THE IP ASSET CLASS: Protecting and Unlocking Inherent Value

STEPHEN BENNETT

ABSTRACT

Intangible inputs are as important, or more important, to wealth creation than tangible assets and corporate leaders are beginning to recognize the value of their intangible assets. Investors are also focusing on companies whose primary property value is largely intangible intellectual property. IP investment strategies involve either attempts to raise and employ immediate capital through securitization or to protect the value of IP through insurance. The nexus between finance and IP presents a revenue opportunity for law firms. There is already a contingent of the legal community that services clients concerning IP issues but only a much smaller niche segment is advising clients regarding securitization and insurance for their IP assets. Lawyers, law firms, and others who understand the conceptual framework and instruments necessary to insure and securitize IP will become a primary resources for facilitating IP business and investment decisions in the future. These entities simply need to equip themselves with a plan of attack to bridge the gap between IP holders, IP investors, and IP insurers.

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STEPHEN BENNETT *

INTRODUCTION

“Within the last quarter century, intellectual property (e.g. patents, trademarks and copyrights) . . . has emerged as a leading asset class within corporate America . . . . In response, a new generation of merchant bankers with a specialization in IP assets has arisen . . . .” James E. Malackowski, President and CEO of ICMB Ocean Tomo

The Brookings Institute commissioned a special task force in 2000 “to consider . . . the growing importance of intangibles in the U.S. economy.” The task force concluded intangible inputs are as important, or more important, to wealth creation than tangible assets. The study also noted that corporate leaders are beginning to recognize the value of their intangible assets. Stock market valuations and corporate investment in information technology affirm the notion that intangibles are becoming increasingly critical to the world economy.

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2 Margaret M. Blair, Gary M. Hoffman & Salvatore P. Tamburo, Clarifying Intellectual Property Rights for the New Economy, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 83, 84 (Bruce Berman ed., 2002).

3 Intangibles include intellectual property, organizational and human capital. Id. at 84.

4 Tangibles are also known as physical assets and include buildings, machines, real property and manufactured goods. Id.

5 Id. at 85.

6 Id. at 87. There is “substantial corporate interest in such things as knowledge management, the development of intellectual capital, improving customer satisfaction and retention, and workplace practices.” Id. (footnote omitted). Corporations are increasingly engaging consulting firms to provide information about intangibles and provide models for measuring and managing them. Id. (footnote omitted). Investors are demanding that firms disclose information regarding their intangible investments. Id. (footnote omitted).

7 Id. at 85–87.

The net value of financial securities issued by the nonfarm, nonfinancial corporate sector grew by 10.2 percent per year, from $1.016 trillion in 1973 to $10.496 trillion in 1997.
It is logical, then, to assume that other segments of the world economy will also take notice of intangibles. The capital market structure of the United States incentivizes participants to employ capital in the expectation of profit or, put simply, people and corporations invest money in order to make money. Organizations such as insurance companies, hedge funds, and investment banks seek to employ large sums of capital in the expectation of significant profit. Some traditional strategies employed by such companies include: capturing asset appreciation (buying something now at a low price and selling it later at a higher price), collateralized loans (lending money today under the stipulation that repayment will not only be the principal sum but also a sum of interest), and insurance (assuming some risk of paying a claim in the future but collecting premium payments now).

The financial industry has recently, however, begun adapting their approach in order to capitalize on the shifting scope of corporate assets. Investors now recognize opportunities to service those whose primary property value is largely intangible intellectual property (“IP”). Two primary strategies are emerging for IP investment, either (a) offensive attempts to raise and employ immediate capital through securitization or (b) defensive posturing to protect the value of IP through insurance.

The nexus between finance and IP presents an opportunity for law firms. Such opportunities are critical because the practice of law is, of course, a business. Large and small firms, even solo practitioners, require well-defined plans in order to weather changing business climates. Diversification across multiple uncorrelated business strategies reduces the risk of destabilization during unexpected changes in legal precedent or the economy.

This comment introduces a unique and diverse business strategy for law firms. “Attorneys still remain the primary resource for facilitating IP business and

But this growth in market value of financial claims cannot be explained by corporate investment in physical property, plant and equipment, which grew at an aggregate rate of only 6.8 percent during a similar period (1970–1997). By the last half of the 1990s, an unprecedented gap had emerged between the market value of publicly traded corporations, and their book value.

The only explanation for this discrepancy that is consistent with notions of rationality in financial markets, Professor Hall claims, is the possibility that corporations “own substantial amounts of intangible capital not recorded in the sector’s books or anywhere in government statistics.”

Id. at 85 (footnotes omitted).

9 See id. at 108–33.
10 Id.
11 See generally FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY (Bruce Berman ed., 2002).
12 Id.
13 See infra Part II.A.
14 See infra Part II.B.
15 See generally BODIE, supra note 8 (describing the general business concepts such as diversification).
16 See generally id.
Part I introduces the conceptual framework through a master hypothetical. Fictional characters are cast in a scenario where a law firm is positioned to fill the void between an IP client and a financial institution. Part II analyzes the basic tools necessary to build the business, both legal and financial, and applies those tools to the master hypothetical. Finally, Part III proposes a business plan to facilitate relationships between holders of IP and the investment community. The business plan remains set in the hypothetical context and suggests a new line of diverse business for a law firm. The law firm expects to guide its client through monetizing and limiting the financial risk surrounding its intellectual property.

I. CONCEPTUAL FRAMEWORK: WALTER'S WIDGETS MEETS MEGASMART EXTRA BIG INVESTMENT BANK

Consider a hypothetical manufacturing company, Walter's Widgets. Walter designed and patented the “Wonder Widget” in his early days as an engineer. Not long after, Walter formed a small company to manufacture and market the Wonder Widget.

Walter's widget is truly a wonder. It became a critical component in the manufacture of low-fuel engines that revolutionized the auto-industry. While Walter is an accomplished inventor, he is not terribly adept at managing his business. His product line provides an excellent revenue stream but his cost structure is preventing him from realizing a significant profit.

Walter recently perfected and patented the “Very Large Wonder Widget” which, he’s certain, will allow aircraft engine manufacturers to increase fuel efficiency and revolutionize the airline industry. In order to manufacture the Very Large Wonder Widget, however, Walter is going to have to build a second, very large, production facility. Walter's balance sheet is not sufficient to fund a new facility.

Walter also has trouble sleeping at night because he knows his competitor, "Webster's Widgets," has stated its intention to be the world's top widget company. Walter is certain that Webster has infringed his patent and is about to market a similar product. Walter is worried that he could quickly find himself needing to file a patent infringement suit against Webster.

Finally, Walter has enemies. His old roommate Ralph from engineering school has been jealously watching Walter's achievements for years. Ralph recently told mutual friends that the Wonder Widget was, in fact, Ralph's invention. He announced his intention to get his “fair share of the Wonder Widget pie.” Walter worries that he may soon find himself defending a suit from Ralph.18

17 Bruce Berman, Introduction to FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY XXV (Bruce Berman ed., 2002).


A convicted car thief and a former Las Vegas pit boss sold their pre-paid cell phone business in 1999 and started a company called Freedom Wireless Inc. Id. The company focuses solely on patent litigation and recently received a $128 million jury verdict against Boston Communications Group Inc. and four other companies. Id. "Critics call the small litigants 'patent trolls' and say they are
Whether he realizes it or not, Walter has three distinct issues. First, he needs capital in order to grow his business. Second, he needs to manage the competitive risk posed by Webster. Third, he needs to manage the litigation risk posed by Ralph.

Walter’s issues are split cleanly into two strategic categories. The first is offensive. Walter should leverage the successful parts of his existing business in order to obtain capital to grow. Walter’s primary assets are the designs that make his widgets unique and successful in the marketplace. He should leverage his intangible assets, primarily his patents, in order to finance his company’s growth.

parasites on successful business.” Id. The founder and chairman of Boston Communications implied that Freedom simply waited for Boston Communications to perfect the technology and become successful before deciding that they “want a piece of that.” Id. Founders of Freedom offer no apologies and admit to no wrongdoing but never actually produced a product based on the patent that was the subject of litigation. Id. To make the story even more interesting,

[As part of its business practice] Freedom bought a “patent-enforcement” insurance policy through Lloyd’s of London, which covered up to $5 million of any litigation costs in exchange for a premium payment that [Freedom’s founder] says was less than 12% of that sum, or less than $600,000. The policy resembled an investment: if Freedom won its lawsuit or settled, the insurer would get back its original outlay plus a 25% bonus. A Los Angeles law firm . . . agreed to represent Freedom Wireless in part on a contingency basis.

Id.

19 See Clarie A. Hill, Securitization: A Low-Cost Sweetener for Lemons, 74 WASH. U. L. Q. 1061 (1996), at 1066. Hill acknowledges that companies raise money in many ways. Id. “They can issue stock, borrow money, sell assets (and lease them back), and sell rights to receive future monies.” Id. at 1066–1067. Securitization allows a business to identify one particular valuable asset and to use that specific asset to generate capital. Id. at 1092. The business is not forced to go through the relatively complex process of providing a valuation for the entire business. Id. The capital provider has a clearer view of the asset securing the capital. Id. The provider is not forced to scrutinize aspects of the business that are not transparent. Id.

