

Practicing in the Patent Marketplace

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The growing secondary market for patents is a relatively recent phenomenon. Understanding this unusual and developing market is necessary to navigating it effectively. This Article surveys the marketplace, identifies its key players, and notes some of the unique challenges presented in patent sales.

Patents are unique assets with differing impacts in different hands. They are susceptible of effective valuation only by specialists—yet most patents are not worth such costly effort and investment. This Article explores how this vibrant marketplace continues to adapt to value these unique assets more efficiently and to deal with imperfect information in individual transactions.

INTRODUCTION

Practitioners in the patent marketplace today face a rapidly changing landscape. During the last half century, employers generally procured, maintained, licensed, commercialized, and enforced employees' patents throughout the patents' lives. Now patents may find a variety of homes and uses in their lifetimes. In the last ten years, patents have been sold in increasing quantities and to and through many different kinds of players. This reflects the substantial financial opportunity that both licensing and enforcing a patent can provide, as well as the evolving strategic and defensive importance of patents to product-producing companies that commercialize their inventions.

For context, global intellectual property (IP) licensing revenues, which include licenses for both patents and technology, have approached or exceeded \$90 billion per year since 2003.¹ During roughly the same time period, there has been a small but steady string of patent infringement awards in United States district courts exceeding \$100 million.² In two of the most heavily litigated technology areas, software and telecommunications,³ the median patent damage awards

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¹ See Ron Laurie and Raymond Millien, *A Survey of Established and Evolving IP Monetization Models*, in *IP Monetization 2010* 187, 192 (PLI 2010).

² Aron Levko, et al, *A Closer Look: Patent Litigation Trends and the Increasing Impact of Nonpracticing Entities* 7 (PwC 2009), online at <http://www.pwc.com/us/en/forensic-services/publications/assets/2009-patent-litigation-study.pdf> (visited Nov 6, 2010).

³ See John R. Allison, Mark A. Lemley, and Joshua Walker, *Extreme Value or Trolls on Top? The Characteristics of the Most-Litigated Patents*, 158 U Pa L Rev 1, 18 (2009).

between 1995 and 2007 were \$8.5 and \$31.4 million, respectively.⁴ Between 2001 and 2007, patent plaintiffs were successful 40 percent of the time, and in those cases that went to trial, they were successful 63 percent of the time.⁵ Between \$6 billion and \$8 billion in capital is currently available to fund patent aggregation programs, some significant portion of which will assert patents in their portfolios.⁶

At the same time, the global patent sale marketplace, which fuels both these offensive and defensive strategies, is estimated to generate only \$1.2 billion per year.⁷ This may seem counterintuitive in light of the staggering litigation awards in recent years and the substantial revenues generated by patent licensing. But, in fact, the value of the average patent is very low, because there are long odds that a particular invention will be commercialized by anyone—and, if it is, there is still uncertainty about when and for how long.⁸ In the high-tech industry, yet another contingency of commercialization is the interdependence of any single invention with other features and inventions in a final product. Most patents are worth less than or about as much as was paid to prosecute them⁹—and all other factors being equal, their value continues to diminish as their expiration date nears. Only a fraction of a percentage point of the total number of issued patents is worth \$1 million or more.¹⁰ Given the huge differences in value among patents, it is no wonder that both scholars and practitioners are seeking ways to improve how patents are valued, with scholars often calling for greater disclosure of

⁴ Aron Levko, Vincent Torres, and Joseph Teelucksingh, *A Closer Look: 2008 Patent Litigation Study: Damages Awards, Success Rates and Time-to-Trial* 3 (PwC 2008), online at http://www.pwc.com/en_US/us/forensic-services/assets/2008_patent_litigation_study.pdf (visited Oct 22, 2010).

⁵ Id at 8–9 (discussing statistics that reflect litigation success rates across all industries).

⁶ See Kevin Barhydt, *Patent Monetization in 2010: The Role of Defensive Patent Aggregation*, in *IP Monetization 2010* 493, 496 (cited in note 1).

⁷ Oliver Wyman, *IP Secondary Market Study: Summary Findings from Oliver Wyman Research *7* (Apr 23, 2009) (“Oliver Wyman Study”) (on file with author) (summarizing the results of a study based on fifty structured interviews in February and March 2009 of inventors, contingent fee IP law firms, brokers and intermediaries, academics and industry experts, and IP counsel from large technology companies).

⁸ When and for how long are important because patent values tend to peak between years thirteen and fifteen, when commercialization is well in progress. Telephone interview with Kenneth Lustig, Managing Director, IP Investments, Microsoft Corporation (Aug 30, 2010) (“Lustig Interview”). See also Aleksandar Nikolic, *Securitization of Patents and Its Continued Viability in Light of the Current Economic Conditions*, 19 *Albany L J Sci & Tech* 393, 419 (2009) (noting factors that can impact patent valuation by an investor, including time to market).

⁹ This is about \$20,000 to \$30,000. Ninety percent of high-tech patents in the secondary market are worth less than \$50,000, leaving some 9 percent of high-tech patents in the secondary market worth between \$200,000 and \$500,000 and 1 percent worth more than \$1 million. *Oliver Wyman Study* at *12 (cited in note 7).

¹⁰ Telephone interview with Cash Elston, Acquisitions Manager, Intellectual Ventures (June 10, 2010) (“Elston Interview”). See also *Oliver Wyman Study* at *12 (cited in note 7).

sale terms to aid in setting market prices and practitioners focusing on refining methods for predicting a patent's value to their own clients.

With such widely varying valuations, motivations, and players, a legal practitioner seeking to negotiate and document a patent assignment transaction has a difficult task ahead. The stakes can be high, and it is essential for the practitioner to help her client evaluate the risks associated with the transaction and think through all of the possible contingencies, even as the market itself is changing and maturing. With many of the transactions involving patents of lower value, the practitioner must manage the dual risks that the potential transaction costs associated with the transaction may be out of proportion to its value and that the patent at issue is the needle in a haystack.

Two key practitioner competencies thus are critical: (1) understanding the patent marketplace, and (2) navigating the complexity of the marketplace, particularly with regard to valuation and negotiation. I examine each here, considering existing approaches, efforts to reduce transaction costs, and legal strategies. I provide a current view of the patent marketplace from a practitioner's perspective. Along the way, I critique several proposals for market reform, arguing that efficiency in the marketplace is increasing and will continue to do so through the actions of the market itself rather than external pressures.

I. UNDERSTANDING THE MARKETPLACE

A. Volume in the High-Tech Sector

The patent marketplace is a relatively new secondary market, which has grown quickly. Between 2002 and 2008, 30,000 to 35,000 patents—mostly high-tech—were sold in the secondary market, representing about 3 to 5 percent of all active high-tech patents in the United States.¹¹ Between 2006 and 2008 alone, the value of information technology patent sales on the secondary market increased by 80 percent.¹² More broadly, during this same period, both product-producing companies and nonpracticing entities (NPEs) increased their high-tech patent purchasing by between 20 and 30 percent.¹³

Between the fall of 2008 and spring of 2010, the volume and price of patent sales declined sharply.¹⁴ In a market occasionally characterized by

¹¹ *Oliver Wyman Study* at *11 (cited in note 7).

¹² *Id.* at *8.

¹³ *Id.* See also Allison, Lemley, and Walker, 158 U Pa L Rev at 22–24 (cited in note 3).

