1999), http://www.oreilly.com/catalog/opensources/book/young.html; *see generally* ROBERT YOUNG ET AL., UNDER THE RADAR: HOW RED HAT CHANGED THE SOFTWARE BUSINESS AND TOOK MICROSOFT BY SURPRISE (1999).

21. *See Why Migrate to Commercial Sendmail Software?*, *at* http://www.sendmail.com/why_sendmail.shtml.

22. *See Open Source Case For Business*, *at* http://www.opensource.org/advocacy/case_for_business.php (visited July 23, 2004).

This business model is akin to the high end/low end model, except that the software publisher creates a package customized for a specific customer need beginning with open source code as a starting point.

• *Create software/hardware packages*

Systems integrators and so-called "value-added" re-sellers combine open source software, hardware, and services to provide turn-key systems to certain lines of businesses, such as law offices.

• *Sell sponsorships*

Linux pioneer Linus Torvalds has founded an organization called Open Source Development Labs which is sponsored by Hewlett-Packard, I.B.M., and Intel, among others.[23]

• *Use free software to attract traffic to website to sell ads*

Many open source websites, such as SlashDot[24] and SourceForge,[25] sell advertising.

• *Sell accessories*

The Debian free software organization sells T-shirts and other merchandise;[26] O'Reilly & Associates[27] sells books about open source software. Most recently, companies have begun to offer insurance against the risk of intellectual property litigation associated with the use of open source software.[28]

V. Dual Licensing

One of the most promising business models for open source software is "dual licensing."

A. The Importance of Licensing to Open Source

Licensing is the legal mechanism that hackers use to grant the rights to create and distribute derivative works of open source software.[29] Hackers

23. *See* http://www.osdl.net/about_osdl/members/.

24. *See* http://www.slashdot.com.

25. *See* http://www.sourceforge.net.

26. *See* http://www.debian.org.

27. *See* http://www.oreilly.com/.

28. *See* Stephen Shankland, *Group: Linux Potentially Infringes 283 Patents*, *at* http://news.com.com/Group:+Linux¶otentiallyņfringes+283¶atents/2100-7344_3-5291403.html (visited Aug. 1, 2004); *see also* Brad Stone, *Nickles, Dimes, Billions: Big Tech Companies are Raking in Big Bucks—a Little at a Time—by Charging Fees for Use of Their Innovations*, *at* http://www.msnbc.msn.com/id/5578247/site/newsweek (visited Aug. 6, 2004) (reporting on the potential threat of patent litigation to the open source community).

29. *See* Gomulkiewicz, *How Copyleft Uses License Rights*, *supra* note 6, at 186-90. *See generally* Lawrence Rosen, Open Source Licensing: Software Freedom and Intellectual Property Law (2004).

use various licenses, but the General Public License (GPL) and the BSD-style license (BSD) are the two most popular.[30] Both of these licenses grant broad rights to create derivative works. The BSD License grants these rights free and clear,[31] but the GPL attaches important conditions. The GPL provides that if a programmer creates a derivative work of GPL-licensed code, the programmer must grant the right to make unlimited derivatives of his or her derivative work, free of charge for all time.[32] Many programmers do not want to grant derivative work rights under these conditions; this is the impetus for dual licensing.

B. Dual Licensing: The Best of Both Worlds or Cowardly Compromise?

Many observers consider dual licensing a clever way for open source hackers to freely share their code while simultaneously profiting from those who wish to use the code for proprietary purposes.[33] Some free software purists frown on the practice, believing that no one should charge a fee for the right to create derivatives and that source code never should be kept secret.

Aside from the philosophical debate, dual licensing creates some licensing-related issues, which I describe in the context of the MySQL software product.

VI. MySQL's Dual Licensing Scheme, its Complications, and Resolutions

A. The Software

MySQL is a database software program published by a Swedish company, "MySQL AB." The MySQL software often runs in conjunction with software known as PHP, which lets computers construct customized web pages.[34] PHP and MySQL run on the Apache web server and Linux-based

30. Robert W. Gomulkiewicz, *De-bugging Open Source Software Licensing*, 64 U. Pitt. L. Rev. 75, 83 (2002).

31. *Id*. at 93.

32. Free Software Foundation, *GNU General Public License,* § 2, *at* http://www.gnu.org/copyleft/gpl.html (last visited June 21, 2004). *See* Gomulkiewicz, *De-bugging Open Source Software Licensing*, *supra* note 29, at 88-92 (discussing the license conditions in GPL Section 2).

33. Dual licensing is used by Digium, MandrakeSoft, Sleepycat, Technical Pursuit, and Trolltech.

34. *See* Stephen Shankland, *MySQL Addresses Open-Source License Problem* (March 12, 2004), *at* http://news.com.com/2100-7344_3-5173014.html (last visited June 21, 2004).

operating systems so frequently that the combination is popularly known by the acronym LAMP.[35]

B. The Licensing

MySQL AB licenses its MySQL software under the GPL.[36] If a user accepts the software under the GPL, the license is free of charge. The only "cost" is that the user must comply with the terms of the GPL, which, as noted previously, require the user to release the source code of any derivatives that he or she creates using MySQL and license the right to make further derivatives at no charge.

MySQL AB also licenses its MySQL software under a license that it calls its "Commercial License."[37] Under the Commercial License, the user must pay a license fee for every copy of MySQL installed on a database server.[38] However, the user is not required to release its source code or license its derivatives.[39]

Users can freely choose the licensing model that best suits their needs. MySQL AB recommends the GPL for "free software enthusiasts" and most non-profit and academic organizations.[40] It recommends the Commercial License to "all commercial and government organizations" because this "frees [the user] from the broad and strict requirements of the GPL license."[41] MySQL AB also recommends the Commercial License for non-profit and academic institutions who have "strong reasons to not publish [their] application in accordance with the GPL" and to "anyone in doubt" about which license to choose.[42]

MySQL AB contends that its dual licensing program is a "win-win" for all parties for several reasons. First, the open source community gets additional superior software at no charge. The software is presumably superior because it has been tested by thousands of hackers who constitute a virtual

35. *Id*. *See also* http://www.mysql.com/company/ for an explanation of LAMP.

36. MySQL, *MySQL Open Source License*, *at* http://www.mysql.com/products/opensource-license.html (last visited June 21, 2004); MySQL, *MySQL Licensing Policy*, *at* http://www.mysql.com/products/licensing (last visited June 21, 2004) (MySQL AB offers a GPL license because it "believe[s] in open source/free software" and "welcome[s] all initiatives to publish more software under the GPL license. . ..").

37. MySQL, *MySQL Commercial License*, *at* http://www.mysql.com/products/commercial-license.html (last visited June 21, 2004).

38. *Id*.

39. *Id*.

40. MySQL, *MySQL Open Source License*, *supra* note 35.

41. *Id*.

42. *Id*. ("To anyone in doubt, we recommend the commercial license. It is never wrong.").

team of worldwide debuggers, and because MySQL AB's profits enable it to improve the software more than the average hacker organization can. Second, commercial customers obtain this open source "battle tested" software at a relatively low cost, as the hacker community provides its bug fixes to MySQL AB free of charge.

Mindful that it must convince the free/open source community that it is truly "one of *them*" in order to attract hacker support, MySQL AB states that its licensing model contributes to software "freedom."[43] "MySQL's dual licensing increases freedom in two ways: first, it encourages the growth of free software by licensing MySQL under the GPL; second, it makes it possible to use our software in situations where the GPL is not applicable."[44]

C. Complications and Resolutions

MySQL AB encountered several difficulties in its dual licensing model. One difficulty occurred because there are a variety of open source licenses, not all of which are compatible with the GPL. In the case of MySQL, the incompatibility arose from the combination of changes that MySQL and PHP developers made to their licensing models.

PHP developers changed from using the GPL to a BSD-style license because it thought that more people would use PHP under a "much more loose license."[45] MySQL AB moved from the Library General Public License[46] ("Library GPL") to the GPL.[47] The Library GPL (now called the "Lesser GPL") provides an exemption for certain libraries from the source code disclosure and derivative works licensing requirements of the GPL.[48] However, MySQL AB realized that this exemption permitted many users to utilize MySQL without paying a license fee in scenarios where MySQL AB

43. *See* MySQL, *MySQL Licensing Policy FAQ*, *at* http://www.mysql.com/company/legal/licensing/faq.html (last visited June 21, 2004).

44. *Id.*

45. PHP, *License Information FAQ*, *at* http://www.php.net/license (last visited June 21, 2004). The BSD license is looser in the sense that licensees have complete freedom to do as they please with derivatives. As noted *supra*, the GPL imposes conditions on its derivative works grant. *See* Gomulkiewicz, *De-bugging Open Source Software Licensing, supra* note 29, at 93.

46. Free Software Foundation, *GNU Lesser General Public License*, *at* http://www.gnu.org/licenses/lgpl.html (last visited June 21, 2004) (Lesser General Public License was formerly known as the Library General Public License).

47. *See* MySQL, *MySQL Licensing Policy FAQ, supra* note 42.

48. *See* Free Software Foundation, *GNU Lesser General Public License, supra* note 45.

thought a fee should be due.[49] Thus, MySQL AB closed this loophole by licensing MySQL under the GPL.[50]

These independent changes in licensing created a conflict when PHP combined with MySQL. Since a BSD-style license does not require licensees to automatically re-license derivative works, PHP did not pass on the GPL-mandated derivative works licensing obligations when PHP was combined with MySQL. To solve this problem, MySQL AB offered a "License Exception" to certain GPL requirements when MySQL is combined with PHP software.[51] MySQL AB also decided to offer a similar License Exception when MySQL libraries are combined with software licensed under certain open source licenses approved by the Open Source Initiative.[52]

VII. Conclusion

Open source programmers have convinced many people to use their software. For some hackers, that is enough. However, others want open source software to be commercially successful as well.[53] Indeed, they argue that commercial success[54] contributes positively to the health of the open source community. Even among hackers who are striving for commercial success, challenges remain.

One challenge arises from the ongoing debate among hackers about whether to license their code under the GPL or a BSD-style license.[55] In the past, the debate was interesting and vigorous, but in the end, a hacker chose a license for his or her software and life moved on. Now, the incompatibility of these licenses can threaten the success of open source products. MySQL AB believes that it has fixed the problem with its License Exception for PHP and its broader exception that allows GPL-licensed MySQL client libraries to be combined with software licensed under certain non-GPL open source licenses. It may be time for open source hackers and their legal counsel to

49. MySQL, *MySQL Licensing Policy FAQ, supra* note 42.

50. *Id.*

51. *Id.*

52. *Id.*

53. *See* David Becker, *Open-Source Companies See Profit Aplenty* (May 19, 2004), *at* http://msn.com.com/2100-1104_2-5216387.html.

54. MySQL, for one, seems poised for commercial success. *See* Martin LaMonica and Stephen Shankland, *MySQL Takes Cue from Master* (April 14, 2004), *at* http://msn-cnet.com.com/2100-7344_3-5190975.html (visited October 2, 2004); David Becker, *HP Expands Open-Source Support* (May 30, 2004), *at* http://msn-cnet.com.com/2100-7344_3-5222843.html (visited October 2, 2004) (reporting on the success of MySQL).

55. *See* Wayner, *supra* note 3, at 90-93.

create generalized licensing solutions that can be used community-wide rather than rely on case-by-case licensing patches.[56]

56. *See* Gomulkiewicz, *De-bugging Open Source Software Licensing, supra* note 29, at 96-103.

Recent Developments in Digital Copyright—The Internet Music Cases

by
*Herbert J. Hammond**
*Corey Weinstein***

INTRODUCTION

Music sharing on the Internet has been a hotly debated topic in the last five years. Music sharing advocates claim that people should have the right to trade music that they have rightfully purchased. Opponents of this practice argue that swapping songs destroys the music industry and violates copyright law. While this debate has raged and the courts have taken up the issue, the file-swapping phenomenon has brought significant, unanticipated changes to the recording industry and to the ways consumers buy music.

Whatever side of the debate you support, under current law, there is no question that peer-to-peer ("P2P") file sharing constitutes copyright infringement. Copyright infringement violates an owner's exclusive rights,[1] which, for purposes of this issue, include the following exclusive rights:

> (1) to reproduce the copyrighted work in copies or phonorecords; (2) to prepare derivative works based upon the copyrighted work; (3) to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending; (4) in the case of literary, musical, dramatic, and choreographic works. . . to perform the copyrighted work publicly; . . . and (6) in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.[2]

The reproduction of a copyrighted sound recording – whether in analog or digital format – without the copyright owner's permission, violates the copyright owner's reproduction right.[3] Music sharing on the Internet is based on the concept of P2P file-sharing, which allows Internet users to directly access the hard drive of other Internet users' computers.[4] After accessing another's computer, an Internet user can make a copy and download files that

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1. 17 U.S.C. § 501(a) (2000).
2. 17 U.S.C. § 106 (2000).
3. § 106(1). In most cases there are two copyrights in issue: (1) the copyright in the underlying musical composition and (2) the copyright in a sound recording of a particular performance of the composition.
4. Jeffrey R. Armstrong, Sony, Napster, *and* Aimster*: An Analysis of Dissimilar Application of the Copyright Law to Similar Technologies*, 13 DEPAUL-LCA J. ART & ENT. L. 1, 6-7 (2003).

are available for sharing from another user's computer.[5] The downloading of copied recordings from one computer to another without the copyright owner's permission, in addition to a violation of the copyright owner's reproduction right, also constitutes a violation of the copyright owner's distribution right.[6] Such a file-sharing system does not require a central server to act as a storage device of recorded songs; instead, a central server or web site merely facilitates the transaction.[7]

In 1998, Congress passed the Digital Millennium Copyright Act ("the DMCA") in an attempt to address some of the issues associated with copyright protection on the Internet.[8] Although there was no question that P2P file-sharing violated existing copyright law, Congress enacted the DMCA "to preserve copyright enforcement on the Internet and to provide immunity to service providers from copyright infringement liability for 'passive', 'automatic' actions in which a service provider's system engages through a technological process initiated by another without the knowledge of the service provider."[9] Under the DMCA, an Internet Service Provider ("ISP") has four safe harbors that might exempt it from liability:

> • The Transitory Communication Safe Harbor, which applies in certain situations where liability would otherwise be based on the provider's network connections, where, among other requirements, the provider has no control over the transmission of the material other than automatic technical processes and responses, and the transmission does not alter the contents;[10]
> • The System Caching Safe Harbor, which provides liability limitations in circumstances of temporary material storage on the provider's system where, among other requirements, the material is transmitted at the direction of someone other than the provider and the storage of the material is an automatic technical process;[11]
> • The Information Residing on Systems at Direction of Users Safe Harbor, which provides liability limitations in situations where infringing material is stored on the provider's system, where, among other requirements, the provider does not have knowledge that the

5. *Id*.

6. §106(2).

7. Armstrong, *supra* note 4, at 6-7.

8. Kevin Michael Lemley, Comment, *Protecting Consumers from Themselves: Alleviating the Market Inequalities Created by Online Copyright Infringement in the Entertainment Industry,* 13 ALB. L.J. SCI. & TECH 613, 620 (2003).

9. *In re* Aimster Copyright Litig., 252 F. Supp. 2d 634, 656 (N.D. Ill. 2002) (quoting ALS Scan, Inc. v. RemarQ Communities, Inc., 239 F.3d 619, 624 (4th Cir. 2001), which cited H.R. Conf. Rep. No. 105-796, at 72 (1998)).

10. *Id*. at 657; 17 U.S.C. § 512(a) (2000).

11. § 512(b); *In re Aimster*, 252 F. Supp. 2d at 657.

material on the system is infringing and the provider does not receive a financial benefit;[12] and

• The Information Location Tools Safe Harbor, which provides for a liability limitation for service providers who refer or link users to infringing material or infringing activity, provided that the provider, among other requirements, does not have actual knowledge of infringing activity, is not aware of facts from which infringing activity is apparent, and does not receive financial benefit.[13]

If an ISP's activities fall within one of these exceptions, provided that the ISP qualifies as a "service provider"[14] and that it has adopted and implemented a policy to disable access of repeat infringers,[15] it cannot be held liable for the infringing conduct of its subscribers.

Additionally, in accordance with its provisions, the DMCA permits a copyright owner to request any United States district court clerk to issue a subpoena to a service provider for an alleged infringer's identification.[16] But, before requesting the subpoena, the copyright owner must notify the alleged infringer of the claimed infringement through a written notification provided to the service provider's designated agent.[17] That notification must include: the signature of the person with the exclusive right;[18] identification of the copyrighted work allegedly infringed;[19] identification of the material that is infringing or is the subject of the infringing activity;[20] identification of the material that is to be removed or disabled;[21] information sufficient to permit the service provider to locate the material;[22] information sufficient to permit the service provider to contact the complaining party;[23] a statement that the complainant has a good faith belief regarding the infringement;[24] and a statement that the information in the notification is accurate.[25]

12. § 512(c).

13. § 512(d); *In re Aimster*, 252 F. Supp. 2d at 657.

14. § 512(k)(1)(A).

15. § 512(i)(1)(A).

16. § 512(h)(1).

17. § 512(c)(3).

18. § 512(c)(3)(A)(i).

19. § 512(c)(3)(A)(ii).

20. § 512(c)(3)(A)(iii).

21. *Id.*

22. *Id.*

23. § 512(c)(3)(A)(iv).

24. § 512(c)(3)(A)(v).

25. § 512(c)(3)(A)(vi).

The Rise of Napster

Napster was one of the first, and most notorious, sites to facilitate subscriber file swapping. Before its enjoinment in early 2001, Napster had facilitated the swapping of hundreds of millions of recordings and had close to 20 million subscribers.[26] In its early days, Napster's business model was designed to promote the copying and distribution of recordings peer-to-peer. For example, in the case of two subscribers (call them Ellen and Max), Ellen would log onto Napster's website, www.napster.com and upload a list of music files on her computer's hard drive, which she was willing to share. Ellen would then initiate a search of a master index, which stored information about a particular recording on Napster's server. The Napster server would search its central index for the song Ellen requested and determine that another subscriber, Max, had a copy of that recording on the his computer's hard drive. After locating the recording, Napster would log Ellen's request, along with her username and Internet address and notify Max's computer of Ellen's request. This notification would initiate a download of the requested recording from Max's computer to Ellen's computer using a proprietary file-transfer protocol. When the download was complete, Ellen's computer would notify Napster that the song had been downloaded to her Internet address. Using this seemingly simple procedure, file swapping via the Napster website quickly became a phenomenon.