Consider Walter’s Widget hypothetical as an example. Walter’s Wonder Widget was revolutionary: this fact was recognized across the world. He, however, cannot efficiently manage a business. His poorly constructed cost structure means that his profit margins from exceptional widget sales are not sufficient to finance a new product line. In order for Walter to issue stock, he must establish the value of his entire business. See id. at 1067–1076. A standard loan will consider the full credit-worthiness of Walter’s business. See id. at 1126 n.154. Assuming Walter already leases the equipment necessary to produce the widgets, he probably owns very few assets. Walter may consider his business a success worth a large sum of money but a capital provider is going to look beyond the widget and see the inefficiencies that Walter creates in his own company. See id. at 1126 n.134. Walter might be faced with selling his original Wonder Widget business in order to finance the new Very Large Wonder Widget line.

Walter’s Wonder Widget patent, however, has significant market value and has demonstrated tremendous success in the auto industry. Walter is the sole supplier of widgets for low fuel auto engines. Securitization offers Walter the opportunity to value only the patent, which has a proven track record of success. See id. at 1096. Securitization offers investors the ability to look past Walter himself and beyond his cash flow issues. See id. at 1085. Investors can ignore the poorly managed company. See id. at 1087. Capital providers can specifically invest in Walter’s patent and the revenues it will derive over a period of time. Id.

20 See generally Hewson Chen, Don’t Sell Out, Sell Bonds: The Pullman Group’s Securitization of the Music Industry an Interview with David Pullman, 2 VAND. J. ENT. L. & PRAC. 161 (2000) (introducing David Pullman as the father of IP securitization). The idea of securitization came about in the early 1970s but was not expanded into the field of intellectual property until 1997 when David Pullman constructed a deal to issue $55 million in bonds backed by the royalty and publishing income receivables from singer David Bowie. Id. at 162. The ‘Bowie Bond’ was the beginning of securitization for intellectual property. Id. Pullman’s work has generally focused within the
The second strategy is defensive and protective. Walter needs to employ risk management devices to protect his intellectual property. Walter needs insurance.\(^{21}\)

Insurance can proactively address potential infringement issues, like the one posed by Webster, as well as defend invalidity attacks, like the one posed by Ralph.\(^{22}\)

entertainment industry, offering deals to James Brown, Holland-Dozier-Holland, and Ashford & Simpson. \(\text{Id.}\)

These music legends are interested in securitizing because these deals promise several benefits to the established artist. The securitization deal is more attractive than a traditional royalty/advance agreement because the artist retains 100 percent of the copyright, generates an immediate monetary windfall, and saves money on taxes because the sale of the bonds is not treated as a taxable event. Securitization deals are more attractive than bank loans. Unlike bank loans; which are short-term in nature and involve a floating rate, Pullman’s securities are fixed rate, non-recourse, and long-term in nature translating into less risk for the artist. Also, bank loans typically only yield about one-tenth what the artist can get through securitization. According to the Pullman Group, the benefits of securitization translate into at least 20 percent extra income for the artist.

This increased amount of money up-front can result in additional indirect advantages. “By gaining control of the net sum of future royalties today, the artist can reinvest and diversify,” making the artist’s wealth less dependent on the success or failure of any specific market. \(\text{Id.}\) at 162 (footnotes omitted).

Revenue from on-line music downloads is expected to revitalize artist bonds that “skidded into an extended downturn” after the market suffered a “weakness in sales for recorded music.” See Karen Richardson, Bankers Hope for a Reprise of ‘Bowie Bonds’, THE WALL STREET JOURNAL, August 23, 2005, at C1. There are other revenue opportunities opening for artist-backed securities such as satellite radio and cellphone ringtones. \(\text{Id.}\)

IP securitization extends beyond the entertainment industry. See Clark, \(\text{supra}\) note 1: at C4. (“Unlike many [IP investment] funds, Ocean Tomo plans to offer loans to companies that are secured by patents and trademarks.”); see also Jennifer Burke Sylva, Bowie Bonds Sold for Far More than a Song: The Securitization of Intellectual Property as a Super-Charged Vehicle for High Technology Financing, 15 SANTA CLARA COMPUTER & HIGH TECH. L.J. 195 (1999) (proposing IP securitization as a ticket to financing for high technology companies).

\(^{21}\) See generally Melvin Simensky & Eric C. Ostenberg, The Insurance and Management of Intellectual Property Risks, 17 CARDOZO ARTS & ENT. L.J. 321 (1999). American International Group Inc, (“AIG”) and Lloyd’s of London offer policies that cover patent infringement. \(\text{Id.}\) at 329. Simensky discusses media liability policies as well as commercial general liability policies but does not list specific insurers. \(\text{Id.}\) at 326. AIG also offers Internet related insurance policies. \(\text{Id.}\) at 335. Litigation Risk Management, Inc, and Intellectual Property Insurance Services Corp. (“IPISC”) offer protection for plaintiffs’ litigation against intellectual property infringers. \(\text{Id.}\) at 337. IPISC also offers a separate policy to cover defense costs against patent infringement. \(\text{Id.}\) at 339. Simensky also discusses a policy that specifically protects losses from underperformance of specific property interests but does not list individual providers. \(\text{Id.}\) at 340

\(^{22}\) Policies fall into five categories. \(\text{Id.}\) at 326–41. First, Media Liability and “errors and omissions” (E&O) policies are geared for those who primarily work with non-patentable intellectual property. \(\text{Id.}\) at 325–326. These are typically marketed to media and entertainment businesses and protect against liability for dissemination of creative works. \(\text{Id.}\)

[Examples include] copyright infringement; trademark infringement; misappropriation of ideas, titles or other items not covered by copyright; breach of implied contract stemming from the alleged use of the submission of an idea or other material; defamation of a person or organization, including libel, slander, product disparagement, trade libel, and infliction of emotional distress, and violation of rights of privacy and publicity. \(\text{Id.}\) at 326.
Next, consider a hypothetical financial institution: Megasmart Extrabig Investment Bank ("MEIB"). MEIB is an active participant in asset-backed securities, specifically mortgage backed securities. MEIB, therefore, already

E & O policies typically pay litigation defense expenses, damages to insured's adversary, and settlement payments. Id. As for cost of the policy, "[d]epending on the amount of the deductible,... E&O policies providing coverage of several millions of dollars can be purchased for under ten thousand dollars." Id. at 328. These policies typically cover only defense against litigation. Id.

Second, companies offer coverage for loss from patent infringement. Id. at 329. "These policies typically cover patent infringement resulting from the use, distribution, sale, and advertising of the insured's products." Id. The policy pays defense expenses; damage awards and settlement payments. Id. "[C]overage typically does not extend to 'offensive' litigations, that is, claims that another entity has infringed the insured's patents." Id.

Third, Comprehensive or Commercial General Liability Policies ("GCL") are broad policies that cover against a wide variety of risks, "many of which have nothing to do with intellectual property." Id. at 331. Insureds relying on GCLs for protection of intellectual property are advised to study the policy carefully and realize that significant complexity arises from claiming IP damage under GCL policies. Id. at 334.

The fourth policy category covers companies whose primary business revolves around Internet content. Id. at 334. Internet Related Insurance Policies are structured specifically to manage specialized risks. Id.

Finally, Simensky notes an expansion in the insurance industry to products that cover the infringed. Id. at 337.

One of the consequences of the soaring cost of litigation is that many businesses simply cannot afford the expense of bringing an infringement suit, even if attorney's fees may be recovered in the end. This problem is exacerbated by the fact that many significant technological innovations are developed by smaller businesses lacking the financial resources to sue larger companies which are likely to defend vigorously. Furthermore, many intellectual property lawyers are unwilling to litigate such cases on a contingency fee basis.

Id. at 337 (footnotes omitted).

One of these policies is known as an "abatement policy," which covers seventy-five or eighty percent of the insured's cost of prosecuting an infringement action and all litigation fees including defending a counterclaim. Id. Individual patent policies protect $100,000 to $500,000 of costs for a premium of $1500 to $3100 per property insured. Id. at 338. The insurer may share in the recovery from a successful action, "up to 125% of the amount it spends on all litigation costs under the policy." Id. at 339; see also Bulkeley, supra note 18 at A1 (discussing details of the "patent-enforcement" policy purchased from Lloyd's of London).

23 See generally Hill, supra note 19. An entity sells its rights to receive future income, known as receivables. Id. at 1067. The purchasing firm then sells an interest in the receivable, a security interest, to investors. Id. Securities are sold to institutional investors (e.g., banks, hedge funds or insurance companies) or to individuals. Id. They may be publicly or privately placed on the market. Id.

