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THE INTELLECTUAL PROPERTY MARKETPLACE: PAST, PRESENT AND FUTURE

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ABSTRACT

This article provides an overview of the evolution of the intellectual property marketplace, describes existing mechanisms by which intellectual property value is transacted, and hypothesizes future marketplace mechanisms. A discussion of intellectual property value is also presented. Specifically, analyses of value indications as evidenced by the public and private equity markets are described. Finally, two future critical issues for intellectual property practitioners relating to intellectual property value are described: class action shareholder litigation and royalty stacking.

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THE INTELLECTUAL PROPERTY MARKETPLACE: PAST, PRESENT AND FUTURE

JAMES E. MALACKOWSKI*

PRELUDE

Today is one of the most exciting times to be working in the field of intellectual property, ("IP") and it is the most exciting time on the business and financial side, due to the dynamic changes and revolution occurring in the IP marketplace.

From the perspective of Ocean Tomo, ¹ the IP marketplace has become more transparent due to various mechanisms through which a larger number of IP-based transactions are occurring. However, there is still a long road before the IP marketplace becomes truly liquid. The adage that the market is always right holds true in the long-term. But what if there is no existing market? Does a marketplace exist for IP today? If such an IP market does exist, is it recognized and understood?

This discussion is organized into three main sections. The first section provides an overview of the evolution of the IP marketplace, describes existing mechanisms by which IP value is currently transacted, and hypothesizes future marketplace mechanisms. The second section discusses IP value, and specifically describes analyses of value indications as evidenced by the public and private equity markets. Finally, two future critical issues for IP practitioners to address are described — class action shareholder litigation and royalty stacking.

I. THE IP MARKETPLACE: PAST, PRESENT AND FUTURE

A. Past IP Marketplace

From Ocean Tomo's vantage point, the first significant development of the IP marketplace in recent times occurred was the creation of the Court of Appeals for the Federal Circuit ("CAFC") in the 1980s.² The CAFC provided real enforcement mechanisms relating to IP rights.

Those who were in the business at the time will recall not only the subsequent resurgence in defensive cross-licensing to counteract patent litigation exposure, but,

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¹ Ocean Tomo Homepage, http://www.oceantomo.com.

 $^{^2}$ United States Court of Appeals for the Federal Circuit Homepage, <code>http://www.fedcir.gov/about.html.</code>

more importantly, the dawning of significant royalty-based IP licensing. For example, when I was on the board of Ford Global Technologies during this era, we renewed our focus on an IP out-licensing department. For the first time in the company's history, it started seeking, in a very formalized way, not only defensive cross-licensing rights, but also incremental income through the out-licensing of its IP-based technologies. Further, we saw an opportunity to enter a model of expansion licensing, which is essentially a licensing program focused on capturing revenue completely outside of what the company considered its core competitive model or industry.

When one analyzes the historic IP marketplace, there are a number of key conclusions. First, the market was primarily motivated by the threat of patent enforcement or litigation. Second, very high transaction costs were associated with transferring IP rights. Even today, IP licensing remains a hand-to-hand combat business where it often takes six to eighteen months to complete a deal, and this comes at significant costs. Most significantly, it was in the 1980s and 1990s that IP began to provide significant and broad based income streams from out-licensing.

I have coined this period of history "The Period of the Feudal Lords" because if one was not an owner of a large number of IP assets, i.e., one did not own a large amount of "land", one had no real interest in the IP marketplace because it simply was not relevant. This has changed dramatically.

B. Present IP Marketplace

The IP marketplace has changed significantly. Today, we are in what I call "The Rise of the Intermediaries." A whole series of market and financing mechanisms has developed, and is developing, in an attempt to capture and harness the value of patents, as well as other types of IP. A few examples of these are provided in the subsequent paragraphs.

We now have web-portal environments transacting IP rights. At one point, there were over sixty web-portals where one could go and attempt to license one's IP or technology. Today, of those sixty only a handful of players remain, with yet2.com³ probably being the premier player in the space.

Currently participating in the IP market and adding significant liquidity are what some people refer to as patent trolls. I refer to them more appropriately as Patent Licensing and Enforcement Companies ("PLECs"). PLECs are based on a new business model that emerged in the last three to five years.

