

**The Big Business of Patents:
The Role of The Federal Circuit Court of Appeals in Establishing Value of
Intellectual Property**

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The author wishes to acknowledge Randy Hillson of Merchant & Gould for his support and ideas reflected in this paper.

The United States Court of Appeals for the Federal Circuit (“Federal Circuit Court of Appeals”) has had an amazing impact on increasing awareness of the value of intellectual property in the United States. Not so many years ago, the Eighth Circuit was known as the “graveyard of patents.” This was so because, of all the Circuits, the Eighth Circuit had one of the most deplorable records on upholding patents. In the twenty-five year period until the late 1970’s, the Eighth Circuit ruled less than 10% of all patents it reviewed to be valid and infringed.

Not all circuits treated patents as negatively as did the Eighth Circuit. Some were known to be strongly pro-patent holder. The differentiation of treatment among the circuits created forum shopping by litigants. The effort to standardize treatment of patent issues was cited as a compelling reason for the creation of the Federal Circuit Court of Appeals in 1982.¹

Since the creation of the Federal Circuit Court of Appeals, everything has changed. Most practitioners would agree that changes have been for the better. The Federal Circuit Court of Appeals has injected a level of predictability of legal

doctrine into the patent system that was not before known. Further, the existence of the Federal Circuit Court of Appeals has permitted the patent law to evolve more quickly, as disagreements between the circuits do not need to go to the Supreme Court to be resolved.

Now, nearly 20 years after the creation of the Federal Circuit Court of Appeals, we can review the track record and draw some conclusions. One obvious conclusion is that the Federal Circuit Court of Appeals has created a new level of confidence in corporate America: intellectual property *can* and *will* be protected. This degree of confidence, I believe, stems from the Federal Circuit Court of Appeals track record of upholding patents. Prior to the creation of the Federal Circuit Court of Appeals in 1982, in 75% of patent cases litigated, the patent owner lost. Since 1982, approximately 70% of all patents that have been litigated through the Federal Circuit Court of Appeals have been upheld.ⁱⁱ

Pro-patent holder changes in the law have led to the general feeling that patents are more valuable than they once were. In addition, the scope of subject matter that can be claimed has been clarified by the Federal Circuit Court of Appeals such that new avenues for patentability have emerged. A notable example is the growth in business method patents following the State Streetⁱⁱⁱ bank decision in 1998. State Street and its progeny^{iv} held that business methods, where data is processed and used, are patentable. As long as the invention constitutes a *practical application* of a mathematical algorithm, formula,

or calculation that produces a useful, concrete and tangible result, patentable subject matter exists.^v Thus, the Federal Circuit Court of Appeals has clarified that business methods are subject to the same

legal requirements for patentability as any other process or method.^{vi}

Because they are perceived by businesses to be more valuable, patents are being sought more frequently and enforced more often. The degree of confidence in the patent system (largely a product of the predictability brought about by the Federal Circuit Court of Appeals) can be seen in the following statistics:

- More patents are being applied for, resulting in an increase in the number of patents issued. It took 70 years for the first million patents to be issued. During the 20th Century, patents issued the rate of about 1 million every 20 years. Currently, the PTO is on track to issue 1 million patents **every 5 years**.^{vii}
- If PTO projections of the number of patent applications in the year 2001 are realized, the number of patent applications will have increased by more than 75 percent in 5 years.^{viii}
- The rate of patent litigation has increased about 8 percent each year since 1991.^{ix}
- Damages awards in patent infringement actions are rising. Awards in the hundreds of millions of dollars are not at all uncommon. Two \$100 million-dollar plus awards involved companies local to our area:
 - Haworth v. Steelcase: \$211 million
 - Proctor & Gamble v. Paragon: \$178 million
 - Honeywell v. Minolta: \$128 million
 - 3M v. Johnson & Johnson: \$116 million

- Heightened patent procurement and enforcement activity is happening even despite rising costs. The cost of filing even one patent is estimated at \$80,000.^x The cost of enforcing a patent is more than fifteen times that: the most recent AIPLA study on the topic reported average costs of about \$1.25 million per litigant.^{xi}

The above statistics can be explained only by hypothesizing that corporate America is perceiving intellectual property, and especially patents, to be more valuable than ever before. In fact, for many organizations, intellectual property is viewed as the organization's most valuable asset. The American Intellectual Property Law Association ("AIPLA") has responded, and formed a Committee on Management of Intellectual Property Assets, which had its inaugural meeting in January, 2000. The Chair of the new committee, Kenneth Crosin, cited statistics that tell the story of our new, knowledge-based economy. In 1978, 80% of corporate assets were tangible assets (equipment, buildings, and the like), and 20% were intangible assets, such as intellectual property. By 1997, this balance had essentially reversed itself: 27% of corporate assets were tangible assets, and 73% were intangible assets.^{xii}

Lately, the popular press is replete with articles urging executives to more proactively manage intellectual assets. Rembrandts in the Attic, published just this year, makes a strong case for unlocking the value in what the authors estimate to be as much as *one trillion dollars* in untapped intellectual property asset values locked up in American businesses.^{xiii}

It appears that CEOs are beginning to take notice. In a recent study, 75% of businesses surveyed identified intellectual asset management as a new corporate strategy issue.^{xiv} Management of intellectual property is seen as a key CEO charter, and is viewed as an emerging way to enhance shareholder value. Further, there is a growing recognition that a company cannot appropriately be valued without placing a value on the company's intellectual assets. Currently in Great Britain, intellectual property is required to be valued and reported on balance sheets. This trend is likely coming to the U.S. as well.