In 1999, it is estimated that around 750 million tracks were illegally downloaded, which accounted for approximately $300 million in losses.[27] By 2002, the recording industry's losses from illegal file swapping were estimated at over $700 million.[28] However, because Napster's servers were not actually making copies of the copyrighted songs — or distributing those copies over the Internet—Napster was not directly violating the copyright owners' rights. Nevertheless, the Recording Industry Association of America ("RIAA"), the recording industry's trade association, filed suit against Napster on behalf of A&M Records and 17 other record companies in December 1999 for contributory and vicarious copyright infringement.[29]

Copyright, though statutory, is part tort law. In tort, as in criminal law, a person may be liable for aiding, abetting, assisting, or encouraging others to

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26. Spencer E. Ante, *Inside Napster: How the music-sharing phenomenon began, where it went wrong, and what happens next*," BUSINESSWEEK, Aug. 14, 2000, at 112, *available at* www.businessweek.com/2000/00_33/b3694001.htm?scriptFramed.

27. Lemley, *supra* note 8, at 625.

28. Yahoo! News, *Recording Industry Sues File Swappers*, *at* http://www.10e20webdesign.com/news_center_latest_technology_internet_news_september_8_2003_recording_industry_sues_file_swappers.htm (last visited July 8, 2004).

29. *In re* Napster, Inc. Copyright Litig., 191 F. Supp. 2d 1087, 1092 (N.D. Cal. 2002). Since Napster did not directly copy or distribute MPEG3 files, the RIAA did not sue Napster for direct infringement.

commit a tort or for conspiracy to commit a tort even if that person did not directly commit the tort. Employers, for instance, may be vicariously liable under the doctrine of *respondeat superior* for torts their employees committed, including copyright infringement. In copyright cases, the courts have extended the principal of *respondeat superior* a step further, holding that even in the absence of an employment relationship, individuals may be vicariously liable for copyright infringement in certain circumstances where they have "the right and ability to supervise" the infringing activity and have a direct financial interest in such activities,[30] regardless of knowledge.[31] Extending the vicarious-liability doctrine beyond employment and agency relationships developed the so-called "dance-hall cases," where the courts found the owner of a dance hall, who hired a band that played unlicensed copyrighted music, liable for infringement even though the owner was neither the employer nor the principal in an agent-principal relationship.[32]

Moreover, while the Copyright Act itself does not explicitly recognize contributory infringement torts, the courts have imposed liability for contributory copyright infringement on persons who had knowledge of the infringing activity and who induced, caused, or materially contributed to another's infringing conduct.[33] But in copyright, as in patent and trademark cases, the *sine qua non* of contributory infringement is a direct infringement by a third party who was aided, abetted, or encouraged by the putative contributory infringer.[34] Similarly, as in patent cases, another condition that must be satisfied to impose liability for contributory copyright infringement is that the accused product or service cannot be capable of substantial, legitimate noninfringing use.[35] In the case of contributory infringement, actual knowledge of the direct infringement is not required: a person may be liable as a contrib-

30. *See* Buck v. Jewell-LaSalle Realty Co., 283 U.S. 191, 198-99 (1931); Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971); Shapiro, Bernstein & Co. v. H. L. Green Co., 316 F.2d 304, 307 (2d Cir. 1963).

31. *Shapiro, Bernstein & Co*., 316 F.2d at 307.

32. *See, e.g*., Dreamland Ball Room, Inc. v. Shapiro, Bernstein & Co., 36 F.2d 354, 355 (7th Cir. 1929). *Accord* Famous Music Corp. v. Bay State Harness Horse Racing & Breeding Ass'n, 554 F.2d 1213, 1214 (1st Cir. 1977); KECA Music, Inc. v. Dingus McGee's Co., 423 F. Supp. 72, 74-5 (W.D. Mo. 1977).

33. Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259, 264 (9th Cir. 1996); *Gershwin Pub. Corp*., 443 F.2d at 1162.

34. *See* Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 434 (1984).

35. *Id*. at 442.

utory infringer if he or she merely has reason to know of another's direct infringement.[36]

In July 2000, the Napster plaintiffs moved for a preliminary injunction.[37] Following an evidentiary hearing, the San Francisco federal court held that the plaintiffs had made a convincing showing on their contributory infringement claims because evidence revealed that Napster had knowledge of and contributed to the infringing acts.[38] That court also found that the plaintiffs were likely to prevail on their claim of vicarious infringement because Napster had the right and ability to supervise its subscribers' infringing conduct and had sufficient financial interest – despite having no current revenues – because it was likely that increases in its user base were driving revenues.[39] The court considered, but rejected, Napster's defenses including first-amendment,[40] fair-use,[41] and copyright-misuse,[42] among others, and enjoined Napster "from engaging in, or facilitating others in copying, downloading, uploading, transmitting, or distributing plaintiffs' copyrighted musical compositions and sound recordings, protected by either federal or state law, without express permission of rights owners."[43] The Ninth Circuit originally stayed the injunction in July 2000,[44] but, in February 2001, it affirmed the lower court's preliminary injunction in nearly every respect.[45]

36. Cable/Home Communication Corp. v. Network Prods., Inc., 902 F.2d 829, 846 (11th Cir. 1990); Sega Enters. Ltd. v. MAPHIA, 948 F. Supp. 923, 933 (N.D. Cal. 1996).

37. A&M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 900 (N.D. Cal. 2000).

38. *Id*. at 920.

39. *Id*. at 920-22.

40. *Id*. at 922-23.

41. Napster argued that the copying that occurred by its subscribers was a "space-shifting" fair use based, in part, on the U.S. Supreme Court's decision in *Sony Corp. of Am*., 464 U.S. at 454-55, which recognized consumer videotaping of television programs to be a legitimate "time-shifting" fair use. *A&M Records, Inc*., 114 F. Supp. 2d at 916. The trial court analyzed these arguments under the traditional fair-use analysis and concluded that any potential non-infringing use of Napster's service was minimal and that the commercially significant use of the service was the unauthorized downloading and uploading of music, most of which was copyrighted. *Id*. at 912-17.

42. Napster argued that plaintiffs were seeking to monopolize the industry by exceeding the scope of their copyrights and attempting to control distribution of music over the Internet, however, the court rejected this argument as inapplicable to the present case. *A&M Records, Inc.,* 114 F. Supp. 2d at 923.

43. *Id*. at 927.

44. *See* A&M Records, Inc. v. Napster, Inc., 2000 U.S. App. LEXIS 18688, 2000 WL 1055915, *1 (9th Cir. 2000).

45. *See* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001).

The Ninth Circuit, in a ruling anxiously awaited by the public and which proved to be significant in later cases, upheld the district court's determination that Napster indirectly infringed at least two of the copyright holders' exclusive rights – reproduction and distribution[46] – and rejected Napster's argument that its activities were a "fair use" because the vast majority of its subscribers were not fair users.[47]

The Court upheld the district court's ruling that the plaintiffs were likely to prove that Napster knowingly encouraged and assisted the infringing upon the plaintiffs' copyrights and would likely prevail on its contributory infringement claims.[48] In reaching that conclusion, the Court pointed out that, "if a computer system operator learns of specific infringing material available on his system and fails to purge such material from the system, the operator knows of and contributes to direct infringement."[49] The evidence showed that Napster not only knew of infringing material available on its system, but could have blocked suppliers' accessibility to the infringing material.[50] The Court also found that Napster failed to remove the material.[51]

The Ninth Circuit also upheld the lower court's conclusion that the plaintiffs were likely to prevail on their vicarious infringement claim.[52] The Court agreed that Napster would financially benefit from the availability of the copyrighted songs on its system.[53] The Court further pointed out that Napster retained control of the system, and, therefore, failed to police it.[54]

But the Court modified the district court's preliminary injunction in one respect: it held that contributory infringement liability only existed to the extent that Napster "(1) receive[d] reasonable knowledge of specific infringing files with copyrighted musical compositions and sound recordings; (2) [knew] or should [have known] that such files [were] available on the Napster system; and (3) fail[ed] to act to prevent distribution of the works."[55] The Court held that "Napster may be vicariously liable when it fails to affirmatively use its ability to patrol its system and preclude access to potentially infringing files listed in its search index" because "Napster has both the ability to use its search function to identify infringing musical recordings and

46. *Id*. at 1014.

47. Fair use is a defense usually when the work is used for purposes such as criticism, comment, news reporting, teaching, scholarship, or research. 17 U.S.C. § 107; *See A&M Records, Inc*., 239 F.3d at 1014-15.

48. *A&M Records, Inc*., 239 F.3d at 1020.

49. *Id*. at 1021.

50. *Id*. at 1022.

51. *Id*.

52. *Id*. at 1024.

53. *Id*. at 1023.

54. *Id*.

55. *Id*. at 1027.

the right to bar participation of users who engage in the transmission of infringing files."[56] But, the Court, by remanding the case to the district court to reform the injunction, placed the burden on the plaintiffs to provide Napster with notice of the copyrighted works and files containing such works available on its system *before* Napster actually had a duty to disable access to the offending content.[57] Conversely, the Court placed the burden on Napster to "[police] the system within the limits of the system."[58]

The Ninth Circuit's affirmation of the district court's preliminary injunction represented the end of Napster's P2P file-swapping service. As a result of the preliminary injunction, Napster declared bankruptcy in June 2002.[59] At the time, it appeared that German media group Bertelsmann AG ("Bertelsmann"), who had begun to invest in Napster, might buy the company.[60] But, amid vehement protests by the recording industry,[61] a Delaware federal bankruptcy judge blocked Bertelsmann's purchase of the company[62] on grounds that Bertelsmann could not come up with enough evidence to show that its investment was made in good faith, rather than as an equity stake in the company.[63] Consequently, Napster terminated all of its employees and ceased operations.[64] And with that, Napster disappeared —at least temporarily.

But Napster, like a phoenix, has risen from the ashes, transformed. Napster's new website now offers its subscribers the ability to buy individual tracks or albums to burn onto CDs.[65] It also offers radio stations and allows subscribers to share musical opinions.[66] Today, Napster has license agreements with the five major record companies and hundreds of other independents, with more than 700,000 tracks totaling its catalog.[67]Los Angeles and New York.

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56. *Id.*

57. *Id.*

58. *Id.*

59. Scarlet Pruitt, *Napster assets auctioned; Bertelsmann to bid high* (Aug. 12, 2002), *at* www.computerworld.com/softwaretopics/software/groupware/story/0,10801,73407,00.html.

60. *Id.*

61. Matt Beer, *Napster goes bankrupt* (Sept. 6, 2002), *at* http://cooltech.iafrica.com/technews/155081.htm.

62. *Id.*

63. Michael Singer, *It's All Over for Napster* (Sept. 3, 2002), *at* http://siliconvalley.internet.com/news/article.php/1456081.

64. *Id.*

65. *See* http://www.napster.com/about_us.html (last visited July 7, 2004).

66. *Id.*

67. *Id.*

The Aimster Litigation

In the *In re Aimster* Copyright Litigation, the five major record companies mentioned above, and others, filed eleven separate suits against Aimster, another music file-sharing service.[68] Aimster, which, like Napster, assisted its subscribers in identifying other subscribers with recordings in MP3 format, provided software to assist its subscribers with transferring digital files into an encrypted format to other online subscribers via AOL's Instant Message network.[69] The Aimster site also provided a "tutorial," which taught subscribers how to transfer and copy works over the Aimster system, using, by way of example, some of the very works Aimster had been put on notice for using because of their infringement.[70] Beginning in November 2001, Aimster also offered a service called Club Aimster, a service where, for $4.95 a month, a member could access "new releases," typically consisting of the 40 most frequently downloaded Aimster songs.[71]

The eleven Aimster suits were consolidated by the Judicial Panel on Multidistrict Litigation, for pretrial purposes, in the Northern District of Illinois.[72] In December 2001, the plaintiffs moved for a preliminary injunction.[73] But in March 2002, the defendants filed for bankruptcy, and all proceedings in the case were stayed, including a status conference scheduled for that very month, and wherein the parties' were to discuss a case management plan and schedule a date for oral argument on the preliminary injunction.[74] However, in June 2002, the Bankruptcy Court lifted the automatic stay so the U.S. District Court for the Northern District of Illinois could consider the preliminary injunction motion.[75]

In resisting the preliminary injunction, the Aimster defendants did not dispute direct infringement by their subscribers, but instead, argued that the Audio Home Recording Act ("AHRA"), a recent amendment to the Copyright Act, provided a defense because the AHRA permits consumers to make analog or digital audio recordings of copyrighted music for their private, non-commercial use.[76] The district court rejected this argument, finding that "ongoing, massive, and unauthorized distribution and copying of Plaintiffs'

68. *In re Aimster*, 252 F. Supp. at 639.

69. *Id*. at 642.

70. *Id*. at 643.

71. *Id*. at 644.

72. *Id*. at 638.

73. *Id*. at 646.

74. *Id*.

75. *Id*. at 646-47.

76. *Id*. at 648-49; 17 U.S.C. § 1008 (2000).

copyrighted works by Aimster end users" did not constitute a "personal use" of the type contemplated by the AHRA.[77]

The trial court concluded that the plaintiffs had demonstrated a likelihood of success on its contributory infringement claim[78], finding that Aimster knew or should have known of the direct infringement by its subscribers because the plaintiffs had sent numerous notices and cease-and-desist letters describing the particular copyrighted works being infringed.[79] The court found that the defendants had materially contributed to its subscribers' infringing activities by providing the software and support services necessary for individual subscribers to upload and download files and that the defendants had failed to provide any evidence of substantial, non-infringing use.[80]

The district court also found that plaintiffs had shown a likelihood of success on its vicarious infringement claim, concluding that Aimster 1) had the right and the ability to terminate individual users and 2) that it had a financial interest in the infringement because it charged its subscribers a monthly subscription fee.[81]

Aimster argued that it was exempt from vicarious and contributory infringement liability under the DMCA's safe-harbor provisions.[82] These safe-harbor provisions are available when a service provider has adopted, and reasonably implemented, a policy that imposes subscriber termination for repeat infringers.[83] While the district court found that Aimster qualified as a "service provider" under the DMCA,[84] that it had in fact adopted a "repeat infringer policy,"[85] and that the plaintiff had failed to identify a single repeat infringer whose access should be terminated,[86] the court did not allow form to triumph over substance. The court found that Aimster failed to effectively *implement* its repeat infringer policy because its system allowed subscribers

77. *Id*. at 649. AOL argues that the name Aimster is derived from AIM, the acronym for AOL Instant Message. *See, e.g.,* Maury Wright, *Rights issues stymie digital music—the closest thing we have to a killer app., at* http://www.reed-electronics.com/commvergemag/article/CA90598?pubdate=7%2F1%2F2001 (last visited June 28, 2004).

78. *In re Aimster*, 252 F. Supp. 2d at 654.

79. *Id*. at 650. The Court also found that Aimster's "Guardian Tutorial" demonstrated how to infringe plaintiffs' copyrights by using specific copyrighted titles as examples. *Id*.

80. *Id*. at 654.

81. *Id*. at 654-55.

82. *Id*. at 656.

83. *Id*. at 657; § 512(i)(1)(A).

84. *In re Aimster*, 252 F. Supp. 2d at 658.

85. *Id*.

86. *Id*. at 659.

to transmit encrypted files, making infringer identification impossible.[87] The court stated that "[a]dopting a repeat infringer policy and then purposely eviscerating any hope that such a policy could ever be carried out is not an 'implementation' as required by § 512(i)."[88] Thus, in September 2002, the court issued a preliminary injunction.

On appeal, Judge Posner, writing for the Seventh Circuit Court of Appeals, affirmed the lower court's injunction.[89] On the contributory infringement issue, the Court recognized that the evidence in the record "does not exclude the *possibility* of substantial non-infringing uses of the Aimster system, but the evidence is sufficient, especially in a preliminary-injunction proceeding, which is summary in character, to shift the burden of production to Aimster to demonstrate that its service has substantial non-infringing use."[90] Aimster failed to produce any such evidence.[91] The Court then gave some direction as to how a similarly situated defendant might meet that burden:

> if the infringing uses are substantial then to avoid liability as a contributory infringer the provider of the service must show that it would have been disproportionately costly for him to eliminate or at least reduce substantially the infringing uses. Aimster failed to make that showing too, by failing to present evidence that the provision of an encryption capability *effective against the service provider itself* added important value to the service or saved significant cost. Aimster blinded itself in the hope that by doing so it might come with the rule of the *Sony* decision.[92]

As to Aimster's vicarious liability, the Seventh Circuit was "less confident than the district judge was that the recording industry would also be likely to prevail on the issue of vicarious infringement"[93] because "[h]ow far the doctrine of vicarious liability extends is uncertain."[94] Judge Posner was unwilling to make the leap from the dance-hall cases to Aimster's case.[95] Judge Posner further stated "[b]y eliminating the encryption feature and monitoring the use being made of its system, Aimster could like Sony have limited the amount of infringement. Whether failure to do so made it a vicarious infringer notwithstanding the outcome in *Sony* is academic [because] its

87. *Id.*

88. *Id.* The court also found the other safe-harbor provisions (transitory communications, system caching, and information location) to be inapplicable. *Id.*

89. *In re Aimster Copyright Litig.,* 334 F.3d 643, 656 (7th Cir. 2003).

90. *Id.* at 652 (emphasis in original).

91. *Id.* at 653.

92. *Id.* (emphasis in original).

93. *Id.* at 654.

94. *Id.*

95. *Id.*

ostrich-like refusal to discover the extent to which its system was being used to infringe copyright is merely another piece of evidence that it was a contributory infringer."[96] However, the Court did not have to resolve its doubts about the trial court's ruling on vicarious infringement in order to decide the appeal.[97]

Turning to Aimster's defenses, the Court seemed unimpressed with Aimster's DMCA defense, stating"[t]he common element of [the DMCA's] safe harbors is that the service provider must do what it can reasonably be asked to do to prevent the use of its service by 'repeat infringers.' "[98] And the Court also added, "[f]ar from doing anything to discourage repeat infringers . . . Aimster invited them to do so, showed them how they could do so with ease using its system, and by teaching its users how to encrypt their unlawful distribution of copyrighted materials disabled itself from doing anything to prevent infringement."[99]

The Software Vendor Cases

Two consolidated cases, *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.* ("MGM") and *Lieber v. Consumer Empowerment BV aka Fasttrack,*[100] were decided in the wake of *Napster* and *Aimster.* These cases did not target the ISPs, but free software vendors that distributed software that could be downloaded free of charge and, when installed, would allow users to exchange digital files when connected to a P2P network.[101] Both *MGM* and *Lieber* were decided by summary judgment cross-motions over contributory and vicarious infringement issues.[102]

In these cases, the plaintiffs did not dispute that the defendants' software was, and could be, used for substantial non-infringing purposes.[103] Relying on the U.S. Supreme Court's opinion in *Sony Corp. v. Universal City Studios, Inc*., and the Ninth Circuit's *Napster* opinion, the California district court held that "liability for contributory infringement accrues where a defendant has actual—not merely constructive—knowledge of the infringement *at a time during which the defendant materially contributes to that infringement*."[104] While the evidence in these cases revealed that the defendants clearly knew that many of the people who downloaded their software

96. *Id*. at 654-55.

