THE TECHNOLOGY-RICH “DOT-COM” IN BANKRUPTCY: THE DEBTOR AS OWNER OF INTELLECTUAL PROPERTY

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The Internet is responsible for "the greatest legal creation of wealth in the history of the planet . . . ." The business of creating and foisting new technology upon others that goes on in Silicon Valley [the birthplace of the internet company] is near the core of the American Experience. The United States obviously occupies a strange place in the world. It is the capital of innovation, of material prosperity, of a certain kind of energy, of certain kinds of freedom, and of transience. Silicon Valley is to the United States what the United States is to the rest of the world. It is one of those places, . . . like Las Vegas, that are unimaginable anywhere but in the United States. It is distinctively us."1

I. INTRODUCTION

The principal assets of many enterprises doing business primarily on the Internet are in the nature of property categorized under the law as intellectual property—namely copyrights, patents, trademarks, and service marks.2 These technology-rich enterprises, whether in the start-up phase or well established, are often in need of commercial financing. Traditionally, to establish or maintain a marketshare, a firm offers its tangible and intangible assets to a commercial bank or other financier, who takes an interest in them as security for a loan. These financing transactions, when they involve personal property security, are most commonly governed by Article 9 of the Uniform Commercial Code (U.C.C.).

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2. Intellectual property as firms’ dominant asset will likely become even more commonplace as information becomes increasingly more commodified. See Raymond T. Nimmer, Information and Intellectual Property Licenses and Financing, in FINANCING THE ENTERPRISES OF THE INTERNET (2000). Intellectual property generally refers to rights associated with patents, trademarks, trade secrets, and copyrights. Patent and copyright law are authorized by Article I, Section 8 of the Constitution, which gives Congress the power “[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” U.S. CONST. art. I, § 8, cl. 8. Federal statutes define the scope of patent, trademark, and copyright protection, but trade secrets are governed by state statutory and common law. The Patent Act provides for patent protection for inventions that are new, useful, and non-obvious. See 35 U.S.C. §§ 101-03 (1994). Copyright protection is reserved for “original works of authorship fixed in any tangible medium of expression,” but does not include protection for “any idea, procedure, process, system, method of operation, concept, principle or discovery.” 17 U.S.C. § 102 (a)-(b) (1994). The Commerce Clause is the constitutional authority for the enactment of the trademark law (the Lanham Act). See U.S. CONST. art. I, § 8, cl. 1. Trade secrets are creatures of state common law. See, e.g., Microbiological Research Corp. v. Muna, 625 P.2d 690, 696 (Utah 1981) (“The trade secret is a type of intellectual property, in effect, a property right in discovered knowledge.”); see also THOMAS M. WARD, INTELLECTUAL PROPERTY IN COMMERCE §§ 1:5-1:11 (Rev. ed. 2001) (a review of the “asset” and “property” characteristics of the major forms of intellectual property).
When a preponderance of a firm’s assets are comprised of intellectual property, however, Article 9 is not necessarily and exclusively the appropriate governing law. Transactions involving intellectual property as security may implicate, in certain circumstances, the statutes defining and governing parties’ rights in intellectual property. One of the fundamental problems that has been identified when intellectual property is involved, however, is that the legal regime governing the use of intellectual property as collateral is unclear and confusing. Whereas Article 9, in outlining the rules for perfecting security interests in personal property collateral, as well as defining priority rights held by a secured party, provides clear and certain rights to all parties to commercial transactions within its reach, intellectual property law fails to address the same concepts as Article 9, offers different timing rules and procedures, and eschews Article 9’s terminology. Accordingly, a party seeking to use intellectual property as collateral is caught in the intersection of intellectual property law and Article 9—with very little direction as to which way to turn.

This uncertainty takes on greater urgency when the debtor, as owner of the intellectual property, files for bankruptcy protection. Bankruptcy provides an acid test for the efficacy of non-bankruptcy law perfection of security interests; the strength and soundness of non-bankruptcy law interests are scrutinized in bankruptcy. When non-bankruptcy law is not state Article 9 but federal intellectual property law, the vulnerabilities in the attachment, perfection and priority rules may be revealed.

Moreover, several important bankruptcy issues beyond the issue of the effectiveness of perfection of security interests in intellectual property are raised in “dot-com” bankruptcies. These include (i) the extent to which the company’s intangible assets are included in its bankruptcy estate; (ii) the restrictions, if any, on the post-petition use, sale, or lease of intellectual property; (iii) the increased vulnerability of creditors to trustee claims of stay violations; and (iv) the potentially greater risk of avoidance of pre-petition transfers as preferential.

This Article will explore these issues in the context of a hypothetical “dot-com” enterprise.

A. eduSkills.com—A Hypothetical Internet Company

eduSkills.com is the brainchild of the principals of two corporations, XYZCo. and Denizen, Inc. The principals of eduSkills initially sought seed money in the

3. See http://www.thestandard.com/article/display (listing, in what is called the “Flop Tracker,” Internet companies that have failed).

4. Section 101(35A) of the Bankruptcy Code provides an illustrative, but incomplete, definition of “intellectual property.” It includes trade secrets, inventions, processes, designs, or plants protected under the Patent Act, patent applications, plant varieties, works of authorship protected under the Copyright Act, and mask works, but neglects to include trademarks, trade names, or service marks. 11 U.S.C. § 101(35A) (1994). These forms of intellectual property were omitted from the definition because of the problems associated with giving licensees the option to retain use rights in these dependent assets against a bankrupt licensor who has otherwise rejected the license. See 11 U.S.C. § 365(n) (1994); see also Ward, supra note 2, § 4:98.

5. For a comprehensive description of eduSkills.com, see eduSkills.com Business Plan [hereinafter Business Plan] (on file with the Author).

6. The company is currently in its early phase and is being managed jointly by executives from Denizen and XYZCo. Once the next round of funding has been raised the company will
amount of $5-10 million to launch their idea: an exciting and entertaining Web site where 12-19 year old teens with learning disabilities come to enjoy an interactive educational experience.\(^7\)

The technology eduSkills.com has licensed and developed includes:

(i) A technology called Xciting, which allows the delivery of rich interactive 3-D content over the Internet. Xciting can deliver content at 5 to 10 times the speed of competing technologies.\(^8\) The Denizen engineers who developed this breakthrough technology had previously developed multi-player aircraft simulation technology. In addition, eduSkills.com has developed some innovative software products based upon the Xciting platform;

(ii) \textit{Registered Copyright Cover: "Shapes and Sounds Software."} Shapes and Sounds Software is interactive learning software that builds on the 3-D capabilities of Xciting and uses interactive "learning block" exercises to help users with both basic geometry and language skills;

(iii) \textit{Unregistered Copyright - Trade Secret: "Shaping the Sentences Software."} Shaping the Sentences Software is interactive learning software that allows the user to create sentence diagrams in an entertaining, graphically rich, 3-D environment providing feedback to guide the student toward an understanding of sentence object, subject, preposition and various modifiers;

(iv) \textit{Patent Applications: "EduCanvas Software."} The claims and specifications describe a software based business method that coordinates and classifies education related Web sites and list servers (schools, learning centers, materials publishers, and organizations) and the Web sites of other suppliers of interactive educational material. The software enables eduSkills.com to consolidate its marketing strategy and discern "felt needs" as they appear on related Web sites and messages culled from list servers. The patent application was filed on December 1, 1999;

(v) \textit{Database related to EduCanvas Software.} eduSkills.com has developed a rich database related to its creation of the EduCanvas Software;

(vi) \textit{Registered Domain Names.} eduSkills.com has registered and has proprietary rights to the following domain names: eduSkills.com; EduCanvasSoftware.com; Shapes&Sounds.com;

(vii) \textit{Trademarks.} eduSkills.com has registered "eduSkills.com" as a trademark.

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7. The company plans to launch its site by July 2000, with at least six interactive entertainment and educational games. This will be followed by a major ramp-up for a twelve-month period—including building advertiser and e-commerce relationships. eduSkills.com will use Web and non-Web based marketing channels to create awareness of the site. At the launch of the site, a small amount will be spent on marketing. As more experiences are added, the marketing spending will increase significantly, with a large media campaign in 2001. There will also be a significant awareness generated by "word of mouth" effect among educators, psychologists, parents, and teens, especially by teens inviting their friends to play multi-player games. Links and cross-promotions with advertisers and content providers will drive additional traffic to the site.

8. eduSkills.com has an exclusive perpetual license to use Xciting\(^\circ\), a 3-D interactive technology from Denizen, Inc., which gives them a clear technology advantage over any rival sites. Xciting allows very high quality, single and multi-player, 3-D interaction between players and web-based characters, without the bandwidth constraints and huge downloads required by other technologies.
II. PERFECTION OF SECURITY INTERESTS IN INTELLECTUAL PROPERTY

A. Perfection Put to the Section 544(a) Avoiding Powers Test

Non-bankruptcy legal regimes outline the methods for the transfer of interests in intellectual property—namely the federal Copyright Act, the Patent Act, and the Lanham Act. Moreover, each of these federal statutes provides a method of documenting and recording interests in intellectual property. Although there is considerable variation between and among these statutory schemes, a common structural element is their linkage of the concepts of transfer and title.

Financiers seeking to take a security interest in most types of personal property look to Article 9, which dissociates the concept of title and security interest transfers and provides an efficient and streamlined method of attachment and perfection of security interests. Article 9 states, subject to certain specified exceptions, that it governs "any transaction (regardless of its form) which is intended to create a security interest in personal property or fixtures including goods, documents, instruments, general intangibles, chattel paper or accounts." As compre-

9. The discussion in this section will be confined to federally protected intellectual property—copyrights, patents, and trademarks.
10. 17 U.S.C. § 205 (c)-(d) read:
   (c) Recordation as Constructive Notice.—Recordation of a document in the Copyright Office gives all persons constructive notice of the facts stated in the recorded document, but only if—
   (1) the document, or material attached to it, specifically identifies the work to which it pertains so that, after the document is indexed by the Register of Copyrights, it would be revealed by a reasonable search under the title or registration number of the work; and
   (2) registration has been made for the work.
   (d) Priority Between Conflicting Transfers.—As between two conflicting transfers, the one executed first prevails if it is recorded, in the manner required to give constructive notice under subsection (c), within one month after its execution in the United States or within two months after its execution outside the United States, or at any time before recordation in such manner of the later transfer. Otherwise the later transfer prevails if recorded first in such manner, and if taken in good faith, for valuable consideration or on the basis of a binding promise to pay royalties, and without notice of the earlier transfer.
11. Section 261 of the Patent Act states, in pertinent part:
    An assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent and Trademark Office within 3 months from its date or prior to the date of such subsequent purchase or mortgage.
12. Section 1060 of the Lanham Act reads in pertinent part:
    An assignment shall be void against any subsequent purchaser for valuable consideration without notice, unless the prescribed information reporting the assignment is recorded in the Patent and Trademark Office within three months after the date of the subsequent purchase or prior to the assignment.
13. See infra notes 31-33.
14. See infra notes 31-33.
15. U.C.C. § 9-104 (1995); see also U.C.C. [Revised] § 9-109(c), (d).
16. U.C.C. § 9-102(1)(a); see also U.C.C. [Revised] § 9-109(a).
hensive in scope as Article 9 is, it also recognizes its potential for displacement, in deference to the federal intellectual property regimes. Each of the federal intellectual property statutes addresses the issue of transfer of an interest in intellectual property, but does not specifically mention, in the language of Article 9, the issues of creation, attachment, perfection, and priority of security interests. Moreover, Article 9 simply provides that if another body of law governs these matters, then Article 9 steps-back or is preempted. It is not apparent, however, from the text of Article 9 nor from the law addressing the title and transfer of interests in intellectual property, exactly which legal regime governs the attachment, perfection, and determination of priority of security interests in federally protected intellectual property.