¹⁴ Robert Aronoff, *The State of the US IP Marketplace 2009–2010*, in *IP Monetization 2010* 477, 482 (cited in note 1) (describing the effect on the patent market of the global financial crisis, which saw many companies racing to sell nonstrategic patents because they were desperate for

indiscriminate buying of patents of dubious quality, the market stalled dramatically after a few significant financial buyers stopped buying patents during the financial crisis.¹⁵ Only higher quality patents were sold during the depth of the recession, mostly to sophisticated buyers.¹⁶ By mid-2010, by all accounts, the market had recovered¹⁷ and had begun to focus on higher quality patents at lower prices than in the pre-recession period.¹⁸

B. The Players

As is a common theme as markets evolve,¹⁹ new types of innovative players with different roles and motivations have appeared in the patent marketplace over the past ten years. They can be placed in a variety of categories, but for simplicity's sake, I consider here buyers, sellers, and facilitators.

1. Buyers.

The bulk of the buying in the patent marketplace is by NPEs, which may be thought of more broadly as “financial buyers.” Sales to financial buyers represent more than 60 percent of the total market value of all transactions and more than 75 percent of the transactions in the marketplace.²⁰ Included among the NPEs are three types of buyers with three distinctly different motivations: (1) patent assertion

cash while demand simultaneously evaporated); Telephone interview with Dan McCurdy, Chief Executive Officer, Allied Security Trust (June 14, 2010) (“McCurdy Interview”).

¹⁵ See Aronoff, *State of the US IP Marketplace* at 481 (cited in note 14).

¹⁶ Elston Interview (cited in note 10). See also Aronoff, *State of the US IP Marketplace* at 482 (cited in note 14).

¹⁷ Telephone interview with Dean Becker, Chief Executive Officer, ICAP/Ocean Tomo (June 8, 2010) (“Becker Interview”). See also *Global Transfer Technology Group (GTT) Releases Q1 2010 Patent Market Index (PMI)* (PRWeb 2010), online at <http://www.prweb.com/releases/2010/07/prweb4264864.htm> (visited Nov 6, 2010). As an example, Ocean Tomo's spring 2010 auction generated ten times the patent sale revenue it generated in its summer 2009 sale. Becker Interview. See also Business Wire, *ICAP Ocean Tomo Auction Sees Record Bidding* (March 26, 2010), online at http://findarticles.com/p/articles/mi_m0EIN/is_20100326/ai_n52924316/ (visited Nov 6, 2010).

¹⁸ Becker Interview (cited in note 17); McCurdy Interview (cited in note 14). See also Lew Zaretski and Kent Richardson, *The Patent Transaction Market at a Crossroads*, Intel Asset Mgmt 25, 28 (Mar/Apr 2009).

¹⁹ See Robert P. Merges, *Of Property Rules, Coase, and Intellectual Property*, 94 Colum L Rev 2655, 2662 (1994) (“The frequency of contracting in many markets for [IP rights] . . . gives rise to a myriad of institutions (broadly defined) designed to streamline the exchange of property rights.”).

²⁰ *Oliver Wyman Study* at *8 (cited in note 7).

firms²¹ (however financed or constituted), (2) defensive aggregators, and (3) Intellectual Ventures (IV).

a) Patent assertion firms. These buyers represent a rapidly growing segment of the patent sale market.²² They buy patents to exploit them in licensing or litigation. When they buy a patent, they take a calculated risk that (1) they will recover more than the approximately \$5 million it will take to fund offensive patent litigation,²³ (2) they can wait one to five years to get to trial²⁴ and even longer to navigate the appeals process, (3) there will not be a judicial or administrative finding that their patent is invalid,²⁵ or (4) they will reach profitable settlements with defendants. They must also deal with differences in how vigorously companies will defend themselves when a patent is asserted by an NPE. Many assertion firms take these risks. NPE litigation activity is up 500 percent since 2001, and 467 NPEs filed information technology patent infringement lawsuits in 2009.²⁶ Obtaining their desired return requires strong business, legal, and analytic expertise, which some NPEs have in-house and others supply through outside counsel and other consultants.

b) Defensive aggregators. These buyers form a small but growing part of the overall marketplace.²⁷ Defensive aggregators provide a strategic service to their funders, which are usually large product-producing

²¹ These include everything from licensing and enforcement companies such as Acacia Technologies, to institutional patent aggregators like Collier Capital, to technology development and licensing companies like MOSAID and WiLAN. See Laurie and Millien, *IP Monetization Models* at 192–93 (cited in note 1) (describing the business model of patent licensing and enforcement companies, which contact targeted firms in an attempt to license patents in their portfolios, and then file infringement suits against firms that refuse to license).

²² *Oliver Wyman Study* at *8 (cited in note 7).

²³ See Colleen V. Chien, *Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents*, 87 NC L Rev 1571, 1584 (2009); Alan Ratliff, *Damages 4* (AIPLA 2007), online at http://www.aipla.org/Content/ContentGroups/Speaker_Papers/Annual_Meeting_Speaker_Papers/200717/Ratliff-paper.pdf (visited Nov 6, 2010).

²⁴ See Levko, Torres, and Teelucksingh, *2008 Patent Litigation Study* at 10 (cited in note 4) (charting the time-to-trial distribution of patent cases from 1995 to 2007).

²⁵ See, for example, *Pfaff v Wells Electronics, Inc.*, 525 US 55, 68–69 (1998) (affirming the Federal Circuit’s decision that the petitioner’s patent was invalid because the patented invention had been on sale for more than a year when petitioner applied for the patent). See also Nikolic, 19 Albany L J Sci & Tech at 404–05 (cited in note 8) (noting that the risk of patent invalidation, as well as the cost and delay of litigation, diminishes the potential value of patents).

²⁶ Barhydt, *Patent Monetization in 2010* at 495 (cited in note 6). See also RFC Express, *Leading PC Companies Lift RPX Membership—Dell & Acer Join the RPX Defensive Patent Aggregation Service* (Apr 21, 2010), online at <http://www.rfcexpress.com/lawsuit-news.asp?id=5701> (visited Nov 6, 2010); Allison, Lemley, and Walker, 158 U Pa L Rev at 32 (cited in note 3) (explaining that NPEs initiated 80 percent of the litigation involving the 106 most-litigated patents in the study and owned 50 percent of the most-litigated patents).

²⁷ See *Oliver Wyman Study* at *8 (cited in note 7) (noting that defensive firms increased patent purchases 20 to 30 percent from 2006 to 2008). See also Barhydt, *Patent Monetization in 2010* at 498 (cited in note 6).

companies seeking to clear patent risk. Defensive aggregators' funding approaches vary, but they generally share the goal of "reduc[ing] litigation and settlement costs on behalf of [a] group of member companies."²⁸

A major benefit of this model is the pooling of costs among companies that would otherwise incur them individually.²⁹ A defensive aggregator places a premium on identifying the right patents to buy to reduce risk for its funders and maximize their individual and collective returns. For example, one aggregator, Allied Security Trust, takes a "catch and release" approach to buying patents. Under that model, it acquires patents, licenses them to its constituents, and then resells the patents subject to those licenses, recapturing whatever financial value it can.³⁰ Another aggregator, Open Invention Network, both purchases patents to clear risk for its members and holds them to permit its members to use the patents if they are sued.³¹

c) Intellectual Ventures. IV is a company that both aggregates patents defensively and licenses them not only to its constituents but also to third parties. In fact, IV promotes itself more broadly as creating a capital market for inventions. IV also funds and obtains patent protection for inventions by its own employees and supports invention and patenting by creating an external network of inventors.³² IV has purchased most of its thirty thousand patents with the more than \$5 billion in capital it has raised since 2000 to support its four funds and a startup.³³ Well funded and ambitious from the beginning, IV has a disproportionate impact in the market.³⁴

d) Other buyers. Operating companies with product lines, large and small, make up approximately 25 percent of all patent sales, though these sales represent more than 60 to 65 percent of the value of all transactions.³⁵

²⁸ Barhydt, *Patent Monetization in 2010* at 498 (cited in note 6).