24 See generally id. at 1076. For example, consider a highly simplified transaction. Homebuyer ("HB") acquires a fixed rate 30-year mortgage from a bank. The mortgage agreement stipulates that HB will pay bank according to a fixed schedule that includes principle and interest. The principal is $100,000 at 10% interest. Bank expects an income stream, or receivable, over the 30-year term of the mortgage that will total $400,000. Bank may, however, immediately monetize the income stream by selling the entire receivable to Receivable Buyer ("RB"). RB pays bank $400,000 and bank is no longer entitled to revenue from HB. Now RB expects the fixed income stream over the 30-year term of the mortgage. RB can then securitize its interest by selling shares, or bonds, to investors. Investors pay RB a share of the entire receivable (example: 400 shares at $1,000 per share) in return for fixed interest payments over a fixed period of time. HB continues to pay his mortgage on a fixed schedule and may be entirely unaware of the securitization. Bank is not required to wait 30 years to employ the $400,000 receivable from HB. RB receives initial payment of $400,000 from investors. RB then collects HB's payment over the 30-year term of the original
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offers its customers a method to presently collect future revenues through securitization. MEIB also has a business unit that sells catastrophe insurance. The bank, therefore, also offers products that allow customers to protect against future losses. MEIB, however, does not have a retail banking business, and it is conceivable that Walter would never cross paths with the financial giant. A perceptive mediator, however, can begin to envision where Walter and MEIB could come together.

To conclude the cast of characters, consider Walter’s lawyer, Lucy. She is a partner in a firm that specializes in IP issues. She assisted Walter in patenting the Wonder Widget. She may not know it but she is in a position to address her client’s unexpressed needs. Lucy is the mediator that should connect Walter with MEIB to capitalize on his patent and manage his risk.

loan and pays each investor a fixed amount for the term of the bond. Investor receives a regular fixed payment for the term of the bond then receives $1000 on the bond at redemption. Note, however, the example above is highly simplified and does not include a discussion of valuation (including the time value of money) or risk surrounding the underlying assets (such as the risk that the mortgagee will default). These issues significantly complicate the transaction beyond the scope of a simple example. For a general discussion of these issues see generally BODIE, supra note 8 at 165–178.

See generally Hill, supra note 19.

See generally Simensky, supra note 21.

See id. at 321.

The hypothetical is, at best, idealistic. See generally Chen, supra note 20. (providing helpful background and clarification as to the complexities presented in securitizing intellectual property.) The history of Pullman’s securitization products indicates that valuation is a complex issue. Id. at 162.

Pullman’s early competitors had significant difficulty constructing and valuing deals. Id. In 1997 well-known Nomura Capital Entertainment announced that it was going to form a music securitization team with industry veterans . . . . By March 1998, however, Nomura had not produced one asset-backed security. By the beginning of 1999, Nomura fired its top bond executive . . . and closed its entertainment bonds division with only one small entertainment loan to show for it.

The Bowie deal alone took Pullman “months to devise, cost over a million dollars, and resulted in a thousand pages of documentation.” Id. at 163 Artists’ work are highly individualistic. Not only is it difficult to value but there appears to be little fungibility from receivable to receivable. “[E]ven with the experience of numerous music securitization deals, Pullman notes that these transactions are still difficult to orchestrate: ‘I thought that after doing a series of these deals, things would get easier, and they haven’t. So that’s what’s amazing about it all—that they don’t become cookie cutter.” Id.

There is also the issue of the labor intensive nature of intellectual property securitizations. By investment banking standards, these deals are small yet can take months to prepare. For this reason, many consider them to be a novelty. For example, in the case of David Bowie’s songs, he could be receiving royalties from radio play, record sales, elevator music, commercials, re-recordings, film and TV rights, and karaoke, all in different countries. These royalty streams must all be examined and defined, which in Bowie’s case necessitated more than a thousand pages of documentation.

Helping Walter manage his offensive and defensive business needs, however, is not an innovation limited to Lucy’s firm. A firm need not specialize in intellectual property to comprehend and facilitate the securitization and protection of Walter’s patent.

II. ANALYSIS: TOOLS OF THE TRADE

Before detailing the instruments used to securitize and insure intellectual property, it is helpful to quickly explore the basic concepts as they apply to this discussion. Securitization is simply a method of raising money without selling property.\textsuperscript{29} The process begins by identifying property that is expected to bring a steady revenue stream for a fixed period of time, known as a receivable.\textsuperscript{30} Instead of waiting for the income stream to pay regularly over time, the property owner seeks to immediately collect the entire value of the receivable.\textsuperscript{31} Enter the financer, a party who pays the property owner the some portion of the expected value of the receivable immediately and collects the right to receive the revenue over time.\textsuperscript{32} The financer purchases the right to the receivable income but not the underlying property itself.\textsuperscript{33} Often, however, the financer does not want to hold the receivable. The financer then finds third parties (investors) who prefer to collect revenue over time. The financer purchases multiple receivables and packages them into a pool of diversified assets. The pool is then marketed to investors who buy shares in the receivable income.\textsuperscript{34} The original property owner continues to own the property, the financer collects fees for putting the transaction together, and the investor collects the receivable income.\textsuperscript{35}

Intellectual property owners who offensively leverage their property to obtain capital, specifically through securitization, must pay careful attention to the process described in section (A) below.\textsuperscript{36} Along the way the IP owner should keep an eye toward marketing the property and keeping the structure attractive to potential investors.\textsuperscript{37}

Insurance is a more straightforward concept. Insurers collect premiums from the policyholder under an agreement to pay damages should some pre-set event

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\textsuperscript{29} See generally Hill, supra note 19.
\textsuperscript{30} See generally id.
\textsuperscript{31} See generally id.
\textsuperscript{32} See generally id.
\textsuperscript{33} See generally id.
\textsuperscript{34} See generally id.
\textsuperscript{35} See generally id.
\textsuperscript{36} Sylva, supra note 20 at 210–230.
\textsuperscript{37} See generally Bruce Berman & James D. Woods, Patent “Brands” Positioning IP for Shareholder Value, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 211–32 (Bruce Berman ed., 2002); see also infra Section III.
\end{flushright}
occur. Of course, payments to individual policyholders or groups of policyholders can greatly exceed the insured’s paid premium. In order to manage this risk, insurers issue various types of polices across diverse geographic areas. Insurers assemble uncorrelated risks in order to maintain stable revenues.

Defensive strategies for IP are discussed in section (B) and involve insurance. Patent insurance policies are structured to defend against infringement/invalidity claims as well as to prosecute potential infringers. The owner should first, however, perform an economic analysis of litigation probabilities and costs versus insurance costs and coverage limitations.

A. Walter’s Offensive: The Structured Attack for Capital

In order to successfully securitize intellectual property the owner generally goes through a three-step process: (1) identify and value the asset, (2) create a special purpose vehicle, and (3) obtain an investment rating. The IP owner, IP investor and advisors on both sides must remain wary of particular pitfalls that risk investment capital and intellectual property during this process.

1. Identification/Valuation

The first step is identifying and valuing the asset. The IP owner starts the process by putting a price on his property. The concept is simple, the revenue stream from the IP asset must cover the security and administration costs and then compensate for the investors’ risk.

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38 See generally Simensky, supra note 21, at 321.
39 Id.
40 Id.
41 Id.

[The insurer] insures a large number of parties which pose similar, yet independent risks. The insurer classifies groups of insureds by degree of risk, and attempts to price coverage in accordance with such classifications. The insurer bears any residual risk that the loss actually suffered will be larger than the insurer’s risk calculations. 

Id. at 321-322.

A simple example is a company that sells insurance policies that cover hail damage to automobiles. A policyholder may pay $20 per month for such coverage where a claim may cost the insurer $2000. See id. To manage the risk of a $1980 loss, the insurer may also choose to sell earthquake insurance or spread its risk to hail across widely dispersed geographic markets. See id. When a hailstorm results in multiple claims the insurer relies on premiums collected from the earthquake policies and by hail policies in other locations as the source of capital. See id.

42 See generally id.
43 See generally Samson Vermont, The Economics of Patent Litigation, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 327–72 (Bruce Berman ed., 2002).
44 Sylva, supra note 20, at 209.
45 Klear, supra note 28, at 807–815.
46 See Sylva, supra note 20, at 209.
47 Id. at 210.
Investors view IP securities similar to the way they view corporate bonds. The security is solely based on expected revenue derived by the intellectual property asset. The security holder expects a predictable cash flow over time (driven by individual shares of the cash flow generated by the IP), but obtains no ownership interest in the underlying IP.

Unlike the issuer of a corporate bond, however, the IP owner cannot look to the market to value his asset. There simply is no active exchange or marketplace where IP assets are regularly bought and sold. As such, buyers and sellers can't get a clear view of the pricing landscape. "Reaching an agreement on valuation of intellectual property is arguably the most difficult hurdle buyers and sellers must overcome in IP transaction negotiations."

Consider an inventor and patent holder like Walter. Walter is knowledgeable about the technical realm surrounding his invention. He has completed prior art searches and knows the significance of the Wonder Widget. He knows the cost, practicality, and workability of the invention. He knows the basics necessary for valuing the patent even though he is not likely to understand or utilize the sophisticated mathematical modeling employed by institutional financers.

While Walter knows the basics to value his invention, arguably he may not be the most objective viewpoint. A patent expert should conduct a valuation. The expert must delve further into the patent claims to determine "whether the invention is broadly or narrowly claimed or what space in the technology area has been reserved for the patent holder." The expert also determines the exclusivity that the patent provides given the value of the technology and breadth of the claims.

In Walter's case, the Wonder Widget has a well-established value demonstrated by his sales. Hard numbers support the patent expert's findings, and it is simple to determine the revenue stream derived from the patent.