Relatively new financing mechanisms associated with IP-based mergers and acquisitions, private debt, and equity are now available. For example, Ocean Tomo currently has a \$200 million fund dedicated to investing in, but not acquiring or litigating, their IP, companies that need growth capital, and have strong underlying patent or other IP asset protections.

Lastly, but what I believe to be most significant, is the phenomenon of structured finance. If one looks financially at where the IP marketplace has been in the last five years, it has been primarily in royalty securitizations and other

³ yet2.com, http://www.yet2.com.

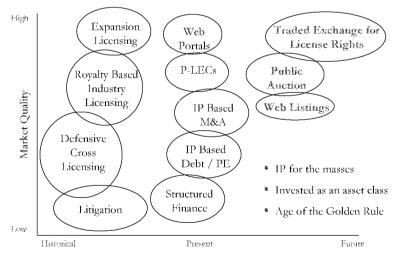
structured finance products. Ocean Tomo recently announced that it participated as the backup advisor and manager in what is the largest trademark transaction ever completed. The transaction involves a \$1.8 billion financing of three brands from a Fortune 500 company. This type of transaction is probably Wall Street's current view of where the IP money is today. It also evidences a major advancement in the IP marketplace, because people would not have even considered such a transaction in these terms five years ago.

Alternatively, the current IP market environment can be classified as a period of trial and error. Not all mechanisms are going to work, and there are many others that have not yet gotten traction. Interestingly, today's environment is also what I view as a period of "Do As I Say, But Not As I Do" from the perspective of the feudal lords. I do not wish to pass judgment, but I think corporations find it okay if they buy some ancillary IP in an acquisition, and then choose to enforce the acquired rights. However, they view the acquiring and enforcement of IP rights by private investors very differently.

Most significantly, this period is where IP is, for the first time, truly viewed as valuable and separate from a company's core business. This is a fundamental transition. For those who have been in the IP business a long time, it was unheard of ten or twenty years ago that anyone would part with their IP or think of their IP as anything other than something to be held onto tightly for their use or for defensive purposes.

C. Future IP Marketplace

The following figure summarizes Ocean Tomo's view of the historic, current and future IP marketplace mechanisms.



Ocean Tomo believes we are about to enter another exciting IP period, one that we call "The Age of the Golden Rule." Simply stated, those with the money or gold are going to drive the IP marketplace. Many current IP marketplace mechanisms

are highly inefficient and/or not working. This is the driving force leading to the development of new mechanisms. Some of the emerging and future IP marketplace vehicles we see are: public IP auctions in various formats; an exchange for trading IP rights; and tradable IP-based index funds; and other various tradable funds.

A. IP Public Auctions

Ocean Tomo held the first live patent auction last month in San Francisco. Before describing the results of the IP auction, I will recount the creation and development of the IP auction concept, which is interesting, and begins with Ocean Tomo's Vice Chairman, Dean Becker. Dean was the first person in this country to sell pagers at the retail level, and also the first to sell wireless phones in retail stores. Previous to that, they were sold in blocks of 50 or 100 from Motorola to the big company sales force. While Dean and I were having a conversation about selling patents and where we thought the marketplace was going, Dean pulled out a catalog from a car auction. He said, "Well, why don't you just sell patents like this? Why do you make it so hard?" After he said this, everyone in the room laughed. Then we thought about it a little more and we said, "Why do we make this so hard?" We had recently finished selling the Commerce One portfolio out of bankruptcy for \$15 million in sixty-five days, and we believed that could be scaled to a larger effort.

That conversation happened in October of last year, and we prepared for our first auction in April. Ocean Tomo had over 1,200 patents submitted for the auction and selected 430. We then divided those 430 patents into 78 Lots or logical groupings. The auction had over 400 people in attendance, including many very senior IP professionals. The first four rows on one side of the floor were occupied exclusively by media professionals; every major technology publication was there as well as the Wall Street Journal. CNBC sent a television crew that taped the entire event, broadcasting snippets. When the auction was finished, Ocean Tomo sold one-third of the patents that were offered for about \$8.5 million. From our view, this first live IP auction was a solid success.