97. *Id*. at 654.

98. *Id*. at 655.

99. *Id*.

100. MGM Studios, Inc. v. Grokster, Ltd., 259 F. Supp. 2d 1029 (C.D. Cal. 2003).

101. *Id*. at 1032.

102. *Id*. at 1031.

103. *Id*. at 1035.

104. *Id*. at 1036 (emphasis added).

would use it to infringe copyrights, the Los Angeles court found that, to be liable for contributory infringement, defendants "must have actual knowledge of infringement at a time when they can use that knowledge to stop the particular infringement."[105] Thus, the appropriate question was "whether actual knowledge of specific infringement accrues at a time when either Defendant materially contributes to the alleged infringement, and can therefore do something about it."[106] The Central District of California court deviated from the *Napster* decision when it found that Streamcast and Grokster defendants, in effect, did "nothing to facilitate, and [indeed could not] do anything to stop, the alleged infringement."[107]

With respect to the "material contribution to the infringing activity of another" element of contributory infringement, the court found that these cases were distinguishable from *Napster*. Specifically, neither defendant provided the "site and facilities" for direct infringement, nor did they do anything to facilitate or enable downloaded file exchanges that would be necessary to materially contribute to user infringement.[108]

Turning to vicarious infringement, the California court found that the defendants clearly derived a financial benefit from the infringing conduct because the ability to trade copyrighted songs and other copyrighted works was a "draw" for users of defendants' software.[109] But, the court also found that the defendants had no right or ability to control the software *once it was acquired by end users* and therefore did not meet the "right-and-ability-to-supervise element" necessary to support a vicarious infringement finding.[110]

The Attack on the Internet Service Providers

More recently, pursuant to the authority granted by Section 512(h) of the Copyright Act, the recording industry has taken steps to stop file swapping by issuing subpoenas to authorized Internet Service Providers ("ISPs"), seeking the names and mailing addresses of subscribers involved in music sharing.[111] In July 2002, the RIAA directed a subpoena to Verizon.[112] Verizon refused to cooperate, arguing that Section 512(h) did not apply to ISPs who acted merely as a conduit and did not store infringing material on their

105. *Id.* at 1037.

106. *Id.* at 1038.

107. *Id.* at 1037.

108. *Id.* at 1039-42.

109. *Id.* at 1044.

110. *Id.* at 1045.

111. 17 U.S.C § 512(h) (2004).

112. Recording Indus. Ass'n of Am., Inc. v. Verizon Internet Servs., Inc., 351 F.3d 1229, 1232-33 (D.C. Cir. 2003).

servers.[113] The district court rejected this argument and ordered Verizon to disclose the name of its subscribers.[114] In a separate suit, Verizon filed a motion to quash the subpoena and lost that case as well.[115]

On appeal from both decisions, the Court of Appeals for the District of Columbia held that Section 512(h) did not authorize the subpoenas that were issued because the copyright owners failed to meet the statute's notice requirement.[116] Subsection 512(c)(3)(A)(iii) of the Copyright Act requires "[i]dentification of the material that is claimed to be infringing or to be the subject of infringing activity and that is to be removed or access to which is to be disabled, and information reasonably sufficient to permit the service provider to locate the material."[117] The court found that the RIAA's notification identified "absolutely no material Verizon could remove or access to which it could disable."[118] Moreover, no matter what information the copyright owner provided, an ISP acting as a mere conduit can neither "remove" nor "disable access to" infringing material because such material is not stored on the ISP's servers, or controlled by the ISP.[119] Therefore, the court held that section 512(h) does not authorize the issuance of a subpoena to an ISP acting as a mere conduit for the transmission of information sent by others.[120] While expressing sympathy with the problem for which the copyright owners sought redress, the appellate court was not willing to stretch the DMCA to cover Verizon's activities:

> We are not unsympathetic either to the RIAA's concern regarding the widespread infringement of its members' copyrights, or to the need for legal tools to protect those rights. It is not the province of the courts, however, to rewrite the DMCA in order to make it fit a new and unforeseen internet [sic] architecture, no matter how damaging that development has been to the music industry or threatens being to the motion picture and software industries. The plight of copyright holders must be addressed in the first instance by the Congress; only the "Congress has the constitutional authority and the institutional ability to accommodate fully the varied

113. *Id*. at 1233.

114. *Id.*

115. *See In re* Verizon Internet Servs., Inc., 257 F. Supp. 2d. 244, 247, 275 (D.D.C. 2003).

116. *Recording Indus. Ass'n of Am., Inc*., 351 F.3d at 1236.

117. 17 U.S.C. § 512(c)(3)(A)(iii).

118. *Recording Indus. Ass'n of Am., Inc*., 351 F.3d at 1236.

119. *Id*. at 1235.

120. *See id*. at 1236.

> permutations of competing interests that are inevitably implicated by such new technology."[121]

The Verizon ruling is limited to ISPs that are mere passive conduits and that do not have infringing material on their servers.

The Attack on Individual File-Swappers

Tracking Downloaders

Following the *Napster* and *Aimster* cases, the RIAA has begun to focus its enforcement efforts against individuals who download music files over the Internet. The RIAA has been successful in identifying potential infringers by using its library of digital fingerprints, called hashes, which uniquely identify MP3 music files that have been traded on Napster since May 2000.[122] In order to locate direct infringers, the RIAA compares the traded music files with those in its library to determine whether the user legally recorded the song from a CD or downloaded it over the Internet.[123] The RIAA has also been able to identify potential infringers through an examination of metadata tags — snippets of information embedded in many MP3 music files.[124]

The RIAA began these enforcement efforts against direct infringers by serving subpoenas on Boston College, MIT, and other universities.[125] Then, in early 2003, the RIAA filed suit asserting direct infringement against four students at Princeton, Rensselaer Polytechnic Institute, and Michigan Technological University.[126] Various entertainment industry groups assisted the RIAA's efforts by sending letters to 2,300 university presidents, "urging a tough stand on copyright infringement" for their students.[127]

Beginning in the summer of 2003, the RIAA commenced a public relations campaign, in which it threatened to sue individuals for damages as high

121. *Id*. at 1238 (quoting Sony Corp. v. Universal City Studios, Inc., 464 U.S. 417, 431 (1984)).

122. Associated Press, *Revealed: How RIAA Tracks Downloaders* (Aug. 28, 2003), *at* www.m4radio.com/main/messageboard/377.html (last visited June 21, 2004).

123. *Id*.

124. *Id*.

125. Associated Press, *Schools Fight Music Piracy Subpoenas* (July 23, 2003), *at* www.freedomfight.ca/forum/showthread/t-585.html (last visited June 21, 2004).

126. Associated Press, *Music Industry Sues Students Over Alleged File-Swapping Networks* (April 4, 2003), *at* http://sfgate.com/cgi-bin/article.cgi?f=/N/a/2003/04/04/state0732EST0039.DTL&nl=fix (last visited June 21, 2004) (The Michigan student alone offered more than 650,000 songs for downloading, in addition to the 1,866 songs from his personal collection.).

127. *Id*.

as $150,000 per copyrighted song for illegally swapping copyrighted music over the Internet.[128] Although the RIAA promised only to go after users "who [were] illegally distributing a *substantial amount* of copyrighted music,"[129] it served subpoenas on ISPs seeking the identity of people who had downloaded as few as five songs.[130] As a result of the RIAA's efforts, in July 2003, the recording industry obtained 871 federal subpoenas against service providers, seeking disclosure of individual computer users suspected of illegally sharing copyrighted songs.[131]

From the beginning of its public relations campaign, the RIAA has expressed interest in settling cases against individual file swappers without litigation.[132] The RIAA recently publicized an amnesty program, in which it promised not to sue users who signed a "clean-slate" affidavit.[133] The "Clean Slate" Program granted reprieve to users who voluntarily identify themselves, erase downloaded music files, and promise not to share music on the Internet in the future.[134] However, clearly such relief does not apply to the more than 1,600 users whom the RIAA has already targeted with subpoenas.[135]

At the same time that it revealed its amnesty program, the RIAA filed a first wave of 261 lawsuits against individual Internet music file-sharers.[136] In one of these proceedings, the RIAA sued a twelve-year old girl. She became the first defendant to settle a lawsuit with the RIAA, agreeing to pay $2000, or about $2 for each song she allegedly "shared."[137]

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128. Associated Press, *New File-Sharing Sites Hide Users' IDs* (July 1, 2003), *at* http://www.elipsenet.com/media/cnn (last visited June 21, 2004) (This is the maximum recovery of statutory damages allowed by statute.).

129. Associated Press, *Will you be sued by the music industry?* (Aug. 19, 2003) (emphasis added), *at* www.cnn.com/2003/TECH/internet/08/19/downloading.music.ap/index.html.

130. Associated Press, *Music Industry Wins Approval of 871 Subpoenas* (July 18, 2003), *at* http://www.usatoday.com/tech/news/techpolicy/2003-07-18-riaa-suits_x.htm (last visited June 21, 2004).

131. *Id.*

132. *Id.*

133. CNN, *261 Music File Swappers Sued; Amnesty Program Unveiled* (Sept. 9, 2003), *at* www.cnn.com/2003/TECH/internet/09/09/music.downloading/index.html (last visited June 21, 2004).

134. CNN, *12-Year-Old Settles Music Swap Lawsuit* (Sept. 9, 2003), *at* www.cnn.com/2003/TECH/internet/09/09/music.swap.settlement/index.html (last visited June 21, 2004).

135. *Id.*

136. *Id.*

137. *Id.*

Another defendant was a seventy-one year-old grandfather from Richardson, Texas, whose teenage grandchildren downloaded music onto his computer while they visited his home.[138] And another was a Yale University professor who downloaded about 500 songs before his ISP notified him about the RIAA's interest in his activities.[139]

By September 2003, the RIAA had settled 52 of the 261 suits filed against alleged copyright infringers.[140] The settlements ranged between $2500 and $7500 per case, with one settlement in excess of $10,000.[141] The settlements, which do not require any admission of wrongdoing, require the users to destroy illegally downloaded songs and agree "not to make any public statements that are inconsistent" with the settlement agreements.[142] In addition, some users have settled before being sued.[143] The RIAA claims that 838 people have actually requested amnesty from future lawsuits in exchange for a formal admission, an agreement to delete the songs, and a pledge not to engage in this activity again.[144] A spokesman for the RIAA stated that 233 of the 382 suits that had previously been filed had been settled for an average of $3,000.[145] The potential settlement of an additional 100 lawsuits was pending as of January 2004.[146]

The Second Wave of Lawsuits

In January 2004, the RIAA sued 532 more users for illegally distributing copyrighted music over the Internet.[147] This time, the lawsuits designated "John Doe" defendants whose names were presently unknown to the RIAA and who were identified only by their internet protocol addresses.[148] According to the RIAA, the latest lawsuits target those whose actions are "egre-

138. Associated Press, *Who's Targeted By Music Swapping Suits?* (Sept. 9. 2003), *at* http://www.inreview.com/archive/topic/9061.html (last visited June 21, 2004).

139. *Id.*

140. Associated Press, *RIAA Settles 52 of 261 Lawsuits Over Downloading* (Sept. 30, 2004), *at* http://www.foxnews.com/story/0,2933,98644,00.html (last visited June 21, 2004).

141. *Id.*

142. *Id.*

143. *Id.*

144. *Id.*

145. Bob Keefe, *Music File-Sharers Hit by New Round of Lawsuits*, AUSTIN AMERICAN STATESMAN, Jan. 22, 2004, at C1.

146. *Id.*

147. CNNMoney, *More Song Swappers Sued* (Jan. 21, 2004), *at* money.cnn.com/2004/01/21/technology/riaa_suits/index.htm (last visited June 21, 2004).

148. *Id.*

gious," as these defendants had uploaded, on average, about 858 songs.[149] The lawsuits did not target people who downloaded music from such networks as Grokster, Kazaa, and Gnutella.[150]

The Third Wave of Lawsuits

In February 2004, the RIAA sued another 531 John Doe computer users in Atlanta, Philadelphia, Orlando, and Trenton.[151] These John Doe defendants were customers of ISPs, such as Comcast Cable Communications, Inc., and Earthlink Inc., based in those cities.[152] The RIAA's latest group of filings represents the largest number of complaints filed at one time since the beginning of its public relations campaign in the summer of 2003.[153]

The Rise of Online Music Stores

As a result of the ease of downloading music via the Internet and the effects that downloading illegal music has had on the music industry, more record companies have been turning to online music stores as a way to recoup some of the money lost from Internet file swapping. Online stores, such as BuyMusic.com, iTunes, Roxio, and Real Rhapsody, have already begun to replace traditional music stores, especially for a generation already accustomed to shopping on the Internet and downloading music. Moreover, the success of such online music stores seems assured. In 2003, American music fans paid to download more than thirty million songs from the Internet.[154]

In the first month after Apple Computer's iTunes' launch in April 2003, users paid a fee to download songs from the site, at an initial rate of one million songs per week. .[155] For ninety-nine cents, a subscriber with a Macintosh can download a song and play it on many different sources, including

149. Keefe, *supra* note 145, at C1.

150. *Id.*

151. Associated Press, *RIAA Targets More Downloaders* (Feb. 17, 2004), *at* http://www.cbsnews.com/stories/2004/04/26/entertainment/main613773.shtml .

152. *Id.*

153. *Id.*

154. Reuters, *Execs Vow Global Crackdown on Music File Sharing* (Jan. 22, 2004), *at* www.cnn.com/2004/TECH//internet/01/22/media.music.reut/index.html (last visited June 21, 2004).

155. CNNMoney, *Giving iTunes A Careful Listen* (May 27, 2003), *at* money.cnn.com/2003/05/27/technology/techinvestor/hellweg/index.htm (last visited June 21, 2004).

portable devices.[156] Apple has now made deals with Universal, Warner, BMG, EMI, and Sony Music Entertainment.[157]

BuyMusic.com's site, which was launched in July 2003, now offers more than 300,000 songs from five major record labels for between seventy cents and $1.29 per song, or between $7.95 and $12 for an entire album.[158] However, this site limits users' ability to transfer the songs to multiple computers and to portable devices.[159]

EMI Music, a major record label, has supported legitimate P2P file swapping such as iTunes.[160] At a January 2004 industry conference, Ted Cohen, EMI's Senior Vice President for Digital Development and Distribution, urged people to give legal file sharing a chance, stating "[W]e want to learn how to embrace P2P."[161]

Europe has also embraced similar online music stores through companies such as Wippit, a British-based company that allows subscribers to download any of Wippit's tunes and save them in unlimited locations for around $50 a year.[162] Although most of the 200 recording companies who are currently members of Wippit are independent, EMI will soon join the venture.[163] Four other major record labels are currently discussing joining as well.[164]

A German company, 4FriendsOnly.com, is taking a different route. 4FriendsOnly.com will offer fans more than the opportunity to listen to music; it expects to pay users a commission if they pass on songs to friends and the friends then purchase them.[165] Friends who receive a recommendation will even have access to the song, enabling them to listen several times before deciding whether or not to buy.[166] Chief executive Jurgen Nutzel be-

156. Associated Press, *Apple's Online Music Coup Ignites a Budding Industry* (Jan. 11, 2003), *at* http://www.kansascity.com/mld/kansascity/business/5825224.htm?1c (last visited June 21, 2004).

157. *Id.*

158. Associated Press, *Buy Guy Launches Music Service* (July 22, 2003), *at* http://www.cbsnews.com/stories/2003/07/22/tech/main564511.shtml (last visited June 21, 2004).

159. *Id.*

160. Associated Press, *Taming the File-Swapping Beast* (Feb. 3, 2004), *at* www.cnn.com/2004/TECH/internet/02/03/taming.file.sharing.ap/index.html (last visited June 21, 2004).

161. *Id.*

162. *Id.*

163. *Id.*

164. *Id.*

165. *Id.*

166. *Id.*

lieves that users who receive a commission may be less likely to burn extra copies of songs for friends.[167]

The Future of the Music and Entertainment Industries

Though the music industry's future is currently unclear, it appears likely that the downloading of music recordings – both legal and illegal — is here to stay. Whether the online distribution model merely supplements or completely supplants the traditional distribution channels for digital recordings remains to be seen. For now, it is clear that the Napster phenomenon hasn't changed the whole landscape of the music and entertainment industries.

167. *Id.*

Co-operative Development of Technology: Understanding the Risks and Creating Opportunities to Excel

by
*David L. Hitchcock**

INTRODUCTION

While technological advances come with increasing speed and complexity, the globalization of the economy has forced companies to become leaner and more focused on their core areas of expertise. As a result companies are forced to seek and acquire assistance from others when dealing with certain technological areas. In such cases, businesses often form co-operative relationships, such as outsourcing development work, mutual development agreements, joint ventures. These and other co-operative affiliations serve to facilitate a rapid adaptation to market and technology changes. These types of arrangements often come with significant risks, among them loss of trade secrets and competitive know-how, the unwitting creation of competitors, impeded marketing options, and legal obstacles related to exploiting and enforcing intellectual property rights. At the same time, these affiliations offer opportunities to excel by reducing costs, enabling rapid product development, as well as opportunities to benefit from the marketing prowess of others. Thus, speed has become the focus of the business manager, who often recognizes that those businesses that succeed in getting their product to the market first generally retain a higher percentage of the market share than late-comers into the marketplace with similar products or services. The drawbacks described above often arise to outweigh the benefits when the legal framework of the co-operative effort is either inappropriate to begin with, or was ill-conceived to suit the expectations of the parties.

New market dynamics will continue to change the manner in which businesses are structured and conducted. Dr. John Caris predicts that future competitive companies will be those which are small, highly specialized, and affiliated through a nodal network.[1] Dr. Caris' business model envisions a highly flexible and adaptable system, one which can change rapidly along with swiftly fluctuating markets and technologies. This emerging competitive environment demands a greater degree of cooperation between a client's operational units and their lawyers.

Historically, the relationship between attorneys and their clients has not been well-suited to succeed in a highly fluid business environment. This

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1. Dr. John C. Caris, *2nd Renaissance Programs*, the ISIS Companies, *at* http://www.isiscompanies.com (last visited June 17, 2004).

paper will focus on developing a relationship between attorneys and business managers to maximize the possibility that co-operative development arrangements are truly opportunities to excel. Furthermore, it will focus on some significant risks of co-operative technology development, which many agreements either fail to address adequately or overlook entirely.