The final part of the valuation considers risk. There are basic categories of risk that guide investor decisions. Investors will consider the length of time remaining on the patent, the odds the patent will be declared invalid, the risk of infringement litigation, and the risk of disruptive technology (making the patent obsolete in the

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48 Walter Bratic, Brent Bersin & Paul Benson, Measuring Intellectual Property Portfolio Performance, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 251, 254 (Bruce Berman ed., 2002).
49 Id.
50 Id.
52 See Id.
53 Id.
55 See Id.
56 See Id.
57 See infra note 64.
58 Id.
59 Id. at 19.
60 Id.
marketplace). Similar risk components will rise again during Walter’s quest for a credit rating.

Financers and investors will, of course, also conduct their own independent valuation of the IP asset. Investors’ valuation of IP is probably the most complex part of this process and, as such, is where deals often fail. A sophisticated toolbox of valuation instruments is available to assist IP investors, ranging from qualitative valuation strategies to complex mathematical modeling.

2. Special Purpose Vehicle and True Sale

The financer for an IP security needs to isolate the asset responsible for the receivable income in order to provide the clearest risk profile for individual investors. “The IP finance company is going to want to make the IP, its only collateral, safe from a bankruptcy by creating what is known as a special purpose vehicle (“SPV”).” The sole purpose of the SPV is to isolate the asset for

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62 See infra section III (CREDIT RATING).
63 See generally Chen, supra note 20 at 162.
64 See generally Arrow, supra note 51. Arrow describes a patent as the equivalent to a call option in the financial markets. Id. at 117–119.

When framed in a financial perspective, a patent is best defined as the right to a future series of cash flows that may or may not ever materialize. It requires its owner to expend money in order to obtain an underlying asset (create the product), and that asset may or may not turn out to be worth more than the money spent to obtain it.

Id at 117. Compare that description to the behavior of a call option:

The owner of a call option must pay out additional cash in order to receive the cash value of the underlying asset. The future value of the underlying asset is variable and initially unknown; it may turn out to be less than the cash that must be spent to receive it (which is the case with an option that ends up out of the money). A call option, therefore, is the right to a future asset which may or may not have any value.

Id at 117–119. Arrow notes that “IP assets have a nearly identical payout structure to . . . call options.” Id. at 119.

Call options are readily modeled and frequently valued using the Black–Scholes formula. Id. at 120. “Modern option pricing techniques are often considered among the most mathematically complex of all applied areas of finance.” Id. at 121.

Arrow describes, at length, a method for valuing patents using the Technology Risk/Reward Unity (TRUU®) and compares this method with basic option pricing. Id. at 124–126.

While there is no defined market for Intellectual Property, Arrow notes that an asset tracking index, the Intangible Asset Market Index, tracks the value of intangible assets in the five fastest growing IP sectors. Id. at 128–129.

Arrow finally discusses a measurement for quantifying risk surrounding IP, the IP Asset Beta. Id. at 129. “Using IP Asset Beta, buyers and licensees of intellectual property are able to quantitatively weigh risk levels of different assets they are considering acquiring.” Id. at 131.

65 Agiato, supra note 61, at 433.
66 Id.
securitization from the remainder of the IP owner's interests. The SPV is typically a wholly owned subsidiary of the IP owner.

It is crucial that the SPV be bankruptcy remote in order to protect the secured interest from the originator's creditors. In order to make the SPV bankruptcy remote the asset transfer must be conducted as a "true sale." "A true sale is a sale by the originator of its right, title, and interest in the asset which is to be securitized by the SPV." The SPV is typically a wholly owned subsidiary of the IP owner.

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A collateralized loan represents a pledge of collateral through the transfer of assets and, in the event of bankruptcy, these assets are retained in the overall estate. In such case the securitized IP receivable is then exposed to the originator's creditors. Failure to effect a true sale increases the risk that shareholders will not receive revenue and therefore greatly reduces the value of the receivable itself.
Perfecting a true sale is not a clear cut process but courts look to intent, the transfer of risks and benefits, the party bearing the risk of loss, benefits retained by the originator, terms of the purchase, and compliance with the Uniform Commercial Code.\(^7\)

3. Credit Rating

The SPV must also obtain a credit rating.\(^7\) Credit agencies objectively evaluate investment structures and provide simple metrics as to the investment risk.\(^7\) Standard & Poor’s Ratings Group,\(^8\) Moody’s Investors Services,\(^8\) Duff and Phelps,\(^8\) and Fitch Investors Services,\(^8\) Inc. are some well known credit rating agencies.\(^8\) Once an investor is sure that the SPV is truly independent of the originator, and if the SPV obtains a credit rating indicating a low investment risk [high investment quality], the security’s chances for success greatly increase.\(^8\) An agency such as Moody’s evaluates a patent security under the following categories of risk: technology

Id.

\(^{77}\) Sylva, supra note 20, at 221.

Several factors are weighed when considering whether a true sale has occurred. These factors include: (1) whether the parties intended to engage in a true sale of assets; (2) whether a transfer of the risks and benefits of the ownership of the assets has occurred; (3) whether the SPV and its investors bear the risk of loss if anything should happen to the assets; (4) whether the benefits of ownership appear to be retained by the originator because the originator may repurchase the assets by paying the purchase price; (5) whether the documentation provides that the originator services the transferred assets (which is customary, but may be done by an independent party); (6) whether the purchase price was fixed, as opposed to floating; and in some transactions, (7) whether there was compliance with the Uniform Commercial Code. ...

\(^{78}\) Id. at 209.

\(^{79}\) See Jay H. Eisbruck, Credit Analysis of Intellectual Property Securitization A Rating Agency Perspective, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 411, 448 (Bruce Berman ed., 2002). Moody's Investor Services uses a gradation of investment quality denoted by nine rating symbols "to designate the least investment risk [i.e., highest investment quality] to that denoting the greatest risk [i.e. lowest investment quality].” The following symbols are used: Aaa, Aa, A, Baa, Ba, B, Caa, Ca, C.” Id. at 449.

\(^{80}\) For more information on Standard & Poor's see http://www2.standardandpoors.com (last visited Jan. 28, 2006).

\(^{81}\) For more information on Moody’s Investment Services see http://www.moodys.com/ (last visited Jan. 28, 2006).

\(^{82}\) For more information on Duff & Phelps see http://www.duffle.com/ (last visited Jan. 28, 2006).

\(^{83}\) For more information on Fitch Investor Services, also known as Fitch Ratings, see http://www.fitchratings.com/ (last visited Apr. 15, 2006).

\(^{84}\) Sylva, supra note 20, at 227. “Credit ratings are opinions about both the absolute risk of a default of payment on the security and the relative credit risk vis-à-vis other categories of ratings.”

\(^{85}\) See id.
marketing and acceptance, technological obsolescence, licensee payment risk, servicing risk, and legal risk.\textsuperscript{86}

Returning to the master hypothetical, Walter’s first concern as he approaches Moody’s for a credit rating is the technology itself and competing technologies.\textsuperscript{87} The risk of patent obsolescence is relatively low in the short-run simply because the technology is so new. It will naturally take time for his competitors to research and develop widgets capable of greatly increasing fuel efficiency. As such, a short-term securitization would be viewed favorably in terms of technological obsolescence.\textsuperscript{88}

Walter has also made significant investments to bring the Wonder Widget to market. The costs associated with a manufacturing facility provide a barrier to entry that may also reduce the risk of technological obsolescence.\textsuperscript{89}

Walter has not licensed the Wonder Widget and therefore there are no risks surrounding licensee default or expiration of current license agreements during the term of the securitization.\textsuperscript{90} The lack of licensing agreements also eliminates servicing risk for the security.\textsuperscript{91}

Walter has some legal concerns that are likely to concern Moody’s.\textsuperscript{92} Walter’s product is relatively new and embedded in a market that is constantly under the

\textsuperscript{86} See Eisbruck, supra note 78, at 445. Trademark revenue securitization is reviewed under the same general risk structure as patents except that trademarks are also reviewed for the risk that the trademark image falls out of fashion or popularity as opposed to the technological obsolescence risk of patents. \textit{Id.} at 448. Music Royalties are reviewed for asset credit quality, structural cash flow allocations, and legal issues. \textit{Id.} at 449. Future film receivables are reviewed for asset quality (a fundamental analysis of the studio and a film performance analysis) and a legal and structural analysis. \textit{Id.} at 452–56.

\textsuperscript{87} \textit{Id.} at 446. Technological obsolescence risks are broken into four categories: (1) short term of the securitization; (2) large cost of replacement technology, (3) brand recognition, and (4) alternative use. \textit{Id.} (1) “The period when a competing patent first enters the market could provide a window during which an established patent’s revenues are not threatened. If the term of the securitization is confined to this window, the risk of obsolescence is reduced.” \textit{Id.} (2) The substantial financial and marketing investment necessary to bring products to market “provides a high barrier to entry for potential new products, limiting exposure of existing patents to obsolescence.” \textit{Id.} (3) “Patent income from products with strong brand recognition and loyalty would be more resistant to erosion from new technologies.” \textit{Id.} (4) “Development of new uses reduces exposure to a technological advance in one application and expands the patent’s revenue-generating potential.” \textit{Id.}

\textsuperscript{88} See \textit{id.} at 446.