Many interesting things were observed in this auction. First, those who have ever attended a Sotheby's auction or a car auction know that typically only about one-third to one-half of the items offered for sale are actually going to sell. For us, ultimately selling forty-four percent of what was offered was truly staggering. The second observation was that more than one-half of the patents up for auction sold "off the floor." During the two and one-half hours of the official live auction there was a lot of bidding, one million dollars, one and a half million dollars, etc., and some patents were not sold because they did not reach the seller's reserve, or minimum bid price. However, numerous sellers came to the green room after the auction and said they were willing to reduce their reserves and willing to make a deal. We were surprised at how much of that happened.

But what does this tell us? It tells me that Ocean Tomo actually made a marketplace because of the widely varying expectations for what patents would sell for in an open outcry auction environment. As we calibrate future buyer and seller expectations, our view is that in future auctions, which are scheduled for October 25-26, 2006 in New York, April 2007 in Chicago, and June 2007 in London, we will see

less action happening off the floor, and more transactions being completed with the gavel falling.

Finally, in the IP marketplace and related to the subject of IP auctions, one question that is always asked is "Should I sell or should I not sell?" The alternative to not selling IP has traditionally been licensing. From a licensing perspective, one of the benefits is that it remains the largest value capture. A long, thorough, and effective patent licensing program is likely going to total the most dollars at the end of the day because of the quantity strategy.

But there are clearly benefits to selling a patent, including the elimination of many risk factors. Circumstances change, and if one sells a patent, he does not have to worry about those changes. Selling a patent also eliminates the cost of owning it. Most importantly, the process is less threatening to buyers and makes it easier to address confidentiality issues. When Ocean Tomo receives a client assignment and calls potentially interested counter-parties, most often the conversations goes like this: "Hello, I'm from Ocean Tomo. I'd like to talk to you about a patent opportunity." The other person then says, "If you're calling to license, I am going to hang up. If you're calling about selling a patent, I'm interested and I want to hear about all the opportunities you have."

The marketplace's perspective has changed on that one point over the last three to five years. I think this change can be attributed, in part, due to some hysteria that exists around the PLEC enforcement issue. In a sale, complete control of the asset is forfeited, and this is viewed as a less threatening transaction.

B. Serial IP Sales

Another IP auction-type marketplace that has developed is what we call the serial sale. An example of a serial sale is paying \$1.5 million to purchase a patent, and reselling the same patent six months later for \$1.2 million dollars. The overall economics of such a sale is appealing. The net cost to the first purchaser is only \$300,000, which seems to be a good value for a fully paid license that the new owner would grant himself in the interim. This model has captured a lot of attention recently, because it takes advantage of the inherent nature of this unique asset, which is that it is infinitely divisible. Ocean Tomo thinks serial sales are going to be a trend of the future.

C. On-line IP Sales

In Ocean Tomo's view, the current web-portal model for IP licensing is not working. However, there are numerous lessons to be applied from successful web transaction portals such as eBay[®]. Ocean Tomo anticipates a number of web-based listings offering patents and other IP for sale, as opposed to complicated license

agreements. In fact, Ocean Tomo has launched one such initiative: The Dean's ListTM Online IP Exchange.⁴

D. IP Rights Exchange

An organization that we should all become familiar with is the Center for Applied Innovation. It is a non-profit organization formed in Illinois at the suggestion of the Governor's Office of Economic Development to try to encourage IP as a regional asset for economic growth.

Consider Silicon Valley. Silicon Valley is a blended concentration of information technology combined with venture capital. Such a mix has spurred a huge economic engine over the course of ten years. Seeing similar potential, Jack Lavin, the Head of the Governor's Office of Economic Development, insightfully realized that Illinois holds a real IP leadership position. The first patent law firm in the country was here, and the first patent bar association was here. If one looks at the big accounting firms, to the extent that there are still some left, their national offices were spread around the country, but their IP groups were headquartered in Chicago. The firm I co-founded, IPC Group, later known as InteCap, grew to the largest IP consulting firm in the country, headquartered in Chicago. Ocean Tomo, too, is headquartered in Chicago.