²⁹ McCurdy Interview (cited in note 14). See also RPX Corporation, *FAQs*, online at <http://www.rpxcorp.com/index.cfm?pageid=23> (visited Nov 6, 2010).

³⁰ See Laurie and Millien, *IP Monetization Models* at 206 (cited in note 1). See also James E. Malackowski, *The Intellectual Property Marketplace: Past, Present, and Future*, 5 John Marshall Rev Intel Prop L 605, 609 (2006) (predicting correctly an increase in "serial sales").

³¹ See generally *Open Invention Network*, online at <http://openinventionnetwork.com/about.php> (visited Nov 6, 2010).

³² See Nathan Myhrvold, *Funding Eureka!*, 88 Harv Bus Rev 40, 47 (Mar 2010).

³³ Id at 44, 48.

³⁴ Becker Interview (cited in note 17). See also Aronoff, *State of the US IP Marketplace* at 481 (cited in note 14) (observing that over the past four years, IV's "enormous appetite for patents . . . [has] arguably on its own created a market distortion felt around the world").

³⁵ *Oliver Wyman Study* at *8 (cited in note 7).

2. Sellers.

By definition, in a secondary marketplace, anyone who buys a patent can sell it again. But product-producing companies are increasingly selling portions of their portfolios. This is particularly true for companies with large portfolios, perhaps to reduce maintenance payments, to generate cash during challenging economic times,³⁶ or to extract value to reinvest in the acquisition of new assets as part of a mature overall intellectual asset management program.

3. Facilitators.

Other specialists support patent transactions, including brokers, auctioneers, clearinghouses, valuation experts, technology vanguards, and, of course, the important and omnipresent patent attorneys. Each of these contributes to and benefits from the marketplace at varying levels of quality and remuneration—and variously impacts the value of the patent(s) transacted. Some are worth highlighting.

a) Brokers. Only 25 percent of all patent sales are direct, between two product-producing companies or between a product-producing company and an NPE. Brokers facilitate three-quarters of the sales in the patent marketplace,³⁷ for which they extract fees of between 10 and 25 percent for bringing the parties together.³⁸ Buyers value brokers because having an intermediary can help maintain buyers' bargaining power, and sellers value brokers because they help to find buyers.

Brokers are becoming more effective at packaging patent value, such as evidence of use and claim charting.³⁹ Brokers believe they are able to put together transactions by connecting the “[b]est buyer[s] and seller[s]”⁴⁰ and therefore often participate strategically for clients on both sides of a transaction. Some clients, however, have expressed concern that the brokers in this marketplace may be conflicted in their loyalties, and some feel that brokers should not remain unfettered to

³⁶ See Aronoff, *State of the US IP Marketplace* at 482 (cited in note 14).

³⁷ *Oliver Wyman Study* at *8 (cited in note 7).

³⁸ Telephone interview with David Kaefer, General Manager, Intellectual Property Licensing, Microsoft Corporation (Aug 30, 2010) (“Kaefer Interview”). See also Patent Matchmaker, *About Patent Monetization*, online at <http://patentmatchmaker.com/AboutPatentMonetization.html> (visited Nov 6, 2010) (noting that patent brokers take “up to 25%” of the final sale price for their services). In a \$1.2 billion market, this translates roughly into a \$200 million market for brokerage fees.

³⁹ For a discussion of claim charting, see note 69.

⁴⁰ Barhydt, *Patent Monetization in 2010* at 499 (cited in note 6). See also Aronoff, *State of the US IP Marketplace* at 489 (cited in note 14).

represent both sides of a transaction when other professionals are not allowed to do so.⁴¹

b) Auctions. Ten percent of the patents sold are currently sold through auctions.⁴² In 2006, Ocean Tomo created an auction marketplace, based on the model of an art auction or car auction, in which buyers and sellers could gather to evaluate patents and make purchases within a definite period of time. IP investment funds, including IV, were some of the first buyers, and this early buying created an important buzz that drew more interest to the marketplace.⁴³ Although its most recent auction yielded strong financials, there are not many strong competitive auction alternatives to Ocean Tomo, particularly in the United States. By contrast, there is substantial competition among brokers. Some in the industry believe the auction phenomenon, while very important to the early growth of the market for patents, will not be as influential going forward⁴⁴—in part because some players do not wish to participate in public bidding.

c) Online clearinghouses. The “wave of the future” for some time now, a number of functioning IP clearinghouses sell patents online, and more are forming.⁴⁵ Some of these clearinghouses simply list patents for sale but do not provide pricing or other information unless potential buyers enter into a relationship with the clearinghouse, either for that transaction alone or more broadly.⁴⁶ Others provide some standard information about the patent and its history, as well as the offering price.⁴⁷

⁴¹ McCurdy Interview (cited in note 14). See also Raymond Millien and Ron Laurie, *Meet the Middlemen*, in *Licensing in the Boardroom 2008: Key Licensing Issues for Senior Executives*, Intel Asset Mgmt 11, 13 (Supp 2008), online at <http://www.iam-magazine.com/issues/complete.ashx?g=68bb21ce-9dc8-488c-98be-c4986ef63921> (visited Nov 6, 2010).

⁴² Becker Interview (cited in note 17). See also Perry J. Viscounty, Michael Woodrow De Vries, and Eric M. Kennedy, *Patent Auctions: Emerging Trend?*, 28 Natl L J 35, 35 (May 8, 2006) (describing the increasing importance of auctions as part of “an emerging trend toward a more liquid, more public and more robust market for patents”).

⁴³ Becker Interview (cited in note 17). See also Joff Wild, *New Report Reveals IV's Ocean Tomo Auction Buying Spree*, Intel Asset Mgmt Blog (Mar 11, 2010), online at <http://www.iam-magazine.com/blog/detail.aspx?g=cfe64384-80f6-44cd-bc50-311fecf0e9ea> (visited Nov 6, 2010) (asserting that IV purchased 76 percent of the available patents at a recent Ocean Tomo patent auction).

⁴⁴ Becker Interview (cited in note 17). See also Aronoff, *State of the US IP Marketplace* at 485 (cited in note 14) (hypothesizing that, in an increasingly competitive marketplace, “public and private auctions may be replaced by targeted and strongly customized sales efforts to a more limited set of buyers”).

⁴⁵ See Laurie and Millien, *IP Monetization Models* at 205 (cited in note 1).

⁴⁶ See, for example, *Idea Buyer*, online at <http://www.ideabuyer.com> (visited Nov 6, 2010).

⁴⁷ See, for example, *Patent Auction*, online at <http://www.patentauction.com> (visited Nov 6, 2010).