The issue of perfection of security interests in intellectual property is at the heart of many of the fundamental issues that arise in a debtor-with-intellectual-property's bankruptcy. When a debtor files for bankruptcy, its trustee becomes interested in determining whether any non-bankruptcy claimed rights (such as perfected security interests) are vulnerable to defeat. The trustee has the power, under section 544(a) of the Bankruptcy Code, to upset the interests of an unperfected creditor, thereby limiting the creditor's ability to receive the full measure of what

17. The Official Comment to Old § 9-106, which defines “general intangibles,” offers examples including goodwill, literary rights, rights to performance, copyrights, trademarks, and patents, “except to the extent that they may be excluded by Section 9-104(a).” U.C.C. § 9-106 cmt.; accord U.C.C. [Revised] § 9-102(a)(42) & cmt. 5d. The Official Comment to Old section 9-104 says, “[W]here a federal statute regulates the incidents of security interests in particular types of property, those security interests are of course governed by the federal statute and excluded from this Article.” See also U.C.C. [Revised] § 9-109(c).

18. Section 9-104(a), known as the complete “step-back” provision reads: “This Article does not apply to a security interest subject to any statute of the United States, to the extent that such statute governs the rights of parties to and third parties affected by transactions in particular types of property.” U.C.C. § 9-104(a); see also U.C.C. [Revised] § 9-109(c). Moreover, the partial “step-back” language in section 9-302(3)(a) states that an Article 9 filing “is not necessary or effective to perfect a security interest in property subject to a statute . . . of the United States which provides for a national or international registration . . . or which specifies a place of filing different from that specified in this Article.” U.C.C. § 9-302(3)(a); see also U.C.C. [Revised] § 9-311(a)(1). The Official Comment to Old section 9-302, in contrast and contradiction to the Official Comment to Old section 9-104(a), states: “Examples of the type of federal statute referred to in paragraph (3)(a) are the provisions of 17 U.S.C. §§ 28, 30 (copyrights), 49 U.S.C. § 1403 (aircraft), 49 U.S.C. § 20(c) (railroads).”

19. See supra note 18.

20. See supra note 18.

21. See supra notes 10-16.

22. To illustrate, Article 9 provides a method for perfecting security interests in general intangibles: the filing of a financing statement in the jurisdiction where the debtor is located indicating the types or describing the items of collateral. See U.C.C. § 9-401. Notwithstanding the fact that copyrights, patents, trademarks, and trade secrets all fall within the catch-all definition of Article 9 “general intangibles,” Article 9 may have to step back with respect to the issue of perfection or may be preempted in its entirety. See U.C.C. § 9-104; see also U.C.C. [Revised] § 9-109(c).

23. As the Bankruptcy Code provides:

The trustee . . . may avoid any transfer of property of the debtor or any obligation incurred by the debtor that is voidable by—(1) a creditor that extends credit to the debtor at the time of the commencement of the case, and that obtains, at such time and with respect to such credit, a judicial lien on all property on which a creditor on a simple contract could have obtained such a judicial lien, whether or not such a creditor exists.

they are owed in the debtor’s bankruptcy.24 When the legal system governing the perfection of security interests in intellectual property is uncertain, creditors’ interests are potentially compromised.

1. Perfection of Security Interests in Copyrights

In considering the reach of section 9-104(1) as applied to copyright-protected assets, the court in *In re Peregrine Entertainment, Ltd.*,25 addressed the issue of the proper place to record a public notice of a security interest—the federal copyright office or the Secretary of State’s office of the relevant state.26 *Peregrine* involved a debtor with a library of copyrights in motion pictures. A bank loaned the debtor six million dollars and took a security interest in its film library.27 The bank filed its financing statement pursuant to Article 9’s filing rules governing tangible and intangible personal property, but did not record its interest in the Copyright Office.28 When debtor filed for bankruptcy, the debtor as debtor-in-possession sought to avoid the bank’s security interest in the copyright collateral and related receivables pursuant to its section 544(a) strong arm powers.29 The court ultimately held that the security interests were avoidable because the bank had not perfected its interest in the Copyright Office.30

The *Peregrine* court held that when copyright assets are used as collateral, Article 9 must “step back” in deference to the perfection and priority rules of section 205 of the Copyright Act. The court based its conclusion on the fact that the Copyright Act has established a provision for recording a “transfer of copyright ownership or other document pertaining to copyright,” as well as a scheme for determining priority between conflicting transferees.31 The court concluded not only that Article 9 must “step back” but that the federal Copyright Act preempts state law Article 9’s perfection and priority provisions.32 In addition, the *Peregrine* court, in deciding that a lien creditor is a protected transferee under section 205(d) of the Copyright Act,33 determined that a creditor who fails to record its security interest in the Copyright Office is subject to defeat by the bankruptcy trustee (as a hypothetical lien creditor).34

The court in *In re AEG Acquisition Corp.*,35 reached the same conclusion with respect to the correct place to perfect a security interest in copyrights, three years


25. 116 B.R. 194 (C.D. Cal. 1990); see also *In re AEG Acquisition Corp.*, 127 B.R. 34, 41 at n.8 (Bankr. C.D. Cal. 1991), aff’d, 161 B.R. 50 (B.A.P. 9th Cir. 1993).


27. *Id.* The bank filed a UCC-1 financing statement describing the collateral as “[a]ll inventory consisting of films and all accounts, contract rights, chattel paper, general intangibles, instruments, equipment, and documents related to such inventory, now owned and hereafter acquired by the [d]ebtor.” *Id.* at 197-98 (first alteration in original).

28. *Id.* at 198 & n.3.

29. *Id.* at 198.

30. *Id.* at 207-08.

31. *Id.* at 198.

32. *Id.* at 202.

33. *Id.* at 205-06.

34. *Id.; see also* 11 U.S.C. § 544(a) (2000). For a critique of the *Peregrine* court’s position on this point, see Ward, supra note 2, § 2:73.

35. 161 B.R. 50 (B.A.P. 9th Cir. 1993).
later.\textsuperscript{36} AEG involved security interests in three films, two of which had registered copyrights.\textsuperscript{37} The security interests with respect to all three films were recorded in the Copyright Office.\textsuperscript{38} The court held that section 205 of the Copyright Act was the proper law governing perfection of interests in copyrights, but that copyright registration was a prerequisite for copyright perfection, thus finding the creditor unperfected with respect to the two unregistered copyrights.\textsuperscript{39}

Recently, the court in \textit{In re Avalon Software},\textsuperscript{40} adopted a part of the \textit{Peregrine} formula in holding that security interests in copyrights that were not recorded under section 205 of the Copyright Act were unperfected and thus avoidable in bankruptcy.\textsuperscript{41} The \textit{Avalon} court went further than the \textit{Peregrine} and \textit{AEG} courts, however, in noting that certain general intangibles and accounts receivables associated with copyrights were also within the recording mandate of section 205.\textsuperscript{42} The court thus deemed the copyright-related assets to be unperfected to the same extent that the copyrights were unperfected—notwithstanding an otherwise proper Article 9 filing by the creditor against the debtor's general intangibles and accounts.\textsuperscript{43} Moreover, the \textit{Avalon} court suggested that rights to payment from intellectual property licenses, as proceeds of copyrights, must be perfected in the same manner as the original copyright, thus offering an expansive interpretation of which original collateral should be viewed as "copyrightable and therefore outside of the reach of Article 9."\textsuperscript{44}

The issue of perfection of security interests in unregistered copyrights was again addressed in \textit{In re World Auxiliary Power}.\textsuperscript{45} The debtor in this case designed and sold aircraft products and offered such products and designs as collateral in connection with a loan from a creditor.\textsuperscript{46} One of these designs was copyrighted, but the copyright was not registered in the Copyright Office.\textsuperscript{47} The creditor filed a UCC-1 financing statement but did not record the security interest in the Copyright Office.\textsuperscript{48}

\textsuperscript{36} \textit{Id.} at 59-60.

\textsuperscript{37} \textit{Id.} at 53.

\textsuperscript{38} \textit{Id.}

\textsuperscript{39} \textit{Id.} at 57.

\textsuperscript{40} 209 B.R. 517 (Bankr. D. Ariz. 1997).

\textsuperscript{41} \textit{Id.} at 522. The court in \textit{Avalon}, however, rejected the total step-back of \textit{Peregrine}, and implemented the partial step-back of section 9-302(3)-(4), determining that compliance with the terms of the Copyright Act (meaning registration and recordation of the underlying copyrighted work) resulted in creditor's perfection of its interest. \textit{See id.} at 521-22.

\textsuperscript{42} \textit{Id.} at 521.

\textsuperscript{43} \textit{Id.} at 523.

\textsuperscript{44} \textit{Id.} at 521. But see \textit{Broadcast Music Inc. v. Hirsch}, 105 F.3d 1163 (9th Cir. 1997), where the court held, in a non-bankruptcy context that an irrevocable assignment of an interest in copyright royalties not recorded pursuant to the Copyright Act, but complete under state law, had priority over a perfected IRS lien. \textit{Id.} at 1167-68. The \textit{Avalon} court further addressed the issue of after-acquired copyrights. \textit{In re Avalon Software}, 209 B.R. at 522. Because the document recorded in the Copyright Office must specifically identify the work to which it pertains, the court stated that after-acquired copyrights are not recorded (and thus perfected) by the original recording in the Copyright Office. \textit{Id}. The significance of this is apparent when a financier is seeking to secure a loan with collateral. \textit{See} 17 U.S.C. § 205(c) (2000); \textit{see also} discussion infra Part II.B.

