



7-1-2002

## IP Strategies for Start-Up Ecommerce Companies in the Post-Dot-Bomb Era

Ron Corbett

Follow this and additional works at: <https://scholarship.law.tamu.edu/txwes-lr>

---

### Recommended Citation

Ron Corbett, *IP Strategies for Start-Up Ecommerce Companies in the Post-Dot-Bomb Era*, 8 Tex. Wesleyan L. Rev. 643 (2002).

Available at: <https://doi.org/10.37419/TWLR.V8.I3.12>

This Symposium is brought to you for free and open access by Texas A&M Law Scholarship. It has been accepted for inclusion in Texas Wesleyan Law Review by an authorized editor of Texas A&M Law Scholarship. For more information, please contact [aretteen@law.tamu.edu](mailto:aretteen@law.tamu.edu).

# IP STRATEGIES FOR START-UP ECOMMERCE COMPANIES IN THE POST-DOT-BOMB ERA

Ron Corbett†

I. INTRODUCTION.....	643
II. DEFINITIONS AND KEY PRELIMINARY QUESTIONS .....	644
A. <i>Defining IP and the IP Audit</i> .....	644
B. <i>Patents are of Growing Importance to eCommerce Companies</i> .....	645
1. The Limits of Copyright Protection.....	645
2. Patent Protection of Software and Business Methods .....	646
C. <i>What Are Investors Looking For?</i> .....	649
1. Protected Innovative Ideas .....	649
2. Minimal Risks .....	649
III. CONDUCTING AN IP AUDIT—WHAT TO FOCUS ON AND HOW TO GO ABOUT IT .....	651
A. <i>Why—Four Essential Items that an Audit Should Determine</i> .....	651
1. Identify All IP Assets.....	652
2. Identify Problems With Ownership .....	652
3. Identify Defects in Title or Enforceability .....	653
4. Identify Unprotected Assets .....	654
B. <i>Going about an IP Audit</i> .....	655
1. When—Timing and Scope of an IP Audit .....	655
2. Who—The IP Committee.....	656
3. How—Conducting the IP Audit .....	656
IV. WHAT TO DO WITH THE RESULT—STRATEGIC APPROACHES TO MANAGING IP ASSETS .....	658
A. <i>Minimalist Strategies</i> .....	658
B. <i>Intermediate Strategies</i> .....	660
C. <i>Advanced Strategies</i> .....	662
V. SUMMARY AND CONCLUSIONS .....	663

## I. INTRODUCTION

Despite recent dramatic setbacks in stock market valuations of eCommerce companies, last year saw record levels of investment

---

† Associate, Hitt, Gaines & Boisbrun, P.C., P.O. Box 832570, Richardson, Texas; J.D., Dedman School of Law, Southern Methodist University, Dallas, Texas; Assistant Professor, Department of Radiology, UT Southwestern Medical School at Dallas; Ph.D. (Biophysical Chemistry) and B.Sc. (Chemistry), University of Calgary, Calgary, Alberta, Canada.

funding available for start-ups.<sup>1</sup> In the post-dot-bomb era, however, wary investors have become much more discerning and critical of the value and long-term potential of start-ups.<sup>2</sup> The valuation of intellectual property (IP) assets held by the start-up company is often a key issue to investors because this defines the amount of investment capital and the percentage of equity share that the investor will take in the company.<sup>3</sup> Investors also want assurances that the company has exclusive ownership of their key products or processes.<sup>4</sup> Often an eCommerce start-up company has no tangible assets—only intangible assets in the form of intellectual property (IP) and the know-how of the company's key personnel.

This Article reviews how eCommerce and other start-up companies may evaluate and demonstrate their existing IP assets, adopt a rational strategy to grow and gather new IP assets, and thereby secure funding. Part II defines IP and an IP audit, considers why patents are increasingly important to Internet start-ups, and defines what investors expect to see in the way of IP assets. Part III covers the what, why, when, who, and how of conducting an audit. Part IV discusses different levels of IP strategies that a company may adopt. Finally, Part V reviews and summarizes the importance IP assets have for start-up eCommerce companies.

## II. DEFINITIONS AND KEY PRELIMINARY QUESTIONS

### A. *Defining IP and the IP Audit*

Harris defines IP as the property right given to the “*expression of information*,” “but not existing in [the] information itself.”<sup>5</sup> The special value of IP lies in its intangible nature—the “ability to be multiplied in identical copies and simultaneously used by many consumers in the same format or in different formats.”<sup>6</sup> As illustrated below,

---

1. In 1999, approximately \$40 billion from Angel Investors was invested into U.S. start-up companies at their early seed stage—with additional investments of equal amounts from Venture Capitalists occurring in later funding rounds up to an initial public offering (IPO). Thea Singer, *Grassroots Venture Capital: Where the Money Is*, INC., Sept. 1, 2000, at 50, available at LEXIS, News Group File, All File. For the first three quarters of 2000, about \$1.7 billion in private equity funding was introduced in the Dallas-Fort Worth area. Jeff Bounds & Rusty Cawley, *VC's Glide*, DALLAS BUS. J., Nov. 3–9, 2000, at 1.

2. See Singer, *supra* note 1 (suggesting that Angel Investors are beginning to make investment decisions on grounds similar to traditional Venture Capital firms).

3. Richard D. Harroch, *Negotiating Venture Capital Financings*, 610 FOURTH ANN. INTERNET L. INST. 507, 511 (2000).

4. See *id.* at 512–13; Jeff Bounds, *Back to Earth*, DALLAS BUS. J., Sept. 8–14, 2000, at 1 (citing David Hook, general partner at the Dallas venture-capital firm Hook Partners, noting that many Internet companies cannot sustain their competitive advantage because they lack proprietary technology).

5. LESLEY ELLEN HARRIS, *DIGITAL PROPERTY: CURRENCY OF THE 21ST CENTURY* 11 (1998).

6. *Id.* at 13.

new technology is expanding the five traditional areas of IP and blurring the boundaries between these categories.<sup>7</sup>

An IP audit traditionally meant the "systematic evaluation of the ownership, status and value . . . together with the recording of the information . . . on a database,"<sup>8</sup> or "a cataloging of a company's [IP] assets."<sup>9</sup> IP audits have long been mandatory to meet the due diligence requirements for mergers, acquisitions, or other transfers.<sup>10</sup> An audit creates a balance sheet of IP assets and liabilities, including for example, defects in IP ownership or potential IP infringement claims.<sup>11</sup> IP audits are also triggered by licensing agreements, changes in company ownership, or a sizeable influx of capital investment.<sup>12</sup> Today, IP audits are part of an ongoing self-evaluation that all eCommerce and other high-tech companies should conduct to manage, maximize, and control IP assets.<sup>13</sup> Given the rapid pace of change in technology, IP laws, and the reorganization of corporations, ongoing self-evaluation is a necessity.<sup>14</sup>

## B. Patents are of Growing Importance to eCommerce Companies

### 1. The Limits of Copyright Protection

The Copyright Act of 1976 recognized that copyright protection extends to computer programs.<sup>15</sup> Copyright protects the tangible expression of a computer program source code, object code, or non-

---

7. The five traditional areas are: (1) copyrights, protecting creative works such as literature, art, drama, music works, sound recording, and computer software; (2) patents, protecting inventions such as machines, articles of manufacture, processes or compositions; (3) trademarks, protecting words, names, symbols, logos, designs, or the shapes of goods; (4) trade secrets, protecting concepts, ideas, or factual information; and (5) industrial designs, protecting "original shape[s], pattern[s], or ornamentation applied to a useful article." *Id.* at 118–19. A work or invention can be protected by more than one of these classes. *Id.*

8. Katherine C. Spelman & John J. Moss, *The Intellectual Property Inventory: Why Do It?*, 403 CONDUCTING INTELL. PROP. AUDITS 257, 259 (1995).