This paper's discussion of these issues shall be addressed from the standpoint of a party seeking developmental technology or consulting services from another party. Not unexpectedly, the interests of the supplier of the technology or services will, in some cases be adverse; in other cases, the interests of the supplier may be mutual – such as within a joint venture where both parties are supplying some of the technology. Traditional attorney-client counseling practices do not sufficiently maximize the potential gains from outsourced technology.

The following description of a typical scenario may help to inform the discussion below: various business managers belonging to at least two different business entities embark upon a meeting arranged in order to discuss a proposed relationship, presumably with the intent that any agreement or affiliation shall be sufficiently beneficial so as to make it worth each party's investment – be it time, resources, or both. Said business managers then reach an agreement that quite naturally tends to focus on those terms that address the immediate business needs at hand, leaving their lawyers to then simply "paper the deal". The problem inherent in this typical scenario is that, at that very moment, it seats business manager and lawyer at odds. One might even say their respective positions at that point are polar opposites from one another. On one hand, business manager wants an agreement drafted – rapidly – so as not to delay the time-sensitive development work. And while speed does often lead to the competitive advantage, by nature, the lawyer needs and wants to carefully consider the arrangement before completing a final draft so as to ensure that the agreement provides the requisite client protection, especially in terms of intellectual property ownership, later options, and adequate protection from any future infringement claims. The lawyer is also well aware that a poorly prepared, hastily drafted document itself could even result in future litigation. Moreover, every lawyer knows that messy disputes often end with ultimately unhappy clients, the kind that are not likely to bring back any future business.

This traditional approach to the attorney-client relationship has resulted in much lament, bewailing lawyers' role in business relationships, such as a call to "reduce the number of lawyers", evoking comparisons to beavers: that lawyers "get in the middle of the stream and dam it up."[2] The business manager generally views the lawyer as overly cautious, nitpicking, and prone to generate unnecessary expense. Moreover, the deal-making process is frequently slowed since the parties are forced to confront and resolve significant

2. Donald Rumsfeld, *Rumsfeld's Rules: Advice on Government, Business, and Life*, Analects Ink, *at* http://www.analects-ink.com/weekend/020308.html (last visited July 7, 2004).

legal issues that were not previously considered or addressed. Previously agreed-upon terms of the deal are sometimes then retracted in light of the impact of the legal issues relevant to the deal that the lawyers have uncovered. Then, as negotiations thusly become bogged down by circumstances surrounding legal issues within the deal, the business managers begin to see, perhaps subjectively, the proverbial "window of opportunity" closing. This combination of actions and reactions often results in either a deal that never comes to fruition, or to the completed acceptance of a less that ideal agreement – for one or both parties to the deal.

Unfortunately, this same circle of dysfunction within the deal making process is repeated again and again in attorney-client relationships throughout the country. In order to combat this very real problem, attorneys must learn to assist their clients in forming business practices which avoid the aforementioned issues. The following discussion outlines an approach that includes the use of a risk matrix, designed to identify issues early-on in the deal making process, as well as proposes that a "Deal-Landing Team" be formed upon the initiation of projects that may be susceptible to the dysfunction described above.

A risk matrix can provide effective guidance to business managers by helping them to recognize the relevant issues early-on in the process, and by supplying a project staff that is equipped to consider those issues at hand in a given project. The "Deal-Landing Team" (DLT) should be assembled based upon the results of the risk-matrix analysis. The operation and composition of the DLT shall be described in greater detail in part V, below.

Structurally, several approaches may be contemplated as alternative routes to reaching the business objective. The types of deals agreed upon may include: (a) licensing technology from an outside source; (b) engaging outside services to develop a technology; (c) co-operative research agreements that contemplate joint development efforts; and (d) forming a joint venture. Joint ventures can take on many forms, among them partnerships, limited partnerships, and limited liability companies.

The aforementioned risk matrix is the crucial first step in an improved process. The matrix should be developed by taking into account those risks that are unique to the client's business. A simplified high-level example appears below as an illustration.[3]

An effective risk matrix provides managers with basic planning notices, as well as the level of risks associated with the proposed deal. It also predicts how straightforward the development of an appropriate deal structure will be.

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3. A detailed matrix can effectively be constructed using a program which presents the manager with a series of questions concerning deal points generated from past experience. The manager selects the points applicable to the current deal and the program generates one or more weighted risk factors. The degree of risk thus provides the manager with issues to then discuss with various specialists; the risk assessment also assists in determining the appropriate makeup of the DLT.

VEHICLE / GOAL	A joint business venture where the joint venture will be the operating entity	Co-development agreement in which each party will provide technology and/or proprietary information	Outside vendor to supply custom product
New product in a new market	HIGH-Complex	HIGH-Intermediate	MODERATE-Intermediate
Enhancement or expansion of an existing product line	MODERATE-Complex	MODERATE-Intermediate	MODERATE-Intermediate to Basic
Administrative or management tool	NOT APPLICABLE	MODERATE-Intermediate	LOW-MODERATE-Intermediate to Basic

Following the matrix above, consider the following contemplated transaction: the formation of a joint venture in the production of a new product designed for an untested segment of the market. The creation of a joint venture with another company requires much more thought and consideration than a structure that involves a straightforward licensing of patent rights. Furthermore, a joint venture involves legal issues that, if not properly addressed, carry high risks. Risks such as the loss of the right to use the intellectual property supplied to the joint venture. A joint venture will also likely involve a complex business structure, as well as other related agreements. Furthermore, the matrix can also be used to direct the manager's attention to significant issues that must be addressed. As mentioned, the matrix can also effectively lead to the proper staffing of the DLT.

Another advantage of the matrix is that it can effectively assist the business planner in applying the appropriate resources in view of the importance and complexity of the deal. A joint venture related to a new product in a new market area merits much greater attention than, for example, a software system for internal records management. Thus, use of the risk matrix in conjunction with the DLT enables the company to successfully negotiate the deal from the start, in a manner designed to maximize its potential.

I. Significant Legal Issues are Frequently not Addressed or are Addressed Inadequately

As discussed above, the typical business scenario dictates that the business managers agree upon the deal's terms, followed by a request to the lawyer to "paper the deal". At this point, the lawyer may then raise a number of important legal issues not addressed in the business negotiations. The sequence of events in the typical business scenario frequently results in the acceptance of terms which a fully informed business manager would not have entered with full knowledge, earlier in the process, of all of the pertinent legal issues. Often, a less than ideal agreement is accepted because there is not time to seek an alternate arrangement. The integrated DLT approach

allows for the early identification of issues, which in turn allows for the acceptance of terms based on a considered evaluation of the risks.

Discussed below are some of the more significant legal issues that many deals frequently overlooked or do not sufficiently addressed. For purposes of illustration, we will refer to a software product as the "product of interest". Software has been selected because a computer program typically embodies most of the intellectual property rights, thus a computer program can embody patented technology, copyrightable works, trade secrets, mask works,[4] as well as trademarks. The term "engaging party" (the client) as used herein refers to the party initiating the deal. The term "vendor" is used to describe the other party.

A. Ownership Rights, Generally

A common misunderstanding by many who contract for the development of technology from a third party is the belief that, because they engaged and paid for the development of the technology, they own the intellectual property developed. However, ownership of intellectual property rights is not governed simply by whether one paid for the work. Moreover, ownership principles for the various intellectual property rights are not the same in every case. Another issue involved may be joint ownership, which is mentioned in the paragraphs below briefly and again in section IVB, *infra*.

a. Copyright

In the United States, Copyright Law generally recognizes the author(s) of an original work of authorship as the owner(s) of said work. An employer may be considered to be the author under the "work made for hire" doctrine.[5] This doctrine provides that an employer is the author of a work (an original work of authorship) if it is made by an employee within the scope of his duties.[6] Notably, the work for hire doctrine does not extend to consultants or others who are not actual employees of the company.[7] Many companies will hire a vendor to develop a computer program, advertising materials, and so on, while having no agreement in place addressing or assigning the ownership of the copyright. The result in such cases is that, although the company owns the copy of the work delivered to it, it does not own the copyright in the work: the right to reproduce, make copies, and the other rights which

4. *See* 17 U.S.C. § 901 et seq. (2000). A "mask work" is a registration of a printed circuit. A printed circuit in certain cases may embody in a physical form, a function which could alternately have been performed by software.

5. 17 U.S.C. §§ 101, 201(b) (1976).

6. *See* 17 U.S.C § 101 The "work for hire" doctrine also applies in certain other, narrow circumstances in cases of commissioned works.

7. Cmty. for Creative Non-Violence v. Reid, 490 U.S. 730, 737 (1989).

accrue to a copyright owner.[8] In this software scenario, the vendor owns the copyright, resulting in significant limitations on the engaging party's enjoyment of the work. These limitations may include the inability to make copies, derivative works (updates and revisions), maintenance of the software, and the inability to license it to others.

When both the engaging party and the vendor contribute to the creation of an original work of authorship, both are deemed authors. The respective ownership rights depend upon the nature of the work as either a compilation or a joint work.[9] A joint work is one prepared by two or more authors with the intention that their contributions be merged into inseparable or interdependent parts of a unitary whole. The co-authors of a joint work are treated as tenants in common, with each having an undivided interest in the whole, regardless of the relative portions each contributed.[10] Furthermore, each may exercise the rights of a copyright owner without permission of the other, and each is immune from infringement claims by the other owner.[11] However, a co-owner does owe an obligation to the other co-owner to account for any profits earned.[12]

In the case of a collective work, such as an encyclopedia, ownership in the collection is separate and distinct from ownership of the individual works in the collection. Each author of each portion retains the copyright in the individual contribution. The owner of the copyright in the collective work has limited rights, which are confined to the collection as a whole.[13] Transfer of copyright ownership may only occur by operation of law or by written agreement.[14] Thus, when the engaging party hires a vendor to create a work, a written agreement with the vendor must be in place that provides for the transfer of copyright ownership – provided, of course, that the engaging party wishes to own the copyright.

Copyrights granted by license are construed in favor of the copyright owner. For licensing purposes, exclusive copyrights can be divided into the right to make copies by market segments, such as motion pictures and video. Frequently, disputes arise concerning how to address and dispose of rights in the works associated with technology not yet existing at the time of original creation. For example, does the grant of a license to make a "motion picture"

8. 17 U.S.C. § 106 (1976).

9. *Id.* § 101.

10. Childress v. Taylor, 945 F.2d 500, 505 (2nd Cir. 1992).

11. Cortner v. Israel, 732 F.2d 267, 272 (2nd Cir. 1984), Weissman v. Freeman, 868 F.2d 1313 (2nd Cir. 1989), *cert. denied*, 493 U.S. 883 (1989).

12. Oddo v. Ries, 743 F.2d 630, 633 (9th Cir. 1984).

13. N.Y. Times Co., Inc. v. Tasini, 533 U.S. 483, 488 (2001), Greenberg v. Nat'l Geographic Soc'y, 244 F.3d 1267, 1272 (11th Cir. 2001), *cert. denied*, 534 U.S. 951 (2001).

14. 17 U.S.C. § 204(a) (1976).

from a book prior to the development of videotape media include the right to make video tapes? For example, a party licensed to reproduce books before the advent of the digital age did not have the right to produce electronic books.[15]

At least one court has held that an exclusive license is not freely transferable by the licensee where the agreement is silent as to the right to assign. Where the license was silent as to the right to assign, it could only be assigned with the consent of the owner.[16] Additional risk exists with respect to rights in a copyright-based agreement with an individual author, because they are terminable.[17] If the author of a work is an individual, the author or any heirs may have a right to terminate a previous exclusive or non-exclusive license.[18]

To be certain, there are significant risks related to ownership in any work prepared by an outside source. In addition to addressing the issue of copyright ownership, experience has shown that the agreement should also incorporate any obligation by the supplier to ensure that it actually owns the copyright it purports to transfer. In reality, most software vendors do not clearly understand these principles. An unfortunate result of this ignorance can and often is the eventual loss of copyrights in the works they create.

b. Patent

Similar to copyrights, patent rights belong inherently to the inventor. Under federal patent law, that inventor must be an individual. Thus, unless an employer obligates an employee to assign inventions to the employer, the individual employee automatically owns any inventions – regardless of whether created under the scope of the inventor's employment.[19] This part of the patent law system inevitably means that virtually all employees should be required to enter into an assignment agreement favoring the company before beginning employment. As mere contracts, these employment agreements are then governed by state law. In fact, even in the absence of a writ-

15. Random House, Inc. v. Rosetta Books, L.L.C., 150 F. Supp. 2d 613 (S.D.N.Y. 2001), *aff'd*, 283 F.3d 490 (2nd Cir. 2002). Random House was licensed to reproduce books. The authors later licensed Rosetta to produce electronic books. The court ruled that Random House's license to reproduce books did not include electronic books.

16. Gardner v. Nike, Inc., 279 F.3d 774, 779-80 (9th Cir. 2002).

17. *See* 17 U.S.C. § 203(a) (1976); *see also* 17 U.S.C. § 304 (2000).

18. 17 U.S.C. § 304.

19. An employer may have some rights to an invention made by an employee not obligated to assign the invention to the employer under the Shop Rights Doctrine. This doctrine provides that an employee, who made an invention utilizing the resources of his employer, and during his hours of employment, has a claim for a non-exclusive right to use the invention. This shop right is generally considered to be personal to the employer and not assignable to others.

ten employment agreement, most jurisdictions recognize an implied obligation to assign inventions patent rights over to an employer when the employee's job duties include things like research and development.[20] A company may have some rights to an invention made by an employee with normal duties that do not include research and development tasks. This is possible under the "shop rights" doctrine, whereby the employer receives a personal, non-exclusive license in the invention when it is created on company time or by utilizing company-owned resources.

Under United States patent law, absent an agreement to the contrary, each inventor has an undivided interest in the ownership of the patent.[21] Each co-owner can exploit and practice the invention of the patent without the consent of the other owner and without liability for infringement to the other owner. However, in contrast to copyright law, the co-owner has no obligation to account to the other co-owner for any profits earned.[22] Thus, when the vendor is a co-inventor, that entity will own a type of rights in the invention which could ultimately remove all value in the development for the engaging party; legally, the co-inventor/vendor is free to license or sell its interest to anyone, even a direct competitor.

Furthermore, there is also the risk that the vendor will not have sufficient patent rights-assignment contracts with its own employees, in which case they may end up with an employee that owns an interest in the company's development project. In one case, an unnamed inventor sold his rights to the invention to a defendant in an infringement suit. Because of the court's finding that the unnamed co-inventor was a co-owner of the patent, the defendant in that case was also a co-owner of the patent in the suit. Thus, the plaintiff co-inventor was denied any right to injunctive relief.[23]

While many agreements do not address who will own inventions, sometimes even those agreements which address ownership fail to demand that the vendor warrant that it has appropriate employment contracts in place with sufficient provisions for the mandatory assignment of inventions.

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20. Scott Systems Inc. v. Scott, 53 U.S.P.Q.2d 1692, 1694 (Colo. Ct. App. 2000), *cf.* Banks v. Unisys Corp., 228 F.3d 1357 (Fed. Cir. 2000) (reversing summary judgment of implied-in-fact contract and holding that the refusal of an employee to sign the standard agreement that included a requirement to assign inventions raised a material issue of fact of whether the necessary meeting of the minds occurred, proof of which is required to support an implied contract).

21. 35 U.S.C. §§ 261-62 (1952).

22. *Id.* § 262.

23. Ethicon Inc. v. United States Surgical Corp., 135 F.3d 1456, 1468 (Fed. Cir. 1997), *cert. denied*, 525 U.S. 923 (1998) (In this case Choi was an unnamed co-inventor of the patent. Choi licensed the defendant and intervened in the initial action to establish Choi's claim as a co-inventor. Choi's claims as co-inventor were established and his license to the defendant was an effective defense.)

c. Trade Secrets

Trade secret protection exists under the laws of the individual states; thus the definition of a trade secret varies among the states. Most states have adopted a definition of trade secret pursuant to the Uniform Trade Secrets Act or the Restatement of Torts.[24] Therefore, the legal elements required to establish trade secret rights, as well as the associated ownership principles, differ from state to state.

Generally, the developer owns the resulting trade secret(s). Such an owner merely holds the rights to (a) recover damages, and (b) to prevent the use of the trade secret by the defendant (having acquired the proprietary information improperly). While a trade secret can owned by more than one developer, the principles of co-ownership with regards trade secret use by one owner without the consent of the other are not well established; outcomes are generally heavily influenced by the terms of the parties' contract.[25] Moreover, in certain circumstances co-owners of trade secrets may not even have a right of disclosure to others.[26]

Any potential engaging party should be made aware of the possible marketing limitations often placed upon products embodying a vendor's trade secret. In general, most software vendors regard the underlying code to their software to be a trade secret that is embodied within the software product. As such, when the sale of products will reveal the trade secrets of the vendor, there must be a clear understanding, upfront, of the engaging party's intention to sell the resulting product in a manner that could or would disclose the vendor's trade secret.

d. Trademark

A trademark is a symbol that serves to identify the source of a particular good or service and to distinguish it in the marketplace from similar goods or services offered by competitors. Trademarks exist by the adoption and use of the mark in connection with the sale of the good or service, thus the mark is owned by the entity which is the source of the good or service, or which exercises appropriate control over the manufacturer or offers of same[27]. In an arrangement where the vendor will market the product, ownership of any future developed trademarks should be considered. When proper terms are included in the agreement, the engaging party may rightfully claim any benefit of the vendor's use of the resulting product.

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24. R. M. MELQUIN, MELQUIN ON TRADE SECRETS, Nov. 2003, § 1.01.

25. B. F. Gladding & Co., Inc. v. Scientific Anglers, Inc., 245 F.2d 722 (6th Cir. 1957) (finding jointly-developed trade secret owned by both parties; thus each party was entitled use enjoyment under the parties' agreement).

26. Morton v. Rank Am., Inc., 812 F. Supp. 1062, 1072 (C.D. Cal. 1993).

27. Note: In the U.S. there must be usage of the trademark in commerce for rights to exist; whereas, in many foreign countries trademark rights depend from registration rather than use.

B. The Importance of Understanding the Ramifications of Joint Ownership

While the deal structure may be such that joint ownership is not anticipated to be involved, actual execution of the terms of the deal may still end with joint ownership in the product. While the master agreement could address most of the conceivable issues that may arise in any business deal, most clients simply do not want the added expense of having an exhaustive agreement drawn up that covers every remote possibility or scenario. The scope of issues addressed by the terms of the contract is ideally determined each party's level of risk tolerance in the deal. And, even if joint ownership is not contemplated or even considered remotely possible, when an agreement places part or all of a companies livelihood on the line, as in cases of the business's primary product or service, relative to the possible risk, the issue clearly merits the additional effort and expense needed to ensure that joint ownership is addressed – protecting the client business if and when an unanticipated joint ownership situation arises from a cooperative business development deal should be of equal concern to the business parties as it would be to their attorneys.