\textsuperscript{45} 244 B.R. 149 (Bankr. N.D. Cal. 1999).

\textsuperscript{46} \textit{Id.} at 150.

\textsuperscript{47} \textit{Id.}

\textsuperscript{48} \textit{Id.}
The court in *World Auxiliary Power* held that because the Copyright Act provides no means of perfecting a security interest in unregistered copyrights, section 9-302(3) does not "preclude perfection by filing a UCC-1 financing statement." If a creditor perfects its security interest in an unregistered copyright solely by filing a financing statement in accordance with the terms of Article 9, however, once the debtor takes the final steps to register such copyright, the creditor would find itself unperfected—likely upon a challenge by a bankruptcy trustee—unless there is a recordation in the Copyright Office specifically identifying the work.

A number of assets of eduSkills.com are copyrighted or copyrightable. Consider the following scenario:

Bank wants to take a security interest in eduSkills.com's Shapes and Sounds Software and Shaping the Sentences Software. Assume that both software products are being regularly revised and improved, to both get their bugs out, as well as to enhance their utility.

What steps does Bank have to take to ensure that upon eduSkills.com's bankruptcy, its security interest is not vulnerable to avoidance? With respect to the registered copyright in Shapes and Sounds Software, pursuant to *Peregrine* and *AEG*, Bank must register its security interest in the Copyright Office, "specifically identify[ing] the work to which it pertains." This will serve to protect the creditor's interest in the specifically identified work, but not as to any subsequently improved versions or forms of the software. This is because the provision describing the steps necessary for recordation of security interests in registered copyrights requires a specific description of each copyrighted asset and makes no mention of any method to take an interest in after-acquired property.

If Bank further intends to take a security interest in assets that may be proceeds of the Shapes and Sounds Software, including any general intangibles and accounts that might arise as a result of a sale or license, under the teachings of *Avalon*, interests in such assets, as they arise, must also be recorded in the Copyright Office. Bank, however, is well advised to similarly record its interest in both the software and any proceeds and after-acquired property in the U.C.C. as a precautionary measure.

With respect to the Shaping the Sentences Software, characterized as an unregistered copyright and state protected trade secret, Bank should file its interest in the proper U.C.C. office. Bank should be cautioned, however, that the simple act of registering the copyright under the Copyright Act would defeat its perfection, even under the holding in *World Auxiliary Power*. Furthermore, under the *Avalon Software* holding, the bank with only an Article 9 filing is vulnerable even if it could successfully argue that the proper characterization of the software was a trade secret and not a copyright.

49. Id. at 151; see also 17 U.S.C. § 205(c) (2000) (registration is a predicate to constructive notice).


51. See id. at 154 n.11; see also *WARD*, supra note 2, § 2:81A. But see Alice Haemmerli, *Integrity Interests: Where Intellectual Property and Commercial Law Collide*, 96 Colum. L. Rev. 1645, 1657-68 (1996) (arguing that Article 9 is the governing law for perfection of all security interests in unregistered copyrights).

52. 17 U.S.C. § 205(c) (1994); see also *WARD*, supra note 2, §2:75.
2. Perfection of Security Interests in Patents

The Patent Act states that the "assignment, grant or conveyance" of an interest in a patent "shall be void as against any subsequent purchaser or mortgagee" unless the assignment, grant, or conveyance "is recorded in the Patent and Trademark Office within three months from its date or prior to the date of such subsequent purchase or mortgage."\(^{53}\) Does this provision preempt Article 9 with respect to transfers of security interests in patents? The court in *In re Transportation Design and Technology, Inc.* stated that the language in the Patent Act providing for the recordation of an assignment does not include within its meaning the transfer of a security interest, because the transfer of a security interest does not involve a transfer of title, and thus such a recorded assignment does not defeat the interest of a lien creditor.\(^{54}\) Accordingly, the court concluded that an Article 9 filing and perfection serves to protect the secured party against the bankruptcy trustee. The *Transportation Design* court stated in dicta, however, that recording under section 261 of the Patent Act would be necessary to protect the secured party against subsequent assignees of the patent, including a secured party that formed its security interest into a "conditional assignment."\(^{55}\)

Following the lead of *Transportation Design*, the Bankruptcy Appellate Panel in *In re Cybernetic Services, Inc.*, held that a recording with the Patent and Trademark Office is insufficient to provide constructive notice of a transfer of a security interest, and therefore the Patent Act does not preempt Article 9.\(^{56}\) In affirming the panel's decision in *Cybernetic Services* the Ninth Circuit described the security interest as a "mere license" placing it clearly outside the recording mandate of section 261, *even as against subsequent assignees*.\(^{57}\) Therefore, to establish priority against involuntary lienholders, including the trustee in bankruptcy, and against subsequent assignees, the creditor must perfect its interest under Article 9.

eduSkills.com has a patent application pending in EduCanvas Software, a software based business method. Assume that Bank, considering the financing of eduSkills.com's operations, wants to take a security interest in this potentially valu-

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53. Id.


55. Id. at 639-40. Section 261 of the Patent Act states: "An assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent and Trademark Office within three months from its date or prior to the date of subsequent purchase or mortgage." 35 U.S.C. § 261 (1994).

56. *In re Cybernetics Servs., Inc.*, 239 B.R. 917 (B.A.P. 9th Cir. 1999). One of the patent collateral cases that finds Article 9 filing sufficient for perfection against the trustee is *City Bank and Trust v. Otto Fabric, Inc.*, 83 B.R. 780 (D.C. Kan. 1988). *Otto Fabric* is worthy of special note, however, because the secured party had both filed under Article 9 and recorded under section 261 of the Patent Act before the bankruptcy petition. Perfection marks the date of the transfer, however, when the transfer is for or on account of an antecedent debt under the preference rules in section 547 of the Bankruptcy Code. In *Otto Fabric* the secured creditor's Article 9 filing was outside the ninety-day period for preference avoidance in § 547(b), but its later Patent Act recording of the "conditional assignment" was within the ninety-day preference period. The court found no preference had occurred because it dated the transfer as of the time of Article 9 "perfection."

57. *In re Cybernetic Servs., Inc.*, 252 F.3d 1039, 1051-52 (9th Cir. 2001) (A security interest is a "mere license" and not an "assignment, grant or conveyance" under the recording mandate in section 261 of the Patent Act.) In its zeal to remove security interests from section 261, the Ninth Circuit may have carried its reasoning too far. See WARD, supra note 2, § 2:91A.
able business method patent application. Under the dictates of both *Transportation Design* and *Cybernetic Services*, Bank must file a financing statement pursuant to the terms of Article 9. This filing would perfect Bank’s interest against defeat by eduSkills.com’s bankruptcy trustee. Under the Ninth Circuit’s recent decision in *Cybernetic Services*, this filing would also seem sufficient against subsequent assignees of the patent. Framing the security interest as a conditional assignment may still be prudent, however, for the secured creditor who wants to rely on the PTO records.

3. Perfection of Security Interests in Trademarks

Similar to the Patent Act, the Lanham Act provides for the recordation of assignments of trademarks, together with trademark holders’ goodwill. In the absence of a specific provision addressing the transfer of security interests, however, courts have held that the U.C.C. provides the proper method of perfecting security interests in trademarks. For example, the court in *In re Together Development Corp.*, held that filing with the PTO was ineffective to perfect creditor’s security interest because the Lanham Act did not specifically provide for the recordation of security agreements.58

In *In re 199Z, Inc.*, the creditor similarly recorded its interest in the PTO, as well as filing an improper financing statement under Article 9.59 The court, in finding secured creditor’s interest to be unperfected, held that the Lanham Act does not preempt Article 9 because it does not expressly include provisions for recording security interests within its scope.60

eduSkills.com has registered the trademark “eduSkills.com,” as well as the domain names, “eduSkills.com,” “EduCanvasSoftware.com,” and “Shapes&Sounds.com.” Each of these has potential value and thus may be valuable collateral. Assume Bank wants to take a security interest in all of eduSkills.com’s trademarks and domain names in exchange for the grant of a loan. Even though there is some question about the proper characterization of domain names,61 if some are deemed to be trademarks, Bank must file a financing statement describing the trademarks pursuant to the provisions of Article 9 to perfect its interest. Upon eduSkills.com’s bankruptcy, if so properly filed, Bank’s interest will withstand challenge by the bankruptcy trustee. Bank, however, under the Lanham Act, will have a problem as transferee of such trademarks if they are transferred, in accordance with the bankruptcy distribution, in the absence of the goodwill of eduSkills.com.62


60. *Id.* at 782.

61. See *Ward*, *supra* note 2, § 144.

62. See 15 U.S.C. § 1060 (1994). “A registered mark or a mark for which application to register has been filed shall be assignable with the goodwill of the business in which the mark is used, or with that part of the goodwill of the business connected with the use of and symbolized by the mark.” *Id.*; see also *Roman Cleanser v. National Acceptance Co.*, 802 F.2d 207 (6th Cir. 1986) (goodwill not limited to tangible machinery but may include the transfer of formulae and customer lists).
B. Characterization of Intellectual Property When Used As Collateral

The body of case law addressing the issue of how one perfects and enforces a security interest in federally protected intellectual property raises more questions than it answers. The cases described above both introduce and reinforce the uncertainty that exists with respect to security interests in intellectual property. They raise further questions about the scope of the reach of the federal provisions providing for the recordation of interests in intellectual property. Accordingly, these cases draw into question the ability of intellectual property holders to use the value of these intangible, yet valuable, assets in commerce.63

Another concern central to the issue of the proper steps for perfection of security interests is how to characterize specific types of intellectual property for commercial law purposes. To illustrate, it is not necessarily clear how to properly characterize computer software. A prospective lender seeking to take a security interest in such software must first determine whether this software is copyrightable, patentable, or protected as a trade secret, or is characterized pursuant to Article 9, as "intangibles," or "ordinary goods."64 If a copyright has been registered describing, with specificity, the software, then the place to register and thus perfect a security interest may be the Copyright Office.65 If however, a business method patent has been registered with the PTO, it may be deemed a general intangible, with the perfection location dictated by Article 9.66

The extent to which software is determined to be copyrightable or patentable in the first instance, as well as how one perfects a security interest in an unregistered copyright,67 or in after-acquired copyrights68 remains unclear. The number of unanswered questions that are raised by this one commercial scenario make the collateralization of copyrighted materials an uncertain venture and, accordingly, make creditors particularly vulnerable in the "dot-com" debtor's bankruptcy.