What are we doing to maximize that potential for our regional growth? One of the initiatives of the Center for Applied Innovation is the idea of a traded exchange of IP rights, which ties in nicely with Chicago's existing boards of trade, the Mercantile Exchange and the Board of Trade. Ocean Tomo's view of the evolution of IP auctions involves large companies having a portfolio of patents related to a given technology, for example, short-range wireless technology. These companies would like to make the patents available to a marketplace. Rather than using the traditional licensing model, they will hire a banker to assess the size of the applicable market, and the size of the appropriate opportunity, such as 100 million units over five years. The company will then decide on an offer for the exchange, such as seventy million units at three cents a unit. Those needing licensing rights will go to the Board of IP Exchange and simply buy as many units as they need. If they buy too many, they can put them back once this is realized. There will be market makers who say, "You know, three cents a unit, that's a steal. They are worth a nickel, a dime. We'll buy as many as we can at three cents a unit and resell them at a profit." Likewise, there will be market makers who say, "Three cents is absurd. That technology has no future. We'll short them at three cents and we'll cover a penny."

This is an interesting idea. When I spoke with IP professionals about it, the usual response was, "It's never going to happen." When I got to the Board of Trade, the usual response was "Wonderful idea," and the people were jumping up and down. Looking at it from their perspective, what do they know about this financial asset? In fact, they know a lot about a patent — think 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

⁴ The Dean's List Online IP Exchange, www.TheDeansList.com.

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. Moreover, they also know that IP dwarfs those other assets in terms of value.

Therefore, it is my prediction that we will see in Chicago a Board of IP Trade and that everyone will have an opportunity to contribute and make it happen. I would certainly encourage everyone to do so.

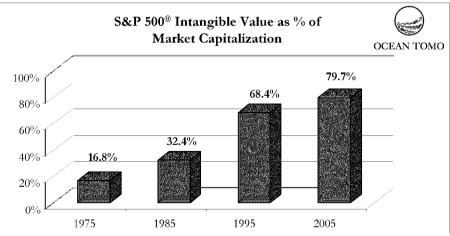
E. IP-Based Index Funds

Ocean Tomo is announcing that it will bring IP-based index funds to the market this fall. The first such product is the "Ocean Tomo 300 Index" to be listed on the American Stock Exchange. Most everyone is aware of the Dow Jones Index® consisting of the thirty biggest stocks, and the S&P 500® consisting of 500 industrial stocks. However, the Ocean Tomo index is based on the 300 companies with the best patent portfolios relative to their market capitalization. The Ocean Tomo index will enable mass investors, which have historically been removed from the innovation process, to participate in the IP marketplace for the first time.

II. IP VALUE ASSESSMENT

A. Intangible Value as a Percent of Market Capitalization

The following chart presents the intangible asset value of the S&P 500® as a percentage of total value. The data was originally put out by the Brookings Institute and we have recently updated it through 2005. This chart shows that today most companies' worth is based not on tangible assets, but on intangible assets.

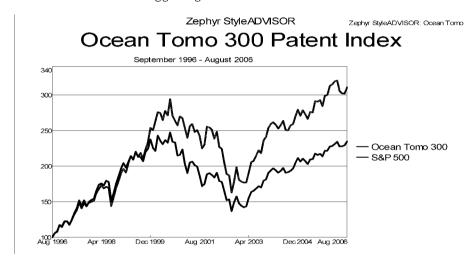


Data: Ned Davis Research, Inc.

Reasonable questions after review of the above data are: what does the data really mean for asset managers; and what does the data mean for officers and directors?

B. IP Performance vs. S&P 500 Index

First, I will address what the data means for asset managers. The following figure shows that if one had invested in companies with the top twenty-five patent portfolios, based merely on a citations analysis, one's out-performance of the S&P 500® would have been a staggering.



The above results are, in part, some of the encouragement we received for developing the Ocean Tomo 300 index. When you take not twenty-five stocks, but 300, and use a much more robust selection analysis, the results do not look much different, but the confidence levels drastically increase. The results show that there really is something going on with innovation and particular patents. It further shows that technology is driving corporate value.