9. See Barry D. Rein, *Technology Audits Particularly Urgent Now*, N.Y.L.J., June 19, 2000, at S9.

10. See Spelman & Moss, *supra* note 8, at 259 (stating that the Securities and Exchange Commission mandates due diligence in the occurrence of corporate transfers or financial infusions). "Due diligence is simply an inquiry of the underlying legal and factual circumstances associated with an acquisition transaction." Jonathan Bick, *Due Diligence for 'Dot-Com' Deals*, N.Y.L.J., May 18, 1999, at 5 & n.1.

11. See Steven M. Bauer, *Assets and Liabilities in an Intellectual Property Audit*, 1 B.U. J. SCI. & TECH. L. 8 para. 3 (1995).

12. Spelman & Moss, *supra* note 8, at 259.

13. Ernest D. Buff & Leslie Gladstone Restaino, *Using Intellectual Property Audits in Acquiring and Exploiting Technology*, N.J.L.J., Mar. 29, 1999, at 33.

14. See Rein, *supra* note 9.

15. ROBERT A. GORMAN & JANE C. GINSBURG, COPYRIGHT: CASES AND MATERIALS 197 (5th ed. 1999) (reviewing H.R. REP. NO. 94-1476, at 54 (1976), reprinted in 1976 U.S.C.C.A.N. 5659, 5667).

literary components, such as a video game display.<sup>16</sup> Copyright registration is a relatively inexpensive and simple way to ensure that legal remedies are available against unapproved copying.<sup>17</sup> Copyright protection, however, does not extend to processes or methods of operation underlying the tangible computer program.<sup>18</sup> Thus, while copyright can protect software against literal copying, it does not protect against reverse engineering or independent discovery to achieve the same result.<sup>19</sup> Moreover, judicially-created standards to determine non-literal copying have been problematic.<sup>20</sup> Therefore, it may be relatively simple for competitors to write a program that duplicates the function, but does not infringe the copyrighted software.<sup>21</sup>

## 2. Patent Protection of Software and Business Methods

In 1994, the United States Court of Appeals for the Federal Circuit held that the practical application of a mathematical algorithm transformed by machine to produce "a useful, concrete, and tangible result" was patentable.<sup>22</sup> *In re Alappat* signaled the end of a long-standing doctrine that mathematical algorithms in computer programs were only patentable if they produce some physical transformation or were applied to a process step.<sup>23</sup> Four years later in *State Street Bank & Trust Co. v. Signature Financial Group*,<sup>24</sup> the Federal Circuit held that a business method was patentable. Applying the same reasoning as in *Alappat*, the court concluded that so long as useful, concrete, and tangible results are obtained, a computer program incorporating a mathematical algorithm is patentable subject matter.<sup>25</sup> *State Street* en-

---

16. See Barton E. Showalter & Jeffrey D. Baxter, *Strategic Use of Software Patents*, 547 19TH ANN. INST. ON COMPUTER L. 1057, 1067 (1999).

17. See Christopher S. Cantzler, *State Street: Leading the Way to Consistency for Patentability of Computer Software*, 71 U. COLO. L. REV. 423, 431 (2000); see also U.S. COPYRIGHT OFFICE, U.S. DEP'T OF COMMERCE, APPLICATION FORM TX (1999) available at <http://www.loc.gov/copyright/forms/formtxi.pdf> (last visited Nov. 7, 2000) (providing a downloadable application form for copyright registration of non-dramatic literary works including computer programs, quoting a fee of \$30 until June 30, 2002).

18. See Showalter & Baxter, *supra* note 16, at 1068.

19. See *id.* at 1071.

20. See *id.* at 1072 (explaining the difficulty courts have had in applying the abstraction-filtration-comparison test developed in *Computer Associates International, Inc. v. Altai, Inc.*, 982 F.2d 693, 706-11 (2d Cir. 1992)); Andrew B. Katz, 'State Street' May Place Start-Ups in Peril, N.Y.L.J., Jan. 19, 1999, at C2 (explaining that copyright law as applied to software continues to change as the *Altai* test is refined).

21. See Showalter & Baxter, *supra* note 16, at 1071.

22. See *In re Alappat*, 33 F.3d 1526, 1544 (Fed. Cir. 1994) (en banc).

23. Peter H. Kang & Kristin A. Snyder, *A Practitioner's Approach to Strategic Enforcement and Analysis of Business Method Patents in the Post-State Street Era*, 40 IDEA 267, 271-72 (2000) (citing *Alappat*, 33 F.3d at 1544).

24. 149 F.3d 1368, 1370, 1373 (Fed. Cir. 1998) (holding that a computerized accounting system to manage mutual funds was patentable).

25. See *id.*

ded a second long-standing doctrine that business methods were unpatentable.<sup>26</sup>

*State Street* and *Alappat* have enormous implications for start-up companies producing software or using eCommerce methods. Because the two doctrines that previously excluded software and business methods from being patentable have been set aside, or at least strongly narrowed,<sup>27</sup> there has been a flood of patent applications for Internet business methods.<sup>28</sup> Notable examples of issued patents include: CyberGold's patent covering the practice of paying consumers who view ads on the Internet;<sup>29</sup> Priceline.com's patent covering online reverse auction methods;<sup>30</sup> and Amazon.com's patent for one-click electronic commerce methods.<sup>31</sup> These companies presumably now have the right to prevent competitors from using the particular business method embodied in their patented software, as in *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*,<sup>32</sup> or to use the patent as the basis for forging a licensing agreement.

The advantages of patent protection lies in the broad scope and exclusivity in the rights given to the owner, as compared to copyright.<sup>33</sup> Unlike a copyright, a patent can extend to the underlying process and

---

26. See Kang & Snyder, *supra* note 23, at 273–74 (citing *State Bank & Trust Co. v. Signature Fin. Group, Inc.*, 927 F. Supp. 502, 515–16 (D. Mass. 1996), *rev'd*, 149 F.3d 1368 (Fed. Cir. 1998)).

27. The Federal Circuit recently noted that “the judicially-defined proscription against patenting of a ‘mathematical algorithm,’ . . . is narrowly limited to mathematical algorithms in the abstract.” *AT&T Corp. v. Excel Communications, Inc.*, 172 F.3d 1352, 1356 (Fed. Cir. 1999).

28. See Kang & Snyder, *supra* note 23, at 276–77, 277 n.67; Ross Bentley, *Method Patent Goldrush Spreads*, COMPUTER WKLY., Sept. 14, 2000, at 74, available at 2000 WL 26666138 (expecting 1000 business method patents to be filed in the year 2000); Rein, *supra* note 9 (estimating that 1,300 and 2,600 business method patents were filed in 1998 and 1999, respectively).