III. INTELLECTUAL PROPERTY INCLUDED AS "PROPERTY OF THE ESTATE"

It further may not be clear the extent to which all of assets of a "dot-com" debtor are included in its bankruptcy estate. Upon the filing of a bankruptcy peti-

63. See Ward, supra note 2, § 2:4.
64. Moreover, if software is embodied in goods that are normally used in more than one jurisdiction, the software, if deemed to be an Article 9 asset, may be deemed to be "mobile goods." If the intellectual property embodied in the software is deemed to be general intangibles, the secured party must file a financing statement in the state where the debtor is located. Cases have held that software products are to be as "ordinary goods," thus requiring a state law filing in the place where the "last event occurs on which is based the assertion that the security interest is perfected or unperfected." It should be noted that Revised Article 9 overrules the "software as ordinary goods" case law and defines software as a general intangible. Financing statements with respect to general intangibles are to be filed in the place the debtor is located, which, in the case of an organized entity, is in its place of organization. See U.C.C. [Revised] §§ 9-102(a)(42), (75), 9-307(b), (e) (1999).
65. Supra notes 25-52 and accompanying text.
66. U.C.C. § 9-103(3)(1997). Under Revised Article 9 the place to file with respect to all collateral is debtor's "location," which is defined for corporate debtors as its state of organization. U.C.C. [Revised] §§ 9-301, 307(e).
67. Supra notes 25-52 and accompanying text. According to the World Auxiliary Power court, registration of a copyright is critical to that copyright's inclusion under the recording provisions of section 205. In re World Auxiliary Power, 244 B.R. 149, 153 (Bankr. N.D. Cal. 1999).
68. Supra note 49-51 and accompanying text.
ployees, not yet embodied in a tangible medium or otherwise protected under the copyright or patent acts. Such know-how may be in the nature of general concepts acquired in the course of work, or may rise to the level of a trade secret. Is it fraudulent concealment for a debtor to retain and fail to disclose on its bankruptcy schedules such know-how, or is such know-how merely a debtor's or debtor's employees' "retained expertise which it can exploit for its own benefit?" The answer to this question turns upon whether such know-how is estate property.

The determination of whether such know-how is estate property depends

74. Cases have held that general concepts are not protectable, per se, as trade secrets. Winston Research Co. v. Minnesota Mining & Mfg. Co., 350 F.2d 134, 140 (9th Cir. 1965).

75. The Uniform Trade Secrets Act defines a trade secret as information that, "(1) Derives independent economic value, actual or potential, from not being generally known to the public or other persons who can obtain economic value from its disclosure or use; and (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy." Furthermore, a trade secret may consist of any formula, pattern, device or compilation of information which is used in one's business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it. It may be a formula for a chemical compound, a process of manufacturing, treating or preserving materials, a pattern for a machine or a device or list of customers. RESTATEMENT (SECOND) TORTS § 757 cmt. b (1989).

76. Two Bankruptcy Code provisions address the issue of the debtor's fraudulent behavior with respect to assets of the estate. Section 727(a)(2) (denial of a discharge if a transfer or concealment of assets was made with fraudulent intent) and Section 548(a) (avoidance of a transfer that was made with fraudulent intent or constructively fraudulent). Section 727(a)(2) reads:

The court shall grant the debtor a discharge, unless—

. . . the debtor with intent to hinder, delay, or defraud a creditor or an officer of the estate charged with custody of property under this title, has transferred, removed, destroyed, mutilated, or concealed, or has permitted to be transferred, removed, destroyed, mutilated, or concealed—

(A) property of the debtor, within one year before the date of the filing of the petition; or

(B) property of the estate, after the date of the filing of the petition.


Section 548(a)(1) reads:

The trustee may avoid any transfer of an interest of the debtor in property, or any obligation incurred by the debtor, that was made or incurred on or within one year before the date of the filing of the petition, if the debtor voluntarily or involuntarily—

(1) made such transfer or incurred such obligation with actual intent to hinder, delay, or defraud any entity to which the debtor was or became, on or after the date that such transfer was made or such obligation was incurred, indebted; or

(2)(A) received less than reasonably equivalent value in exchange for such transfer or obligation; and

(B)(i) was insolvent on the date that such transfer was made or such obligation was incurred, or became insolvent as a result of such transfer or obligation;

(ii) was engaged in business or a transaction, or was about to engage in business or a transaction, for which any property remaining with the debtor was an unreasonably small capital; or

(iii) intended to incur, or believed that the debtor would incur, debts that would be beyond the debtor's ability to pay as such debts matured.


78. The evolutionary form of original estate property is deemed to be estate property, pursuant to section 541(a)(6) of the Bankruptcy Code. 11 U.S.C. § 541(a)(6) (1997) (The estate is comprised of "[p]roceeds, product, offspring, rents, or profits of or from property of the estate.").

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tion, a bankruptcy estate is automatically created. The estate includes the pool of assets that will ultimately be distributed to satisfy the claims of creditors, and is broadly defined. The bankruptcy code definition of "estate" states that it is comprised of all of the debtor's interests in its property, wherever located, including proceeds of or from property of the estate. Accordingly, the threshold issue to be determined upon a bankruptcy filing is exactly what assets are properly included in the debtor's bankruptcy estate and thus available for distribution to creditors.

One of the central tenets of bankruptcy policy is its respect for property rights created under non-bankruptcy law. Cases have held that, notwithstanding its intangible nature, intellectual property held by a debtor at the time a bankruptcy petition is filed is included within the estate. As such, eduSkills.com's software products, includes: 1) a registered copyright in Shapes & Sounds Software; 2) an unregistered copyright/trade secret in Shaping the Sentences Software; 3) a patent applications in EduCanvas Software; 4) registered Domain Names in (i) eduSkills.com, (ii) EduCanvasSoftware.com, (iii) Shapes&Sounds.com; 5) the trademarks—eduSkills.com; and 6) licenses from Denizen for the use of Xciting. These are all potentially included in debtor's bankruptcy estate.

A. Know-How or Trade Secrets?

What is excluded from this list, however, but what may have potential value to a reorganizing debtor, is know-how of the debtor personally or the debtor's em-

70. Section 541 of the Bankruptcy Code defines estate as "all legal or equitable interests of the debtor in property as of the commencement of the case." Id. § 541(a)(1).

Congress has generally left the determination of property rights in the assets of a bankrupt's estate to state law. Property interests are created and defined by state law. Unless some federal interest requires a different result, there is no reason why such interests should be analyzed differently simply because an interested party is involved in a bankruptcy proceeding. Uniform treatment of property interests by both state and federal courts within a State serves to reduce uncertainty, to discourage forum shopping, and to prevent a party from receiving a "windfall by reason of the happenstance of bankruptcy."

Id. at 54-55 (internal citations omitted).
72. Chesapeake Fiber Packaging Corp. v. Sebro Packaging Corp., 143 Bankr. 360, 371 (D. Md. 1992) (citing United States v. Inslaw, Inc., 932 F.2d 1467, 1471 (D.C. Cir. 1991)) ("It is undisputed that . . . [the property of the debtor's estate includes] the debtor's intellectual property, such as interests in patents, trademarks, and copyrights."). Moreover, any tangible assets debtor has an interest in are similarly deemed property of the estate. For example, any inventory held by debtor in connection with product sales, would similarly be deemed property of the estate.

73. A bankruptcy estate includes both intellectual property with a res, as well as contract rights to intellectual property. Contract rights to intellectual property may be deemed to be licenses. Such contract rights are likely deemed licenses to use intellectual property. An exclusive license covering copyrighted software is a transfer of a piece of the res of a copyright, whereas a nonexclusive license is a mere contractual right—an executory contract that invokes section 365. Both characterizations fall within the definition of estate property, but the distinction is important because contract rights held by the debtor may be deemed to be an executory contract, which is governed by section 365 of the Bankruptcy Code. See Ward, supra note 2, § 4:3 (distinguishing "property" rights in an intellectual property "res" from contractual "property").
upon whether it was considered merely general conceptual information, or whether it was a legally cognizable trade secret. If it is general conceptual information, then it would likely be considered property of the employee or the debtor personally, and not property of the debtor's bankruptcy estate. If, however, the know-how rises to the level of a trade secret, then it would be deemed to be property of the debtor at the time of the bankruptcy filing, and accordingly, estate property. If employees with such know-how remain in debtor's employ, post-petition, and such know-how ultimately evolves into a valuable patent or copyrightable asset, the extent to which the know-how, in its evolved form, is estate property similarly turns upon whether the know-how, in its original form, is deemed to be property of the estate.

B. Customer Lists

Are an internet company's customer lists property of the estate? If so, can they be sold pursuant to a liquidation plan or transferred to the newly reorganized entity? Internet companies' customer lists differ from "bricks and mortar" or paper catalogue companies' customer lists in that they often contain specific information about a customer. For example, an on-line company may have gathered information, either directly from the customer, or indirectly through technological tracking devices. Such customer-specific information may include not only the

79. The court, in Fleming Sales, Co., Inc. v. Bailey, found that certain information acquired in the course of defendant employee's employment, such as lists of manufacturers, did not rise to the trade secret level: "Business experience and know-how as reflected in that information, however valuable, are not something the law protects from the rigors of the marketplace." Fleming Sales, Co., Inc. v. Bailey, 611 F. Supp. 507, 516 (N.D. Ill. 1985).

80. Debtor's or debtor's employees' personal expertise is not deemed to be an asset of the estate. "[E]quity has no power to compel a man who changes employers to wipe clean the slate of his memory." Avocado Sales Co. v. Wyse, 10 F.2d 485, 488 (1932) (quoting Peerless Pattern Co. v. Pictorial Review Co., 132 N.Y.S. 37, 39 (1911)); see also 11 U.S.C. § 541(a)(6) (1997) (The estate is comprised of "[p]roceeds, product, offspring, rents, or profits of or from property of the estate, except such as are earnings from services performed by an individual debtor after the commencement of the case." (emphasis added)).

81. In re McGee, 157 B.R. 966, 975 (Bankr. E.D. Va. 1993). "[I]ntellectual property held by a debtor at the time he files a petition is property of the estate." Id. The court, in In re McGee, held that debtor, in failing to disclose on bankruptcy schedules certain information-type property in fact concealed a trade secret, which was deemed to be valuable "property of the estate." Id. at 976. Accordingly, debtor was denied a discharge under section 727(a)(2)(A). Id.