C. Potential Impact on CEOs and Directors

There is another important issue I take away from the previous two figures. If one is the CEO or director of a public company, the last thing one worries about before going to sleep and the first thing one checks in the morning is the stock price. That CEO or independent public director could sleep a little bit better in 1975, because if the company was worth \$10 billion, \$8.3 billion of it was on the balance sheet in terms of property, plant, and equipment. Furthermore, if the factory burned down, it was insured. Today it is a very different situation. CEOs of public companies in which patents or other intellectual assets are driving value can wake up in the morning and read a headline informing them that their IP has evaporated

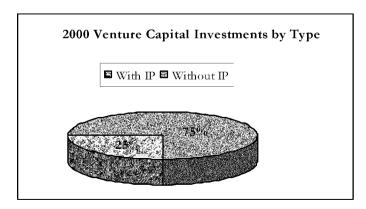
because: the patent office decided to reexamine, the judge or jury came out with an adverse decision, or the company missed a maintenance payment. Importantly, not only did the company lose value, the company's shareholders may have an argument to come after the CEO or director personally and ask for their money back.

There have been more than two dozen IP class action shareholder litigations, and they have involved failed process and control matters, such as missing a patent maintenance payment, overstating the value of a patent portfolio in an IP or secondary offering, or generally mismanaging or under-managing the IP. One can imagine the discomfort of the CEO or the independent director, sitting on a volatile pool of assets that can evaporate. The assets are not insured, and if they evaporate for reasons that were arguably lack of proper management, the CEO could be sued and held personally liable.

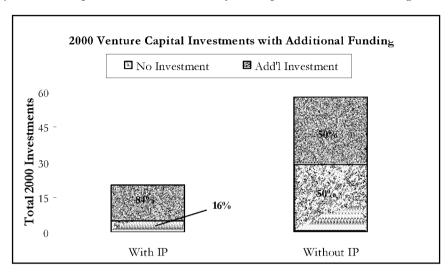
I believe we have not seen a Wall Street Journal article discussing a \$100 million IP related class action verdict because the cases that have been filed are either still pending, settled, or the defense has won. But I am certain that such a case will eventually appear. One day we will read in the paper about a one-quarter or a one-half billion dollar verdict against the officers or directors of a company. Global 2000 companies are going to wake up and say "We have to get our house in order." This will be an opportunity because, as they get their houses in order, they will be giving better information to the marketplace. As they give better information to the marketplace, share prices that are sustained by IP will stabilize. That is what Ocean Tomo believes will happen with public companies.

D. Private Investments and Venture Capital Industry

When one thinks about private investments, one imagines Silicon Valley and venture capitalists. In thinking about the importance of IP and this source of capital, an apparent question is: what percent of venture capital transactions involve patents or patent applications at the time of their investment, or within a year? Before Ocean Tomo performed research on this question, I thought the answer would be in the range of 90%. I imagined such a high percentage because these are really smart people, and the companies, e.g., Kliner Perkins, Sierra, Sequoia, and Accel, include the best-of-the-best. Ocean Tomo performed research based on data between 1995 and 2002 for about 150 venture capital transactions. The actual results are presented in the following figure. As it turns out, only 25% of the entities invested in by these venture capital companies have patents or applications within one year.

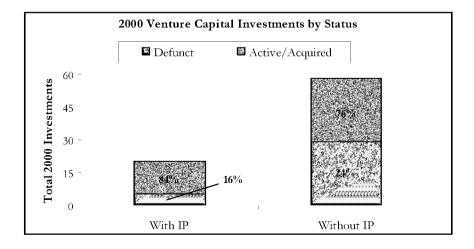


Ocean Tomo pondered an additional question, "Does it make any difference?" Unfortunately, the companies would not share with us their return data. But what we can find are two things: (1) which companies had additional rounds of capital and (2) whether or not the company went bankrupt. The results of our analyses are presented in the following two figures.



The left side data indicate that if a company had IP, it got a second round of capital 84% of the time. The right side data indicates that if a company did not have IP, it got a second round of funding 50% of the time. Is that a notable difference? We think so.

What about bankruptcy? The results depicted in the following figure indicate that those companies that had IP went bankrupt only sixteen percent of the time, whereas those without IP went bankrupt twenty-four percent of the time. Again, in our view, this is a notable difference.