In practice, many business managers consider joint ownership concerns to be unimportant for various reasons. Since engaging managers regard the vendor (at least initially) as a partner, one with which they share the same goals and interests in the project. Also, managers may be unseasoned, or unfamiliar to the fallout of a deal that has gone bad; those individuals simply do not yet appreciate how disruptive and wasteful the cleanup period can become. What's more, a business manager may falsely believe that joint ownership, even if unintended, is still acceptable. This false sense of comfort probably stems from the popular misconceptions that any co-owner is legally obligated to (a) obtain consent from the other owner before any use of the product of the deal, and (b) share the profits, if any, gained from any permitted unilateral use with the other, consenting, owner. As previously explained, *supra*, under part IVA, the law in this area is not always intuitive, and thus understandably does not necessarily match assumptions made by a average business person, even those assumptions based upon his or her own personal business experiences. For instance, contrary to the common misconceptions noted above, the co-owners of a patent each holds the right to unilaterally license the patent to another party – without consent from co-owners, and is under no obligation to share or otherwise account for any use-related profits.[28] In the business agreements contemplated in this paper, the chief risk of joint ownership in patented technology is competitive: the co-owner (intended or otherwise) could simply license the technology to a main competitor or assign its interests to the competition, thereby destroying or substantially reducing the value of the main patent right – to exclude others

28. 35 U.S.C. § 262. Thus, without a written agreement to the contrary, each owner is free to do what he or she pleases with the patent without the requirement to account to the other co-owner.

from making the invention. What's more, other patent rights are similarly affected, among them is the right to sue for patent infringement. Under a jointly-owned patent, a single co-owner has the right to block an infringement suit, thus essentially taking the right from the other owners, by simply refusing to voluntarily join in an infringement suit.[29] Closer inspection, taking into account the points of potential conflict described above, confirms the urgent need for prompt and competent discussion of the proactive options for resolving these and other important legal issues before inking the deal.

C. Pre-existing Intellectual Property Rights

a. The Parties' Intellectual Property

As with traditional property, the intellectual property (IP) rights bundle includes the right to exclude others from its use. Conversely, ownership of an IP right does not automatically include the right to use the IP; similarly, patent ownership does not always include a right to make the invention. To illustrate this apparent paradox, consider a current patent owner who infringes an earlier patent in making his now-patented invention. In that case, since the subsequent owner would be liable for patent infringement of the earlier patent owned by the first inventor, he would likely also be subject to enjoinment from producing the invention. The second inventor in that case is then effectively forbidden by law to use his or her rightfully-owned IP (the patented invention idea itself) until the earlier, infringed patent expires.

Surprisingly, pre-existing IP rights are among the topics most overlooked and inadequately addressed within co-operative business agreements. Vendors are almost sure to hold some sort of intellectual property rights coming into the deal, a fact that should not surprise business managers for whom the vendor's demonstrated expertise in a certain area is very likely the primary reason for the proposed co-operative deal in the first place. The engaging business party, however, perceiving the issue as complicated and beyond the scope of their agreement, will generally just assume that the necessary licenses and permissions for their use of the vendor's current IP are either in place, or are otherwise implied in the agreement. Additionally, the problem is more insidious than just that mistaken assumption. The compounding factor here is that vendors plainly lack the incentive to address the pre-existing IP issue; silence on that subject can and often does create an edge for vendors, and may even provide leverage for the vendor during subsequent negotiations for more compensation.

The very thought of the aforementioned assumption made by a client is enough to make any lawyer cringe. Technically speaking, the engaging party in that situation relies upon the existence of an implied license – an affirmative defense at most – for which the plaintiff bears the burden of proof. Further, even supposing that the implied license defense flies at trial, most courts impose strict limits upon the scope of an implied license. Addressing this

29. Schering Corp. v. Roussel-UCLALF SA, 104 F.3d 341, 345 (Fed. Cir. 1997).

issue at the outset of the agreement minimizes the odds of any future need for expensive and time-consuming litigation together with, as noted, what is likely to be a companion volatile outcome.

Accordingly, in order to avoid such costly litigation, the agreement should specifically contemplate either the transfer of ownership of pre-existing technology, or grant appropriate licenses to allow the engaging party to make and sell the result of the cooperative effort. Furthermore, the client must be educated properly; a clear understanding that a mere license to the underlying technology may not be sufficient for its intended purpose is key to clients trying to put together well-constructed and mutually-beneficial cooperative business arrangements.

Consider the situation in which the engaging party hires a software vendor to produce a program to perform a particular function. The programmer or developer compiles the deliverable by using pre-existing software, plus writing new, original software. The new software with its pre-existing work to create the product. This common scenario may hide many problems. For example, assuming that the developer also owns the copyright to its pre-existing software, the product developed likely infringes the pre-existing work.

Also, during negotiations a patent application may be pending which, if issued, could affect the deal. Agreements should either specifically provide that there are no other patents or pending patent applications that might interfere with the agreement's purpose, or state that other patents or patent applications do exist and are to be included in the product's license and price. While arguments opposing such clauses could be made, i.e. they are either unnecessary since it would essentially create an implied condition within the agreement, or that the clauses would be redundant since the failure to disclose would violate the implied covenant of good faith and fair dealing that is part of every contract. Regardless of the counterarguments mentioned, the principle remains that when it comes to enforcement, it is preferable to address a matter directly – where possible – within the express terms of the agreement, and better in most cases to avoid having to rely upon implied obligations never negotiated between the parties to the deal.

b. IP Owned by Third Parties

As the amount of the anticipated investment or potential commercial value of the deal increases, consideration should be given to a study of intellectual property owned by others that may impact the ability to market the product. Many refer to such studies as "freedom to operate" studies. However, that title engenders unrealistic expectations, because it is usually economically unfeasible to fully determine whether there is truly freedom to operate. Complex products have many subcomponents and may be made by a number of processes; thus a study of each potential area of infringement is generally impossible from a practical viewpoint. Further, with regard to patents, an unpublished patent application may be pending that could be in-

fringed because it later issues.[30] The likelihood of a relevant pending patent application increases in current "hot bed" research and development technologies. Nevertheless, these studies are well-warranted and the nature of the deal could easily justify the added expense. The value of the study is generally going to be directly related to a careful selection of which technologies to review, likely sources of infringement claims, and to the number and quality of any available design alternatives. The study should indicate the likely risks and as a powerful and effective tool to reformulate the deal when necessary. An additional benefit to the admittedly complex study process is that often times the study will also reveal potential parties for participation in the deal, which were previously unknown or not considered.

c. IP Standards

Standards Development Organizations (SDOs) develop standards surrounding intellectual property. At the outset of the relationship, it is important to determine if the client has been or is involved with an SDO. For example, a company may withdraw from a SDO and later obtain a patent covering the standard. In one such case, a suit alleged fraud on the part of company that withdrew from the SDO by a co-participant in the SDO.[31] If the engaging party is a member of a SDO, and the subject technology relates to that standard, the party must consider that the patent resulting from the work could potentially be subject to the limiting standards set for reasonable and non-discriminatory licensing.[32] At the time of publication, the Federal Trade Commission (FTC) is currently investigating whether the agency should restrict IP rights, and whether it should impose mandatory obligations for standard-setting participants. The FTC has expressed a number of concerns regarding the patent system's effect on fair competition.[33] Among the FTC's concerns: (a) that several patents may apply or attach to a single product. (b) emerging "professional patent-asserting" outfits that buy patents with the sole intention of filing lawsuits.[34] The report contended that the entire "patent thicket" was hindering development and thus competition in the marketplace.[35] It is likely that the FTC may address the issue of patent licenses

30. Most patent applications are published 18 months after filing; normally, an application is not made available to third parties prior to its publication.

31. Rambus, Inc. v. Infineon Tech. N. Am. Corp., 318 F.3d 1081 (Fed. Cir. 2003), *writ denied*, 124 S. Ct. 227 (2003).

32. James C. DeVellis, *Patenting Industry Standards: Balancing the Rights of Patent Holders With the Need for Industry Wide Standards*, 31 AIPLA Q. J., 341, 301-52 vol. 31 (Summer 2003).

33. Federal Trade Commission, *To Promote Innovation: The Proper Balance of Competition and Patent Law and Policy* (October 2003), *available at* http://www.ftc.gov/os/2003/10/innovationrpt.pdf (last visited Oct. 5, 2004).

34. *Id*. at 148-49.

35. *Id*. at 30-43.

relating to industry standards. The risks associated with development work and IP standards will likely become the subject of major change to the law at some point. This is true of IP standards more so than many of the other types of risks addressed in this paper.

D. Agreements with Foreign Entities

The risks multiply when the vendor is a foreign entity. One must take into account differences in relevant foreign law and U.S. law regarding all the risks applicable to a deal confined to the U.S. The parties must further consider the body of law surrounding multi-national deals. Depending upon the technology, licensing may be restricted by government regulations issues from, among others, agencies like the State Department and the Department of Commerce.[36]

Generally, the parties and their counsel must be cognizant of the fact that the legal principles for IP can vary dramatically between nations. One thing that the engaging party must understand is the doctrine of nationality of IP rights. The doctrine states that that United States IP law does not always apply in other countries.[37] In most other countries, the first person to file a patent application owns the invention. This, of course, deviates substantially – in operation and philosophy – from U.S. law, under which the first to actually invent owns the invention. In some countries, inventors have claims to compensation based upon the degree of success of the inventions. Additionally, in many countries trademark rights are registration-based rather than use-based. Also, some developing nations may fail to recognize trade secrets at all. Aside from these certain nations, many countries do not include the tort law aspects of U.S. law – which incorporates tort and contract law in trade secrets cases – in their trade secret case evaluations. Foreign countries also may not recognize or enforce a prohibition against reverse engineering of software. Moreover, certain contract terms that are proper under U.S. law may be unenforceable, or create risk of suit under anti-trust and similar laws of another country.[38] In addition, consent of co-owners may be required for licensing of copyrights.[39] Furthermore, some foreign countries provide rights to the authors of copyrighted works, which cannot be waived.[40] Hence, an agreement which provides waiver of such rights would be unenforceable.

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36. *See* U.S. Dep't of Commerce Bureau of Indus. & Sec. Res. Links, *available at* http://www.bis.doc.gov (last visited June 18, 2004); *see generally* Export Admin. Regulations Database, *available at* http://www.access.gpo.gov/bis/ear/ear_data.html (last visited Oct. 5, 2004).

37. PETER D. ROSENBERG, PATENT LAW FUNDAMENTALS § 18.01 (2d ed. 2001).

38. D.S. Teske & T. Arzu, *Considerations in International Intellectual Property Licensing*, 20 N.8 CILW 10, 10-20 (Aug. 2003).

39. Jan Kriz & Karel Knap, *Czech Republic* § 4[3][c] at 18.

40. *Id.* § 7[4], CZE-24; *see* source cited *infra* note 41.

Outsourcing of software development to foreign entities mandates consideration of the legal landscape in the vendor's country. Popular countries for outsourcing have laws that may make any contractual provision prohibiting reversed engineering of software unenforceable.[41] Thus, the engaging party may not be able to obtain the same rights and protection as he/she would have if the vendor were located in the U.S. The only recourse left to the engaging party may be an enforcement action in a foreign country, which can prove to be expensive. Even if the client is willing to move forward with a case, the foreign jurisdiction may not even offer a viable enforcement mechanism at all. U.S. courts limit enforcement to protection against products imported by way of infringement occurring in foreign jurisdictions to cases where the illicit copies would have been constituted an infringment had they been produced in the United States.[42]

India has become a current favorite for U.S. companies' software design outsourcing activities. When dealing with India, that country's copyright laws contain some provisions that should cause some concern for an engaging party. In particular, India follows the practice of so-called "fair dealing" or "fair use" of software. The doctrine provides that the following activities do not qualify as acts of infringement: (a) those acts necessary to gain information essential for the inter-operability of programs independently-created by lawful possessors; (b) studying and testing designed to discern ideas and principles underlying elements of a program, if necessary for the functional use for which the program was supplied; and (c) copying an adaptation of a legally-obtained program, if done for non-commercial personal use.[43] At present, this author is unaware of any cases interpreting the scope of permissible use under item (c) above; just how much protection it affords to a qualifying individual remains unclear.

E. Improvements

Another oft-overlooked issue at deal time is the status of improvements that are put into place during the course of the agreement. Thus, in cases of a licensed trade secret or patent right, it could be vital to require the licensor to provide improvements to the technology and divulge them to the other party if the improvements were added while under current license to the engager. The subject is important to address because enhancements can occur many ways, including (a) as the engaging party's sole work, (b) as the vendor's sole work, or (c) through the joint cooperation of both parties. As discussed

41. Jan Kriz & Karel Knap, *supra* note 39, at 15.

42. 17 U.S.C. § 602(b) (1976).

43. International Intellectual Property Alliance, "India" Special 301 Report of Global Copyright Protection and Enforcement, at 138 n.11 (2002), *available at* www.iipa.com (last visited June 20, 2004); *see also* S. RAMAIAH, INDIA 2 INTERNATIONAL COPYRIGHT & LAW PRACTICE (Paul Edward Gellar & Melville B. Nimmer eds. 1999).

above, this raises complex ownership questions with regards to the added improvements: especially as to whether improvements will be licensed back, and if joint ownership shall be permitted.

F. Confidentiality

In order to maintain trade secrets, a confidentiality agreement must be in place. While a broad range of terms may be included, an engaging party that insists upon having an "ironclad" agreement risks driving away preferred vendors. The deal-makers typically assume that all parties either have the same or at least similar procedures in place for information protection. Many times, in truth it is the opposite – that the parties to do not have the same safety measures to protect confidential information. Balancing the importance of the information that each party possesses while avoiding off-putting, restrictive terms on information usage usually creates the most acceptable result. Important points to consider: (a) whether the objectives will be met sans disclosure; (b) what is the minimum information necessary; (c) whether it is possible to limit access to certain staff in meeting the objective; (d) practicality of measures; (e) whether other IP rights might hinder the other party; and (f) whether the vendor is capable of correctly and competitively making use of the confidential information.

Ending up with an ill-advised confidentiality agreement can result in the company being restricted in future development efforts or potentially subject it to a future lawsuit based upon improper use of disclosed material. Disputes of that kind can be quite problematic, usually giving rise to substantial proof issues. Some agreements require marking of materials, limited access to the material, and other restrictive provisions which may aid in establishing a claim. Finally, it must also be remembered that damages obtained from breach of the confidentiality agreement could be insignificant compared to the high value of the potentially lost information.

G. Arbitration & Mediation

Believing that disputes can be more quickly and economically settled by arbitration, many agreements contain an arbitration provision. Unfortunately, many of these provisions are little more than boilerplate – stock language added with little thought. For example, the parties may agree to arbitration according to the rules of the American Arbitration Association (AAA). However, the rules of arbitration differ depending upon the type of dispute.[44] Despite the differences, agreements rarely specify which AAA rules are to apply. Experience has shown that a vague arbitration clause can easily result in a procedure that ends up being even more costly and time consuming than litigation, thus defeating the purpose of the clause altogether. When a client does choose to include an arbitration clause, it must be drafted carefully, thoughtfully addressing arbitration procedure, discovery, issues to

44. *See* http://www.adr.org (last visited June 20, 2004).

be resolved, and the particular rules to apply to the procedure itself. The agreement terms should also dictate include whether the arbiter will be empowered to impose the equivalent of temporary or preliminary injunctions.

In addition to arbitration clauses, agreements can provide for mandatory dispute mediation prior to the initiation of other mechanisms. The most effective mediation clauses require that (a) the mediation occur within a short time from the origination of the disputes, and (b) specify that senior management with settlement power must be present for the mediation. Furthermore, a particular mediator can be specified as a term of the deal; the ideal mediator in these kinds of cases would be one with a business background, rather than a lawyer. That way, the mediation process has a better chance of staying focused on resolving the dispute while still preserving the deal's value for both parties.

H. Assignment

Most agreements relating to the development of IP should address whether they are assignable, and if so, under what terms an assignment may be made. A major concern here is ensuring that vendors do not acquire the right to assign the development project to others. Otherwise, a competitor may acquire the engaging party's IP by acquiring the development agreement. Typically, the vendor for similar reasons may desire to limit the assignability of the agreement by the engaging party. Despite the obvious importance of keeping this information out of competitors' hands, limiting assignability may not be the best choice if the engaging party wants the option open if it wishes to later dissociate from the technology for whatever reason. Assignability must be weighed carefully and with the business strategy before reaching any co-operative agreement.

I. Trademarks

In general, trademarks do not often pose an issue of major risk. However, agreements should be clear that no trademark rights are being licensed to the vendor. Or, if trademark rights are to be licensed, the terms of the license should incorporate some provisions for quality control. The major trademark issue to think about here is that of "co-branding". Co-branding occurs when two or more companies' trademarks are to appear in connection with the same product. A high-profile example of co-branding is personal computers made by, say, Dell Computer, that also includes the "Intel Inside" logo – both on the product itself, and in conjunction with Dell's (and others') marketing efforts.

Co-branding can be risky. Often a vendor's selection is largely based upon an excellent product reputation. If so, and the engaging party seeks a co-branding agreement, there is always a chance that the other party's reputation could suffer at some point in the future for various reasons – be it a scandal or the occurrence of a prejudicial marketing event – in which case it

would behoove the party that seeks co-branding to include an escape provision within the agreement.[45]

J. Termination

Frequently, the parties do not foresee a termination, or do not understand the legal principles relating to the practical consideration of termination. Often, issues overlooked in relation to termination are (a) whether the party will be licensed to sell off inventory, (b) whether there is a need for the continuation of licenses for underlying technology, (c) whether termination should result in any changes in ownership of the technology.

When the parties will enter into a joint venture, the termination provisions are critically important. In a typical joint venture, the joint venture owns the technology developed by the joint parties. Thus, when the joint venture is dissolved, mechanisms are necessary in order for the distribution of the joint venture property. Certain assets such as cash and accounts receivable pose little difficulty, however, deciding how to dispose of intellectual property in the form of copyrights, trademarks and trade secrets is much more problematic. Without an appropriate agreement relating to the fate of the intellectual property of the joint venture, the intellectual property may not be usable by either party to the dissolved joint venture.

K. Software-Specific Issues

a. Anti-Circumvention & Copyright-Management Data Regulations

The Digital Millennium Copyright Act (DMCA) contains anti-circumvention provisions, designed to prevent the copying of technology.[46] The DMCA also prohibits the removal of so-called "copyright-management" information from technological data.[47] If inclined to do so, these provisions can allow vendors to frustrate engaging parties' intentions to gain the full use and enjoyment of the end product. Conversely, some engaging parties may want their product to incorporate anti-circumvention technology, copyright-management information, or both. In either scenario, the parties are well-advised to consider the issues when finalizing the terms of the deal.