83. One such device is known as a "cookie." As described by Professor Kurtz: Cookies are small data files deposited on your hard drive by a site you are visiting. When you connect to a web site that uses cookies, the web site computer, called a web server, deposits the cookie—a small piece of information about your visit to that site—and a unique identifier on your computer's hard drive. The next time you visit the site, the cookie is transmitted back to the web server, which can then "remember" what you did last time. The information can be stored in a database and can be used to customize the site or to target advertisements or content. Cookies allow web site operators, including advertisers, to record information such as the trail of sites that a person visits and her online purchases, often without her knowledge. For example, the operator of a site that sells books or videotapes can know every web page that the user has clicked on and every book or film looked at or ordered over a number of visits, allowing the operator to compile a list of the user's preferences.

Id. at 161.
length of time the customer spent on each Web page, but also the number of pages visited, the items purchased, as well as the previous sites visited. This information is potentially valuable to other internet businesses, particular debtor's competitors, yet the debtor may not sell or otherwise transfer these lists, due to the affirmative promise of privacy debtor offered to its users.

84. The tracking of previous web sites visited is referred to as the "clickstream." Clickstream data can be collected through the use of persistent client state HTTP cookies, sometimes also called magic cookies or just cookies." Id.

85. In exchange for customer's use of the Internet site, many businesses have adopted a privacy policy, whereby they promise not to share personally identifiable information with third parties without the customer's consent. To illustrate, the privacy policy of AnyDay.com, Inc. reads as follows:

AnyDay.com, Inc. (AnyDay.com) regards the privacy and security of member information as a critical component of the service that we offer to our members. The following information explains our information gathering and dissemination practices. AnyDay.com is a member of the TRUSTe program and is in compliance with TRUSTe privacy principles.

TRUSTe is an independent, non-profit initiative whose mission is to build users' trust and confidence in the Internet by promoting the principles of disclosure and informed consent. Because this site wants to demonstrate its commitment to your privacy, it has agreed to disclose its information practices and have its privacy practice reviewed and audited for compliance with TRUSTe. When you visit a Web site displaying the TRUSTe mark, you can expect to be notified of:

1. What information this site gathers/tracks about you.
2. What this site does with the information it gathers/tracks.
3. With whom this site shares the information it gathers/tracks.
4. This site's opt-out policy.
5. This site's policy on correcting and updating personally identifiable information.
6. This site's policy on deleting or deactivating your name from our database.

Information Collected

When you register with the AnyDay.com service, registration form requires you to give us your name, gender, your birth date, country, zip code, time zone and email address ("Registration Data"). Demographic and profile data is also collected at our site. Generally, this information is collected through "traffic data" and may entail the use of "Cookies", "IP addresses" or other numeric codes used to identify a computer. The use of "Cookies" on the site is explained in more detail below in the IP Address and Cookies section.

Use of Information

We use Registration Data to tailor and deliver the AnyDay.com service to your particular needs for services such as horoscopes, weather and personalized events. We also use Registration Data to send you information about our company and service and to keep you informed of enhancements and complementary products in which you might be interested. You may choose to stop receiving future communications from us. Please see the Opt-Out and Discontinue section.

We use demographic and profile information to tailor your experience at our site, showing you the content that we think you might be interested in as well as displaying the content according to your preferences.

Sharing of Information

AnyDay.com feels strongly that your personal data should only be seen by you, unless you choose to share it with others. We will never sell, rent, license or exchange personally identifiable data with a third party without your permission. No personally identifiable data or information will be shared with advertisers or partners without your permission. Some of your information may be shared on an aggregate basis only, as a part of a larger set of statistics (for example, statistics that indicate the percentage of our members that are female), but that information will not be suffi-
Moreover, a company in bankruptcy may be precluded by the Federal Trade Commission Act from selling or otherwise transferring its customer lists, in derogation of its privacy policy.86 The Federal Trade Commission (FTC) has the authority to investigate and prosecute "unfair or deceptive acts or practices in or affecting commerce."87 This authority covers on-line commerce, which has been determined to include the collection and transfer of on-line customer information.88 To illustrate, in Federal Trade Commission v. Toysmart.com, LLC,89 the FTC sued
Toysmart.com, claiming that they engaged in "deceptive practices by violating its privacy policy in offering its customer lists for sale." 90 After protracted negotiations, Toysmart.com and the FTC ultimately reached a settlement agreement pursuant to which Toysmart.com agreed to only sell its customer lists as part of the sale of its goodwill, and not as a stand alone asset. Moreover, the buyer of the list had to comply with the terms of Toysmart.com's original privacy policy, or get the affirmative consent of each customer to any changes. 91 Clearly the FTC's position with respect to Internet customer lists and consumer privacy has called into question the ability of Internet companies to use or sell, in connection with a liquidation or reorganization, what may be a valuable asset of the estate. 92

C. Trademarks

Trademarks represent the reputation and corresponding goodwill of a business, and accordingly, the Lanham Trademark Act requires that trademarks be transferred with the goodwill of the firm. 93 A trademark transferred in the absence of the business' goodwill is referred to as a prohibited "assignment in gross." The transfer of a security interest in a trademark has been held not to rise to the level of an assignment, and thus may be transferred without the business' underlying goodwill. 94 Upon foreclosure, however, the trademark may not be transferred to the foreclosing creditor without the associated goodwill. As such, while falling within


91. If a customer failed to affirmatively consent to a change in policy, the new owner of the customer list had to abide by the terms of the original policy. The aggressive actions of the FTC ultimately led to Toysmart.com's decision not to sell its customer list.


93. 15 U.S.C. § 1060 (1994). "A registered mark or a mark for which application to register has been filed shall be assignable with the goodwill of the business in which the mark is used, or with that part of the goodwill of the business connected with the use of and symbolized by the mark." Id.; *See also* Roman Cleanser v. National Acceptance Co., 802 F.2d 207 (6th Cir. 1986) (goodwill not limited to tangible machinery but may include the transfer of formulae and customer lists).

the definition of property of the estate, non-bankruptcy law restrictions on trademark transfers may preclude their effective assignment.95

Many “dot-com” firms include within their assets a domain name or names.96 Domain names are identifying addresses of organizations or businesses, and, depending upon the market, they may be valuable assets of the estate.97 Are domain names considered trademarks and if so, must they be transferred only with the associated goodwill of the company? The answer is yes, if the domain name operates as the identifier of the company’s goods or services. The PTO has stated that a domain name functions as a trademark if it serves as a “source identifier” for the services that are being offered on the Internet.98 If however, the domain name is a mere business address, then it is likely that it would not be registrable as a trademark.99 Accordingly, the transfer of domain names would not be subject to the provisions of the Lanham Act, including the requirement that the transfer be with the associated goodwill of the transferee.

D. Proceeds, Product, Offspring of Estate Property

The definition of “property of the estate” also specifically includes, “[p]roceeds, product, offspring, rents, or profits of or from property of the estate.”100 The Bankruptcy Code does not specifically explain or define the proceeds concept, so courts look to non-bankruptcy law for guidance. Currently, Article 9 defines proceeds as “whatever is received upon the sale, exchange, collection or other disposition of collateral or proceeds.”101 Article 9 embraces the idea that proceeds is what results when estate property is disposed of. Revised Article 9 expands the definition of proceeds to include, “whatever is acquired upon the sale, lease, license, exchange or other disposition of collateral,” and “rights arising out of collateral.”102 This expanded definition eliminates the “disposition” requirement and is broad enough to include forms of property into which intellectual property evolves or metamorphoses. For example, a trade secret, protected under state common law and covered by Article 9 as a general intangible, may transform, post-petition, into a copyrightable invention (as defined under the Copyright Act) and thus will be

95. The recent well-publicized sale of the “Pan Am” mark to a small start-up air carrier with only three aircraft in its fleet, however, suggests that the non-bankruptcy requirement that sufficient goodwill pass with the mark is given a relaxed spin in the bankruptcy court. Martha Brannigan, Pan Am II: Tiny Start-Up Touts Old Name, WALL ST. J., Sept. 3, 1996, at B8. Trademarks must be sold and used, or used by the debtor, or be deemed abandoned. Defiance Button Mach. Co. v. C & C Metal Prod. Corp., 759 F.2d 1053, 1060 (2d Cir. 1985) (discussing the issue of trademark abandonment, but noting that goodwill does not “ordinarily disappear or (completely) lose its value overnight”).
96. There is a method of registration of domain names, which secures a holder’s property rights in such addresses. ICAAN is the international registration organization for domain names.
97. Domain names’ value to the estate, however, depends upon, as for any other asset, the market’s willingness to pay a price. See Online Partners.com, Inc. v. Atlantinet Media Corp., No. Civ.A.C. 98-4146 (N.D. Cal. 2000). But see Dorer v. Axel, 60 F. Supp. 2d 558, 561 (E.D. Va. 1999) (stating in dicta that a domain name is not personal property).
100. 11 U.S.C. § 541(a)(6).
deemed under Revised Article 9\textsuperscript{103} to be estate property, by virtue of its status as proceeds of estate property.\textsuperscript{104}

In contrast, an improved patented device or a derivative of a patented device would not necessarily fall within the section 541(a)(6) definition (even under the Revised Article 9 definition of "proceeds") because such devices may be separately protected under patent law. For example, in \textit{In re Szombathy},\textsuperscript{105} the court held that certain improvements and modifications to a patented machine made by the debtor post-petition were not included in debtor's bankruptcy estate. The court noted that even if the improvements infringe the pre-petition property under the Patent Act, they remain property of the debtor. Because the improvements were a significant enhancement and were independent of the original patented machine, they did not qualify as proceeds of such machine.\textsuperscript{106}

If eduSkills.com files for Chapter 7 bankruptcy prior to the development of its copyright registered "Shaping the Sentences Software," but following the development of "Shaping the Sentences Software" trade secret, the state law protected trade secret would be deemed to be part of debtor's bankruptcy estate. If, post-petition, eduSkills.com further developed this software so that it evolved into the copyright registered "Shaping the Sentences Software," it would similarly be included in debtor's bankruptcy estate as proceeds of estate property pursuant to section 541(a)(6).\textsuperscript{107}

Assume, in the alternative, that eduSkills.com has filed for Chapter 7 bankruptcy protection after having developed its patent protected EduCanvas Software. Accordingly, such patent rights would be included in its bankruptcy estate. Further assume that post-petition, eduSkills.com has made certain improvements in its patented EduCanvas Software, and such improvements are independently patentable. Would the improvements to the patented EduCanvas Software be deemed to be included in debtor's bankruptcy estate as "proceeds, product or offspring" of the original patented software? Under the test announced in \textit{In re Szombathy}, a bankruptcy court would recognize the property interest deemed under non-bankruptcy (patent) law to be an independent property interest and such property would be considered property of debtor and not property of debtor's bankruptcy estate.