Standardized templates for patent transactions are fundamental to a successful online clearinghouse. Although many in the industry seek to adopt standard patent sale transaction terms and templates in order to reduce transaction costs, this tantalizing goal has been difficult to accomplish across the entire market. Even originally intriguing clearinghouse projects have been unable to gain significant momentum, in part because of the difficulty in standardizing forms of agreements for unique assets like patents. Smart minds remain focused on applying best practices from other industries, such as transacting in rights to airwaves or pollution, as the industry continues to confront this foundational problem.⁴⁸

II. NAVIGATING THE PATENT SALES MARKETPLACE

The decision to buy or sell a patent and the process of completing a sale can be difficult for practitioners, who must balance many options and contingencies while striving to keep client costs low.⁴⁹ Strides have been made in reducing transaction costs⁵⁰ as the number of transactions and the experience of the various players increase. Yet transaction costs can still be high and transactions can be quite complex. At the root of the complexity is the fact that a patent's value is contextual, not inherent, in nature.⁵¹

There are five basic things one does with a patent: (1) assert it, (2) license it, (3) sell it, (4) hold it for defense, or (5) let it expire.⁵²

⁴⁸ Lustig Interview (cited in note 8). See also Laurie and Millien, *IP Monetization Models* at 205 (cited in note 1).

⁴⁹ McCurdy Interview (cited in note 14). See also John E. Dubiansky, *An Analysis for the Valuation of Venture Capital-Funded Startup Firm Patents*, 12 BU J Sci & Tech L 170, 188 (2006) ("There is potential risk of patent illiquidity due to the high transaction costs . . . Specifically, there are often difficulties in locating a prospective purchaser, and, once a purchaser has been identified, communicating and allocating the risks of commercialization.").

⁵⁰ See Merges, 94 Colum L Rev at 2662 (cited in note 19).

⁵¹ See Marshall Phelps and David Kline, *Burning the Ships: Intellectual Property and the Transformation of Microsoft* 168 (Wiley 2009) ("The worth of a patent . . . depends upon who wants to use it, for what commercial or other purpose, in what market (or litigation setting), and under what set of economic and legal constraints."); Carlos J. Serrano, *The Dynamics of the Transfer and Renewal of Patents* *5 (NBER Working Paper No 13938, Apr 2008), online at <http://www.nber.org/papers/w13938> (visited Nov 6, 2010) ("Some potential buyers can generate higher patent revenue than a current patent owner because they might have better production facilities and managerial skills as well as complementary assets."); Dubiansky, 12 BU J Sci & Tech L at 174 (cited in note 49) ("Patents are unique goods. There will always be differences between other traded technologies and the one at issue. Furthermore, the dynamic of the technology transaction can vary significantly from transaction to transaction.").

⁵² Elston Interview (cited in note 10). See also Julie L. Davis and Suzanne S. Harrison, *Edison in the Boardroom: How Leading Companies Realize Value from Their Intellectual Assets* 12-14 (Wiley 2001) (explaining the intellectual property value hierarchy as including defensive use, controlling patent costs (such as by selling or abandoning patents), and using patents to generate revenue (such as by sales, licensing, and enforcement)).

How any one use or combination of uses might benefit any particular owner differs based upon the owner's situation⁵³ and the patent's life experiences before it came to that owner.⁵⁴ A transaction in this marketplace usually presents three interdependent challenges that must be addressed in order for a sale to be completed: (1) how to value the patent or patents in context, (2) the role of "comparable" transactions in the marketplace when considering value, and (3) how to factor in the relevant players' business positions given the parties' potential information deficits.⁵⁵ The players view and navigate these challenges in a variety of ways. I explore below some existing and possible approaches by the market and the practitioner to meet these challenges.

A. Valuation

Patent valuation is inherently challenging, as is readily apparent from the difficulty federal district courts and juries have in deciding damages for patent infringement.⁵⁶ Judges, juries, and practitioners all must determine whether a patent is valid and enforceable, and, if it is, how broadly it can be used by the holder or enforced against others, and all of this requires highly contextual and case-specific analysis. Not only is each patent unique by definition under the Patent Act, but it is also valuable only with reference to a specific context.⁵⁷ In addition, patents are cast in a special language, which most of the legal and business population cannot understand. The traditional gate through which one must pass for most of this understanding is the patent attorney or

⁵³ See Phelps and Kline, *Burning the Ships* at 168 (cited in note 51).

⁵⁴ Elston Interview (cited in note 10). See also Tynax, *Patent Purchase Due Diligence* *1, online at http://www.tynax.com/PDFDocs/Patent_Sale_Due_Diligence.pdf (visited Nov 7, 2010); Accuval, *Patent Valuation*, online at <http://www.accuval.net/services/appraisals/intangible-asset-valuation/patent-valuation.php#2,-1,0> (visited Nov 7, 2010).

⁵⁵ See, for example, Richard Conroy, *Intellectual Property Valuation*, in *IP Monetization 2010* 153, 158 (cited in note 1).

⁵⁶ In the infringement-litigation context, the parties have more information available than in the standard patent sale negotiation, including detailed information about the parties' previous IP transactions and substantial information regarding actual product volumes and potential revenue streams. Notwithstanding this additional information, including industry expert testimony, valuation approaches and awards vary widely. See *Merges*, 94 Colum L Rev at 2660 n 16 (cited in note 19). See, for example, *Medtronic Sofamor Danek USA, Inc v Globus Medical, Inc*, 637 F Supp 2d 290, 309 (ED Pa 2009) (stating that a "compensatory royalty rate" in patent infringement cases "must reflect the fair market value of the infringer's unauthorized use of the patentee's invention"); *Putnam v Henkel Consumer Adhesives, Inc*, 2007 WL 4794115, *4-5, 7 (ND Ga) (explaining both the "market approach" of valuing patents to determine royalty awards, which involves looking at comparable transactions with similar parties, and the "income approach," which involves calculating the benefits derived from the use of the patent).

⁵⁷ See 35 USC §§ 101-02 ("Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor."). See also *Merges*, 94 Colum L Rev at 2664 (cited in note 19) (noting that the unique nature of intellectual property assets creates valuation problems).

other specialist in the art, as was envisioned when the patent system was designed.⁵⁸ So for any particular patent, an actual evaluation of its quality, validity, and scope requires specialist attention.

The industry has approached patent valuation in a number of ways. First, brokers or sellers often evaluate patents using either a “heavy” or “light” version of a market-based approach. This involves standard factors such as the patent’s scope and quality, the industry and technology at issue, how easy it is to tell if the patent has been infringed, who the likely infringers are, and a proposal of what licensees “should” pay the patentee for licenses.⁵⁹ Traditionally, the patent specialist provides an assessment of the patent’s “coverage,” while key business partners identify market opportunity in potentially infringing product revenue streams. Perhaps the most important elements in the valuation are the “claims charts” that detail current, actual patent infringement by a particular product or products and demonstrate that the infringing functionality would be missed if it were removed and would be difficult to replace with a reasonably priced noninfringing alternative.

Further, many in the marketplace engage in a comparative, data-driven analysis of the patent at hand. Key indicia of patent-specific value include (1) the number of citations to the patent by third parties and by the patentee;⁶⁰ (2) the number of citations to prior art— in particular, scientific studies and materials—by the patentee;⁶¹ (3) the remaining duration of the patent;⁶² (4) the number of times the patent

⁵⁸ See Henry E. Smith, *The Language of Property: Form, Context, and Audience*, 55 *Stan L Rev* 1105, 1173–74 (2003) (suggesting patents are “another striking example in which the delineation of the right presupposes expertise”).

⁵⁹ See Dubiansky, 12 *BU J Sci & Tech L* at 174 (cited in note 49). In essence, this approach considers some of the factors, discussed in *Georgia-Pacific Corp v United States Plywood Corp*, 318 F Supp 1116, 1120 (SDNY 1970), that are used in litigation valuation analysis—expanded to consider the financial impact relative to other potential infringers in the market.