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45. Examples of possible reasons for wishing to discontinue co-branding include situations where the other party suffers accusations of disreputable conduct, as in the case of Enron Corporation; another scenario could be that the other party suffers a highly disruptive public market event, such as in the case of the Tylenol tampering in the 1980s. Although probably unlikely to become an issue, the seriousness of the potential for harm mandates precautions for such contingent events and thus that well-drafted agreements should address license terms as well as quality-control.

46. 17 U.S.C. § 1201 (1998).

47. *Id.* § 1202.

b. Specialized Software Types: Open-Source, Freeware, Shareware

The advent of the consumer market for computers and software was accompanied by an attitude that software should be freely accessible. In turn, an open and generalized hostility developed over time that was directed towards software creators' IP rights. This phenomenon ultimately spawned at least three new categories of software applications: open-source, freeware, and shareware. Despite the names, use of these applications is still normally under a license or other agreement that either limits use, or requires that any new software incorporating the application in question be made available to others under the same conditions as the original application. Freeware, for example, frequently features a license agreement stating that the application is free only for uses that are non-commercial and personal in nature. Management of this risk can be particularly vexing because, in practice, programmers might not know about the legal implications of freeware and open-source use in their applications, and generally rarely worry about use restrictions or licensing of freeware and its brethren. To address these risks, many agreements require that no third-party software shall be used, or in the alternative that no third-party software will be used without the written consent of the engaging party.

L. Practical Issues

a. The Other Party

The value of the deal is highly dependent upon the stability, skill, and integrity of the other party. In practical terms, the value of the confidentiality agreement can be measured in direct proportion to the strength of the other party's integrity. Clients' efforts to investigate the other parties to a deal are generally inadequate. A search using readily-available databases such as LexisNexis, LitAlert, and Dun & Bradstreet should reveal whether or not the subject was involved in any previous disputes, or has ever been accused of any improper conduct. Verifying references given by the other party is another effective means of research, providing valuable insight into the subject's responsiveness and actual capabilities. Finally, another major risk to be avoided regarding the vendor's competence relates to its expertise surrounding IP rights and acquisition. For instance, software companies have been known to have engaged consultants and erroneously assumed that they then owned the copyright in that work. Careful research is a fundamental piece of the risk-management puzzle in co-operative deals, since even risks that a client has carefully avoided for itself may still wind up in the deal anyway because of the vendor inadvertence or bad business practices. At that point, by default, it becomes the client's problem as well.

b. Flexibility

In many co-development agreements, future events are highly uncertain. This is especially true for joint ventures producing a new product. An overly

rigid agreement is not always in the best interest of the parties. For example, acquisition of patent rights is very expensive. One party may not believe that the rights justify the expense. Provisions can allow the other party the option to carry the expense and solely own the invention's patent(s). Additionally, the agreement may provide a party with an option to reduce royalty payments as a contribution to capital.

II. Deal-Landing Team: the Concept

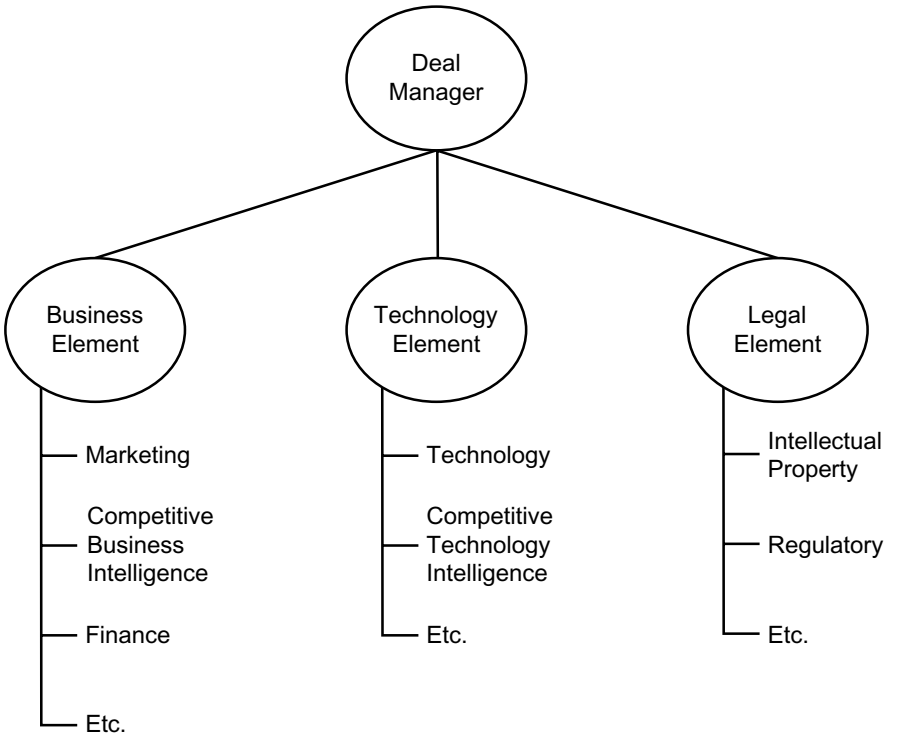
The DLT concept aims to identify and organize an appropriate task force, prior to approaching another party, in order to develop an overall deal strategy. The concept is based on a highly successful Marine Corps system.[48] The team's goal is to formulate a clear set of objectives, recognize potential shortcomings, and develop a negotiation plan designed to maximize results and minimize risk at the outset of the process. It must be emphasized that in order to achieve maximum benefit, it is imperative that the DLT be formed and meet before the initiation of any outside negotiations. The structure for the DLT is illustrated below.

All too often, in the past, managers did not include legal representatives from the outset. Even in simple transactions, a legal element should be included in the earliest planning stages. The motivation to delay input from legal representatives is normally to avoid the expense. It is important to recognize, however, that the money saved in precautionary legal expenses on smaller ten deals is quite easily dwarfed by the unintended legal expense of one bad deal.

The three primary elements of the DLT are: (1) the Business Element, (2) Technology Element, and (3) the Legal Element. Each component is purposely referred to as an "element" to clearly indicate that each is part of a single team, versus three individual camps.

Based on traditional practices, the following example of a typical transaction shall help demonstrate the effectiveness and desirability of taking the DLT approach. Suppose that a business named "Money Company" wanted a new software system to manage its client accounts. Money Company then approached a vendor named "Pro Software", and the business teams of both

48. Many of our naval task forces have embarked aboard a Marine Battalion Landing Team (BLT). The Battalion Landing Team has a commander and three elements. Prior planning is the hallmark of success, because once the fleet sails reconfiguration of the team is very difficult. The three elements are the air combat element (combat and transport), the ground combat element (infantry, armor, artillery), and the combat service support element (supply, maintenance, medical). Importantly, the BLT for each deployment is structured to meet the expected tasks in the scheduled patrol area. Based on the risk assessments, the commander outlines the makeup of the Battalion Landing Team. Thus, the specific composition of each element is driven by the current situation. Each element must understand the requirements, capacity and capabilities of the other elements, in order to maximize the efficiency of the team.



companies reached an agreement that provided for delivery of software – with certain functionality, by a required date, for payment of a specified sum to the developer, and on a yearly maintenance contract. The maintenance contract called for a yearly additional software maintenance fee at a set amount. Money Company receives the agreement drafted by the software vendor and sends it to its attorney for review. The attorney asks a few questions, such as:

- Do you realize you will not have the right to maintain the program, if you do not utilize their maintenance service?
- Do you realize you will not own the program?
- Will the program include information and processes which you consider trade secret or proprietary?
- Do you realize they can market the software to your competitors?
- What happens if the software company goes out of business, as many have done in the dot-bomb era?
- When your license terminates, will you be able to recover the data and transition it to a new system?
- After expiration of the current license, you have no right to operate the system, but will you have the obligation under regulations to maintain data for a certain period of time?

- Do you realize that no warranty of non-infringement has been provided?
- Do you realize that the statement of work does not include conversion of current data to be useful in the new system?

These questions, in turn, prompt the business manager to bring his information technology specialist together with the attorney to discuss the answers to these questions and their potential impact in the future. As a result, the agreement is renegotiated – with a several-month delay, a cost increase to provide necessary technical functionality and services, plus additional attorneys' fees for the extra time and effort. Some of the terms included in the renegotiated agreement include:

a. Money Company will own the derivative work to be created by the software provider. The software provider retains its rights in its preexisting works and agrees to license those works to Money Company as they are embodied in Money Company's custom package.
b. Pro Software authorizes Money Company to make copies for maintenance and to perform maintenance and backup.
c. Pro Software authorizes Money Company to make derivative works of its own work in order to transfer the system to a different operating system in the future.
d. Pro Software places the source code and documentation in escrow and deliverable to Money Company in the event Pro Software fails to exist in the future.
e. Pro Software is not authorized to sell the custom program to any other person or to utilize any of the modules developed for Money Company in the development of other products.
f. Pro Software provides Money Company with a warranty of non-infringement with respect to Pro Software's preexisting software. Pro Software represents that the customization provided for Money Company is an original work of authorship; however, Money Company provides a warranty against patent infringement as a custom developed product to develop its specifications.

As a result of the renegotiated contract, Money Company now gets a viable client management system that is within its own control. The product meets the technological requirements of Money Company, and the risk of infringement has been allocated appropriately between the parties. The lesson to take from this example? That significant time and money could have easily been saved had a DLT been formed early to outline the various business, technological, and legal needs before starting the negotiations with Pro Software.

The DLT concept is only effective when employed early – as the initial step of the process. If properly executed, the DLT will identify the issues and risks sought be to resolved or avoided. Also, the DLT structure requires a

mutual understanding between the attorney and client. In order for an organization to excel, it must be willing to accept some degree of risk. Consequently, the attorney and client need to work together to decide what that level of risk should be.

Many businesses have adopted the 80% principle. This principle reflects the theory that if there is an 80% probability of success, then one should take the action. For long-term success, the corporation needs to develop a culture where risk-taking is encouraged, not penalized. When a corporate manager has entered into a deal falling within the pre-determined acceptable risk level, the calculation of which was based on information available at the time, that manager should not be penalized if the deal fails. The transactional lawyer must adopt a habit of providing the client with the potential legal risks in light of the proposed deal structure and subject matter of the deal. Of course, the client must make the ultimate decision of whether or not to accept certain risks.[49]

To gain the full value of the DLT system, the deal manager along with each element leader should be responsible for updating the risk matrix when a risk event occurs, such as if a dispute as to ownership rights actually develops. After the occurrence of a risk event, each element should review the risk matrix to determine if it included sufficient information to identify that risk. If not, the appropriate information should be added to the matrix. If the matrix identified the risk, was the risk level assigned to the particular risk appropriate? If not, the risk level should be adjusted relative to the new information available.

III. CONCLUSION

The business environment has become highly-fluid and globalized. It is increasingly clear that in order to thrive under these conditions, businesses must avoid unacceptable risks by paying greater attention to issues during the planning phase. Businesses must also become more proficient and proactive in developing risk-evaluation mechanisms: thus creating more and better opportunities to excel.

49. An expert in the area of criminal law, Professor Abramowski has stated that "when a defendant asks you to decide whether he should take a plea bargain, remind him that it's his decision – he's the one who does the time."

[Un]Safe Harbor: No Common Denominator In Privacy Compliance

by
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*Mark Courtney***
*Peter Vogel****

Privacy is a social issue that varies depending on the mores of any particular culture. Clearly there have always been personal privacy issues before the advent of the Internet. However, the Internet has provided wide-spread proliferation of personal data which has dramatically changed the scope of where personal data may be. It was not really until about 1995 that the Internet brought this wide-spread change caused by ubiquitous growth of personal computers, online networks, graphical browsers, and broadband communications. Since it is impossible to accurately predict the ultimate direction of personal privacy on the Internet, governments around the world are trying to cope with the current state of the art.

We discuss a number of particular privacy issues confronting personal privacy as things stand on the Internet today.

I. THE EU DIRECTIVE ON DATA PRIVACY AND THE U.S. "SAFE HARBOR" PROVISIONS

The EU Data Directive was completed in 1995[1] and provides strict protections for an individuals' information in the form of personal data. The Directive defines "personal data" as "information relating to an identified or identifiable natural person (data subject)."[2] Because it is a "directive" and not a regulation, to become effective, it requires the member states of the EU to enact national laws which implement the Directive. In addition to rigorous requirements for data transfer and processing within the EU common market member countries, the Directive also provides that member states will not permit the transmission of personal data for processing to countries outside

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1. Directive 95/46/EC, OJ L 281, p. 0031-0050 of 23/11/1995, *available at* http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=31995L0046&model=guichett (last visited Oct. 5, 2004).

2. *Id*. at Article 2(a).

of the EU which do not provide "adequate protection."[3] After the Directive was enacted, the EU commission opined that the United States did not provide the requisite protection. There was therefore a possibility that the flow of data from Europe to the U.S. would be interrupted by the implementation of the Directive. The EU-US "Safe Harbor" program was negotiated to solve this problem.

The Directive governs the collection of, transmission of, and processing of, "personal data" within the EU, as well as its export from the EU.[4] The Directive accomplishes this through the use of categories of regulations called principles and criteria, including:

(i) principles regarding the proper collection and handling of the personal data[5];

(ii) criteria governing the legitimate processing of the data[6];

(iii) conditions regarding export of the data from the EU countries[7].

Other provisions also give the individual "data subject" the right to know who collects and handles the data.[8]

With respect to (i) above, the Directive requires that the entities handling "personal data:"

(a) ensure the data is processed fairly and lawfully;

(b) collect it for specified and legitimate purposes and that it is not processed further than necessary for those purposes;

(c) that the personal data be relevant and not excessive for the legitimate purpose for which it is collected;

(d) the data be kept accurate and updated as necessary; and

(e) the data be kept in a form that identifies the individual for no longer than necessary.[9]

With respect to (ii) above, entities may process personal data only if:

(a) the data subject (identifiable person) has given "unambiguous consent";

(b) processing of the data is necessary for the performance of the contract the data subject has entered into, or at the request of the data subject prior to entering a contract;

(c) processing is necessary for the data subjects' legal obligations;

(d) processing is necessary to protect the vital interests of the data subject;

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3. *Id*. at Article 25.

4. *Id*. at Articles 1, 2(b).

5. *Id*. at Article 6.

6. *Id*. at Article 7.

7. *Id*. at Articles 25, 26.

8. *Id*. at Articles 10, 11.

9. *Id*. at Article 6.

(e) processing is necessary for the public interest or exercise of official authority; or

(f) processing is necessary to promote a legitimate interest pursued by the data controller[10] or a third party, and is not outweighed by the data subjects interest in privacy.[11]

Additionally, the data controller must notify the member states data protection authority before automated processing of data begins.[12]

With respect to (iii) above, the personal data may be exported from an EU member country to a third country only if the third country "ensures an adequate level of protection."[13] But, an exception to this rule provides that personal data can be exported to a third party country which doesn't "ensure an adequate level of protection" where the following conditions are met:

(a) data subject has given unambiguous consent;

(b) transfer is necessary for performance of a contract between the data subject and the controller of the data;

(c) the transfer is necessary for the completion of a contract or performance of a contract in the interest of the data subject and between the controller and a third party;

(d) the transfer is legally required in the public interest or for legal claims;

(e) the transfer is necessary to protect the vital interests of the data subject; or

(f) the transfer is made from a public register which is intended to provide information to the public and which is open to the public or persons who can show a legitimate interest.[14]

Finally, a member country can authorize the export of personal data to a "data controller" outside the EU, even if the "data controller" is in a country that does not provide adequate protections, so long as the "data controller" adduces adequate security to protect the data subject, for example, through appropriate contractual clauses.[15] Preferred model contractual provisions are available.[16]

EU member countries have now implemented the Directive. Some countries are said to have implemented legislation that is *stricter* than that required by the Directive. For example, some countries have broadened the "data subject" to include entities like corporations, businesses. The privacy

10. *Id*. at Article 2(d).

11. *Id*. at Article 7.

12. *Id*. at Article 18.

13. *Id*. at Article 25.

14. *Id*. at Article 26(1).

15. *Id*. at Article 26(2).

16. *Id*. at Article 26. Model contract provisions are available at http://europa.eu.int/comm/internal_market/privacy/modelcontracts_en.htm.

right of deceased persons under the national legislation varies, as do the enforcement provisions. The availability of the "Safe Harbor" is critical to the compliance by US based companies or entities to ensure that their data flow is available or maintained from Europe to the U.S.

A. Trade Between The Us And Eu

One obvious reason for the need for US and EU businesses to share data is because of the substantial trade between the US and the EU. The U.S. Census Bureau, Foreign Trade Division, reported that in 2004 there was approximately $455 billion in trade between the U.S. and EU.[17] Most of this trade is dependent on the exchange of data. Without any further analysis $455 billion in trade is significant, but a further review of this Report shows an increase of about 11% from 2003 to 2004, and significant increase of 49% from 1997 to 2004. This 49% increase in annual trade between the U.S. and the EU may be attributable in some way to the growth and proliferation of the Internet since 1995.

The size of the Internet is still unclear, although various researchers speculate on the size, some organizations such as the Internet System Consortium ("ISC") claim determining it is impossible.[18] The ISC January 2005 Internet Domain Study indicates that there are approximately 318 million separate domain names in use.[19] This represents an increase of 36.4% from January 2004 of 233 million names and an increase of 6,625% from 1995 of 4.8 million domain names.[20]

Clearly trade will increase between the U.S. and the EU, and electronic commerce over the Internet will undoubtedly be a major factor.

B. The "Safe Harbor" Provisions

Because the Data Directive states that member states are not to allow the transmission of data to countries which do not provide adequate protection of the data, and because this could have led to an interruption in data flow from Europe to the United States (the U.S. legal system having been found to not have the requisite "adequate protection"), negotiations were held to create a solution- these eventually led to the "Safe Harbor". The Safe Harbor program, administered by the U.S. Department of Commerce, provides U.S. corporate entities with the means to voluntarily comply with the EU Data Directive and thus ensure that their data can continue to flow from

17. *See* "Trade (Imports, Experts and Trade Balance) with European Union (25)" at http://www.census.gov/foreign-trade/balance/c0003.html#2004.

18. *See* the ISC Internet Domain Survey at http://www.isc.org/.

19. *See* "ISC Internet Domain Survey" at http://www.isc.org/index.pl?/ops/ds/.