IV. THE USE, SALE, OR LEASE OF ESTATE (INTELLECTUAL) PROPERTY

There may be further problems raised by the use, lease, or sale of intellectual property in connection with a debtor's bankruptcy. Section 363 of the Bankruptcy Code empowers the trustee to use, sell, or lease property of the estate under certain specified conditions.\textsuperscript{108} It may be necessary to sell a bankrupt company's assets

\textsuperscript{103} But not under current Article 9, which requires a "disposition" of collateral in order to generate proceeds. U.C.C. § 9-306(1) (1994).

\textsuperscript{104} But see \textit{In re Transportation Design and Tech., Inc.}, 48 B.R. 635, 641 (S.D. Cal. 1985) (limiting the definition of proceeds under the old language of the California Commercial Code to what arises when collateral is "sold or in some way disposed of").

\textsuperscript{105} No. 97C481, 1997 U.S. Dist., LEXIS 5168 (N.D. Ill. Apr. 14, 1997).

\textsuperscript{106} \textit{Id.} at **8-10.

\textsuperscript{107} Section 541(a)(6) reads: "Proceeds, product, offspring, rents, or profits of or from property of the estate, except such as are earnings from services performed by an individual debtor after the commencement of the case." 11 U.S.C. § 41(a)(6).

in the course of either a reorganization or a liquidation. Any such use, sale, or lease, however, must recognize the unique qualities of intellectual property.

For example, non-bankruptcy law may preclude the sale of certain "dot-com" company assets. As noted above, trademarks may not be sold in the absence of the firm's goodwill. If domain names are deemed to be trademarks, and a "dot-com" is reorganizing, the sale of some of its domain names may be prohibited, drastically affecting the value of a creditor's security interest. Moreover, potentially valuable on-line customer lists may not be sold in violation of the Federal Trade Commission Act.

Even if some of the problems concerning the ability to sell certain types of intellectual property in the course of a bankruptcy are overcome, there may not be a ready market for intellectual property sold at a "fire sale" where a "going concern" value may no longer be relevant. Intellectual property is potentially time-sensitive, particularly with respect to new technologies and there is the potential for early obsolescence as even newer technologies are developed. Moreover, it may be the case that intellectual property may have little value in the absence of developed human expertise in the particular high-tech field. Accordingly, in many cases, sales of "dot-com" assets in connection with reorganizations and liquidations of "dot-com" businesses may be problematic or in other cases, impossible.

V. Bankruptcy Automatically Triggers a Stay Against Creditor Action

Once bankruptcy is filed, a stay prohibits creditor action against the debtor, the debtor's property, and the estate property. The automatic stay prohibits, among other conduct, any action taken to perfect or otherwise enforce a lien. Because such an act would improve their position relative to the debtor's other creditors and disrupt the bankruptcy asset distribution scheme, creditors may not take the steps to become a secured creditor after bankruptcy is filed. Even if the effort to perfect a security interest post-petition is misplaced, the effort itself is deemed to be a violation of the automatic stay.

For example, in In re Stockbridge Funding Corp., the court held that a creditor who recorded its mortgage interest in an attempt to improve its standing vis-à-vis other creditors was attempting to exercise control over estate property and thus violated the stay, notwithstanding the fact that the recording turned out to be unnecessary to perfection. Thus, the automatic stay prohibiting acts taken

109. Supra notes 62, 85 and accompanying text.
110. Infra notes 120-27 and accompanying text.
113. Any steps taken, however, to establish a security interest or to achieve a perfected secured status prior to bankruptcy, if properly done, are respected in bankruptcy, subject to any violation of the preference or fraudulent conveyance provisions of the Bankruptcy Code. 11 U.S.C. §§ 547, 548 (1997). If a security interest is not, however, properly perfected under state law, it is subject to defeat by the trustee in bankruptcy. 11 U.S.C. § 544(3) (1997).
115. Id. at 807, 811; see also Ward, supra note 2, § 4:22.
with respect to debtor, debtor's property, and estate property is strictly enforced by
courts in order to preserve the integrity of the bankruptcy process.

When a technology-rich debtor files for bankruptcy, there is an increased risk
of a stay violation by a creditor with a purported interest in that debtor's intellec-
tual property. Because a creditor has a greater chance of failing to properly follow
the formalities of perfection of security interests when intellectual property is
involved, due to a lack of clarity in the rules, confusion with respect to the issue of
after-acquired property, and uncertainty as to the proper non-bankruptcy law char-
acterization of certain intellectual property assets, there is a greater chance of a
creditor attempting to correct its mistakes once bankruptcy is filed. Consider the
following example:

Suppose Creditor X, seeking to perfect a security interest in the copyright
protected Shapes & Sounds Software filed a financing statement pursuant
to the terms of Article 9. Once eduSkills.com filed for bankruptcy, Cred-
tor X would be precluded from "correcting its mistake" and filing in the
Federal Copyright Office.

In addition to the the difficulties surrounding the characterization of intellec-
tual property, and the questions about the proper method of perfection, challenging
issues are presented when the holder of a security interest in intellectual property
seeks relief from the automatic stay. A secured creditor may petition a court for
relief from stay pursuant to section 362(d) which, if granted, would allow a
creditor to remove its collateral from the bankruptcy estate in order to exercise its
non-bankruptcy law rights. Section 362(d)(2) allows for relief from stay if, (A)
the debtor has no equity in the property subject to the security interest, and (B)
such property is not necessary to an effective reorganization. To determine if
the first test under section 362(d)(2) is met, (debtor has no equity in the (intel-
tual) property) a valuation of the property must be performed. While issues of
valuation are always difficult in bankruptcy, when the collateral at issue is in-
tellectual property, unique issues are raised.

Currently, the valuation of intellectual property is an imperfect art, rather than
a science. Since many of the assets held by firms doing business on the internet
are new technologies, their potential for ready obsolescence is great. Moreover,

116. See supra Part II.A.
117. Section 362(d) reads:
On request of a party in interest and after notice and a hearing, the court shall grant
relief from the stay provided under subsection (a) of this section, such as by terminat-
ing, annulling, modifying, or conditioning such stay—

(2) with respect to a stay of an act against property under subsection (a) of
this section, if—

(A) the debtor does not have any equity in the property; and
(B) such property is not necessary to an effective reorganization.
118. Id.
119. See Associates Commercial Corp. v. Rash, 520 U.S. 953, 956 (1997) (holding that the
proper method for valuing collateral was the replacement value of that asset).
although there are some established asset valuation methods, the valuation of intellectual property in a bankruptcy context presents some unique issues. First, the value of intangible assets is not fixed; it is very context sensitive and depends upon the existence of a market for the asset. Moreover, there are some inherent assumptions in a bankruptcy context, which include the fact that the business failed, and therefore, how valuable can these assets that were central to the failed business be?

Furthermore, the valuation question may turn on the extent to which the assets of the debtor are found to have what has been referred to as "asset versatility." Pursuant to this concept, consideration would be given to the value of assets performing at their highest and best use. Accordingly, if a valuation determined that software that was being used by debtor as educational games could be put to higher and better use by another firm engaged in a more commercial enterprise, then the asset's valuation should reflect that versatility.

Moreover, if the debtor is reorganizing, a valuation of its assets will be affected by its potential for "enterprise versatility." An enterprise has versatility when "given its brand name, and relationships with regular Internet users who use the . . . website as their primary point of access to the Internet, the entire enterprise is in a position to move in a multitude of directions, enter (without a huge investment in soft costs) a multitude of e-commerce businesses, and do so in a powerful, market dominating way." Consider the following example:

Assume Creditor Y properly perfected its security interest in the patent for "EduCanvas Software." Once notified of eduSkills.com's Chapter 11

120. Gordon V. Smith has identified three available methods of valuation of a firm's assets—the cost method, the market approach, and the income approach. As described by Smith:

The cost method looks to the cost that would be incurred to replace the asset in question. This approach is not often appropriate for intangible assets or intellectual property. The market approach directs us to study arm's length transactions involving property similar to our subject. Intangible assets or intellectual property are rarely exchanged in public transactions, so this technique is not often available to us. That leaves the income approach, in which we calculate the present value of the future economic benefits of owning the subject property.

The income approach requires three inputs—the amount of income, the duration of the income and the risk associated with its realization. As a practical matter, this all boils down to a discounted cash flow calculation.

Gordon V. Smith, Presentation at Financing the Enterprises of the Internet at the University of Maine School of Law (June 15, 2000).

121. See William J. Murphy, Presentation at Financing the Enterprises of the Internet at the University of Maine School of Law (June 15, 2000).

122. See Smith, supra note 120, at 4.

123. This concept is borrowed from real estate appraisers.

Highest and best use for land is the use that, at the time of appraisal, is the most profitable likely use. It is the use that will provide the greatest return to the land after the requirements of labor, capital, and coordination have been satisfied. Thus, [it] may also be defined as the available use and program of future utilization that produces the highest present land value.


124. Smith, supra note 120, at 4.

125. Id. at 5.

126. Id. (describing Yahoo! as an example of an Internet firm with enterprise versatility).
bankruptcy filing, Creditor Y filed a Motion for Relief from Stay pursuant to section 362(d)(2) claiming that debtor does not have any equity in the property, and the patented process is not necessary for an effective reorganization.

What result? To determine whether a creditor’s Motion for Relief from Stay ought to be granted, a valuation of the EduCanvas Software must be conducted, and the value compared to the amount of eduSkills.com’s outstanding obligation.\textsuperscript{127} If both elements of section 362(d)(2) are met, the stay will be lifted and Creditor Y will be free to foreclose on its collateral.

The valuation of intellectual property, however, may not be such a simple or straightforward task. A valuation of eduSkills.com’s assets could take the income approach, recognizing the traditionally essential relationship between earnings and value.\textsuperscript{128} Such a process would likely result in a valuation of zero; not only are most “dot-com” companies lacking in earnings, a “dot-com” in bankruptcy surely is.\textsuperscript{129} Accordingly, the recognition of a positive value for intellectual property assets held by a “dot-com” debtor would likely turn on the assets’ “asset versatility” or the firm’s “enterprise versatility.”