E. IP Value Conclusion

The conclusion we draw from these types of analyses is that the IP marketplace is being created, in part, because there is real value associated with IP assets, both in the private investment context and, probably more importantly, in a large-scale public equity context.

III. OBJECTIVE PATENT QUALITY ASSESSMENT AND MARKET CREATION

What can we learn from history? One of the things Ocean Tomo concluded was that we have been living in an IP marketplace, in one form or another, for a long time. One aspect of the IP marketplace has been the patent renewal versus abandon decision: should we pay the fee to maintain a patent, or abandon the patent?

Ocean Tomo collected patent-related data and metrics going back to the 1980s, which included millions of patents and multiples of that in terms of parsed patent data, and analyzed them based on the assumption that, all things being equal, patents that are maintained are better than patents that are abandoned. Based on this analysis, Ocean Tomo found that it could statistically identify objective patentrelated metrics that might explain what makes one patent better than another. If one compares (1) patent maintenance rates to (2) a list of patent-related factors, e.g., the type of technology, the number of forward and backward citations, the law firm, the patent examiner, the number of patent office actions, the number of words in a claim, etc., and then combines the two data sets using a powerful computer, one can create powerful, predictive regressions. This process is very similar to how people predict credit scores, intelligence based on IQ scores, and numerous other measures that we rely on each and every day. If one runs this analysis for all US patents, one will come up with a common metric to compare patent quality. Ocean Tomo has done this and it is called the IPQTM score or PatentRatings score. In this rating system, 100 is average and a patent could, for example, have a score of 180, which is basically an A+ rating. This rating system involves no judgment on our part.

Ocean Tomo prudently also ran some empirical studies. In the first study, we went to a very large company in Chicago and randomly picked 200 of their patents and ranked them from best to worst based upon what the company thought the patents' value was. The company performed a similar analysis. We then reviewed the same data set using a statistical algorithm and found an eighty percent plus correlation between our results and their results. However, it took the company about two months and it took us about two and a half minutes. So, Ocean Tomo's system is predictive of patent quality, and we continue to gain more and more confidence in its results.

The next thing we did was ask, what does a patent do for a business? Arguably, it allows a company to charge higher prices, save costs, or gain a bit of market share. All of these economic events translate into further profit or gross margin improvement. To test this, we took a thousand publicly traded companies and correlated their gross profit percentages against the quality of their patent portfolio. Again, we found a very strong statistical correlation.

The reason I take the time to discuss these issues is because they are fundamentally enabling investors to now look at IP as an asset class. The comparative example to think about is home mortgages. Twenty years ago, a mortgage was simply a way to buy a house. Wall Street looked at that class of debt and said, "How can we make that investable?" The challenge is, one person has a \$100,000 mortgage and lives in Chicago, another has a \$100,000 mortgage and lives in California, and another has the same amount living in New York. The value of all these mortgages is very different, and the value of the mortgage payment and earnings is wildly different.

How did people ever equate these mortgages? They did it through statistical algorithms and credit scores. So now if Jim has a \$100,000 mortgage and an 820 credit score, Joe has a \$100,000 mortgage with a 750 score, and Sally has an 850 score, the figures start to look comparable. Investors can now rate and pool the various mortgages together, and thus, they become investable. This is exactly what Wall Street is now starting to do with patents because of the patent rating metrics that I mentioned.

What is also critical about 50+ patent rating metrics used by Ocean Tomo is that if I explain the variables to someone, he or she can recreate the analysis and produce the same results. This is key, because if the test is objective and repeatable, parties can then agree or disagree on how valuable it is. The original numbers are still relevant as a benchmark, and the parties can start to compare the numbers to their own experience and draw their own conclusions.

So we think, just as mortgages, credit card receivables, and auto loans have each became an investable vehicle, patents and IP will become a market as well.

CLOSING

I have been to Washington and met with members of the IP Congressional Caucus. I think everyone has an obligation, because of their profession, to get involved. If you are a member of AIPLA, go see their committee on the issues important to you. LES has a committee, IPO has a committee, and it is only going to become more important because so much is at stake. In the long-term, the market will figure it out; it is smarter than we think. I, for one, would like to let the market decide.