20. *Id.*

Europe.[21] The benefits to the participating company include: the EU Commission finding that the Safe Harbor program provides adequate protection, automatic approval or waiver of prior approval requirements by member states for data transfer, actions against the company by EU citizens will be heard in the U.S., and no interruption of data flows.[22]

The Safe Harbor is a voluntary self-certification program.[23] Organizations may take advantage of the program by certifying that they are in compliance.[24] False statements about compliance is actionable by the FTC or U.S. other statutory bodies.[25]

The safe harbor recognizes and implements the following "principles" of the EU Data Directive[26]:

> 1. ***Notice***: An organization must inform individuals about the purposes for which it collects and uses information, how to contact the organization with any complaints, the types of third parties to which it discloses information, and the choices and means the organization offers individuals for limiting its use and disclosure. This notice must be provided before the organization uses such information for a purpose other than that for which it was originally collected.
> 2. ***Choice***: An organization must offer individuals the opportunity to choose (opt out) whether their personal information is (a) to be disclosed to a third party or (b) to be used for a purpose that is incompatible with the purpose(s) for which it was originally collected or subsequently authorized. Individuals must be provided with clear and conspicuous, readily available, and affordable mechanisms to exercise choice.
> 3. ***Sensitive Information***: For sensitive information (information specifying medical or health conditions, racial or ethnic origin, political opinions, religious or philosophical beliefs, trade union membership or information specifying the sex life of the individ-

21. *See* "Safe Harbor Overview" at http://www.export.gov/safeharbor/sh_overview.html.

22. *See* "Safe Harbor Benefits" at http://www.export.gov/safeharbor/sh_overview.html.

23. *See* "How Does an Organization Join?" at http://www.export.gov/safeharbor/sh_overview.html.

24. *Id*.

25. *See* "How and Where Will the Safe Harbor be Enforced?" at http://www.export.gov/safeharbor/sh_overview.html.

26. The Department of Commerce provides and administers the safe harbor provisions. *See* "Safe Harbor Privacy Principles" at http://www.export.gov/safeharbor/SHPRINCIPLESFINAL.htm. *See also* http://www.export.gov/safeharbor/sh_overview.html for many helpful web pages, summary information and the safe harbor provisions in detail.

> ual), they must be given explicit (opt in) choice if the information is to be disclosed to a third party or used for a purpose other than those for which it was originally collected.
> 4. ***Onward Transfer***: To disclose information to a third party, organizations must apply the Notice and Choice Principles. Where an organization wishes to transfer information to a third party that is acting as an agent, it may do so if: it first either ascertains that the third party subscribes to the Principles or is subject to the Directive or the organization enters into a written agreement with the third party requiring that the third party provide at least the same level of privacy protection as is required by the relevant Principles.
> 5. ***Security***: Organizations creating, maintaining, using or disseminating personal information must take reasonable precautions to protect it from loss, misuse and unauthorized access, disclosure, alteration and destruction.
> 6. ***Data Integrity***: Consistent with the Principles, personal information must be relevant for the purposes for which it is to be used. An organization may not process personal information in a way that is incompatible with the purposes for which it has been collected or subsequently authorized by the individual. An organization should take reasonable steps to ensure that data is reliable for its intended use, accurate, complete, and current.
> 7. ***Access***: Individuals must have access to personal information about them that an organization holds and be able to correct, amend, or delete that information where it is inaccurate.
> 8. ***Enforcement***: Effective privacy protection must include mechanisms for assuring compliance with the Principles, recourse for individuals to whom the data relate affected by non-compliance with the Principles, and consequences for the organization when the Principles are not followed.

So the Safe Harbor "Principles" create a system of notice, opt-out, opt-in for certain sensitive information, control of subsequent transfers, data security and integrity systems by the data controller, access by the subject person to the data, and enforcement of the Principles.

The US self-certification process is an annual written submission to the Department of Commerce.[27] A list of companies making the self-certification is maintained at the Department of Commerce website so that any entity can confirm that an entity in the US that is to receive data has complied with the Safe Harbor. Currently over 450 entities are listed.[28]

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27. *See* "How Does an Organization Join?" at http://www.export.gov/safeharbor/sh_overview.html

28. *See* "Safe Harbor List" at http://web.ita.doc.gov/safeharbor/shlist.nsf/webPages/safeărbor+list.

Although a US based corporation or entity without assets in Europe might be safe in relying on the "Safe Harbor" provisions and compliance with the program, a corporation or entity with assets *inside* Europe will also be directly exposed to the national legislation - which may be more strict than that of the Directive, so awareness of the various national acts and regulations which implement the Directive is required, as well as compliance with the Safe Harbor, to avoid problems with compliance.

The EU Data Protection Working Party has published a report on the status of the implementation of the Directive; it is quite detailed and includes information about the national legislation in each country.[29] Other information of interest is available on the Internet summarizing the country events and legislation.[30]

While compliance with the Safe Harbor is necessary for global business transactions in the transfer of any personal information from any EU country, there are many other privacy acts in the U.S. and elsewhere which may require more, or different, compliance than the Safe Harbor Principles.

II. U.S. LEGISLATION

Federal privacy laws in the US take a "sector specific" approach (one of the differences between the US and EU approaches, the EU Directive takes a broad approach to all data transfers, irrespective of the purpose of the transfer or the sector of the economy.)[31] This results in a patchwork of laws and regulations, and, in some areas, leaves room for individual state laws that are stricter or require different steps to comply with.

A. HIPAA: Health Insurance Portability and Accountability Act

The Health Insurance Portability and Accountability Act, "HIPAA,"[32] was enacted by the U.S. Congress in 1996.[33] It is implemented and administered by the Department of Health and Human Services and the rules were issued in final form in August 2002.[34] The rules went into effect in April

29. *See* "Technical Analysis of the Transposition in the Member States" at http://europa.eu.int/comm/internal_market/privacy/lawreport/data-directive_en.htm.

30. *See* http://www.bakernet.com/ecommerce/home-privacy.htm for a country by country summary of privacy laws, recent events, and other useful information collected by the law firm of Baker Mckenzie.

31. *See* "Safe Harbor Overview" at http://www.export.gov/safeharbor/sh_overview.html.

32. Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191, 110 Stat. 1936.

33. The complete statute is available at http://aspe.hhs.gov/admnsimp/pl104191.htm.

34. Privacy Rule, 45 C.F.R. pts. 160, 164 *available at* http://www.hhs.gov/ocr/hipaa/finalreg.html.

2003, with compliance being required by April of 2005, with the exception of smaller health plans, which were required to be in compliance in April 2006.[35] Enforcement is through the Office of Civil Rights ("OCR") under the Health and Human Services.[36] The Act requires the agency to establish a Privacy Rule[37] and a Security Rule[38]. The security rule requires certain administrative, technical, and physical security procedures for the covered entities to use to assure the confidentiality of electronic protected health information.

The Act applies only to certain entities: certain health care providers, hospitals, health plans, health insurers and health care clearinghouses; however it also reaches the "business associates" of these providers, entities should therefore be aware that when they are processing or transferring the covered information, they may be impacted.[39]

The Privacy Rule applies only to certain protected health information. Protected health information means information that relates to:

1. the individual's past, present or future physical or mental health or condition,

2. the provision of health care to the individual, or

3. the past, present, or future payment for the provision of health care to the individual.[40]

If this information is of such nature that it may identify the individual or for which there is a reasonable basis to believe may be used to identify the individual, it falls into a sub-category of health information known as individually identifiable health information.[41] Individually identifiable health in-

35. Health Insurance Reform: Security Standards, 68 Fed. Reg. 8334 (Feb. 20, 2003) *available at* http://www.cms.hhs.gov/hipaa/hipaa2/regulations/security/03-3877.pdf.

36. *See* "Compliance and Enforcement" at http://www.hhs.gov/ocr/hipaa/.

37. Privacy Rule, 45 C.F.R. ps. 160, 164 was issued Dec. 2000, and subsequently amended 4 times.

38. 45 C.F.R. pt. 162. *See* http://www.cms.hhs.gov/hipaa/hipaa2/regulations/security/03-3877.pdf for the final rule, comments, and provisions as published in the Federal Register.

39. *See* 45 C.F.R. § 160.103. The rules provides that a business associate is a person or organization, other than a member of a covered entity's workforce, that performs certain functions or activities on behalf of, or provides certain services to, a covered entity that involve the use or disclosure of individually identifiable health information. Business associate functions or activities on behalf of a covered entity include claims processing, data analysis, utilization review, and billing. Business associate services to a covered entity are limited to legal, actuarial, accounting, consulting, data aggregation, management, administrative, accreditation, or financial services.

40. 45 C.F.R. § 160.103 (2005).

41. *Id.*

formation includes many common identifiers, such as name, address, birth date or Social Security number.[42] Use of this information by the covered entity beyond normal use, or beyond what is necessary for the provision of health care to the individual or for billing and payment processing for such health care, is regulated by the Act. Permitted disclosures under the Act include:

1. to the individual (unless required for access or accounting of disclosures)[43],
2. treatment, payment, and health care operations[44],
3. where the individual has an opportunity to agree or object to the disclosure[45],
4. incident to an otherwise permitted use and disclosure[46]
5. public interest and benefit activities[47], and
6. certain legally required disclosures.[48]

Any other disclosures require the health entity to obtain authorization from the individual.[49] A covered entity may not condition treatment, payment, enrollment or benefits eligibility on an individual grant of such an authorization, save in limited circumstances.[50]

An authorization must be written in specific terms and plain language. It may request use and disclosure of protected health information by the covered entity seeking the authorization, or by a third party.[51] Examples of disclosures that would require an individual's authorization include disclosures to a life insurer for coverage purposes, disclosures to an employer of the results of a pre-employment physical or lab test, or disclosures to a pharmaceutical firm for their own marketing purposes.

All authorizations must be in plain language, and contain specific information regarding the information to be disclosed or used, the person(s) disclosing and receiving the information, expiration, right to revoke in writing, and other data.[52]

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42. *United States Department of Health and Human Services, Office for Civil Rights – HIPAA*, *at* http://www.hhs.gov/ocr/hipaa (last revised September 16, 2004).
43. § 164.502.
44. § 164.506.
45. § 164.510.
46. § 164.502.
47. § 164.512.
48. § 164.502.
49. §§ 164.502, .508.
50. § 164.508.
51. *Id.*
52. *Id.*

While there are various uses for health information collected by the covered entities, the Privacy Rule specifically regulates marketing of health information to non-affiliated third parties by requiring affirmative consent of the individual to make these disclosures. Marketing is defined, as "[a]n arrangement between a covered entity and any other entity whereby the covered entity discloses protected health information to the other entity, in exchange for direct or indirect remuneration, for the other entity or its affiliate to make a communication about its own product or service that encourages recipients of the communication to purchase or use that product or service."[53] It also requires additional disclosures in any case where the health care provider receives "direct or indirect remuneration."[54] However, communications announcing new services available from the covered entity which already has the individuals' information, such as the individual's doctor, doctor's group or hospital, are not prohibited as "marketing."[55]

Covered entities must give individuals sufficient notice as of the effective date of the Rules.[56] A covered health care provider with a direct treatment relationship with individuals must deliver a privacy practices notice to patients starting April 14, 2003 as follows:

1. Not later than the first service encounter, including service delivered electronically, and if the first service delivery to an individual is delivered electronically, the covered health care provider must provide electronic notice automatically and contemporaneously in response to the individual's first request for service,

2. If the covered health care provider maintains a physical service delivery site, by making the notice available at the service delivery site for individuals to take with them and by posting the notice at each service delivery site in a clear and prominent place where people seeking service may reasonably be expected to be able to read the notice,

3. If the covered health care provider maintains a web site that provides information about the covered entity's customer services or benefits, it must prominently post its notice on the web site and make the notice available electronically through the web site, and

4. In emergency treatment situations, the provider must furnish its notice as soon as practicable after the emergency abates.[57]

Covered entities, whether direct treatment providers, indirect treatment providers (such as laboratories) or health plans, must supply notice to anyone on request. A covered entity must also make its notice electronically availa-

53. § 164.501.

54. § 164.508(a)(3).

55. § 164.508.

56. *See* § 164.520.

57. § 164.520(c).

ble on any web site it maintains for customer service or benefits information.[58]

The covered entities in an organized health care arrangement may use a joint privacy practices notice, as long as each agrees to abide by the notice content with respect to the protected health information created or received in connection with participation in the arrangement. Distribution of a joint notice by any covered entity participating in the organized health care arrangement at the first point that an organized health care arrangement member has an obligation to provide notice satisfies the distribution obligation of the other participants in the organized health care arrangement.[59]

The covered entity must make a good faith effort to get a written acknowledgement of the notice from the individuals.[60]

Covered entities must maintain data safeguards, complaint resolution procedures and take other actions to protect health information.[61] They also must allow individuals to access their records.[62] Negligent or willful disclosure in violation of the rules can result in either of civil or criminal penalties.

In addition, it is important to understand that HIPAA is a "floor," that is, state laws may be enacted and not preempted if they provide greater protection than that required by HIPAA or the associated rules. For example, a health care provider or other covered entity which is in compliance with the "sensitive information" rules of the EU Data Directive, the European Union's privacy initiative, and a more stringent directive than HIPAA, may also be considered to meet the requirements of HIPAA. Therefore, a current awareness of state privacy laws is important.[63]

Also, the notices required by HIPAA are promulgated by the HHS Department and should be followed explicitly. Notice under the Safe Harbor may not be adequate.

B. COPPA: The Children's Online Privacy Protection Act

The Children's Online Privacy Protection Act ("COPPA"), passed by Congress in October 1998[64], requires the Federal Trade Commission ("FTC"), to issue and enforce rules concerning children's online privacy. The

58. *Id*.

59. § 164.520(d).

60. § 164.520(e).

61. § 164.530.

62. § 164.524.

63. *See, e.g*., *State of CalOHI Office of HIPAA Implementation*, *at* http://www.ohi.ca.gov/state/calohi/ohiHome.jsp (last visited February 23, 2005).

64. 15 U.S.C. § 6500-6505 (2004), *available at* http://www4.law.cornell.edu/uscode/15/6505.html (May 18, 2004).

FTC issued the Children's Online Privacy Protection Rule in November 1999 that has been in effect since April 21, 2000.[65]

COPPA applies to the following entities:

• operators of commercial websites or online services directed to children under 13 that collect personal information from children,

• operators of general audience sites that knowingly collect personal information from children under 13, and

• operators of general audience sites that have a separate children's area and that collect personal information from children.[66]

COPPA requires covered entities to:

• post a privacy policy on the homepage of the website and link to the privacy policy everywhere personal information is collected,

• provide notice to parents about the site's information collection practices and, with some exceptions, get verifiable parental consent before collecting personal information from children,

• give parents the choice to consent to the collection and use of a child's personal information for internal use by the website, and give them the chance to choose not to have that personal information disclosed to third parties,

• provide parents with access to their child's information, and the opportunity to delete the information and opt out of the future collection or use of the information.

• not condition a child's participation in an activity on the disclosure of more personal information than is reasonably necessary for the activity, and

• maintain the confidentiality, security and integrity of the personal information collected from children.[67]

The Act defines a child as an individual under the age of 13, and governs the collection, use, and transfer of personal information of a child. Personal information is generally information that could be used to identify or locate an individual, such as name, address, city or town, email address, phone number or other information which when combined with information collected about the parents could permit the physical or online contact of the child.[68]

Verifiable parental consent is required prior to collection of the information. Post collection consent is not sufficient.[69] However, the site may collect information only as needed to obtain the parental consent. Therefore, the

65. 16 C.F.R. § 312 (2005), *available at* http://www.ftc.gov/os/1999/10/64fr59888.pdf (last visited Feb. 22, 2005).

66. 16 C.F.R. § 312.3.

67. *Id.*

68. § 312.2.

69. § 312.5.

internet site may ask the child for information such as the parent's phone number in order to obtain the required consent.[70]

Sites that respond to inquiries from a child but do not retain the information for further contact are excepted from this consent requirement, though. For example, legitimate "homework help" sites which reply to a request from a child can collect information necessary to respond.[71]

Website operators must give to parents a disclosure regarding the types of information that is collected from the children, and the parents must be given the opportunity to restrict the use of that information by the website. The website must also use reasonable efforts to provide parents with notice of its privacy policies regarding children and must post such policies on its website.[72]

COPPA prohibits website operators from conditioning a child's participation in an activity - like a game or prize offer - on the child's disclosure of more personal information than is reasonably necessary to participate in the activity.[73] This provision prevents tying personal information from children to popular and persuasive incentives like games and prizes, and preserves a child's access to such activities.

THE "SAFE HARBOR" UNDER COPPA

COPPA authorizes and recognizes a safe harbor system whereby entities interested in creating a safe harbor compliance program can request a certification letter from the FTC certifying that a program meets the applicable requirements. CARU ("Children's Advertising Review Unit") has implemented one such safe harbor system which, like the Safe Harbor for the US compliance with the EU Data Directive, involves several steps in a voluntary self certification process.[74] Various programs have been certified, including TRUSTEE[75] and the Entertainment Software Rating Board ("ESRB") program[76]; other requests are pending.

C. Enforcement actions under COPPA

The FTC has the right to enforce COPPA for many organizations. Banks and Credit Unions are governed by the FDIC or the National Credit Union Board, and certain trade unions and other organizations are governed by other statutory bodies, but generally, the FTC can enforce the penalty provisions of COPPA.

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70. § 312.5(c).

71. *Id.*

72. § 312.4.

73. § 312.7.

74. *See CARU Safe Harbor Program Requirements*, *at* http://www.ftc.gov/privacy/safeharbor/carureqs.pdf (last visited Feb. 22, 2005).

75. *See* http://www.truste.org (last visited Feb. 22, 2005).

76. *See* http://www.esrb.org (last visited Feb. 22, 2005).

Recent enforcement actions were brought against UMG Recordings and Bonzi Software, each of which agreed to settle with the FTC for $400,000 and $75,000, respectively.[77] In each case the organization was charged with violating COPPA by knowingly collecting personal information from individuals under 13 without the required parental consent (each collected individual's birthdates and therefore had "actual knowledge" they had collected information about children).

Earlier actions were taken in 2003 against Mrs. Fields and Hershey's Cookies, both of whom collected information about children's birthdays, names and home addresses for "birthday club" promotions. Mrs. Fields allegedly collected the information without obtaining the required consent, while Hershey's used a notice that was allegedly inadequate under COPPA. Mrs. Fields settled for $100,000 and Hershey's for $75,000.[78]

Because COPPA specifically requires the website operator to contact and obtain verifiable parental consent prior to the collection of personal information, unlike HIPPA, compliance with the Safe Harbors of the EU Data Directive will not be sufficient to meet this requirement. The EU Data Directive concerns the transfer of data, but the COPPA Act prohibits the collection of the data in the first place. Therefore, operators which intend to reach and collect information about the protected audience of children will need to do more than the Safe Harbors provide.