29. U.S. Patent No. 5,794,210 (issued Aug. 11, 1998); see also Kang & Snyder, *supra* note 23, at 288.

30. See U.S. Patent No. 5,794,207 (issued Aug. 11, 1998); see also Showalter & Baxter, *supra* note 16, at 1071.

31. U.S. Patent No. 5,960,411 (issued Sept. 28, 1999); see also William D. Wiese, *Death of a Myth: The Patenting of Internet Business Models After State Street Bank*, 4 MARQ. INTELL. PROP. L. REV. 17, 26–29 (2000) (reciting several examples of patented Internet business methods, including: Internet Search Methods, Electronic Shopping Carts, Secure Online Payments, and Methods for Downloading Videos or Software).

32. See 73 F. Supp. 2d 1228, 1249 (W.D. Wash. 1999) (granting Amazon.com a preliminary injunction against Barnesandnoble.com's use of a single-click eCommerce ordering system), *vacated by* 239 F.3d 1343, 1366 (Fed. Cir. 2001) (concluding that the necessary prerequisites for a preliminary injunction were not met, because although Amazon.com would likely succeed on an infringement claim, Barnesandnoble.com raised substantial questions as to the validity of the patent); see also *Amazon.com, Borders Announce Alliance*, PUGET SOUND BUS. J. (Seattle), Apr. 11, 2001 (stating that Borders was to make a one-time payment and give a portion of future online sales in exchange for using Amazon's patented customer tracking technology) at <http://seattle.bizjournals.com/seattle/stories/2001/04/09/daily23.html> (on file with the Texas Wesleyan Law Review).

33. See Showalter & Baxter, *supra* note 16, at 1066–73.

methods embodied in software.<sup>34</sup> A patent gives the owner the right to exclude others from making, using, offering to sell, or selling the invention.<sup>35</sup> This applies even to those who independently arrive at the same method or use reverse engineering.<sup>36</sup> Patents thus have a decided edge over copyright protection, especially where it is difficult to show improper copying.<sup>37</sup> A patent also gives the owner a significant market advantage for an extended period (twenty years from the date of filing of the patent application), or until better technology is invented.

These broad rights, while a benefit to the patent holder, also raise significant new costs and risks for eCommerce start-up companies. Before issuing a patent, the U.S. Patent and Trademark Office (PTO) reviews the application to ensure proper subject matter, utility, novelty, non-obviousness, and adequate disclosure of the invention.<sup>38</sup> The costs of obtaining a patent are substantially higher than copyright registration, taking two to three years and costing several thousand dollars.<sup>39</sup> Within limits, however, these costs can be delayed by making a provisional patent application.<sup>40</sup> Patent infringement litigation is expensive, typically requiring the plaintiff to both prove infringement and rebut the defense that the patent is invalid.<sup>41</sup> Additionally, as more Internet business methods patents are issued, it may become increasingly difficult to avoid infringing a patent. It follows that the characterization of IP assets and risks plays a pivotal role in helping a start-up to decide the extent to which IP assets should be protected. Likewise, assessing IP assets and risks become a larger factor in the

---

34. *Id.* at 1066–69.

35. 35 U.S.C. § 271(a) (1994 & Supp. V 1999).

36. See Showalter & Baxter, *supra* note 16, at 1071.

37. See Cantzler, *supra* note 17, at 441.

38. See, e.g., Jim H. Salter, *Conducting the Intellectual Property Audit for Patents*, 429 CONDUCTING INTELL. PROP. AUDITS 161, 172 (1996).

39. See Cantzler, *supra* note 17, at 443; Katz, *supra* note 20 (quoting a 1997 American Intellectual Property Lawyers Association survey that the average fee to file a software or hardware patent was \$7,500; with PTO fees, responses to Office Actions and other costs, that figure is easily doubled).

40. Provisional patent applications provide a means to establish a filing date at about one-fifth the filing expense of a patent application. See MADSON & METCALF, P.C., A HANDBOOK FOR PROTECTING YOUR INTELLECTUAL PROPERTY § 2.4 (3d ed. 2002) at <http://www.mmlaw.com/handbook> (on file with the Texas Wesleyan Law Review). The inventor has twelve months to refine the invention, do market testing, get funding, seeking licensing or manufacture the invention. *Id.* There are, however, significant limitations to provisional patent applications. See *id.* Because there are no claims, the inventor also has no rights against infringers. Provisional applications must satisfy the requirements of the first paragraph of 35 U.S.C. § 112 (1994). MADSON & METCALF, *supra*, § 2.4. That is, there must be a written description that enables one skilled in the art to make and use the invention, and present what the inventor considers to be the best mode for making and using the invention. *Id.* Finally, if not converted into a regular non-provisional application within one year, the application will be deemed abandoned. *Id.*

41. See Cantzler, *supra* note 17, at 444.

overall evaluation of a start-up as a candidate for funding and investment.

### C. *What Are Investors Looking For?*

#### 1. Protected Innovative Ideas

A strong IP portfolio helps attract and secure financing from investors.<sup>42</sup> Investors want proof of exclusive and effective IP rights. Patents, for example, should provide a well-defined description of the company's core technology holdings and exclusive market advantages. Patent, copyright, and trademark holdings also represent potential sources of revenue from licensing agreements. At minimum, a patent portfolio provides some assurance to investors that the company's core technology is not infringing on another company's patents, although this is by no means guaranteed.

For these same reasons, an IP portfolio also increases the valuation of a company when it is time for the founders to execute their exit strategy, by making an IPO, or agreeing to a merger and acquisition by another company.<sup>43</sup> At the IPO stage, before purchasing or recommending stocks, analysts and the general public look for innovative technology, the security of its market position, and the potential for growth. Alternatively, large corporations may find it more efficient to purchase a company having innovative technology protected by patents, rather than attempt to invent around a patent in-house.<sup>44</sup> Or, two companies of equal size may form a strategic joint venture with cross-licensing between ventures.<sup>45</sup> A strong patent portfolio may signal an attractive buy-out opportunity by entities prospecting for high-technology companies that are considered to be undervalued because of their unused or unrealized IP assets.<sup>46</sup>

#### 2. Minimal Risks

Conversely, unprotected IP assets may signal the risk of an increased "burn rate" on investment capital due to IP litigation, and thereby negatively impact the credibility of a company's balance sheet. IP assets that are not protected or not properly licensed indicate significant risks to a potential investor.<sup>47</sup> Without a patent, for

---

42. See Showalter & Baxter, *supra* note 16, at 1077.

43. See Spelman & Moss, *supra* note 8, at 259–61.

44. See Showalter & Baxter, *supra* note 16, at 1078–79.

45. See Dick Thurston, *Business Planning for Technology Joint Ventures* (suggesting that venturers need to consider the negative impact that the unrestricted activities, including research development, could have on future intellectual property rights), available at <http://www.hayboo.com/updatestuff/article.htm> (last visited Nov. 7, 2000) (on file with the Texas Wesleyan Law Review).

46. See Josh Kosman, *Buyout Firms Undervalue Intellectual Property*, *BUYOUTS*, Mar. 22, 1999, at 24, available at 1999 WL 8954720.