\textsuperscript{89} See \textit{id.} While the cost of production is a barrier to entry, Walter’s product line has also proven to be in high demand. As such, there is significant incentive for competitors to come to market with similar products. High barriers to entry in this case are not likely to lessen the risk that competitors will make the Wonder Widget technologically obsolete.

\textsuperscript{90} See \textit{id.} at 447.

\textsuperscript{91} See \textit{id.} “For example, the licensor could be required to manufacture a necessary component of the final product, or further develop the technology over time, and/or provide marketing or technical support. Noncompliance with any of these obligations could cause the agreement(s) to be dissolved and interrupt the revenues paid to the securitization.” \textit{Id.}

\textsuperscript{92} See \textit{id.} at 446. There are four categories of legal risk: (1) product liability, (2) patent challenge or infringement, (3) expiration and (4) bankruptcy. \textit{Id.} (1) “Use of patented technology could result in damage claims for environmental, personal injury, or other forms of negligence that a securitization could be responsible for.” \textit{Id.} (2) “Challenges to the validity of the patent can be made by third parties causing all or part of it to be overturned. In addition, unlicensed entities could attempt to use the technology without paying royalties.” \textit{Id.} (3) All patents expire 20 years after their filing date. \textit{Id.} (4) “Other creditors of the licensor could attempt to claim patent revenues in the event of licensor bankruptcy.” \textit{Id.}
environmental microscope. As such, he may be exposed to product liability risk. "A long view must be taken on the risk of product liability, since it could take time for evidence to accumulate and scientific studies to be completed assessing damage and causes." If the Wonder Widget is found to cause environmental damage or damage to automobiles that leads to injury, the securitization could face total loss of value.

Walter is already losing sleep over his second legal concern, which is also a legal risk that could lead to a lower credit rating. Actions by Webster and Ralph demonstrate risk that the court could declare Walter's patent invalid which would then decimate the value of the securitized receivable income.

B. Defending the Widgets: Probabilistic Approach

1. Patent Insurance vs. Roommate Ralph

American International Group, Inc. (AIG) and Lloyd's of London both offer patent insurance policies that defray litigation, judgment, and/or settlement costs. "These policies typically cover patent infringement resulting from the use, distribution, sale, and advertising of the insured's products." Obviously the cost of insurance is a fraction of the cost of litigation in the short-run but the individual IP owner needs to understand how such risk reduction devices fit their individual business goals. A quantitative decision tree analysis provides a valuable tool to quantify litigation cost and risk versus costs and limitations of IP insurance.

"[A] patent insurance policy covers liability for: defense expenses (largely attorneys' fees), including costs incurred defending injunction motions; damage
awards; settlement payments; and prejudgment interest.” These policies are typically structured so that the cost of an unsuccessful defense is applied to the total indemnity and may reduce the amount available to satisfy a judgment.

A standard patent infringement policy does not cover offensive litigation. Offensive litigation is covered under a separate set of policies from other insurers, known as plaintiffs' insurance. Standard policies also do not cover willful infringements: claims based on a failure to pay royalties; criminal acts; known prior infringements; claims by a government entity other than for infringement of government patents; failures to maintain a patent, and; litigation that was pending prior to the policy's effective date.

Insurers also consider proactive corporate steps to avoid infringement, such as compliance programs, as part of its calculus when deciding the cost and availability of coverage. An insurer may also consider the applicant's own patents and history of infringement and may order a patent search.

Many patent infringement policies obligate the insured to cooperate with the insurer in defense or settlement. The insured may be required to assign the entire defense to the insurer, and the insurer is often an active participant (sometimes the only participant) when selecting counsel. The insured is required to get the insurer's approval before settling any claim.

Some policies do not provide reimbursement until the final disposition of the claim, after appeal or final settlement. Such a term can obviously have significant impact on the policyholder and “can eviscerate the value of obtaining patent infringement insurance” when the attorney won't wait for reimbursement. An insurer may also reserve the right to negotiate settlements.

2. Patent Insurance vs. Webster's Widgets

Insurance limits the risk to Walter's Widgets from Walter's old roommate Ralph. A standard policy does nothing, however, to protect Walter from the threat posed by Webster's Widgets. “In response to this problem, at least two

106 Id.
107 Id.
108 Id. at 337.
109 Id. at 330.
110 Id.
111 Id.
112 Id.
113 Id.
114 Id.
115 Id.
116 Id. at 329 (“What benefit does an insured receive when insurance reimbursement arrives at the end of litigation, long after the attorneys' bills are overdue and payroll must be met?”).
117 Id.
118 See id. This policy may provide a particularly efficient solution for Walter if the policy is priced near $3000 per patent per year as Simenky suggests. See id. For a more complex business with more numerous patents, however, the efficiency of such policies becomes significantly more questionable. See id.
119 See id. at 326–41.
insurance companies, Litigation Risk Management, Inc. and Intellectual Property Insurance Services Corp. ("IPISC") have begun writing insurance policies to provide funding for plaintiffs’ litigation against intellectual property infringers."121 "Abatement policies" are available from IPISC to protect individual patents or patent portfolios.122

IPISC’s policies cover seventy-five or eighty percent of the insured’s cost of prosecuting an infringement action, including attorney’s fees, expert witness fees, deposition and court costs, and any costs incurred in defending against a counterclaim based on the invalidity of the insured’s patent, trademark, or copyright. The insured must pay the balance. The insurance will also cover the same percentage of the defense for a declaratory judgment action, provided the insured can assert a counterclaim for infringement, that is, provided that there is potential for monetary recovery.123

IPISC’s policies do not cover judgments or damages against the insured, but rather only the cost of the infringement suit.124 These policies are indemnity policies allowing the insured to choose counsel with the insurer’s approval.125 Some policies reserve the right to approve a litigation budget, and their somewhat complex approval process can severely hinder the litigation process.126 Some insurers also share in recovery on a successful action.127

3. Patent Insurance vs. the Numbers: Cost/Benefit

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126 Simensky, *supra* note 21, at 338.

A significant drawback to the IPISC policies is their approval process. IPISC requires the submission of a substantial amount of detailed information, as well as the opinion of independent counsel, before giving its approval. This seems unmanageable in the context of emergency litigation, particularly when the insured might want to seek a temporary restraining order. It appears that Litigation Risk Management, Inc. on the other hand, conducts its approval process up front, forcing the insured to obtain an opinion on the strength of its property prior to receiving coverage. While such process undoubtedly raises the initial cost of coverage, it makes for greater efficiency when it comes time to file a lawsuit.

*Id.* at 338–339.
127 *Id.* at 339. Some insurers recover 125% of the costs incurred in litigation. *Id.*
At this point, Walter is faced with a series of decisions that have associated costs and benefits. Instead of arbitrarily deciding to pay for insurance based on his worry and sleep loss, Walter can perform a quantitative analysis using a decision tree. The decision tree allows Walter and his advisors to follow a path of available decisions and then associate dollar cost and dollar benefit across each decision combined with the probability of certain events along the way.

The tree calculates an expected value of a particular decision by inputting dollar values along paths of possible decisions and probabilistic outcomes. Consider a simple example. A gambler in a casino has $1,000 and two choices: (1) put the entire sum into a slot machine with a 10% chance of a $5,000 payout and a 90% chance of no payout, or (2) put the money in his pocket and go home. The decision tree has two initial paths, (1) gamble or (2) go home. The expected value of path (2) is zero since the gambler walked in with $1,000 and walks out with $1,000. Nothing ventured, nothing gained, and nothing lost. Path (1) offers a 10% chance of making $4,000 profit (above the initial sum) and a 90% chance of a $1,000 loss. The expected value is the probability of profit multiplied by the expected profit (0.1 * 4,000 = 400) plus the probability of loss multiplied by the expected loss (0.9 * -1,000 = -900). In this case the expected profit is $400 and the expected loss is $900 therefore expected value of the transaction is 400 – 900 or a loss of $500. The gambler can focus on the final expected value (a loss of $500) and simply decide to go home or he can quantify his overall risks (a 10% chance of making $4,000 and a 90% chance of losing $1,000) and decide whether he feels lucky.

Walter's decision tree is more complex (see Figure 1) but offers a similar method for quantification of risk and calculating expected value. For simplicity, consider

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128 Simensky cites the cost of AIG's patent policy at $3000 per patent per year, but is unclear as to how much coverage is provided at that level. Id. at 330. IPISC's policy coverage (for individual patents) ranges from $100,000 to $500,000 for a premium of $1500 to $3100 per patent. Id. at 338.

129 Vermont notes that the human mind cannot generally manipulate "large numbers of interrelated and uncertain variables." Vermont, supra note 43, at 329 (footnote omitted). He looks to the science of decision making, specifically a "subdivision of the field of operations research called decision analysis." Id. A quantitative decision tree analysis allows the user to: (1) "decompose a problem into parts simple enough for our minds to wrap around" Id., (2) "weigh all relative significance of those parts" Id., (3) "systematically assign probabilities to them" Id., (4) "compile all of our judgments" Id., (5) "boil the whole problem down to a few numbers, such as the dollar value of settling versus the dollar value of litigating." Id.