⁶⁰ In their comparison of a set of 106 of the most-litigated patents in the United States and a random sampling of patents that had been litigated only once, John Allison, Mark Lemley, and Joshua Walker found that the most-litigated patents were cited twice as often. Allison, Lemley, and Walker, 158 *U Pa L Rev* at 13–14 (cited in note 3). See also Dubiansky, 12 *BU J Sci & Tech L* at 182 (cited in note 49). But see Moore, 20 *Berkeley Tech L J* at 1526 (cited in note 52) (arguing that the rates at which patents are renewed are better predictors of patents’ values than the rates at which patents are litigated).

⁶¹ All things being equal, a patent that amply and exhaustively cites prior art is commonly viewed to be less susceptible to invalidation and therefore of higher quality and more valuable. See Allison, Lemley, and Walker, 158 *U Pa L Rev* at 15 & n 31 (cited in note 3).

⁶² Serrano, *Transfer and Renewal of Patents* at *3 (cited in note 51) (“[T]he probability of an active patent being traded decreases with age with one exception—in the year immediately following each renewal date the probability discontinuously increases.”).

has been transferred;⁶³ and (5) the number of claims contained within the patent.⁶⁴ There is a strong correlation between patents that score well on these indicia and those that are litigated most frequently,⁶⁵ and a further correlation with value. As such, the industry has developed multiple tools and rating systems, both custom and off-the-shelf, to facilitate evaluations based on these factors.⁶⁶

In addition, the potential impact of a patent in the marketplace can be analyzed by running algorithms that predict the applicability of the patent to a particular industry.⁶⁷ In some cases, the automated analysis will compare the patent to others of similar quality according to the indicia described above. In addition to providing a relative score for a particular patent on the quality indicia, this type of analysis helps identify potential markets from which the owner can obtain a return on its investment. Sophisticated, automated financial analysis, including discounted cash flow and other income indicators, is then overlaid.⁶⁸ Depending on the technology involved and the buyer or seller's resources, these types of assessments can be used as an independent valuation, or they can supplement an evaluation by a patent attorney or analyst.⁶⁹

⁶³ *Id.* at *15–16 (finding that 12.4 percent of all patents are traded at least once in their lifecycles and that this proportion rises to 19 percent when weighted by citations). See also Allison, Lemley, and Walker, 158 U Pa L Rev at 22 (cited in note 3).

⁶⁴ Allison, Lemley, and Walker, 158 U Pa L Rev at 15 (cited in note 3) (stating that “the number of claims is sometimes associated with patent value” but citing sources questioning the value of claim frequency as an indicator of patent value).

⁶⁵ *Id.* at 28.

⁶⁶ See Aronoff, *State of the US IP Marketplace* at 483 (cited in note 14):

For buyers in the new market, the flood of patent assets has put even greater importance on having a clear strategy against which acquisition opportunities can be evaluated. In many cases, the sheer volume of patent assets for sale has so overwhelmed many buyers' internal resources that they have missed opportunities to acquire good solid patent assets at very reasonable prices from motivated sellers. In response, we see a strong move towards investment in both IP strategy and analytics by a broad range of buyers—both corporate and financial.

⁶⁷ These algorithms are often grounded in machine learning based upon the presence, relationship, and correlation of technical terms in the patent specification. See, for example, F. Russell Denton, *Rolling Equilibriums at the Pre-commons Frontier: Identifying Patently Efficient Royalties for Complex Products*, 14 Va J L & Tech 48, 69–72 (2009) (describing the shortcomings of “deductive” metrics and proposing a metric based on descriptive factors).

⁶⁸ See Dubiansky, 12 BU J Sci & Tech L at 175 (cited in note 49).

⁶⁹ Data-driven analysis on its own will likely provide support only for low- to mid-range valuations and should be thought of as the best approach available to assess value in this range without significant infringement analysis. Claim charts are necessary for claims of high value, and the data-driven analysis can be used to complement and buttress them. Kaefer Interview (cited in note 38). For an example of a website that provides claim charting services, see Jack Polymath, *Frequently Asked Questions*, online at http://jackpolymath.com/services/faq#Dynamics_q1 (visited Nov 8, 2010).

1. Valuation in the context of a portfolio strategy.

In addition to calculating return on investment, many organizations evaluate a patent's value in the context of their other strategic objectives. For example, Microsoft employs a taxonomy that details a wide range of the IP-related tactics that the company employs.⁷⁰ These tactics include, for instance, licensing patents to others, purchasing patents, supporting law reform, and prosecuting patents. The tactics are then segregated into three asset or liability types—(1) internal investments (for example, patent applications and prosecution); (2) external investments (for example, patent investments); and (3) conflicts (for example, litigation reserves)—as reflected in Figure 1 below. Any initial or upfront cost associated with the asset or liability is reflected in the “Investment Cost” column.

FIGURE 1. CONCEPTUAL VALUE MATRIX

| | | Investment Cost | Enterprise Value Creation | | | | |
|------------------------|----------------------|-----------------|---------------------------|-----------|------|-------------|-------|
| | | | Financial | Defensive | Risk | Competitive | Total |
| Assets/ Liabilities | Internal Investment | \$ | \$ | \$ | \$ | \$ | \$ |
| | External Investments | \$ | Tactics Map to Matrix | | | \$ | \$ |
| | Conflicts | \$ | \$ | \$ | \$ | \$ | \$ |

After classifying the opportunity or risk, tactics are then evaluated from three different perspectives: financial, defensive, and strategic. Financial value includes licensing streams, sales proceeds, or other value that might result from a transaction with regard to an IP asset or liability. Defensive value includes the value of avoiding litigation and other risks such as the costs of a product design-around in the event of an injunction. Strategic value is the market-level impact of the IP asset, such as time-to-market advantage.

For example, in purchasing a patent, the evaluator calculates the likelihood of obtaining licensing income or resale value in a particular industry segment. She then evaluates the same purchase from the perspective of how it might reduce the company's financial exposure from litigation, based on the assumption of a lower likelihood that this value will be realized than any purely financial return. Finally, she evaluates the likelihood that the proposed purchase would be of actual strategic assistance in the marketplace, such as by providing quicker

⁷⁰ See Sumner Lemon, *Baseball Book Spurs Microsoft Patent Model*, PC World (Aug 5, 2009), online at http://www.pcworld.com/article/169665/baseball_book_spurs_microsoft_patent_model.html (visited Nov 8, 2010).

time to market or the exclusive adoption of the invention because competitors do not wish to risk an infringement suit. She then feeds each of these outputs into an algorithmic process that considers value characteristics specifically related to the asset,⁷¹ assigns some risk multiplier for each type of value in that technology area, generates net present values by value type, and aggregates an overall net present value for the patent.

There are many proprietary valuation models in use today in the technology industry, in the hands of companies, NPEs, and facilitators.⁷² Microsoft's approach to optimizing the value of its IP portfolio is just one example of the way many players are using the substantial public and private data available to broaden their perspectives on particular transactions of interest to them.⁷³ It also demonstrates the many factors and nuances that come into play as industry players attempt to streamline valuation analyses and make them more objective and useful.

2. Valuation in the negotiation.

Despite advances in data tools and portfolio evaluation approaches, buyers' and sellers' value assessments still diverge widely.⁷⁴ This is caused in part by the specialists, particularly in the patent attorney and financial ranks, who can bring experiential biases to their work.⁷⁵ These biases can make it hard for the specialists to provide their clients an objective view of value. This in turn can polarize the parties' expectations and make them less reasonable and therefore

⁷¹ These value characteristics are proprietary, but they include the kinds of metrics commonly used when valuing a patent, including backward and forward citations, portfolio ratings, and ratings on particular technology areas and subsets.