47. See Joby A. Hughes & Kate L. Birenbaum, *Insuring Intellectual Property Risks: Creative Solutions on the Cutting Edge*, 568 *PROTECTING YOUR INTELL. PROP.*



example, the company cannot exclude competitors from copying or reverse engineering products or processes entering the public domain. Moreover, U.S. patent law provides a mere one-year grace period within which to apply for a patent after publishing, selling, or offering to sell an invention.<sup>48</sup> Therefore, a decision not to patent early on can have serious and irrevocable implications for a company's long-term growth potential and value. Consider the consequence of a larger competitor, for instance, holding a patent for an eCommerce business method that is critical to the survival of a start-up company.<sup>49</sup> Internet business methods and associated computer programs are particularly susceptible to patent infringement because they may comprise hundreds of potentially patentable features.<sup>50</sup>

Owning a patent, however, does not eliminate the risk that significant investment capital will be burned up in litigation against infringers—or the costs to defend against an infringer's inevitable assertion that the patent is invalid.<sup>51</sup> Several commentators conservatively estimate the average cost of legal fees for a single patent litigation suit at \$1 million.<sup>52</sup> In addition, a lawsuit places large demands on the time of senior employees to produce documents, give depositions, attend hearings, and consult with legal counsel.

Moreover, large companies may be motivated in part to use IP litigation as a strategy to test the strength of funding behind a start-up company. That is, a large competitor infringing the start-up's patent may wish to see if it has the financial capacity to tolerate litigation—or instead will agree to accept a small licensing fee simply to stop litigation expenses.<sup>53</sup> On the other hand, fear of the uncertainty and potentially high costs and damages arising from IP litigation can steer competitors out of a patent holder's market entirely.<sup>54</sup> Filing a lawsuit against an accused infringer may even dissuade customers from buying or licensing the accused's product out of fear that future parts, warranties, and services will not be available. The subsequent in-

---

ASSETS 203, 212–13 (1999) (suggesting that insurance companies are showing increased awareness of a need for start-ups to insure IP assets).

48. 35 U.S.C. § 102(b) (1994).

49. See Katz, *supra* note 20 (suggesting that most small businesses will eventually find themselves at the mercy of large companies capable of bearing the expense of building up an extensive portfolio of software patents); Rein, *supra* note 9 (“[V]irtually every company . . . will likely run smack into one or more of these business method patents.”).

50. Rein, *supra* note 9.

51. Alternatively, at a much lower cost to the infringer, a competitor may request the PTO to re-examine a patent for validity, in light of publications or patents not considered during the original patent's prosecution. See MANUAL OF PATENT EXAMINING PROCEDURE § 2209 (8th ed. 2001) [hereinafter MPEP].

52. E.g., Bauer, *supra* note 11, at para. 12; Hughes & Birenbaum, *supra* note 47, at 218; Katz, *supra* note 20.

53. Hughes & Birenbaum, *supra* note 47, at 216.

54. See *id.*; see also Bauer, *supra* note 11, at para. 12.

creased sales revenue to the IP owner may, in part, pay for the costs of litigation, and thus provide little motivation to settle.<sup>55</sup>

The potential for huge damage awards can also make large companies a target of litigation by smaller companies with proprietary IP.<sup>56</sup> The possibility of winning a large damage award has even lead to the formation of entities whose principal business is to exploit patent positions in litigation.<sup>57</sup> Some law firms now accept a contingency fee arrangement, amounting to forty to forty-five percent of the damage award, in exchange for rendering IP litigation services.<sup>58</sup>

Licensing agreements containing indemnification and warranty clauses also present risks.<sup>59</sup> For example, a contractual obligation to pay legal fees or damages incurred by a licensee against a third party who successfully proves patent infringement could easily exceed the value of the entire license. On the other hand, a start-up company may have insufficient bargaining power not to assume these risks when negotiating a licensing agreement.

None of these risk scenarios particularly appeal to investors who want to see their capital grow the business and not pay for IP litigation. Both the founders of eCommerce start-up companies and investors, therefore, need to be armed with accurate information about the value of their IP assets and the potential costs of defending those assets. The risks that the start-up will infringe another's protected IP, and the costs that could entail, are all important factors in making an investment decision, or in deciding in which direction to take the company.<sup>60</sup> An IP audit improves the likelihood that strategic decisions to properly account for the benefits and risks associated with IP assets can be made.<sup>61</sup>

### III. CONDUCTING AN IP AUDIT—WHAT TO FOCUS ON AND HOW TO GO ABOUT IT

#### A. *Why—Four Essential Items that an Audit Should Determine*

The founders of start-up companies are frequently so focused on actually developing their product that the seemingly more "mundane" business aspects of the venture are set aside.<sup>62</sup> One prime area of

---

55. See Bauer, *supra* note 11, at para. 13.

56. See Hughes & Birenbaum, *supra* note 47, at 224–25 (giving examples of cases where the smaller patent-holding company was awarded over \$100 million in damages).

57. *Id.* at 226–27.

58. *Id.* at 227; see also Bauer, *supra* note 11, at para. 1 (stating that while Congress is attempting to restrict the size of damage awards in civil tort cases, there is an unfettered increase in damage awards in IP litigation).

59. Hughes & Birenbaum, *supra* note 47, at 211.

60. Bauer, *supra* note 11, at para. 2.

61. See Hughes & Birenbaum, *supra* note 47, at 238–39.

62. See Bauer, *supra* note 11, at para. 4 (stating that managers allow IP to fall in disrepair; engineers lose interest in old technology).

neglect is documenting IP assets and deciding how to protect those assets. An IP audit can help re-focus attention on what the company's competitive edge is and how it can be protected.<sup>63</sup> An IP audit provides four distinct classes of objective information in this regard.<sup>64</sup>

### 1. Identify All IP Assets

Key issues in any IP audit is identifying the IP subject matter, how it works, and how it is manifested in the company. The type of IP that a start-up company creates and that needs protection depends on the purpose and scope of the company. For example, while a technology-based company will focus mostly on patents and trade secrets, a company providing consumer products will emphasize trademarks, and a company producing entertainment media will stress copyright protection.<sup>65</sup> Unfortunately, many start-up companies frequently fail to monitor, and therefore underestimate, their IP assets.<sup>66</sup> For example, software may have fallen into disuse after completing the specific project for which it was designed. Logos and other branding may appear on products, letterheads, business cards, or in advertisements, but never have been registered as a trademark.<sup>67</sup> Even if no longer critical to the company, well-documented IP assets may be sold, licensed, or used as the basis for joint business ventures.<sup>68</sup>

### 2. Identify Problems With Ownership

Questions about the validity of ownership of IP will invariably arise in sales transactions, licensing agreements, or during IP litigation. It is therefore critical for the company to be able to trace its chain of title of ownership back to the conception of the invention by its own employees.<sup>69</sup> That is, was the IP solely created using company resources on company time? The failure to obtain assignment agreements may give former employees, contractors, or third parties a claim to the ownership or joint ownership of a company's IP assets.<sup>70</sup>

For example, absent an express assignment agreement, all the inventors named on a patent retain an undivided interest in the patent, and can exploit its exclusive right for profit without accounting to the other co-inventors.<sup>71</sup> Similarly, independent contractors and consul-

---

63. MADSON & METCALF, *supra* note 40 (Introduction).

64. See *Intellectual Property—Make it Work For You*, INTELL. PROP. UPDATE (Haynes & Boone) Winter 1997 [hereinafter *Make it Work*], at <http://www.hayboo.com/briefing/IPText.htm> (on file with the Texas Wesleyan Law Review).