130 Id. at 329.

131 Id. at 335-336.

132 See generally id.

133 See generally Vermont, supra note 43, at 335-60. See also JOHN C. HULL, OPTIONS, FUTURES AND OTHER DERIVATIVES 201–217 (Prentice Hall 2000) (1989). Hull refers to the decision tree as a "binomial tree" and discusses their relationship to risk-neutral valuation and in pricing options. Id. at 201.

134 This decision tree was calculated using Lumenaut v.3.0.1 Microsoft Excel add-in downloaded from http://www.lumenaut.com/download.htm (last visited 10/30/05). @RISK, Precision Tree, Expert Choice, DPL, HIVIEW, and DATA are other providers of decision tree software. Vermont, supra note 43, at 339. The example is highly simplified for demonstrative purposes. An actual calculation is likely to feature multiple decisions and probabilistic events. See id. at 336–60.

Additionally, significant experience with decision trees is advised in order to acquire the most robust analysis. Id. at 359. "Novices can execute tree analyses that generate insight, but 'it is difficult to avoid serious biases without having an analyst present.' (footnote omitted) In difficult or important cases, it's best to hire a decision analyst versed in law or a lawyer versed in decision
only Walter’s option to purchase plaintiff’s insurance in anticipation of Webster’s looming infringement. The first decision in the tree is whether to purchase insurance. The set of branches beyond this point are symmetric along either the insured path or the uninsured path. The next split is a probabilistic event: infringement action against Webster. The final split is a probabilistic event as to whether Walter will prevail in the suit against Webster. This is the basic structure of the tree.

Next, dollar values and probabilities are assigned. Assume: (1) the cost of the insurance is $3,000 per year with a coverage limit of $500,000; (2) litigating the issue is expected to cost $500,000; (3) if the suit prevails, the expected damage award is $1,000,000; (4) litigating the issue is expected to take five years; (5) the plaintiff’s policy stipulates a shared award totaling 125% of the insurer’s cost on all litigation. Walter’s analysis indicates a 25% probability that legal action will be necessary against Webster and an 80% probability of winning the suit once filed. Walter will spend $15,000 on insurance premiums across the five years of litigation (assuming litigation begins this year). The insurance company will retain $625,000 (the cost of litigation plus 25%) in the event litigation is successful but Walter will not be responsible for any litigation costs under the terms of the policy.

First, examining the decision path that keeps Walter uninsured, the decision tree indicates the expected value of the decision not to insure is $75,000. Walter has a 75% chance that he will neither profit nor suffer a loss from this decision (only a 25% chance that litigation is necessary). If litigation is necessary, Walter will be responsible for the $500,000 in costs but stands an 80% chance of recovering the entire $1,000,000 award. The combined probability of litigation and award indicates a 20% chance that Walter will profit $500,000 from the litigation. There is a 20% chance, however, that Walter will lose the litigation and suffer the $500,000 litigation costs. Since there is only a 25% chance of the litigation in the first place, Walter stands a 5% chance of a $500,000 loss. The uninsured path nets Walter a 75% chance of no profit and no loss, a 20% chance of a $500,000 profit, and a 5% chance of $500,000 loss. The total expected value across all paths is $75,000.

Next, the path in which Walter purchases insurance nets an expected value of $63,000. Walter loses $15,000 along all branches due to the cost of insurance over the 5-year time horizon. Since the probability of a lawsuit is only 25%, Walter stands a 75% chance of losing $15,000. In the event of successful litigation, Walter’s costs are fully covered by the policy, and after the insurance company retains its part of the damage award, his profit is $375,000. This eventuality is 20% probable. In the event the litigation is unsuccessful, however, Walter only loses the cost of the insurance."

A robust analysis must include considering and employing methods to correct input bias and ensure clarity when determining input probabilities. Id. at 336. The analyst may spend days or weeks ensuring inputs are objective. Id.

This simplistic example does not consider the value of many variables that should be included in a “real world” case. See id. at 336–38. Examples of further variables to consider in more depth: validity, enforceability, infringement, average awards, median, chances of collecting, taxation, time value of money, legal costs, indirect costs, injunctions, enhanced damages, high low and medium damage calculations, and adjustment for risk. Id. at 342–355.

135 See generally id at 342–355.

136 These values only consider profit and loss from litigation. There is no discussion of economic losses to Walter’s business from the patent infringement.
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insurance policy, $15,000. This eventuality is 5% probable. The insured path nets Walter an 80% chance of losing $15,000 and a 20% chance of a $375,500 profit. The total expected value across all paths is $63,000.

A simple comparison of expected values indicates that Walter would be better off selecting the uninsured path. The final decision, however, hinges on Walter's risk tolerance. If Walter is overly concerned about the 5% chance of a $500,000 loss, he may prefer to pay $15,000 to ensure that he will not have to suffer it.

III. PROPOSAL: BUSINESS PLAN FOR IP MONETIZATION

Investors are beginning to understand how patents can give . . . ideas an enforceable advantage [and] provide investors with a higher and sustainable return on their capital. . . . [Soon] there is going to be a serious scarcity of people who understand the linkages between IP, technology, and the marketplace. That creates opportunities . . . [and] IP know-how is going to be at a premium. Ian Harvey, CEO of BTG Plc.138

A successful business strives to diversify its business lines in order to weather changes in economic climates.140 A successful law firm should diversify legal lines to protect against changes in legal precedent or the economy. A strategy to facilitate relationships between IP owners and the investment community could be a new line of business for a law firm that does not currently specialize in IP law or allow an IP firm to help current clients increase profits by leveraging and protecting their IP. Any new business strategy, however, requires thorough planning.141 Crafting an IP

137 See Vermont, supra note 43, at 355.
Most people and companies are adverse to risk. For example, imagine that your life savings is $500,000 and you're offered the opportunity to make a bet with the following odds: 90 percent chance of losing $500,000, 10 percent chance of winning $10 million. Although the expected value of the bet is $1 million, almost everyone would refuse it.

Id.

138 Ian Harvey, Creating Tomorrow IP and the Future of Business, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 541, 547 (Bruce Berman ed., 2002).

139 "Ian Harvey is the CEO of BTG Plc, one of the leading organizations for acquiring, developing and licensing intellectual property rights." Id. at 558.

140 See generally BODIE, supra note 8.

141 JOAN GILLMAN & SARAH WHITE, BUSINESS PLANS THAT WORK 38 (Adams Media Corp. 2001).

If you were a trucker, you wouldn’t leave the driveway without a road map. If you were a builder, you wouldn’t start construction without a blueprint. If you were a pilot, you wouldn’t take off without a flight plan. Get the picture? Planning is essential wherever leadership is involved. Whether it’s you leading yourself in your own one-man band, or you and your management team leading your 200-person workforce, the plan is the critical element in getting where you want to go.

Id. A typical business plan includes five main components: front matter, marketing, personnel, financial, and closing. Id. at 42. Front matter includes an executive summary and explains the basic business description, vision and mission statements. Id. at 43–45. The marketing section contains an analysis of the market, describes products or services to be offered, and how those products or services will be marketed. Id. at 55–72. The personnel section demonstrates how the
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monetization business plan involves: (A) defining a basic business framework, (B) conducting a careful survey of the business landscape, and (C) determining a process for entry.142

A. Business Basics: Patent Monetization Practice

A business plan begins with a general overview of the business.143 The overview is a brief introduction, without significant detail.144 It should first concisely convey what the business will do, who the targeted customers are, what the broader organizational structures surrounding or supporting the business are, and why the business is expected to be successful.145 Next, the plan should state the vision of the business to crystallize a compelling and sincere view of the business goal.146 Finally, a mission statement should define a tactical strategy to achieve the vision for the business, focusing only on the most critical elements.147

Consider the Walter’s Widgets hypothetical and his lawyer Lucy’s firm, Lucy’s Law Firm (“LLF”).148 The following is an example introduction for a plan to add patent monetization to Lucy’s firm:

(1) Overview. The purpose of this plan is to outline a strategy by which LLF (or “the firm”) will assist clients to obtain a competitive advantage in their respective markets by structuring services that unlock trapped value from patent inventories and protect patent value from external threats. The strategy adds an additional business line to the firm’s current patent litigation practice and, as such, will be initially supported by the firm’s current revenue. The patent monetization practice will first educate current clients on the instruments available to securitize and insure their patent assets. Once LLF’s unique skill in patent monetization is recognized, new clients are likely to seek the firm’s counsel. Initial interest in monetization representation could then lead to the desire of clients to engage the other services of LLF, such as patent litigation. This strategy proposes a service that is expected to have a broad and diverse customer base ranging from patent holders to investment

work of the business is accomplished by functional area. Id. at 73–87. The financials component presents research on the financial needs of a business then projecting future financial activity. Id. at 87–107. The closing summarizes key facts and reiterates the overall purpose of the plan. Id. at 49–50.