If, however, the patented EduCanvas Software could be sold to another firm and used for other, more commercial, purposes, then perhaps a positive value could be attributed to it. Similarly, if eduSkills.com is reorganizing, and can transform itself from an educational Web site into, for example, a more commercial oriented site focused on a less targeted and larger market, then this enterprise versatility will be reflected in the EduCanvas Software’s value. The parties seeking to establish a positive value, however,\textsuperscript{130} would have to find a readily recognized market for either the asset or the reconstituted enterprise, which may not be so easy in the time it takes to conduct a bankruptcy proceeding.

VI. PREFERENCE AVOIDANCE OF SECURITY INTERESTS

A. Requirements for Avoidable Preference

The Bankruptcy Code allows for the avoidance of certain preferential transfers made upon the eve of bankruptcy. Section 547 of the Bankruptcy Code requires a two-step inquiry to determine whether a given transfer qualifies for pref-

\textsuperscript{127} Creditor Y has the burden of proof on the issue of the debtor’s equity. 11 U.S.C. § 362(g)(1) (1997). The debtor has the burden of proof with respect to the necessity of Creditor Y’s collateral to its effective reorganization. Id. § 362(g)(2).

\textsuperscript{128} See Smith, supra note 120, at 2-3.

\textsuperscript{129} As observed by a noted valuation expert: “The lack of earnings seems to be considered a value enhancement in the New Economy, and we’re not referring to modest, start-up losses, but rather to losses measured in the hundreds of millions—with no real assurances as to when the negatives will be positives.” Id. at 3.

\textsuperscript{130} These parties are the trustee in bankruptcy and the debtor. These are the parties who would likely benefit from the determination that the debtor does have equity in the collateral. If there is equity in encumbered collateral, the stay may not be lifted, and the collateral remains as part of the estate in order to assist the debtor in its reorganization efforts.
erential avoidance. Section 547(b)\textsuperscript{131} sets forth seven elements that must be established to prove an avoidable preference. These elements include: (i) a transfer;\textsuperscript{132} (ii) of an interest in the debtor's property;\textsuperscript{133} (iii) to or for the benefit of a creditor;\textsuperscript{134} (iv) for or on account of an antecedent debt;\textsuperscript{135} (v) made while the debtor was insolvent;\textsuperscript{136} (vi) made on or within ninety days of bank-

131. 11 U.S.C. § 547(b) reads:

[T]he trustee may avoid the transfer of an interest of the debtor in property—

(1) to or for the benefit of creditor;

(2) for or on account of an antecedent debt owed by the debtor before such transfer was made;

(3) made while the debtor was insolvent;

(4) made—

(A) on or within ninety days before the date of the filing of the petition; or

(B) between ninety days and one year before the date of the filing of the petition, if such creditor at the time of such transfer was an insider; and

(5) that enables such creditor to receive more than such creditor would receive if—

(A) the case were a case under chapter 7 of this title;

(B) the transfer had not been made; and

(C) such creditor received payment of such debt to the extent provided by the provisions of this title.


132. Section 101(54) of the Bankruptcy Code broadly defines transfer to include "every mode, direct or indirect, absolute or conditional, voluntary or involuntary, of disposing of or parting with property or with an interest in property, including retention of title as a security interest and foreclosure of the debtor's equity of redemption." 11 U.S.C. § 101(54) (1997). Accordingly, the perfection of security interests, title transfers, and payments to creditors all fall within the definition of "transfer" under the Bankruptcy Code.

133. In order to be subject to preference avoidance, the transfer must be of property of the debtor.

134. Section 101(10)(A) of the Bankruptcy Code defines a "creditor" as "an entity that has a claim against the debtor that arose at the time of or before the order for relief concerning the debtor." 11 U.S.C. § 101(10)(A) (1994). "Claim" is broadly defined as a "right to payment, whether or not such right is reduced to judgment, liquidated, unliquidated, fixed, contingent, matured, unmatured, disputed, undisputed, legal, equitable, secured or unsecured." Id. § 101(5)(B). Because one of the stated justifications for preference avoidance is to ensure equitable treatment among similarly situated creditors, it follows that the transferee have the status of a creditor with a claim to debtor's bankruptcy estate.

135. The Bankruptcy Code does not specifically define the term "antecedent debt." Cases have determined that for a debt to be antecedent pursuant to section 547, the transfer must come after the date of the incurrence of the debt. See Ward, supra note 2, §§ 4:38-39.

136. The classic definition of an insolvent debtor is one whose liabilities exceed its assets. Section 101(32) of the Bankruptcy Code defines "insolvent" as a "financial condition such that the sum of the entity's debts is greater than all of such entity's property, at fair valuation." 11 U.S.C. § 101(32) (1994). The insolvency test is applied on the date the transfer is made. If a debtor is solvent at the time of the transfer in question, and later becomes insolvent and is insolvent at the time of bankruptcy, the insolvency test is not met, and the transfer is not vulnerable to preferential avoidance. The timing rules of section 547(e) come into play in determining a debtor's solvency at the time of transfer, because the date a transfer is made may be determined with reference to the section 547(e)(2)(B) grace period. Id. § 547(e). Section 547(f) sets forth a presumption of insolvency during the ninety days preceding the bankruptcy filing. Id. § 547(f). This provision's legislative history explains the impetus behind the enactment of the presumption of insolvency during the ninety days prior to bankruptcy:

Given the state of most debtor's books and records, such a task is nearly impossible. Given the financial condition of nearly all debtors in the three months before bankruptcy, the task is also generally not worth the effort. Rarely is a debtor solvent during the three months before bankruptcy. Thus, the preference section requires the trustee prove a fact that nearly always exists yet never can be proven with certainty.
rupture;\textsuperscript{137} (vii) that enables such creditor to receive more than they would receive under a chapter 7 distribution.\textsuperscript{138} If the trustee proves all seven elements,\textsuperscript{139} the trustee has established its prima facie case for a preference, and the transferee then has the burden of proving that one of the section 547(c) exceptions applies.\textsuperscript{140} Section 547(c) describes eight different circumstances in which an otherwise avoidable preferential transfer is granted a safe harbor from avoidance. These circumstances include: (i) a contemporaneous exchange for new value;\textsuperscript{141} (ii) a transfer in the ordinary course of business;\textsuperscript{142} (iii) a transfer in connection with an enabling loan;\textsuperscript{143} (iv) a transfer followed by a subsequent advance of new value;\textsuperscript{144} (v) a transfer made in connection with a floating lien;\textsuperscript{145} (vi) statutory lien trans-

H.R. Rep. No. 595, 95th Cong., 1st Sess. 178 (1977). The burden is placed on the creditor to rebut this presumption, which likely will involve an examination of debtor's books and records and a valuation of its assets. In the case of a challenge to a transfer made to or for the benefit of an insider beyond the ninety days prior to bankruptcy, the trustee is not granted the benefit of a presumption, and must prove insolvency with reference to the debtor's records. 11 U.S.C. § 547(f).

137. Any transfer challenged as a preference must be made, if to a non-insider, within ninety days prior to debtor's bankruptcy filing. Transfers are potentially avoidable if made within one year of bankruptcy if the transferee is an "insider." "Insider" is defined under the Bankruptcy Code to include a "relative of the debtor or of a general partner of the debtor," "a partnership in which the debtor is a general partner," "a general partner of the debtor," "or a corporation of which the debtor is a director, officer, or person in control." If the debtor is a corporation, an insider is deemed to be a "director of the debtor," an "officer of the debtor," a "person in control of the debtor," a "partnership in which the debtor is a general partner," a "general partner of the debtor," or a "relative of a general partner, director, officer, or person in control of the debtor." 11 U.S.C. § 101(31) (1994).

138. The final focus of the preference analysis is "upon whether the creditor would have received less than a 100% payout in a Chapter 7 liquidation." Smith v. Creative Fin. Mgmt., Inc. (\textit{In re} Virginia-Carolina Fin. Corp.), 954 F.2d 193, 199 (4th Cir. 1992). This test requires a comparison between the value of what the creditor received as a result of the transfer, and what the creditor would have received in a hypothetical Chapter 7 liquidation, absent the transfer. \textit{Id.} This is measured "not by what the situation would have been if the debtor's assets had been liquidated and distributed among his creditors at the time the alleged preferential payment was made, but by the actual effect of the payment as determined when bankruptcy results." Palmer Clay Prod. v. Brown, 297 U.S. 227, 229 (1936). If the value of what was actually received is greater than the amount the creditor would have received in a liquidation, the hypothetical liquidation test is satisfied.

139. In the case of a Chapter 11, "a debtor in possession shall have all the rights, other than the right to compensation under section 330 of this title, and powers, and shall perform all the functions and duties . . . of a trustee serving in a case under this chapter." 11 U.S.C. § 1107 (1994).

140. Not all transfers made while the debtor is insolvent are deemed under the Bankruptcy Code to be preferential. Some transfers are deemed beneficial, notwithstanding the bankruptcy process. \textit{Id.} § 547(c)(1)-(8). Section 547(g) reads:

For purposes of this section, the trustee has the burden of proving the avoidability of a transfer under subsection (b) of this section, and the creditor or party in interest against whom recovery or avoidance is sought has the burden of proving the nonavoidability of a transfer under subsection (c) of this section.

11 U.S.C. § 547(g).

141. \textit{Id.} § 547(c)(1).

142. \textit{Id.} § 547(c)(2).

143. \textit{Id.} § 547(c)(3).

144. \textit{Id.} § 547(c)(4).

145. \textit{Id.} § 547(c)(5).
fers;146 (vii) transfers to satisfy domestic relations debts;147 and (viii) a transfer made in small consumer transactions.148 Even though of the seven section 547(b) elements must be present in order to find a preference, the transfer need only qualify under one of the section 547(c) safe harbors to be saved from avoidance.