65. Buff & Restaino, *supra* note 13.

66. See Kosman, *supra* note 46 (stating that sellers of high-tech companies may undervalue their unused, warehoused patents).

67. See Bauer, *supra* note 11, at para. 6.

68. See *Make it Work*, *supra* note 64.

69. See Bauer, *supra* note 11, at para. 8.

70. *Id.* at para. 8–9.

71. See *id.* at para. 8.

tants retain copyright ownership of software and associated written material, absent an agreement stating otherwise.<sup>72</sup> Conversely, when hiring a new employee, it is important to investigate the previous employer's assignment and non-competition agreements to ensure that the new hire is not in violation of previous agreements, and is able to assign the rights to any new inventions.<sup>73</sup>

### 3. Identify Defects in Title or Enforceability

Analogous to real estate transactions, the failure to record an assignment or transfer of interest in an IP asset can create a defect in title. For example, under federal law, a second assignee to a patent takes superior title over the first assignee if: (1) the first assignee fails to record within three months of ownership or before the second assignment; (2) the second assignment was taken in exchange for valuable consideration; and (3) the second assignee was without notice of the first assignment.<sup>74</sup> A similar rule exists for the assignment of trademarks.<sup>75</sup> Likewise, an unrecorded transfer of copyrighted works is void against a subsequent bona fide purchaser who records.<sup>76</sup>

In anticipation of IP litigation or licensing, it is important to ensure all formal requirements have been followed to allow law suits and damage recoveries against potential infringers.<sup>77</sup> For example, although copyright registration is not required, it establishes *prima facie* evidence of a valid copyright, is a prerequisite for filing suit against an infringer of U.S. works, and allows the collection of attorney fees and past damages.<sup>78</sup> Similarly, registration creates *prima facie* evidence of the validity and ownership of a trademark,<sup>79</sup> and entitles the mark owner to damages from an infringer.<sup>80</sup>

Proper notice of IP rights must be made to ensure that full remedies under the law are possible. For example, although not legally obligated to mark a patent, an owner can collect damages only from the

---

72. *Id.*

73. Evan R. Smith, *COMPETITIVE PATENT STRATEGIES: A GUIDE FOR TECHNOLOGY COMPANY EXECUTIVES* (1999), at <http://www.gttechlaw.com/eg/patentbook.html> (on file with the Texas Wesleyan Law Review).

74. 35 U.S.C. § 261 (1994).

75. *See* 15 U.S.C. § 1060(a) (2000).

76. *Cf.* GORMAN & GINSBURG, *supra* note 15, at 319 (discussing 17 U.S.C. § 205(d) (1994)). However, a written and signed nonexclusive license prevails over a transfer if "the license was taken before execution of the transfer" or "taken in good faith before recordation of the transfer and without notice of it." 17 U.S.C. § 205(e) (2000).

77. *See* Buff & Restaino, *supra* note 13.

78. GORMAN & GINSBURG, *supra* note 15, at 411-13 (reviewing the effect of registration under 17 U.S.C. §§ 408, 410-12).

79. 15 U.S.C. § 1057(b).

80. *Id.* § 1117. Application to register a mark gives national constructive notice of use of the mark. *Id.* § 1057(c).

point in time an infringer had actual notice of patent rights.<sup>81</sup> Moreover, the patent holder is obligated to ensure that licensees also properly mark goods produced under a patent.<sup>82</sup> Since 1989, copyright notice is no longer a prerequisite for copyright protection,<sup>83</sup> but notice is still valuable in that it eliminates the innocent-infringer defense.<sup>84</sup> Actual notice is a prerequisite for obtaining damages and lost profits for trademark infringement.<sup>85</sup>

Finally, failing to observe certain post-registration formalities may result in the loss of IP rights or the levy of fines. For example, maintenance fees for utility patents must be paid three and one-half, seven and one-half, and eleven and one-half years after issue—failure to do so is deemed to be abandonment of the patent after a six-month grace period.<sup>86</sup> Within three months after copyright registration, two copies of the work are to be deposited with the Copyright Office.<sup>87</sup> Similarly, within six months of trademark registration, proof of use of the mark in commerce must be sent to the PTO,<sup>88</sup> and registration must be renewed every ten years.<sup>89</sup> Domain names can be renewed for up to ten years.<sup>90</sup> Trademarks can lose their distinctiveness and hence legal protection, unless measures are taken to prevent a mark from becoming generic.<sup>91</sup>

#### 4. Identify Unprotected Assets

An audit may also identify key IP assets that can and should be protected. Technical staff may not appreciate that many seemingly “obvious” inventions are in fact patentable.<sup>92</sup> History teaches that

---

81. 35 U.S.C. § 287(a) (Supp. V 1999). Notice is made by fixing “the word ‘patent’ or the abbreviation ‘pat.’ together with the number of the patent” on an article or its packaging or by serving written notice on the infringer. *Id.*

82. *E.g.*, *Amsted Indus., Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 184–87 (Fed. Cir. 1994) (holding that unless the patentee marks the article, an infringer is not on notice of the infringement until the patentee specifically charges the infringer as such).

83. 17 U.S.C. § 408(a). The three elements of notice are: (1) the symbol “©,” the word “copyright,” or the abbreviation “Copr.,” (2) the work’s first publication year; and (3) the name of the copyright owner. *Id.* § 401(b).

84. GORMAN & GINSBURG, *supra* note 15, at 406–07 (citing 17 U.S.C. § 401(d)).

85. 15 U.S.C. § 1111. Notice is made by marking goods or packaging with any one of the following: the words “Registered in U.S. Patent and Trademark Office;” the abbreviation “Reg. U.S. Pat. & Tm. Off.,” or the symbol “®.” *Id.*

86. 35 U.S.C. § 41(b) (Supp. V 1999).

87. 17 U.S.C. § 407(a)–(b).

88. 15 U.S.C. § 1051(d).

89. *Id.* §§ 1058–59.

90. *See, e.g.*, *Renew for One to Nine Years*, VeriSign, Inc., at <http://www.netsol.com> (last visited June 20, 2002).

91. A mark is deemed “abandoned” when “any course of conduct of the owner, including acts of omission [or] commission, causes the mark to become . . . generic . . . or otherwise to lose its significance as a mark.” 15 U.S.C. § 1127.

92. *See* Bauer, *supra* note 11, at para. 6; Jon L. Roberts, *The ABC’s of Patent Protection*, NEWSL. (Roberts & Abokhair, L.L.C., Reston, Va.), June 12, 1998, at <http://>

often an innovation has applications in areas totally unrelated to its originally intended purpose.<sup>93</sup> For these reasons, the decision to patent may be delayed for an extended time after the invention is made. It is therefore critical to document dates for the conception and reduction of the invention to practice, and all development and testing done in between these two milestones. If proper measures are not taken to keep the invention secret, the opportunity to patent may be lost forever.

Procedures to maintain secrecy of information do not merely apply to patentable subject matter. A trade secret can be anything not generally known and provides a commercial advantage.<sup>94</sup> For example, customer lists, market surveys, or even negative information—that is, knowing what not to do—can also be a trade secret worthy of protection.