D. Gramm Leach Bliley Act of 1999

The Gramm Leach Bliley Act ("GLBA") was enacted on November 12, 1999.[79] The Act covers many aspects of the financial services industry, and certain provisions include privacy protection for consumer financial information. The GLBA requires the Federal Trade Commission, along with 7 other agencies, to promulgate certain regulations to implement the Act. In addition, the GLBA is implemented by the individual states. It, like HIPPA, is a "floor," which recognizes the right of individual states to provide greater protections than that of the GLBA without preemption.

The GLBA required the Federal Trade Commission and the other agencies to promulgate several Rules, including the Financial Privacy Rule[80] and

77. *UMG Recordings, Inc. to Pay $400,000, Bonzi Software, Inc. to Pay $75,000 to Settle COPPA Civil Penalty Charges*, *at* http://www.ftc.gov/opa/2004/02/bonziumg.htm (Feb. 18, 2004).

78. *FTC Receive Largest COPPA Civil Penalties to Date in Settlements with Mrs. Fields Cookies and Hershey Foods*, *at* http://www.ftc.gov/opa/2003/02/hersheyfield.htm (Feb. 27, 2003).

79. 15 U.S.C. §§ 6801-6809 (2004), *available at* http://www.ftc.gov/privacy/glbact/glbsub1.htm (last visited Feb. 22, 2005).

80. 16 C.F.R. pt. 313 (2005), *available at* http://www.ftc.gov/os/2000/05/65fr33645.pdf (May 24, 2000).

the Security Rule.[81] The Commission also enforces the GLBA prohibitions on "pretexting," or collecting financial information about individuals through the use of false pretexts.[82] Generally, though, the GLBA governs the disclosure by financial institutions of consumer financial information to non-affiliated third parties, and may require consent or give consumers "opt-out" choices prior to disclosure.[83]

All financial institutions are covered by the GLBA. Beyond purely financial institutions like banks and credit unions, which are governed by agencies other than the FTC, such as the Federal Reserve, NCUSA or the FDIC, covered institutions include those that "significantly engage" in financial activities.[84] Examples include mortgage brokers, lenders, check cashing services, credit counseling services, medical services providers issuing long term credit, financial advisors, including tax advisors, estate planning, retailers that issue credit cards, auto dealers and leasing agents that finance, collection agencies, title companies, real estate appraisal companies, credit bureaus, relocation services companies, student loans and mortgages made by government agencies. The GLBA rules as applied to these "non-banks" are regulated and enforced by the FTC. On the other hand, the institutions not covered by the GLBA are retailers that accept but do not issue credit cards, such as grocery stores that allow cash back from a check, small businesses that "run tabs" for regular customers, or stores that provide "layaway" services.

Any "nonpublic personal information" ("NPPI") held by a financial institution is subject to the GLBA provisions. This includes "personally identifiable financial information," and any list, description or grouping of consumers derived from information not publicly available,[85] for example, a list of customers who have accounts with balances in excess of $10,000. Publicly available information, however, such as information contained in generally distributed phone books, is excluded.

"Personally identifiable financial information" is any information a consumer provides to obtain a financial product or service, information about a consumer resulting from a transaction to obtain a financial product or service, or information otherwise obtained about a consumer in providing a financial product or service.[86] The rules list examples of personally identifiable financial information, including the fact that a consumer is a customer of a particular institution, names, addresses, social security numbers,

81. 16 C.F.R. pt. 314 (2005), *available at* http://www.ftc.gov/os/2002/05/67fr36585.pdf (May 23, 2002).

82. *See generally* 15 U.S.C. §§ 6821-6827 (2004), *available at* http://www.ftc.gov/privacy/glbact/glbsub2.htm (last visited Feb. 22, 2005).

83. *See generally* §§ 6801-6809.

84. § 6809.

85. *Id.*

86. *Id.*

account numbers, any information a consumer provides on an application and cookies collected by a website.

One significant purpose of the GLBA was to give consumers notice of the privacy policies of their financial institutions. Any such notices must be clear and conspicuous, reasonably understandable, in plain language and designed to call attention.

Various relationships and transactions between financial institutions and its patrons require differing levels and means of notice.[87] In addition, the GLBA distinguishes between the "consumer" and "customer" of financial institutions. The consumer is one engaging in a personal financial transaction, such as cashing a check, filling out a loan application or arranging for a wire or bank transfer.[88] Alternatively, a customer is essentially a consumer who maintains an ongoing relationship with the institution.[89] Examples of customers include credit card holders, auto lessees, auto loan holders, mortgage borrowers, account holders and the like.[90]

For *customers*, full notice of the privacy policy is to be made not later than the time the customer relationship is first established. This initial privacy notice must provide an "opt out" provision to allow a customer to limit disclosure of nonpublic personal information to nonaffiliated third parties, unless an exception applies.[91] Further, this notice must be made annually after the initial notice for the duration of the relationship.[92]

For *consumers*, a "short form" initial notice may be used, including an "opt out" provision. However, the full privacy policy disclosure is not automatically required, as with customers. The financial institution must only provide a reasonable means by which the consumer may obtain the full disclosure, and must provide such upon request.[93]

All notices must be delivered such that the notice is reasonably certain to reach the consumer.[94] This can include delivery by hand, mailing to the consumer's last known address, or for the consumer who conducts transactions electronically, posting on the company website in such a manner that active acknowledgement of the notice is required for the consumer to proceed.[95] Mere posting on a passive website or a sign in a branch office is not sufficient notice.

87. *See* 16 C.F.R. §§ 313.4, 313.9 (2005).

88. § 313.3.

89. *Id.*

90. *Id.*

91. § 313.4.

92. § 313.5.

93. § 313.6.

94. § 313.9.

95. *Id.*

The GLBA not only regulates notice of privacy policies, but also the substantive policies themselves. While the notices must inform the consumer of all disclosures, whether to affiliates or nonaffiliated third parties[96], the GLBA only prohibits disclosure of nonpublic personal information to nonaffiliated third parties.[97] Thus, the definitions of affiliate and nonaffiliated third party are critical to efficient compliance.

Because the GLBA is limited in this way, it most likely creates no additional compliance burdens for an entity that complies with the Safe Harbor provisions, provided that the specific notice requirements are met.

Most importantly, state laws that provide greater protection than the GLBA must be dealt with, as they are not preempted by the GLBA unless they conflict with it.

PREEMPTION UNDER THE GLBA

The GLBA does not preempt state laws that are not "inconsistent" with the GLBA. More specifically, it is not inconsistent to provide "greater protection" than that provided by the GLBA, as determined by the Federal Trade Commission.[98]

To date, there are four requests from states to consider whether certain provisions of their privacy laws are pre-empted by the GLBA.[99] The states are Vermont, North Dakota, Illinois, and Connecticut. (In addition, California has enacted several important privacy laws that are widely believed to go beyond the GLBA, but no letter has been submitted from that state.)

North Dakota: North Dakota enacted an "opt in" privacy protection scheme in 1985. It required an affirmative choice by the consumer to allow disclosures to third parties. However, after the passage of the GLBA, the North Dakota legislature adopted amendments to the state law recognizing the GLBA and excepting institutions in compliance with the less restrictive "opt out" provisions of the GLBA. The FTC has issued a letter indicating that there is not an inconsistency and thus no preemption.[100]

Similarly, Connecticut uses an "opt in" provision and petitioned the Commission for a determination on their state law. The Commission has ruled that the Connecticut statute is also not preempted by GLBA. An institution can comply with the stricter rule of either GLBA or the Connecticut statute in any circumstance by not disclosing information, and so there is no conflict.[101]

96. § 313.6.

97. § 313.10.

98. 15 U.S.C. § 6807(b) (2004).

99. *See* http://www.ftc.gov/privacy/privacyinitiatives/financial_rule_preemption.html (last visited Feb. 23, 2005).

100. *See* http://www.ftc.gov/os/2001/06/northdakotaletter.htm (June 28, 2001).

101. The Commissioners determination letter is available at http://www.ftc.gov/privacy/glbact/conn020607.htm (last visited Mar. 28, 2005).

Vermont had an existing privacy law in effect prior to the passage of GLBA and requested the Commission review certain rules made pursuant to that law. The FTC has issued a letter indicating that there is not an inconsistency and thus no preemption.[102]

Illinois also filed a petition requesting a determination about it's "opt in" disclosure requirements which require an affirmative consent from consumers prior to disclosure. Similar to Vermont, the FTC has issued a letter indicating that there is not an inconsistency and thus no preemption.[103]

California has the most aggressive privacy laws of recent issue, and will be treated separately below, but has not yet petitioned the Commission for a ruling on the preemption by GLBA.

ENFORCEMENT BY THE FTC

The FTC has enforced the "pretexting" prohibitions of GLBA. The "pretexting" prohibitions apply to the sections of GLBA on fraudulent procurement of personal financial information.[104]

Pretexting prohibits the collection of customer information of a financial institution by making false statements to any person or to the customer themselves. Criminal penalties for violation include incarceration and fines.

Since the effective date of the Act, the FTC has brought several actions against "information brokers," companies, and individuals for violating the "pretexting" provisions.[105] These were settled with agreed orders including fines.

E. "Can Spam" Act Of 2003

The Act entitled "Controlling the Assault of Non Solicited Pornography and Marketing" Act of 2003, reviled by some commentators as the "Yes You CAN SPAM Act", became effective January 1, 2004.[106] Unlike the other legislation addressed here, CAN SPAM does not concern the collection, processing or transfer of individual information, instead it concerns the right of an individual to stop unwanted email from a sender, "SPAM".

The Act provides that unsolicited email must include an "opt out" mechanism that allows consumers to stop additional emails from the sender. It is a violation of the act to use deceptive from, contact, and subject lines, and the

102. *See* http://www.ftc.gov/os/2004/09/040903letterglbcrowley.pdf (last visited Mar. 28, 2005).

103. *See* http://www.ftc.gov/os/2004/09/040903letterglbpadron.pdf (last visited Mar. 28, 2005).

104. 15 U.S.C. §§ 6821-6827; text is available at http://www.ftc.gov/privacy/glbact/glbsub2.htm.

105. See the "pretexting" cases at http://www.ftc.gov/privacy/privacyinitiatives/pretexting_enf.html.

106. Public Law 108-187, 117 Stat. 2699, Senate Bill 877, 15 U.S.C. § 7701 et seq.) can be viewed at http://www.spamlaws.com/federal/108s877.

Act authorizes (but does not require) the FTC to set up a national "do not email" list.

Because it is an "unsubscribe" system many critics allege it is an act written to *enable*, not stop, spam, or unwanted email. The recipient has to "opt out" *after* the spam arrives. Many critics wanted an "opt in" system instead. Further, and perhaps more damaging to consumer privacy, the Act supercedes some tougher state laws, particularly the anti spam acts in place in California.[107]

Nonetheless, suits to address spam have been filed under the new Act by ISPs against marketers whose unsolicited emails failed to include proper headers, contact, and unsubscribe information.[108] The Act gives ISPs a right of action to stop spammers using their services.[109] Additional rights of action vest in various federal agencies including the FTC and in the states.

This note does not address in detail the recent FACTA legislation passed in 2003. FACTA extends the Federal Fair Credit Reporting Act ("FRCA") and pre-empts certain state laws that might otherwise affect disclosures of credit reports information between affiliated entities.[110] The new provisions emphasize requirements that credit reports be accurate.

III. DATA PRIVACY IN CALIFORNIA

Because the state of California has been so active in legislating privacy protection, it is treated as a separate topic here. Only data related legislation is discussed here, there are many other types of privacy protections in the state.

In 2003, California enacted several bills that impact not only California businesses, but any business that collects information from California residents. Thus, global businesses have to be aware of, and know how to comply with, these laws. Additionally, California has a dedicated Office of Privacy Protection.[111]

The following section addresses a few of the very significant ways California's laws could affect businesses performing data handling.

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107. The Act at Section 8 provides that it *supercedes* State laws specifically directed to regulating email. Laws not specifically directed to email, federal or state, are not affected.

108. On March 10, 2004, four of the nation's largest ISPs sued many online marketers under CAN SPAM. The lawsuits, filed by EarthLink Inc., Microsoft Corp., Yahoo Inc., and America Online, mark the first time the enforcement provisions of the law has been tested since going into effect in January.

109. CAN SPAM Act Section 7(g).

110. Pub. L. No. 108-159 (2003). For a summary of the impact of FACTA on credit reporting, *see* http://www.consumerlaw.org/initiatives/facta/nclc_analysis.shtml#5

111. For more information *see* http://www.privacy.ca.gov.

1. Law of Notice of Security Breach[112]

This law, which became effective July 1, 2003, provides that any agency, person or business that has data that includes "personal information" and who becomes aware of a breach of security must disclose the breach to any resident of California whose unencrypted personal information was, or is believed to have been, accessed by an unauthorized person. "Personal information" includes an individual's first name or first initial and last name in combination with any of their driver's license or social security number, or any account number, credit or debit card number with the pin that would allow access to the account.

The notice may be written, electronic, or if many people are involved, by substitute notice through the major media outlets.

2. Privacy of financial information

State Bill 1 became effective July 1, 2004 and it adds protection of financial information privacy that is stricter than GLBA provisions for financial information.[113]

This piece of legislation requires affirmative "opt-in" for sharing of information with third parties, provides for "opt-out" for sharing with affiliates unless in the same line of business under the same name. Furthermore, it requires a plain language notice of consumer rights.

3. AB 68; Online Privacy Act[114]

California's Online Privacy Act became effective July 1, 2004. It requires operators of commercial websites that collect personal information on California residents to post a specific privacy policy on the website and to comply with the policy.

4. SB 27: Information sharing disclosure[115]

Effective January 1, 2005, this California law states that upon request by a consumer, a business having personal information of a California resident must give list of categories of information shared with third parties with the names and contact information of the third parties, OR provide a conspicuous privacy statement with a cost free "opt out" prior to the disclosure.

Note: Financial institutions covered by SB 1 are exempt.

AntiSpam Act: SB 186 – largely preempted by CAN SPAM, this bill effective January 1, 2004 would have been tougher than the federal CAN SPAN act, with larger damages available.

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112. Ca. Civil Code Sections 1729(a) and 1798.82-84.

113. The text of the bill, signed by Gov. Gray Davis on Aug. 28, 2003, is at http://info.sen.ca.gov/pub/03-04/bill/sen/sb_0001-0050/sb_1_bill_20030828_chaptered.pdf.

114. Assembly Bill No. 68, available in text at http://info.sen.ca.gov/pub/03-04/bill/asm/ab_0051-0100/ab_68_bill_20031012_chaptered.pdf.

115. Senate Bill 27, available at http://info.sen.ca.gov/pub/03-04/bill/sen/sb_0001-0050/sb_27_bill_20030925_chaptered.pdf.

IV. Canada Legislation

Canada, a North American neighbor and trading partner, is also concerned about privacy. Canada is one of several other countries that have enacted legislation similar to, and often based on, the EU Data Privacy Directive.[116] Canada's "The Personal Information and Protection of Electronic Documents Act" ("PIPEDA") legislation is particularly important to United States interests and is addressed in detail here.

The Act, a Federal law in Canada, was approved April 13, 2000 and became effective in phases. For a province that enacts a similar provision, that provision supercedes the Federal act for intra-province transactions, otherwise the Federal act is in effect.[117] PIPEDA is not limited to electronic information, but certainly applies to it. In January 2002, the EU Commission recognized the Act as providing "adequate protection." Thus, unlike businesses based in the US, Canadian businesses do not have to consider the EU Data Directive as a separate compliance scheme, so long as they comply with PIPEDA.

PIPEDA creates a Privacy Commissioner.[118] Individual citizens may bring complaints to the Commissioner who has the power to enforce the Act in Federal Court. Citizens may get injunctive relief and fines or damages for violations through an action brought by the Privacy Commissioner.

The information protected is broad: "any information about an identifiable individual whether recorded or not." Entities collecting personal information have obligations to meet certain security requirements. The entities covered by the Act are also broad; after a ramped phase which started with airlines, banks and other regulated entities, then covered health information, the governed entities as of January 1, 2004 extend to :

> The collection, use and disclosure of personal information by any organization in the course of commercial activity within a province;
> All personal information in all inter-provincial and international transactions by all organizations subject to the Act in the course of commercial activities.

The Act requires prior consent before disclosure and prohibits disclosure without consent. Thus, it is a strong "opt in" provision. Furthermore, the Act clearly covers businesses based outside of Canada who collect, use, or transfer data including personal information about individuals within Canada.

The Act is based on two principles, called "Fair Information Principles." First, organizations can only collect personal information that is appropriate

116. For a country by country report, see Privacy International's informative website at http://www.privacyinternational.org/survey/phr2003/.

117. Text is available at http://www.privcom.gc.ca/legislation/02_06_01_01_e.asp

118. The Commissioner has a website at http://www.privcom.gc.ca/index_e.asp.

for the specific transaction; they must explain why they need the information, what it will be used for, whether they plan to disclose it to anyone else and must obtain consent for this use and disclosure (exceptions to the consent provision are made for law enforcement, scholarly research and emergencies). Second, individuals may obtain information about themselves held by an organization and can request that inaccurate or incomplete information be corrected. Exceptions include such matters as national security, solicitor-client privilege, and threats to the safety of others.

Significantly, most provinces have now enacted their own version, so PIPEDA is now a guide to the Canadian laws, but not the actual law in place in most provinces for *intra-province* transfers; however, the Federal law applies to inter-province and international transfers.

V. CONCLUSION

A global corporation or entity that has or collects personal information has to do more than meet the EU-US "Safe Harbor." State, national, and international laws must be considered. As strict as the EU Data Directive is, there are specific notice and consent requirements imposed on anyone collecting personal information that exceed or differ from those requirements. Thus, awareness and vigilance in keeping abreast of these developing requirements is essential for successful compliance.

USEFUL LINKS; most have many pages of information beneath them

EU Data Directive

http://europa.eu.int/comm/internal_market/privacy/index_en.htm

EU Safe Harbor- US Department of Commerce

http://www.export.gov/safeharbor/

US Department of Health and Human Services – HIPAA

http://www.hhs.gov/ocr/hipaa/

US Federal Trade Commission (FTC) – GLBA, FRCA, and COPPA

http://www.ftc.gov/privacy/index.html

California Privacy Laws

http://www.privacy.ca.gov

Canada Privacy Commission – PIPEDA information

http://www.privcom.gc.ca/

International Privacy Information

http://www.privacyinternational.org/

http://www.bakernet.com/ecommerce/intlegis-p.htm