To aid the trustee in its pursuit of avoidance, section 547(f) sets forth a presumption of insolvency during the ninety days preceding the bankruptcy filing, a presumption that may only be overcome by the transferee’s proof of sufficient evidence of solvency.149 Section 547(e) outlines the governing rules that define when a transfer is deemed to be made.150

The time of the transfer relative to the time the debt was incurred is of critical importance when transfers involved are interests in intellectual property. The focus of the timing analysis is on whether there is a “gap” between the incurrence of the debt and the time of the transfer. The “antecedent debt” test is satisfied if the debt is incurred before, or antecedent to the date of the transfer.151

Section 547(e)(2)(B) sets forth a ten-day grace period within which transfers of interests may be perfected.152 With respect to security interests, this grace period begins on the date of attachment.153 If the transfer is perfected within the grace period, the date of the attachment will be deemed to be the date of the transfer.154 If, however, the transferee perfects its interest beyond ten days from the date of attachment, the transfer is deemed to take place on the date of perfection.155

As outlined in Part II, it may not be clear at the outset of a transaction, how a particular intellectual property asset should be characterized, and once characterized, what the proper governing law and method of perfection is.156 If due to confusion and uncertainty the perfection is delayed beyond ten days from the date of the security interest attachment, the transfer may be deemed to be a transfer “on account of an antecedent debt.” If this happens within ninety days of a bankruptcy

146. Id. § 547(c)(6).
147. Id. § 547(c)(7).
148. Id. § 547(c)(8).
149. Id. § 547(f). This presumption only aids the trustee in cases where the transfer is made during the ninety days before a bankruptcy filing. Id. For transfers made to insiders more than ninety days (but less than one year) before bankruptcy, the burden is on the trustee to prove insolvency, in the absence of a presumption. Id. § 547(g).
150. Id. § 547(e). In addition, section 547(a) provides the definition of “inventory,” “new value,” and “receivable.” Id. § 547(a)(1)-(3).
151. The justifications for the preference rules support the necessity of the requirement of transfers made on account of antecedent debt. If a debt is incurred contemporaneously with a transfer, there is no depletion of value from the estate as a result of such transfer. If creditors contribute value commensurate with their receipt of transfers of value, other creditors are not subject to harm. See Ward, supra note 2, § 4:46.
152. Id. § 547(e)(2)(B).
153. Id. § 547(e)(2)(A). That section reads, in part, as follows: “[A] transfer is made . . . (A) at the time such transfer takes effect between the transferee and the transferee, if such transfer is perfected at, or within 10 days after, such time.” Id.
154. Id. If the section 547(e)(2)(A) grace period has not expired at the time bankruptcy is filed, the transferee may perfect its interest within the ten day grace period without violating the automatic stay. Id. § 362(b)(3).
155. Id. § 547(e)(2)(A).
156. See supra Part II.
filing, the transfer is deemed a preference under section 547(b).  

When the transfer at issue is a copyright, a further complication is presented. The Copyright Act section outlining the requirements for recordation of transfers provides for a thirty-day grace period for recordation following the transfer. The relevant language reads: "As between two conflicting transfers, the one executed first prevails if it is recorded, in the manner required to give constructive notice under subsection (c), within one month after its execution in the United States or within two months after its execution outside the United States."  

When the grace period for perfection of copyrights exceeds the section 547(e) allowable grace period determining whether there is an antecedent debt, which grace period controls? The Supreme Court, in *Fidelity Financial Services v. Fink*, held that, in the face of an inconsistent grace period, the twenty-day grace period under section 547(c)(3)(B) was the controlling "timing of the transfer" provision. Because, however, *Fidelity* involved a conflicting state law (not federal law) grace period, it is not clear that the *Fidelity* holding controls when federal copyrights are at issue. Consider the following scenario:  

Suppose that Creditor Z extends credit to eduSkills.com on February 1. Further suppose that Creditor Z records its security interest in eduSkills.com copyrights on February 25th in the Copyright Office. If eduSkills.com files for bankruptcy on March 15th, is eduSkills.com’s grant of a security interest in its copyrights an avoidable preference? Does the perfection of the security interest twenty five days after the debt was incurred make the transfer "for or on account of an antecedent debt"?  

<table>
<thead>
<tr>
<th>Credit</th>
<th>Recordation</th>
<th>Bankruptcy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended</td>
<td>in © office</td>
<td>filed</td>
</tr>
<tr>
<td>February 1</td>
<td>February 25</td>
<td>March 15</td>
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In the event the next bankruptcy court to face this issue decides that the answer is yes, the creditor would be well advised to perfect its interest within ten days after the debt is incurred.  

Another preference-related issue arises when licenses for intellectual property are involved. As stated above, when intellectual property is transferred as collat-

157. Notwithstanding the satisfaction of each of the section 547(b) elements of a preference, the transfer could still be saved if it falls within one of the "safe harbor" exceptions of section 547(c). 11 U.S.C. § 547(c) (1997). In *In re AEG Acquisition Corp.*, the court examined the issue of the timing of the transfer pursuant to section 547(e)(2). The trial court found that creditor Zenith's U.C.C. filing and its recordation in the federal Copyright Office were made more than ten days following the execution of the Restructuring Agreement, whereby a debt was incurred by debtor. Accordingly, the court concluded the security interests were transfers on account of an antecedent debt and not saved by the section 547(e)(2) grace period. *In re AEG Acquisition Corp.*, 161 B.R. 50 (B.A.P. 9th Cir. 1993).  
159. Id.  
160. This issue does not arise when the current version of Article 9 is the law governing the perfection of collateral because even when the law provides for a grace period to perfect an interest, such grace periods are consistent with the Bankruptcy Code's section 547(e) preference grace period. U.C.C. § 9-301(2) (1994) (providing for a ten-day grace period for perfection of a purchase money security interest). *But see* U.C.C. [Revised] § 9-317(e) (20-day grace periods).  
162. Id. at 221. See the discussion of *Fink*’s applicability to a conflicting federal grace period in *Ward*, *supra* note 2, § 4:43.
eral, the debt is deemed to arise once the obligation becomes enforceable.\textsuperscript{163} Moreover, debts incurred in connection with absolute assignments of intellectual property arise at the time title or control is transferred. When intellectual interests are licensed, however, the time the debt is incurred is less straightforward. If one looks at an intellectual property license as analogous to a real estate lease, the debt could be deemed to have been incurred contemporaneously with each periodic payment transfer. Alternatively, if the language of the license, or the context suggests that the license transfer is better viewed as a one-time transfer of rights, in exchange for periodic payments, then the debt would be deemed to have been incurred at the time the license agreement was entered into.

\textbf{B. After-Acquired Intellectual Property—Preferential Transfers?}

In Article 9 governed transactions, as long as the parties provide in the secured loan documentation for creditors’ interest in after acquired property, no further public filing need be made.\textsuperscript{164} This is particularly important to commercial financing transactions where the collateral is dynamic—as is the case with inventory and accounts. When the collateral is intellectual property, the ability to take a security interest in after acquired property may be similarly important. For example, an author of a literary work may produce different versions of the work over time. In order to take a security interest in each version, the copyright would have to be registered and the creditor would have to record a registration statement “specifically identifying the work to which it pertains.”\textsuperscript{165}

According to the formalistic dictates of section 547(b), a recordation of an interest in the newest version of the copyrightable work, if within ninety days of bankruptcy could be deemed to be a preferential transfer. To avoid preference avoidance of such “transfers,” the recordation of the “old version” of the copyrightable asset could be contemporaneously released, thus falling within the safe harbor of section 547(c)(1).\textsuperscript{166}

The success of the creditor claiming this section 547(c)(1) safe harbor will turn on the equivalence in value of the interest released and the interest transferred. Consider the following example:

\begin{quote}
Suppose that the Shapes & Sounds Software developed by eduSkills.com undergoes significant modification by eduSkills.com’s engineers in their
\end{quote}

\begin{quote}
164. Section 9-204(1) provides that if a creditor’s security agreement provides for a security interest in after-acquired property, a new security agreement is not required when the after-acquired property comes into existence. This enables creditors to take blanket liens in all of a debtor’s assets, or all of the assets that fall into certain asset categories. U.C.C. § 9-204 (1997).
165. There is no provision in section 205(d) of the Copyright Act for security interests in after-acquired property. New versions of a copyrightable asset, as they become registered, can be recorded in the federal Copyright Office. 17 U.S.C. § 205(c) (1994).
166. Section 547(c) provides a number of safe harbors for transfers that satisfy each of the section 547(b) preference elements. Section 547(c)(1) reads:
   The trustee may not avoid under this section a transfer—
   (1) to the extent that such transfer was—
   (A) intended by the debtor and the creditor to or for whose benefit such transfer was made to be a contemporaneous exchange for new value given to the debtor; and
   (B) in fact a substantially contemporaneous exchange.
\end{quote}
second year of operation. Creditor Q was granted a security interest in
the original version of the Shapes & Sounds Software and recorded its
interest in the Copyright Office, "specifically identifying the work to which
it pertains." The "new and improved" version of the software is currently
the one that is being used in connection with the Web site. No new re-
cording "identifying" this new version is made. Bankruptcy ensues.

Is Creditor Q "unperfected" with respect to its interest in the "new and improved"
version of the software? The court in World Auxiliary Bank concluded that if the
new derivative work was not "registered" it could be perfected under Article 9.
Even under this logic, however, later registration by the debtor would render the
Article 9 filing ineffective.

Alternatively, suppose that the Shapes & Sounds Software developed by
eduSkills.com undergoes significant modification by eduSkills.com's engineers in
their second year of operation. For example:

Creditor Q was granted a security interest in the original version of the
Shapes & Sounds Software and recorded its interest in the Copyright Of-

ice, "specifically identifying the work to which it pertains." The "new
and improved" version of the software is currently the one that is being
used in connection with the Web site. Creditor Q records its interest in
the "new and improved" version specifically identifying this work.
eduSkills.com files for bankruptcy two months later.

Is the recodensation in the new version a preference? Clearly it is under section
547(b), but does the transfer of a security interest in the new version fall within the
exception in section 547(c)(1) if Creditor Q simultaneously releases its interest in
the original version? The answer to this question turns on the extent to which there
is a difference in value between the old version released and the new version trans-
ferred. If there is comparable value between the two versions, then the "new value"
exception under section 547(c)(1) may save this transfer from preferential avoid-
ance. If the new version is considerably more valuable than the old version, how-
ever, there would not be deemed to be comparable "new value" exchanged, and
thus the section 547(c)(1) safe harbor would not apply. This scenario raises the
valuation of intellectual property issues in yet another context—an issue that is not
easily resolved.

VII. CONCLUSION

As the on-line world continues to evolve, an increasing number of "dot-coms"
will find themselves seeking to liquidate or reorganize and "dot-com" firms and
their creditors will face a myriad of unique issues in bankruptcy. Because the
principal assets of many of these enterprises are intellectual property, bankruptcy
courts have had to reconcile the inconsistencies between intellectual property law
and commercial law. Moreover, the issues such as the extent to which the company's
intangible assets are included in its bankruptcy estate, the restrictions on the post-
petition use, sale, or lease of intellectual property, the increased vulnerability of
creditors to trustee claims of stay violations, and the potentially greater risk of
avoidance of pre-petition transfers as preferential are all matters important to those
involved in transactions with "dot-com" firms. As an increasing number of these
cases are considered by courts, many of these issues will be addressed and re-
solved. Until that time, however, uncertainty concerning rights and obligations in
bankruptcy means uncertainty in structuring transactions—with an attendant com-
promise in the viability of intellectual property as a commercial asset.