### B. Going about an IP Audit

#### 1. When—Timing and Scope of an IP Audit

IP audits may vary considerably in scope. A full-blown audit is required if the company is planning a merger or acquisition, seeking venture capital or financing, or changing IP counsel.<sup>95</sup> A more scaled-back process is appropriate for periodic audits.

Periodic audits serve several functions.<sup>96</sup> They reduce the time and cost to perform a full-blown audit when the need arises. They alert the company of changing laws and force an evaluation of the law's impact on IP assets or policies for characterizing and protecting IP. For example, when the U.S. Supreme Court in *Feist Publications, Inc. v. Rural Telephone Service Co.*<sup>97</sup> ruled that the mere compilation of facts, in unoriginal form, was not copyrightable, this dramatically changed the IP valuations and protective measures used by database service companies. Additionally, the Court's ruling in *Community for Creative Non-Violence v. Reid*,<sup>98</sup> that independent contractors own the copyright for works created for companies outside the confines of 17 U.S.C. § 101 "work made for hire" subsection (2), emphasized the need to obtain assignment agreements. *State Street's* overturning of

---

/www.viennapat.com/newletter/system/newsbyissue\_output.asp (claiming that engineers in a company come up with an innovation, but proposing that any bright engineer would know that).

93. See generally JAMES BURKE, CONNECTIONS (1978).

94. D. Peter Harvey, *Structuring Employment Relationships to Insure Ownership and Control of Intellectual Property*, 403 CONDUCTING INTELL. PROP. AUDITS 35, 57 (1995).

95. MADSON & METCALF, *supra* note 40, § 1.3; Spelman & Moss, *supra* note 8, at 259.

96. See Spelman & Moss, *supra* note 8, at 262.

97. See 499 U.S. 340, 363–64 (1991).

98. 490 U.S. 730, 751, 753 (1989) (interpreting "work made for hire" under 17 U.S.C. § 101).

the business methods exception to patentability, as discussed above, created new opportunities for protecting IP assets in the area of eCommerce.

## 2. Who—The IP Committee

The audit itself is normally conducted through the joint efforts of business and technical management and in-house counsel.<sup>99</sup> In-house managers may already be aware of the company's IP assets, or be in the most efficient position to collect information. A team with broad expertise in sales, marketing, technology and manufacturing, human resources, and law is also needed to collect and organize the data.<sup>100</sup> Furthermore, the committee members should be senior and experienced enough to understand the company's long term goals, and the purpose of the audit, so as to allow them to collect and evaluate the proper information. If necessary, outside counsel with specialized training and experience in IP law can help direct the collection and analysis of data. Finally, armed with the IP audit, upper-level management may then determine a strategic use for IP assets.

## 3. How—Conducting the IP Audit

The audit should start with preliminary notices to all personnel involved in the audit to emphasize its importance and benefits to the company, and to allay apprehension associated with "being audited."<sup>101</sup> Next, interviews should be conducted with technical, legal, and human resource personnel to help identify and collect pertinent information, including licenses, research and development reports, employee and contractor confidentiality and assignment agreements, and employee invention disclosure statements.<sup>102</sup> In addition, the status of patents, copyrights, and trademarks, and applications thereof should be documented. Trade secrets, and the measures currently used to protect those secrets, should also be collected and documented.

Once collected, the audit information is entered into a database.<sup>103</sup> At its most basic, the database would include the owner of the IP asset, class of asset, the inventors or authors, when the asset was created or acquired, the asset's status (*e.g.*, pending or issued patent, registered copyright, trademarks, domain names), on-going maintenance

---

99. See Spelman & Moss, *supra* note 8, at 260.

100. Rein, *supra* note 9; Gillian R. Stacey, *Due Diligence for Transactions Involving IP: Technology Transfers, Licenses and Joint Ventures*, MONDAQ BUS. BRIEFING, Nov. 24, 1999, at 1999 WL 8711689.

101. Rein, *supra* note 9.

102. See Stacey, *supra* note 100 (providing example checklists for the IP committee to follow).

103. See Spelman & Moss, *supra* note 8, at 260 (providing an example of how to set it up).

issues (e.g., payment of maintenance fees for patents, collection or payment of licensing fees), and the expiration or renewal date of the asset.

The IP committee should now be in a position to analyze the database and create a report. There may be advantages at this point to involving outside counsel to provide expert advice on the legal issues such as the patentability of inventions, or the potential for infringement, acquisition or licensing.<sup>104</sup> Additionally, the confidentiality of the database and report is protected if it can be designated as an attorney work-product and a privileged attorney-client communication.<sup>105</sup> IP assets should be considered in light of current and future revenues and the expansion of products or services. This will likely require an examination of competitor's market position and their IP assets, prior art which may prevent the patenting of company inventions, the ownership of IP assets, and the potential for infringement, both against and by the company.

The committee should evaluate the company's current procedures for identifying and protecting newly arising IP.<sup>106</sup> For example, do the scientists and engineers responsible for research and development conscientiously fill out invention disclosure forms? Is there sufficient motivation for employees to do this? How are invention disclosure forms evaluated? Do inventors or sales staff routinely obtain legal clearance before submitting professional publications or presentations at public meetings or tradeshows?

The committee should also assess hiring and exiting procedures for technical and management personnel.<sup>107</sup> Do incoming employees sign the appropriate non-disclosure, assignment, and non-competition agreements? Do exiting employees understand their obligations not to disclose trade secrets to future employers or engage in direct competition against the company?

Finally, based on the detailed analysis and report created by the IP committee, upper level management should decide how existing IP assets fit into the goals of the company. Depending on its importance, the company may wish to implement different strategic approaches for protecting and using IP assets. Further, more than one of these strategies may be applied to different IP assets at the same time.

---

104. Buff & Restaino, *supra* note 13.

105. *Id.*

106. See Rein, *supra* note 9.

107. *Id.*



#### IV. WHAT TO DO WITH THE RESULT—STRATEGIC APPROACHES TO MANAGING IP ASSETS<sup>108</sup>

Many start-up companies are misinformed about what is and can be protected—an IP audit should help rectify that situation. Equally important, however, is making informed decisions about what should be protected. It is important to adopt a strategy that matches the company's direction of growth, recognizes the competition, and yet is still cost-effective.<sup>109</sup> Strategic decisions may be made more difficult due to the evolving nature of IP laws. In turn, this emphasizes the need for an on-going evaluation process. For most start-up high-tech companies, capitalization and cash flow are critical ingredients—an IP strategy should support the stage of development that the company is in and help lead it into its next phase of growth.<sup>110</sup>

##### A. *Minimalist Strategies*

A start-up company may decide, for example for financial reasons, not to patent anything for now. However, in order not to lose the right to patent in the future, that means not publishing, presenting information at conferences, revealing the invention at a tradeshow, or placing a product embodying the invention into the public domain.<sup>111</sup> Because the U.S. awards patent rights to the first to invent, a well-documented record showing when the invention was conceived and reduced to practice is critical for establishing the company's rights over a competitor who invents second, but files a patent application first.<sup>112</sup> A determination of priority is made in an interference proceeding, where the PTO examines evidence such as laboratory notebooks and the testimony of witnesses.<sup>113</sup> It is therefore important to have systematic procedures for disclosing and documenting the development and testing of inventions, and yet still maintain the secrecy of the invention.