⁷² Elston Interview (cited in note 10). See also Elias G. Carayannis and Todd L. Juneau, *Idea Makers and Idea Brokers in High-Technology Entrepreneurship: Fee vs. Equity Compensation for Intellectual Venture Capitalists* 128–29 (Praeger 2003).

⁷³ In addition to data derived from machine learning of patents and other data-driven analyses, many other data can help inform these analyses, including ownership and assignment information, information regarding business sector players and patents, information derived from actual patent licensing or sales transactions, or litigation awards, public settlements, and material financial information in public company securities disclosures.

⁷⁴ Elston Interview (cited in note 10). See also Aronoff, *State of the US IP Marketplace* at 484 (cited in note 14) (“The gap between buyer and seller expectations persists—and it will continue to be a challenging market for time-pressured sellers with B-grade or below assets.”).

⁷⁵ For example, “most corporate attorneys are trained to tell management why a patent is invalid or otherwise can be overcome,” which could lead to undervaluing a patent. McCurdy Interview (cited in note 14). See also Nicholas C. Barberis and Richard H. Thaler, *A Survey of Behavioral Finance*, in George M. Constantinides, Milton Harris, and René M. Stulz, eds, *1B Handbook of the Economics of Finance* 1053, 1065–68 (Elsevier 2003) (discussing various cognitive biases, such as the optimism and representative biases, which could cause financial and other analysts to misinterpret the intrinsic value of patents despite—and perhaps even because of—their experience).

less willing to give ground in a negotiation.⁷⁶ As one player in the market noted with regard to sellers' expectations: "Consultants don't write checks; buyers do."⁷⁷

Parties come to a negotiation, despite doing their homework, with imperfect information. Moreover, they are careful about what information they share, sometimes even keeping negotiations anonymous. Even where both parties negotiate face to face, neither side has full knowledge of the other's relevant revenue streams or future business plans—or the real reason(s) they want to buy or sell the patent. This reduces the utility of dueling market analyses and leads to more straightforward "price" negotiations, unless a good set of claim charts is in the mix.⁷⁸ In fact, the majority of deals are completed based more on previous transactions with the same parties or broker, revenue targets on the seller's side, the amount of available cash on the buyer's side, and known competition from other bidders than on any patent-specific analysis.

B. Transaction Costs and Transparency in the Marketplace

1. Mandatory disclosure requirements.

Because valuation work is complex and costly and yet many buyers and sellers do not rely upon it, some leaders in industry and academia believe that greater transparency around pricing and other terms in patent sales (such as the parties to the transaction) would benefit the market. More specifically, they believe that disclosing more patent data across the industry would help to "rationalize" pricing in the market and make the marketplace more efficient.⁷⁹ They also believe that disclosure of transaction-specific information could fuel refined automated value analyses and potentially influence prices to move toward some median. They argue that such disclosure might

⁷⁶ See Aronoff, *State of the US IP Marketplace* at 484 (cited in note 14).

⁷⁷ Elston Interview (cited in note 10).

⁷⁸ A good analogue in this respect is the industry practice in patent cross-licensing. In those negotiations, each party presents the other with the potential market-based impact of the patents most relevant to the other party from their respective portfolios and then nets the liabilities to some "balancing payment" payable to one or the other. While they will haggle over the propriety of each other's patent analyses and financial assumptions, usually this merely sets a range for the horse-trading.

⁷⁹ Mark A. Lemley and Nathan Myhrvold, *How to Make a Patent Market*, 36 Hofstra L Rev 257, 258 (2007). See also John M. Golden, *Principles for Patent Remedies*, 88 Tex L Rev 505, 551 (2010) (arguing that a "patent czar" could help address the relative opacity of the patent marketplace by requiring certain information regarding patent transfers to be publicized).

even provide helpful and influential benchmarks to courts and juries in making patent infringement awards.⁸⁰

Mandatory disclosure, however, is unlikely to be effective in reducing transaction costs in this marketplace, because it rests on the questionable premise that other patent transactions about which information is disclosed are readily “comparable” and therefore will reliably determine an appropriate value in a practitioner’s current transaction. Prior transaction information is useful only when parties can accurately compare those transactions to the current one,⁸¹ but transactions involving the most valuable patents are usually so unique that there are no real comparables. The valuation of a patent in another transaction with another set of parties has virtually no bearing on the quality, for one thing, of a patent that is the subject of another transaction. Similarly, even assuming the same patent quality and market context, a patent’s licensing history—including the return already received by the seller or its predecessor—would significantly impact the patent’s value in comparison to another patent with a different history. Because of these inherent differences, in major transactions, costly patent analysis and due diligence are unavoidable.

In addition, patent sales transactions can take a variety of forms, from lump sum transactions, to the seller receiving a percentage of the buyer’s future licensing proceeds, to combinations of the two. Even assuming that the patents and markets were comparable in two transactions, the financial arrangements and other terms might not be. Indeed, “terms cost money” in IP transactions, meaning buyers must pay extra for certain desired terms. As such, one could argue that the financials are meaningless without disclosure of all the significant terms in the agreement. Depending upon the degree of required disclosures, the disclosures either would run the risk of being misleading or would reveal so much about the differing terms of various transactions that the effort required to assess whether the situations were “comparable” would defeat the purpose of reducing transaction costs. Beyond the increased transaction costs associated with evaluating “comparables,” all parties would bear the increased transaction-related administrative costs associated with making compliant disclosures.⁸²

⁸⁰ See, for example, Lemley and Myhrvold, 36 *Hofstra L Rev* at 257–58 (cited in note 79).

⁸¹ See Conroy, *Intellectual Property Valuation* at 158 (cited in note 55).

⁸² See Richard A. Epstein, *Simple Rules for a Complex World* 30–31 (Harvard 1995). In addition to potentially increasing overall costs and being minimally useful in determining patent valuation, forced disclosure of significant details of patent sales transactions would be inconsistent with general practices in IP transactions. The vast majority of IP licenses and technology sales occur on confidential bases, except where the provisions are material for the purposes of securities laws or where there is some related court adjudication. Indeed, confidentiality is often highly negotiated between the parties. The requirement of disclosure could have a grave impact on

Moreover, pricing differences reflect both perceived patent quality and potential impact in the hands of the particular buyer. Given the varying values of high-tech patents across a continuum, simply knowing what other patents in the technology area have sold for in the past between other parties, while interesting and perhaps instructive, will not override transaction-specific factors in the negotiation. Because of the unique nature of patents, the “comparables” can always be distinguished. Indeed, the mere existence of “comparables” that are viewed as too high or too low could discourage fruitful negotiations between the parties to a possible transaction.

Additional disclosure, apart from being of dubious assistance in assessing patent value, might impede patent transactions by having a chilling effect on the number of transactions in the marketplace. For example, it could discourage firms seeking to clear patent risks in advance of expanding into a new line of business from investing in patents for fear that their competitors could piece together their proprietary business plans through their patent transactions.⁸³ The same would be true in the case of a firm with financial issues. Rather than raise needed cash through a patent sale, a company faced with disclosure might sit tight in order to avoid the market interpreting (perhaps correctly) that the business is in trouble. In either case, disclosure requirements may reduce the likelihood of the transaction taking place at all.