142 Id. at 43–45. These elements would be included in the front matter and marketing summary of a typical business plan. A discussion of financials and personnel planning is not included in this hypothetical context.
143 Id. at 43. Gillman notes the following necessary pieces to explain business basics in the front matter of a standard business plan: the executive summary, the business description, and the vision and mission statements. Id. at 43–45.
144 Id. at 43.
145 Id. The executive summary includes: the business concept statement, situation statement, key success factors statement and purpose of the plan statement. Id. at 44.
146 Id. at 45.
147 Id.
148 See supra section I.
professionals. The proposed services are currently scarcely available in the legal space.\footnote{The author of this comment could not find a comprehensive list of law firms that are involved in patent securitization. The Pullman Group, (Hill, supra note 20), and Ocean Tomo, (Malackowski, supra note 1), are two examples of organizations that consider and implement lines of business focused toward securitization. From this research, however, it appears that a business line focused on securitizing and insuring patents would be somewhat unique in the legal realm.}

(2) Vision. The patent monetization practice at Lucy’s Law Firm facilitates interaction between patent holders and the investment and insurance communities. It serves as a critical nexus for protecting and releasing the value of patent portfolios.

(3) Mission. The patent monetization practice of LLF connects patent holders with IP investors and/or IP insurers. The practice researches, advises, negotiates, and conducts due diligence on the behalf of patent clients who can benefit through patent securitization or patent insurance. The firm prepares necessary legal documentation and structures the legal entities necessary to facilitate transactions. Strong working relationships between LLF and the investment and insurance communities, as well as with a large patent client base, ensure the necessary network between IP assets and sources of capital.

B. Business Landscape: The Market Analysis

The market analysis discusses the current business environment into which the new strategy will enter.\footnote{Russell L. Parr, IP Leverage Facilitating Corporate Value Creation, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 271, 273 (Bruce Berman ed., 2002).} The analysis should: (1) describe the industry in detail, (2) identify and describe expected customers, and (3) identify and describe competitors.\footnote{Id. at 274.} A sample market analysis for LLF follows.

(1) Industry Analysis. A patent monetization practice will find itself embedded within the broader environment of intellectual property. A 1997 study by Coopers & Lybrand (now a part of Price Waterhouse Coopers) indicated that over $4.5 trillion of total market value could be counted as intellectual property and intangible assets.\footnote{See Harvey, supra note 138, at 544.} In fact, the Coca-Cola Co. is estimated to maintain almost 90\% of its total corporate value in intangible assets and intellectual property.\footnote{Id. at 54.} Patents represent a significant portion of the IP space.\footnote{Id. Note that the company owned less than 30 patents in the late 90’s but has recently been reported to hold over 300 patents with
another 3000 pending.\textsuperscript{158} "This is a fundamental strategic change in the way Microsoft is creating a competitive position for itself. In the future, they can stop competitors encroaching on \textit{its} strategic areas . . . ."\textsuperscript{159}

Investors are paying attention to these stories and investment firms have stepped into the patent marketplace.\textsuperscript{160} One such company, BTG Plc., commercializes the inventions and patents of its partners as opposed to focusing on research and development itself.\textsuperscript{161} For example, one of its partners is developing an improved treatment for varicose veins.\textsuperscript{162} While the product still has a long and complex journey to market, BTG recognized its "blockbuster market potential" and funded a company to finance the full clinical trials and oversee eventual global marketing.\textsuperscript{163}

Such activity is becoming more and more common, yet the landscape for professional counsel at the patent and investing crossroad does not appear to be keeping pace.\textsuperscript{164} "There is probably a bottleneck emerging: companies will want to embody an intelligent understanding of patents as part of their forward strategy, and will find that there are not nearly enough patent professionals or patent intermediaries to go around."\textsuperscript{165}

(2) Target Customers. The target market for LLF's patent monetization practice is immense. There are three primary segments: investment firms, patent holders, and insurance companies.\textsuperscript{166} LLF will serve as the bridge between these segments.

Investment firms showing a strong interest in IP include most of the major Wall Street banks\textsuperscript{167} such as Goldman Sachs,\textsuperscript{168} Citigroup,\textsuperscript{169} Morgan Stanley,\textsuperscript{170} JP Morgan Chase,\textsuperscript{171} and Merrill Lynch.\textsuperscript{172} Insurance companies such as AIG, Lloyd's of London and Litigation Risk Management LLC are also potential customers.\textsuperscript{176}

\begin{footnotesize}
\begin{itemize}
\item\textsuperscript{158} Id.
\item\textsuperscript{159} Id.
\item\textsuperscript{160} See id. at 550.
\item\textsuperscript{161} Id.
\item\textsuperscript{162} Id.
\item\textsuperscript{163} Id. at 551.
\item\textsuperscript{164} See id. at 547.
\item\textsuperscript{165} Id.
\item\textsuperscript{166} See id. at 545 (discussing patent holders); see also Christopher R. Fine & Donald C. Palmer, \textit{Patents on Wall Street Investment Banking Meets Intellectual Property, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY} 511 at 512 (Bruce Berman ed., 2002) (discussing investment firms); see also generally Simensky, \textit{supra} note 21 (discussing insurance companies).
\item\textsuperscript{167} Fine, \textit{supra} note 166, at 512.
\item\textsuperscript{168} For more information on Goldman Sachs see http://www.gs.com/ (last viewed Jan. 28, 2006).
\item\textsuperscript{169} For more information on Citigroup see http://www.citigroup.com/ (last viewed Jan 28, 2006).
\item\textsuperscript{170} For more information on Morgan Stanley see http://www.morganstanley.com/ (last viewed Jan. 29, 2006).
\item\textsuperscript{171} For more information on JP Morgan Chase see http://www.jpmorganchase.com/ (last visited Jan 29, 2006).
\item\textsuperscript{172} For more information on Merrill Lynch see http://www.ml.com/ (last visited, Jan. 29, 2006).
\item\textsuperscript{173} See Simensky, \textit{supra} note 21 at 329.
\end{itemize}
\end{footnotesize}
While LLF needs to establish relationships with the investment firms and insurers listed above, the firm already has proven relationships with patent holders that may seek to monetize or insure their patents. As LLF builds a reputation for assisting its current patent holders to capitalize their property, other patent holders are likely to look to LLF for advice.

(3) Competitive Landscape. The market for patent monetization is in its infancy. There are no known law firms that specialize in connecting patent holders, patent investors, and patent insurance companies. Some firms specialize in a particular niche, such as copyright securitization, but there are few, if any, firms with expertise in structuring services that unlock trapped value from patent inventories and protect patent value in order to maximize clients’ competitive advantage in their respective markets.

C. Into the Breach: The Marketing Plan

The marketing plan describes the future of the proposed business. The plan should provide a detailed description of the services and/or products that underlie the business and then explain the process through which the business will place and promote them in the market. A sample marketing plan for LLF follows.

(1) Services. LLF is in a unique position to bridge the gap between patent holders and those looking to invest in patents. LLF’s role is advisor and counselor. LLF’s patent monetization practice will maintain a strategic dialogue with its clients in order to provide monetization advice. Counsel will develop and maintain an expertise in the client’s industry and products, and then develop an intricate knowledge of the structure, management, history, and legal requirements of the client’s organization.

LLF will assist the client in performance of IP audits and identify patent royalty streams that can be securitized. Audits will also focus toward potential

\[\text{[1]}\] Gating/Must have. These are the crown jewels of the organization—the assets that allow industry participation, propel success in a business or inhibit competitors in a meaningful way. . . .

\[\text{[2]}\] Enabling/Facilitation. This category comprises key know-how or patents that enhance a company’s position in a business but that are not absolutely necessary for the company to enter or to remain in the business, . . .

\[\text{[3]}\] Augmenting. This category represents assets that provide new business opportunities not directly related to the core business or area of expertise covered by the company’s other IP assets. . . .
infringement claims. LLF stands in a position to advise the client on legal options, and LLF’s other practices are prepared to prosecute or defend litigation.\textsuperscript{185} If the IP audit reveals a particular vulnerability, LLF is positioned to discuss hedging the client’s patent litigation risks with patent insurance.\textsuperscript{186}

For clients who pursue patent securitization, LLF’s expertise with due diligence provides a significant advantage. Due diligence requires a thorough catalog of IP assets, valuation of the assets,\textsuperscript{187} and third party patent searches.\textsuperscript{188} Securitization also requires a network of capital providers and LLF stands ready to provide access to and assist in negotiations with capital providers.\textsuperscript{189}

Additionally, clients that choose either securitization or insurance products will require other legal services. For example, LLF can assist in the creation of a special purpose vehicle or execute an insurance agreement.\textsuperscript{190}

At this incubation stage, LLF’s primary challenge is establishing relationships with investment firms and insurers. LLF’s patent monetization practice will need to establish strong working relationships with capital providers in order to achieve its goal of maximizing the patent holder’s competitive advantage.\textsuperscript{191}

(2) Placement and Promotion. LLF provides a significant advantage for clients seeking patent securitization who involve LLF from the early stages of preparation.\textsuperscript{192} LLF will keep an eye toward marketing the property and keeping the structure attractive to potential investors throughout the process.\textsuperscript{193} The marketing strategy focuses on a triangle of innovation, protection, and leverage.\textsuperscript{194} It is critical to market the patent portfolio in a manner that is as clear and concise as possible.\textsuperscript{195}

\[4\] Defensive. Sometimes patents are valuable principally for the exclusion of others, even if the owner does not plan to commercialize them. \ldots

\[5\] Not relevant/Cash value. These are IP assets that probably will be sold or put aside. \ldots

\textit{Id.} at 522–523.

\textsuperscript{184} See Fine, \textit{supra} note 166, at 521.