An invention disclosure program should be put in place—it may be desirable to set up a reward system to motivate compliance by employees.<sup>114</sup> A standardized invention disclosure form should be devel-

---

108. See generally MADSON & METCALF, *supra* note 40 (Part I: Covering Your Assets).

109. See *id.* § 9 (Your Vision); Rein, *supra* note 9.

110. See Rein, *supra* note 9.

111. 35 U.S.C. § 102(a)–(b) (1994). Anything displayed at a tradeshow would be considered an offer for sale.

112. MPEP, *supra* note 51, § 2138.04–.05. Conception refers to completing all mental parts to the inventive act, while reduction to practice means either actually producing a tangible working embodiment of the invention, or constructively making the invention by filing a patent application. *Id.*

113. See *id.* ch. 2300 (Interferences).

114. See Salter, *supra* note 38, at 176; Rein, *supra* note 9.

oped for the company.<sup>115</sup> Research notebooks and test results should be dated and witnessed by a person who can understand the technology described in the notes, and who is also under an obligation to keep the information confidential.<sup>116</sup> Witnesses should also be used to confirm working prototypes or the initial conception of the invention.

An invention disclosure program also helps clarify who the inventors are. This is important when applying for a patent and arranging the assignment of IP rights to the company. As mentioned above, the *Reid* Court established that a work made for hire is an exception to the general rule that copyright vests in the author.<sup>117</sup> In the context of software, however, courts have differed in deciding what constitutes a work made for hire.<sup>118</sup> It is therefore critical for employees, contractors, and consultants, when hired, to sign invention assignment agreements.<sup>119</sup>

Procedures and policies to protect inventions as trade secrets are critical because the right to sue for the misappropriation of a trade secret is lost if the trade secret holder is not reasonably vigilant in their efforts to protect the secret.<sup>120</sup> For example, documents that contain trade secrets should be labeled as such and kept in a secure location. In general, the amount of effort spent on protecting the secret should bear a reasonable relationship to the relative importance and value of the secret.<sup>121</sup>

Reasonable vigilance also includes obtaining contractual obligations from individuals not to reveal company secrets. There should be a clear company policy communicated to all employees, at the time of their hiring, to keep material confidential by using physical measures, such as locking documents and prototypes away, and restricting access for non-employees. Employees, contractors, and consultants should

---

115. Salter, *supra* note 38, at 209–14 (providing an example of an invention disclosure form).

116. *See, e.g., Hahn v. Wong*, 892 F.2d 1028, 1033 (Fed. Cir. 1989) (holding that inventor must prove independent corroborating evidence in addition to his own statements and documents).

117. *See Harvey, supra* note 94, at 38–41.

118. *See Avtec Sys., Inc. v. Peiffer*, No. 94-2364, 1995 U.S. App. LEXIS 25901, at \*14 (4th Cir. Sept. 13, 1995) (holding that software created by an employee outside the time and space constraints of employment is not a work made for hire). *Cramer v. Crestar Fin. Corp.*, Nos. 94-2629 & 95-1069, 1995 U.S. App. LEXIS 25906, at \*14–17 (4th Cir. Sept. 13, 1995) (concluding that because a salaried employee was expected to work at home, and the employee was motivated to serve the employer's interests, a computer program developed by the employee on his own time, using his own equipment and without instruction, was a work made for hire).

119. *See Harvey, supra* note 94, at 78–80, for an example of an employee and consultant assignment agreement, and, *id.* at 85–87, for a software copyright assignment agreement.

120. Spelman & Moss, *supra* note 8, at 260.

121. *See Rockwell Graphic Sys., Inc. v. DEV Indus., Inc.*, 925 F.2d 174, 179–80 (7th Cir. 1991) (recognizing, however, that absolute secrecy would deter business operations and be overly expensive).

be required to sign non-disclosure agreements.<sup>122</sup> Upper-level management and technical personnel should also sign non-competition agreements or covenants not to compete (CNTC). Visitors should be required to "sign in" and wear visitor identifications. As part of signing in, the visitors should be required to sign non-disclosure agreements.<sup>123</sup>

There are several limitations, however, in the extent to which measures to maintain a trade secret can protect inventions.<sup>124</sup> Measures to protect trade secrets do not prevent competitors from gaining the information by legitimate means, such as independent discovery or reverse engineering. This differs from patent ownership which allows the exclusion of all others from practicing the invention, even if it is arrived at with no knowledge of the patent. Many eCommerce methods may be particularly difficult to maintain as trade secrets because methods of selling a product or service, by their very nature, must reveal at least the general method involved to a broad audience of prospective purchasers.<sup>125</sup> An employee's general knowledge cannot be claimed as a trade secret.<sup>126</sup> To do so would overly restrict an employee's ability to make their livelihood in their chosen field if they subsequently leave the company. Although CNTCs are more likely to be enforced against a former employee than trade secret law,<sup>127</sup> significant problems can arise if a CNTC was made *after* employment has already commenced.<sup>128</sup> The concern with overly-restrictive restraints on its citizens' profession, trade, or business has lead some states, like California, to place severe restrictions on the duration and scope of CNTCs.<sup>129</sup>

### B. *Intermediate Strategies*

In addition to the strategies discussed above, the company may elect to patent only those core products or processes vital to the company's business. As mentioned in Part II.B.2, however, the costs of obtaining a patent are not trivial. Moreover, what may seem to the inventor as a single invention is often viewed by the PTO as a combi-

---

122. See, e.g., *id.* at 177, 179.

123. Frederic G. Hammond, *Practical Advice for Internet and Computer Startups*, 590 20TH ANN. INST. ON COMPUTER LAW 821, 830 (providing a sample visitor "Confidentiality Agreement").

124. See Wiese, *supra* note 31, at 24-25.

125. *Id.* at 25.

126. See Harvey, *supra* note 94, at 60-61.

127. *Id.* at 59-63.

128. For example, the Supreme Court of Texas held that when an existing at-will employee compelled to sign a CNTC as a condition for future employment, it was not an enforceable covenant because the CNTC was not ancillary to or part of an otherwise enforceable agreement. See *Light v. Centel Cellular Co. of Tex.*, 883 S.W.2d 642, 643-44 (Tex. 1994) (interpreting TEX. BUS. & COM. CODE ANN. §§ 15.50-.52 (Vernon Supp. 2002)).