2. Increasing efficiency in the marketplace.

Even without such proposed disclosures, the transparency in the market for patents is already higher than for many assets. Some have even made the case that more is known about patents than stocks.⁸⁴

parties subject to the disclosure, especially where the patent sale is only a part of larger, more strategic transactions. See Nikolic, 19 Albany L J Sci & Tech at 415 (cited in note 8) (noting that “most patent sales are through private transactions and will often involve the sale of an entire business”). More importantly, it could chill nonpatent transactions in which patents are necessarily involved—with resulting negative economic impact and reduction of liquidity in the marketplace.

⁸³ Becker Interview (cited in note 17). See also Tony Dutra, *Need for Transparency of Transaction Details Debated at FTC Hearing on New IP Markets*, 77 BNA Patent, Trademark, & Copyright J 702, 702 (2009) (describing the detrimental signaling impact of forced disclosure, namely “if you have to record that you sold a patent, you are indicating to your competitors that you are no longer interested in the associated business”).

⁸⁴ James Malackowski, for example, suggested a trading exchange for IP rights in which participants make offers of rights at per-unit values:

[T]hink of all the information one can garner if one reads a patent, its file wrapper, etc. From a trader’s point of view, they know more about that asset than they could ever know about a share of stock. 10-K financial reports tell you relatively little of the total dynamic of a firm in its industry. Further, a trader would know more about a patent asset than they ever could about whether or not it is going to rain on the Iowa plains next summer and how they should price their weather futures.

Patents are transparent by statutory design; if you know someone who can read what I call “patent-ese,” you can understand much about a patent’s quality and potential applicability from the patent itself and its file history.⁸⁵ Further, not only is the original patentee’s identity public, but there is also a procedure for transferring ownership in a way that is transparent to the public through the Patent and Trademark Office.⁸⁶ In addition, as discussed above, many active players in the industry already have aggregated large amounts of public and private data to drive detailed and highly specific automated analyses. More public information will be available over time, particularly as to significant transactions, which will necessarily be reported in securities disclosures or in the courts.

In fact, the recovery and continued growth of the market in the face of the economic reset suggest that the market is developing and improving. As the marketplace’s actors have become more experienced, they have taken up the challenge to reduce their transaction costs in new ways. Whether they are patent attorneys or financial or technology specialists, defensive aggregators, trading exchanges, or Intellectual Ventures, a wide variety of actors are effectively working as “transaction cost engineers” for this market.⁸⁷ They are working both independently and collectively to structure individual deals and broader solutions in ways that reduce the costs of buying and selling patents.

This engineering is well under way. Automated data-driven analysis is a part of it. Likewise, Ocean Tomo was a pioneer in bringing patents and people together around its auctions, which have generated substantial information sharing in the marketplace. Defensive patent aggregation has been growing, both as a substantive defensive play as well as a structural model to reduce transaction costs. Groups like the Gathering 2.0 continue to evaluate how to reduce transaction costs by

Malackowski, 5 John Marshall Rev Intel Prop L at 610–11 (cited in note 30). See also Dubinsky, 12 BU J Sci & Tech L at 175 (cited in note 49) (“[T]here is much more information available on patent transactions than for many other aspects of the venture capital industry.”).

⁸⁵ See Smith, 55 Stan L Rev at 1174 (cited in note 58).

⁸⁶ See 35 USC § 261 (“An assignment, grant or conveyance shall be void as against any subsequent purchaser or mortgagee for a valuable consideration, without notice, unless it is recorded in the Patent and Trademark Office within three months from its date or prior to the date of such subsequent purchase or mortgage.”). This is neither required nor universally done. For example, some large companies simply make maintenance payments to the Patent and Trademark Office on behalf of the seller and do not register the transfer. Becker Interview (cited in note 17). Some in the industry say that making the registration of transfers of ownership mandatory would go a long way toward providing transparency in the market, without getting into transaction-specific details.

⁸⁷ F. Scott Kieff and Troy A. Paredes, *Engineering a Deal: Toward a Private Ordering Solution to the Anticommons Problem*, 48 BC L Rev 111, 116 (2007).

normalizing patent sale terms and sharing best practices.⁸⁸ Other efficiency solutions have been posited,⁸⁹ and more will be generated over time to reduce transaction costs as the market continues to grow. One only has to look to the extensive IP licensing markets to see the many types of solutions that have been effective in reducing transaction costs across thousands of transactions over the past thirty years, including solutions as diverse as patent pooling and patent pledges.⁹⁰

C. Information Challenges within the Transaction

Whether the practitioner knows much or little about the market's pricing of patents in the technology area at issue in his own transaction, he often lacks other important information while negotiating a deal. He can experience this at various stages of the negotiations, including at the initial "pairing" stage, once valuation is determined, in due diligence, and even once the transaction is finalized. I touch upon two examples of information deficiencies, as well as some opportunities for the practitioner to address them with solutions.

1. Who is involved in the transaction?

As discussed above, brokers and other intermediaries can be enormously helpful in bringing parties together—and they are often more knowledgeable than all but the most frequent buyers or sellers. When at their most valuable, they not only can create a good initial match, but they also can help smooth roadblocks during other stages of the transaction. To get the most impact at the best cost, however, the practitioner must play an important advisory role.

At the "pairing" stage, the use of brokers or other intermediaries often means that the parties do not know with whom they are transacting in the first instance. For a well-known or well-funded buyer, or a buyer whose past transaction data are public, anonymity in the

⁸⁸ See *Gathering 2.0*, online at <http://www.gathering2.com> (visited Nov 8, 2010). Gathering 2.0 is an online peer network for professionals managing intellectual property.

⁸⁹ See, for example, Kieff and Paredes, 48 BC L Rev at 114–15 (cited in note 87). See also Laurie and Millien, *IP Monetization Models* at 205–09 (cited in note 1) (describing newly emerging IP business models, including information exchanges, trading platforms, spinout financing, and patent-based public stock indexes).

⁹⁰ See Grant C. Yang, *The Continuing Debate of Software Patents and the Open Source Movement*, 13 Tex Intel Prop L J 171, 205 (2005). For examples of patent pledges, see Microsoft, *Patent Pledge for Open Source Developers* (Mar 19, 2008), online at <http://www.microsoft.com/interop/principles/osspatentpledge.mspx> (visited Nov 8, 2010) (promising not to assert any claims against open-source developers who meet certain specifications); IBM, *IBM Statement of Non-assertion of Named Patents against OSS* (2005), online at <http://www.ibm.com/ibm/licensing/patents/pledgedpatents.pdf> (visited Nov 8, 2010) (pledging the free use of five hundred of IBM's US patents to support the open-source community).

transaction can help to avoid a “holdup” by the seller seeking an exorbitant price.⁹¹ Similarly, regardless of its size or notoriety, a company in litigation seeking a patent to use in that litigation is likely to pay a premium to the seller if its identity is known, as litigation filings are public. In these anonymous transactions, price negotiations conclude at a price at which the seller’s financial goals are met, and each party assumes the risk that had it known who the other party was, it might have gotten a more favorable deal. Even where, as commonly occurs, substantial information is exchanged with regard to the patent and due diligence is completed, “blind” transactions may have lower transaction costs and result in lower pricing and greater efficiency than more transparent transactions.