\textsuperscript{185} Patent insurance is not likely to be available as a risk management device if the audit uncovers pending, or in some cases imminent, litigation. Simensky, \textit{supra} note 21, at 329–330.

\textsuperscript{186} \textit{See generally} Simensky, \textit{supra} note 21.

\textsuperscript{187} \textit{See supra} section II; \textit{see also} Fine, \textit{supra} note 166, at 529–35 (discussing valuation techniques for merger and acquisition activity: fair value measurements, present value of future cash flows, option pricing models, conjoint and relative utility analysis, cost of development, cost of replacement, expected cost of infringement, and price minus book value).

\textsuperscript{188} Fine, supra note 166, at 525. “[I]n one recent case, a major communications technology manufacturer sought to acquire a rich IP portfolio \ldots [but] a competitor of both the buyer and seller, held many patents in the subject area.” \textit{Id.} Such a situation can significantly affect the valuation of the seller’s IP. \textit{Id.}

\textsuperscript{189} \textit{See} Fine, supra note 166, at 526–28 (discussing, at length, negotiation strategies on both sides).

\textsuperscript{190} \textit{See supra} section II.

\textsuperscript{191} \textit{See generally} Fine, \textit{supra} note 166.

\textsuperscript{192} \textit{See supra} section II.

\textsuperscript{193} \textit{See generally} Parr, \textit{supra} note 152.

\textsuperscript{194} \textit{See id.} at 278. “Innovate, protect, and leverage is the mantra all companies follow that wish to create value in the future. These are the companies whose stock you want to own.” \textit{Id.}

\textsuperscript{195} \textit{See generally}, Walter G. Hanchuk, \textit{How to “Read” a Patent Understanding the Language of Proprietary Rights}, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 27 (Bruce Berman ed., 2002).
Branding will also be a central component to marketing\textsuperscript{196} and, in some cases, the inventor himself should become involved as a public face for the patent portfolio.\textsuperscript{197}

The first corner of the marketing triangle is innovation.\textsuperscript{198} LLF’s patent clients already have proven track records of innovation. They are prominent players in their respective industries with well established products. The marketing plan will simply bring the innovative qualities to the forefront as the client takes its patents into the investment and insurance communities. Specifically, potential investors need to view the client as a company that integrates intangible assets and intellectual property in order to remain on the cutting edge of its industry.\textsuperscript{199}

Protection is the second cornerstone of the marketing plan.\textsuperscript{200} Clients have already taken the first protective steps by patenting their innovations. The next protective steps come through the LLF and client partnership. LLF assists clients in auditing their patent portfolio and proactively structures mechanisms to defend patent value. LLF’s relationship with the insurance industry will provide clients avenues through which they protect against the financial burdens of litigation.

Leverage is the final piece to the marketing puzzle.\textsuperscript{201} This corner of the plan rests mostly in LLF’s sphere of influence, and the patent monetization practice will focus on securitization as the primary leverage strategy. Relationships with investment firms should avail clients of the preeminent sources of funding in the IP securitization realm. LLF ensures its patent clients will receive expert counsel in valuation and legal structuring for securitizing their patents.

Marketing the patents themselves is also a critical component to the leverage strategy. A key to marketing is to make sure investors understand the portfolio. The general conception is that patents are cryptic, difficult to understand instruments.\textsuperscript{202} It will be important to present investors with a clear and easy to understand synopsis of the patent underlying the secured receivable. LLF plans to provide potential investors with a patent packet which will include the pertinent details on the patent itself as well as directing the investor to further information on the invention, supporting documentation of the patent itself and further relevant research.

The patent packet will begin with an executive summary that aims to summarize the strengths of the patent in a concise and uncomplicated manner. The executive summary for the patent packet will first focus on the variety of independent and nested dependant claims that demonstrate the client’s careful

\textsuperscript{196} See generally Berman, supra note 37.

\textsuperscript{197} Jeffery L. Brandt, Capturing Innovation Turning Intellectual Assets into Business Assets, in FROM IDEAS TO ASSETS INVESTING WISELY IN INTELLECTUAL PROPERTY 65, 75 (Bruce Berman ed., 2002).

\textsuperscript{198} See Parr, supra note 152, at 278. "Innovation involves the continued creation of new products and services that are smaller, faster, more efficient, and work better." Id.

\textsuperscript{199} Id. at 280.

\textsuperscript{200} See id. at 278. "Protection involves guaranteeing exclusive rights to exploit the innovations." Id.

\textsuperscript{201} See id. "Leverage is the proactive management of the protected innovations." Id. "This is where the money is made. Assertive use of well-protected innovation rights is the source of value creation." Id. at 281. Parr notes different methods for leveraging IP: simple defensive strategies, defensive strategies with cost control, income generation from licensing, pure-play licensing, charitable donation strategies, securitization, and strategic alliance entry fees. Id. at 281–89.

\textsuperscript{202} See Hanchuk, supra note 195, at 28.
process of drafting and obtaining the patent. Next the summary will highlight the discussion of many different embodiments of an invention from the body of the patent in order to demonstrate a careful and thorough patent drafting process. The patent date will be clearly exposed along with a discussion of the prior art search and search classification conducted by the patent examiner. This process may expose research deficiencies and require LLF to conduct a thorough search to augment the information available at the time of the filing. Finally, the executive summary will discuss patent applications directed to various features of the invention along with any continuation, divisional, or Continuation-in-part applications to indicate the overall strength of the patent portfolio.

The final factor to consider in the leverage strategy is branding. Particularly, LLF will advise clients to embark upon a branding campaign for the specific patent portfolio it is seeking to securitize. Most companies understand the necessity of establishing a brand for their products, but they may not have considered branding their intellectual property. IP branding and IP brand management will assist the client to establish a connection with the investing community. The branding process assists the consumers of information to classify and store the relatively complex information surrounding the patent portfolio. The patent branding strategy conveys the prowess of the patent, giving the indication that there is a "stamp of approval" on the invention.

Where possible, LLF will enlist a valuable ally in the patent branding process, the inventor. "[N]o one knows, loves, or appreciates the success of the invention more than the inventor. The wise organization involves the inventor in drafting the patent application." Therefore, LLF advocates involving a willing and motivated inventor in the process of branding the patent. Investor access to an inspired inventor may also be instrumental during the securitization process.

LLF is uniquely positioned at a valuable junction in the patent landscape. Patent holders, investors, and insurers require a conduit to facilitate transactions that allow the patent holder to protect and unlock the value inherent in its patent portfolio. The firm’s expert status in the field of IP law makes the patent monetization practice a sensible addition to the LLF’s current business lines.

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203 See id. at 61 (listing indicators for the strength or weakness of a particular patent).
204 See id.
205 See id. A lengthy prior art section and search classification indicates that the patent examiner did a thorough job before issuing the patent. Id. Little or no prior art exposed may open the door for potential future problems. Id. at 61–62.
206 See id. at 61.
207 See id. at 62.
208 See generally Berman, supra note 37.
209 Berman, supra note 37, at 220 (“The product behind the world’s most valuable brand, Coke, is essentially carbonated sugar water, yet the brand is estimated to be worth $72.5 billion. Similarly, McDonald’s, American Express, Nescafe, and Heinz are all valuable, widely recognized brand names that are associated with products low in (apparent) technical sophistication.”).
210 Berman, supra note 37, at 220.
211 Id. at 221.
212 Id.
213 Id.
214 See Brandt, supra note 197, at 75.
215 Id.
IV. CONCLUSION

Intangible assets, including intellectual property, make up a significant portion of the world's economy. The world's financial community has begun to take notice and is responding by offering products to protect the value of their IP with insurance and unlock and capitalize on the value underlying the IP asset through securitization. There is already a contingent of the legal community that appreciates and services clients with IP legal issues. A smaller niche segment is already advising clients regarding securitization and insurance for their IP portfolios. Significant opportunities, however, exist for lawyers, law firms, and others who understand the conceptual framework and instruments necessary to insure and securitize IP. These entities simply need to equip themselves with a plan of attack to bridge the gap between IP holders, IP investors, and IP insurers.
(a) The top branches represent the decision to purchase insurance at a total cost of $15,000. (b) There is a 25% chance that an infringement action is necessary with a 75% chance it is not necessary. Since insurance covers the cost of litigation there is no associate cost or benefit along either branch at this step. There is a 75% chance of incurring a $15,000 loss. (c) Once the action is started, there is an 80% chance of winning and a 20% chance of losing. Winning the action brings a benefit of $375,000 whereas losing the action costs nothing more than the cost of insurance (though it would represent significant business losses for Walter). The top branches indicate a 20% chance that Walter will benefit by $375,500 and an 80% chance of costing $15,000.

(d) The lower branches represent the decision not to purchase insurance and therefore not incur the $15,000 cost. (e) The odds of an infringement action remain 25% in favor and 75% against. If the action is necessary it will cost Walter $500,000, otherwise there is no cost. (f) Winning the action (80% probable) brings Walter $1,000,000. Losing the action has business losses associated but no additional cost. The lower branches indicate a 20% that Walter will benefit by $500,000, a 5% chance of costing $500,000 and a 75% chance of zero cost and zero benefit.

Combined probabilities and expected values indicate an expected benefit of $63,000 along the insured path and an expected benefit of $75,000 along the uninsured path.