129. See Harvey, *supra* note 94, at 60-62.

nation of several distinct inventions. And because the PTO allows only one invention per patent,<sup>130</sup> what initially looked like the costs for one application may end up being several. In addition, for a start-up company uncertain about the novelty of their IP, it is especially advisable to have a thorough patent search done by a professional search firm or law firm. A patent search should reveal those inventions that are similar to the company's and thereby allows a more informed estimate of the scope of exclusive market that a patent would give. For example, a search revealing nothing close to the company's invention suggests that a patent could establish a large area of market exclusivity, and therefore be highly valuable. Conversely, a search that reveals several patents surrounding the company's invention may mean that only a patent of narrow scope will be possible. Nevertheless, a narrow patent might be critical for showing investors that the company can practice the invention without infringing on someone else's patent. And patents can also be valuable bargaining tools if the company is accused of infringing another's patent—an offer to cross license patented technology is often part of an acceptable settlement solution.<sup>131</sup>

As noted above, protected IP can also generate income through licensing agreements.<sup>132</sup> A patent greatly strengthens a company's bargaining position for obtaining a licensing agreement because the patent holder can prevent reverse engineering or independent discovery of the invention.<sup>133</sup> To ensure a steady future income from licensing, however, it is critical to make valid agreements that protect the IP asset being licensed and not place the company at risk. For example, a licensing agreement may limit the use of software to a single computer; retain title in the IP to the licensor; specify no copying except one copy for backup purposes; or require the licensee to keep copyright, trademark patent, and other legal notices on the product. Licensing agreements should also contain provisions requiring the licensee to maintain the secrecy of the invention with respect to third parties and not to allow reverse engineering by the licensee or third parties.<sup>134</sup> In addition, the agreement should have provisions excluding or limiting any warranties<sup>135</sup> and indemnification of the licensee. With respect to sales over the Internet, although most courts have

---

130. 35 U.S.C. § 121 (Supp. V 1999) ("If two or more independent and distinct inventions are claimed in one application, the Director may require the application to be restricted to one of the inventions."); MPEP, *supra* note 51, § 802.01 (defining "Independent" and "Distinct").

131. See Rein, *supra* note 9.

132. See Hammond, *supra* note 123, at 845, for a "Sample Electronic Software License Agreement".

133. See Cantzler, *supra* note 17, at 441–42.

134. See Hammond, *supra* note 123, at 825–26.

135. See David A. Einhorn, *Shrink-Wrap Licenses: The Debate Continues*, 38 IDEA 383, 391–96 (1998).

ruled that end-user clickwrap licenses are legally binding, there are notable exceptions.<sup>136</sup>

### C. *Advanced Strategies*

In addition to seeking patents on inventions vital to the company's business and exploiting licensing or cross-licensing opportunities, the company may choose to make offensive use of its patents and other protected IP assets against competitors, and seek IP protection and enforcement in the international arena. Developments in areas of technology critical to the company should be monitored continuously by in-house counsel or a watch service. When potential infringers are identified, they are contacted to initiate a licensing or cross-licensing agreements. Alternatively, inventions which are not critical to the future development of the company may be sold for profit.<sup>137</sup> If a licensing arrangement cannot be made, then litigation to stop infringement is initiated. A company's senior management needs to consider the decision to litigate very carefully. As mentioned above, the high costs of litigation involves not just money, but the consumption of time and distraction of both technical staff and upper level management. On the other hand, royalties or damages awards by courts against an infringer can be very lucrative, and greatly strengthen a company's market position.

Companies with a strong international market or international competitors will want to seek foreign patent protection. Unlike the U.S., nearly all other countries have adopted a first to file rule for establishing the priority of inventorship. Therefore, the decision as to in which countries to file must be made early on. Foreign patent prosecution in

---

136. For example, a split exists between the third circuit and the seventh circuit on the enforceability of shrinkwrap licenses. *See id.* This split reflects differences in how courts have characterized the offeror and offeree in the sale of software and which section of the U.C.C. the court looks to for guidance. In *Step-Saver Data Systems, Inc. v. Wyse Technology*, 939 F.2d 91, 98–100 (3d Cir. 1991), the court held that a shrinkwrap license was unenforceable under U.C.C. § 2-207 (1962). The court interpreted U.C.C. § 2-207 as providing a default rule where parties to a contract have failed to adopt expressly a particular writing with additional or different terms. *Step-Saver Data Sys.*, 939 F.2d at 98. The shrinkwrap license, as a written confirmation, contained additional terms that would materially alter the existing agreement. *Id.* at 105. In *ProCD*, the Seventh Circuit upheld the enforceability of a shrinkwrap license on the grounds that U.C.C. § 2-204(1) allows a contract to “be made in any manner sufficient to show agreement.” *See ProCD, Inc. v. Zeidenberg*, 86 F.3d 1447, 1448–49, 1452 (7th Cir. 1996) (quoting U.C.C. § 2-204(1)). The court found U.C.C. § 2-207 irrelevant because there was only one form of agreement—the shrinkwrap license itself. *Id.* at 1452.

137. The Internet itself is helping to create a market place for the sale and licensing of IP. Pranjali Sharma, *Click Here for the Best in Patented Tech*, *ECON. TIMES*, Apr. 26, 2000, available at 2000 WL 16891515 (stating that the Internet company The Patent & License Exchange, Inc. has created a website, THE PATENT & LICENSE EXCHANGE, INC. HOMEPAGE, at <http://www.pl-x.com> (last visited June 22, 2002), to facilitate the sale and exchange of IP).

multiple countries can be a very expensive proposition—filing patents in ten countries could easily cost a few hundred thousand dollars, for example. The Patent Cooperation Treaty (PCT) allows these cost to be delayed by filing an international application to establish a priority date for the invention.<sup>138</sup> Enforcing a patent against an infringer in a foreign country is also an expensive and uncertain proposition. The decision about where to pursue foreign IP protection should involve an assessment of not only the potential market in that country, but also the cost and likelihood of being able to obtain a meaningful enforcement judgment against an infringing competitor in a foreign court.<sup>139</sup>

## V. SUMMARY AND CONCLUSIONS

A large measure of the value of eCommerce start-up companies rests in its intangible property—the unique ideas, talents and vision of the company's founders and employees. It follows that an IP audit should be an integral part of any start-up's planning and development. An IP audit is required not only when contemplating a merger and acquisition, but as a means to ensure the expansion and long-term survival of the company. It is critical to take measures to foster and protect IP assets from the beginning of the company and throughout its growth.

Inadequate documentation of the discovery and development of innovations, or not taking proper measures to keep this information confidential, may forever preclude the possibility of obtaining a patent for an eCommerce business method and thereby excluding competitors. Likewise, not obtaining confidentiality and nondisclosure agreements, validating the title to IP assets, or making proper notice of IP rights can hinder the assertion of patent, trademark, copyright, and trade secret rights against infringers. These failures may spell the death-knoll for a start-up, because investors recognizing these flaws will decline to offer funding to a company that cannot protect or license its own proprietary technology.

As the start-up progresses through its early stages of funding, and the decision is made to make an IPO, or becomes a target for a merger and acquisition, then the documentation and exclusivity of IP assets will be of paramount importance in the valuation of the com-

---

138. If a preliminary examination is requested ("a Demand"), the applicant has up to 30 months from the application's priority date to enter the national stage of the patent application process for those countries designated. MPEP, *supra* note 51, § 1801.

139. IP law and enforcement can vary dramatically as compared to the U.S. See e.g., Bentley, *supra* note 28, at 74 (stating that in Europe, business methods are not yet patentable); Robert M. Sherwood, *Intellectual Property Systems and Investment Stimulation: The Rating of Systems in Eighteen Developing Countries*, 37 IDEA 261 (1997) (applying a numerical scoring system to rate the overall status IP protection in eighteen developing countries).

pany. Moreover, the results from the IP strategies adopted will determine the return on the investment to angel investors, venture capitalists, and the founders. Founders and investors of eCommerce start-up companies who ignore the importance of their IP assets risk joining the ranks of the "dot-bombs" so prevalent recently.