On the other hand, the use of intermediaries can attenuate the parties from each other, significantly reduce their insights, and increase transaction costs, even to the point that the parties become uncomfortable proceeding with the transaction. For example, some companies do not wish to sell their patents, particularly those covering their own inventions, to highly litigious companies, NPEs, or their competitors. In such a case, the practitioner can use contractual terms in the agreement to address this issue—for example, by the seller providing a list of entities to whom it would not sell the patent or the buyer or its representative representing and warranting that it has no affiliation with any of a set of listed entities.⁹²

Neither side knowing who is really on the other side of the transaction can also negatively impact the ultimate bargain struck where there is a single intermediary for both sides. Unlike in the real estate industry, a nonlawyer intermediary to a patent sale has no legal duty to disclose whether he is representing the other party at the same time and thus could be subjected to conflicted loyalties.⁹³ One could imagine such an intermediary’s potential influence and self-interest in the area of patent pricing. It may benefit the marketplace, over time, to develop a set of standardized procedures for engaging and remunerating

⁹¹ Becker Interview (cited in note 17). See also David Yurkerwich, *Patent Sales and the IP Business Plan*, in *Licensing in the Boardroom 2008*, 37, 38 (cited in note 41) (explaining how some companies choose to buy patents using shell entities, making ownership difficult to trace).

⁹² These restrictions are forms of “black lists,” in which parties variously agree or warrant that identified parties are already licensed under the patents, are not part of the transaction, may not be resold the patent, and so on. By contrast, a “white list” is permissive and can be used, for example, to represent or warrant that a patent has not been licensed to an identified set of parties and therefore that the buyer retains the opportunity to assert the patent against them.

⁹³ McCurdy Interview (cited in note 14). See *Nguyen v Scott*, 253 Cal Rptr 800, 806 (Cal App 1988) (discussing the Code of Ethics of the National Association of Realtors, which provides that a realtor “shall not undertake to provide professional services concerning a property or its value where he has a present or contemplated interest unless such interest is specifically disclosed to all affected parties”).

brokers so that the parties are more comfortable and their positions are better protected.

In the meantime, however, the practitioner can help to assure a fair bargain for his client. For example, he can protect a seller at the time of the engagement with the intermediary by obliging it to shop the patent(s) at issue to a certain number of possible buyers with a certain type of profile before proposing a transaction with a particular buyer.⁹⁴ Or he can oblige the intermediary to forfeit its commission in the event that it is representing both sides.⁹⁵ The practitioner, in any case, should counsel his clients on the benefits and detriments of disclosing the client's identity or requesting or requiring the other party to disclose its. In a market where there are both many individual or smaller sellers and many institutional buyers, providing this advice is an important responsibility.

2. Where has this patent been and what does that mean?

Due diligence is all about obtaining important but hard-to-find information. One of the most challenging aspects of due diligence is evaluating the "encumbrances" on the patent. These include past sales or licenses of the patent to others, which could have a significant impact on the value of the patent in the transaction. They can also include forward-looking terms such as heavily negotiated "grantback" clauses, under which a product-producing company seller seeks licenses that allow it to preserve as much patent freedom as possible in the future for its products and the products with which they may be combined. At the same time, the buyer, seeking to maximize licensing or litigation value in the future, wants as much certainty as possible regarding to whom and for what the patent has already been licensed. Encumbrances thus are pivotal and can become a significant logjam to completing a transaction, because they often impact the valuation.⁹⁶

Evaluating encumbrances often is complicated by information deficits. First, many historical licensing or assignment agreements are subject to confidentiality provisions that do not permit the disclosure

⁹⁴ McCurdy Interview (cited in note 14).

⁹⁵ *Id.*

⁹⁶ Elston Interview (cited in note 10). See, for example, Tynax, *Patent Purchase Due Diligence* at *1 (cited in note 54) (describing the importance of checking the chain of title when valuing patents); Accuval, *Patent Valuation* (cited in note 54) (offering to check "the history of a patent" for a fee). See also Nikolic, 19 Albany L J Sci & Tech at 419 (cited in note 8) ("Factors such as cross-licensing patents can result in lower licensing revenues for investors."); Harold R. Weinberg and William J. Woodward, Jr., *Easing Transfer and Security Interest Transactions in Intellectual Property: An Agenda for Reform*, 79 Ky L J 61, 81 (1990).

of their terms to third parties without the licensee or seller's consent.⁹⁷ In many cases, consent may be difficult to obtain, and even if feasible, obtaining consent from a large number of licensees, as often is the case, can become an administrative nightmare.⁹⁸ It can be even knottier to evaluate the impact of a patent that is, or may be, relevant to a standards commitment, because such a commitment could substantially limit the price the buyer will be able to charge for licenses.⁹⁹ While "white lists," "black lists," and other creative solutions may be used to address some of the uncertainties with regard to confidentiality,¹⁰⁰ major uncertainties may remain as to the impact of historic licensing transactions or assignments. In the grantback context, the uncertainties can be even greater, and pertinent information about the seller and its manufacturers or customers can be even harder to obtain. The result is that many negotiated prices have been reduced, or sales languished, as a result of due diligence that reveals, or suggests, significant encumbrances on the patent. To navigate these due diligence issues as effectively as possible, the practitioner needs both a sharp focus on the issues and a bit of perspective on the overall uncertainty of valuation.

CONCLUSION

As the market for patents matures, actors in the marketplace are becoming more experienced, and legal and business best practices are proliferating. While these transactions will always be complicated because of a patent's inherently uncertain and context-specific nature, many well-qualified and well-funded "transaction cost engineers" are busy trying to make it easier to evaluate patents and bring the best buyers and sellers together, with the goal of increasing the efficiency and vitality of the secondary market for patents.

Valuation will likely remain the most challenging issue in any patent sale, particularly in a market where there are many useless patents

⁹⁷ Elston Interview (cited in note 10). See also Yurkerwich, *Patent Sales*, Intel Asset Mgmt at 38 (cited in note 91) (observing that disclosure is only sometimes required by law, so "[m]uch of the [patent transaction] activity is kept confidential or disclosed only in a limited way").

⁹⁸ Elston Interview (cited in note 10).

⁹⁹ When companies violate standards commitments to license their patents based on agreed-upon royalty terms, the Federal Trade Commission may bring a suit against them. See FTC, *FTC Challenges Patent Holder's Refusal to Meet Commitment to License Patents Covering "Ethernet" Standard Used in Virtually All Personal Computers in U.S.* (Jan 23, 2008), online at <http://www.ftc.gov/opa/2008/01/ethernet.shtm> (visited Nov 8, 2010) (announcing a settlement with N-Data, a company that allegedly broke its standards commitments by attempting to enforce patents against makers of Ethernet equipment).

¹⁰⁰ And a good practitioner can consider the patent sale contingency in fashioning confidentiality provisions going forward.

and so very few highly impactful ones. Transaction costs and transparency in valuation will remain in tension for the foreseeable future.¹⁰¹ Over time, however, solutions to real or perceived information deficits will emerge where they help facilitate transactions. Where they do not, they likely will be rejected or deemphasized, and the industry will focus on other solutions that will make transacting faster and easier.

The challenges and intricacies of the secondary patent market are likely to ensure that legal practitioners with strong intellectual property and transactional expertise will be valuable contributors both to the further maturation of the market and the successful completion of individual transactions. Gaining and maintaining a sense of the marketplace, its actors, and ongoing trends will be critical to ongoing effectiveness. The practitioner with the creativity of a transaction engineer and soul of a businessman can have an even greater impact. Her payoff from investing in this complex and fascinating practice area will be a share in fostering a fair and dynamic IP ecosystem in the years to come.

¹⁰¹ See Dutra, 77 BNA Patent, Trademark, & Copyright J at 702 (cited in note 83).