There is also a growing concern in the U.S. that failure of corporate management to properly safeguard IP could be grounds for shareholder derivative actions on the theory of waste of corporate assets. In Caremark,^{xv} shareholders filed a derivative suit against directors for failure of duty of care in adequately supervising employees, which failure created liability for the corporation relating to health care payments. In Caremark, the Court in passing on the proposed settlement, noted:

In light of these developments, it would, in my opinion, be a mistake to conclude that ...corporate boards may satisfy their obligation to be reasonably informed concerning the corporation, without assuring themselves that information and reporting systems exist in the organization that are reasonably designed to provide to senior management and to the board itself, timely, accurate information sufficient to allow management and the board, each within its scope, to reach informed judgments concerning both the corporation's compliance with law and its business performance.^{xvi}

As of this point, the author is unaware that these principles have been applied to find liability for corporate officers or directors for failure to care for intellectual property assets. However, it is not a far stretch to imagine the application of these principles to an intellectual property context. In fact, some commentators have noted:

...as intellectual property becomes more critical from a strategic, financial and competitive point of view, directors may face similar potential liability based on claims of a breach of fiduciary duty in situations where a company faces a material loss in value due to insufficient attention given to the management of intellectual property assets.^{xvii}

So what is an organization that wishes to best manage its intellectual assets to do?

The first thing to do is to realize that the traditional notions of success using intellectual property are no longer valid. It used to be that, if one could create a good new product, and figure out how to market and sell it, such could spell success. Nowadays, however, if one cannot **protect** what one has created, all is for naught. Any competitive advantage likely will be quickly lost, as competitors rush in to fill in the void. In our information-age economy, the pace of innovation has quickened, and information is easily procured.

It is also probably less safe for corporate managers to totally delegate decisions about intellectual property to middle managers and in-house legal staff. At a minimum, upper management should keep these matters “on their radar screen.” After all, if intellectual property constitutes the largest asset in most

organizations, delegating total responsibility for management of that resource to a middle manager may not be subsequently viewed by a judge or jury to be the most prudent business decision.

Third, corporate managers should assemble a savvy and experienced team of professionals to assist in the process of Intellectual Asset Management. Many groups other than lawyers offer IP valuation and consulting services. In fact, there appears to be a rush to capitalize on serving what is perceived to be an unmet market need. Most of the Big 5 accounting firms are in the business. So too are a number of economists and other financial experts. Some of the techniques employed by these groups include:

- Providing financial-based IP audits (consisting of functions such as review to determine if royalty rates are being paid correctly, and whether maintenance fees are being paid);
- Application of financial measures and econometric techniques to determine various statistics (such as leverage of IP by calculating R&D expenditures as a percentage of sales);
- Providing patent mining software designed to determine which competitors are in a particular field of technology and where their patent stakes lie, as well as determining prior art citations and patent density in particular technical fields^{xviii}; and
- Providing services that assess the company's current state of intellectual asset management and providing reports for improving systems and performance.

Undoubtedly, these techniques might be useful tools, and also might provide a good starting point to an organization wishing to more closely manage its intellectual property. But regardless of the service employed, there is no silver

bullet, no quick fix. An intellectual property portfolio is an organic thing; it is constantly shifting and changing. Experts, including IP counsel, must take an *active and continuous role* in shaping the portfolio. As in other matters, effort in will probably correlate with results out.

Ideas for basic management of intellectual assets include:

- 1) The organization must have a sustained commitment toward the goal of systematically developing and strengthening its IP portfolio.
- 2) The business objectives of the organization must be the guiding force and must set the vision for the IP portfolio. The point of first instance is the BOARDROOM, where overall strategy is set in the context of marketplace realities and predictions.
- 3) The organization must be organized in a way such that the business directives of the organization trickle down to the people who are making the day-to-day decisions about IP.
 - A) Incentives that reward the type of behavior management seeks to instill must be established, i.e., performance requirements and accountability should be linked to IP management;
 - B) Budgets must reflect corporate goals for IP management.
- 4) Not all IP is created equal; the organization must determine the points at which it expects to receive the most VALUE for its investment. Then, each IP piece will be treated according to what the organization expects to get from it:
 - A) If it's core technology, the goal should be to protect and defend it to the hilt;
 - B) If it's emerging or potentially valuable technology, the goal should be to protect it to some extent and hedge your bets;
 - C) If it's not useful technology, the goal should be to get some value from it (e.g., license it out) or to dispose of it via donation, or to consciously choose to no longer maintain it. Some commentators

indicate that up to 35% of a typical organization's technology is orphan technology that provides no current value to the organization holding it.^{xix}

- 5) In addition to addressing its current portfolio, an organization would be wise to look forward to its future IP portfolio as well. This should be linked to the organization's long-range strategic plan and budget.

Considerations include:

- A) What needs to be done to effectively block competitors from key areas; and
- B) What needs to be done to set up a stake in new technology areas for the organization (development and/or acquisition of key technology).

Accomplishing these objectives takes something more than a traditional patent attorney, often caricatured as a card-carrying member of the pocket-protector club, who loves the intricacies of technology. While there is certainly need in the patent system for services of attorneys who are adept with technology, the development of the new economy has created a need for another type of professional as well: that is, one that understands the nature of business and can astutely guide clients through decisions about intellectual property in a manner that helps to create and augment this very important asset for the client.

The business of patents is now big business.

In sum, intellectual property has become king in the world of corporate assets, in large part due to our changing society and the Federal Circuit Court of Appeals' role in protecting IP. Many organizations struggle over how to manage

this valuable asset. But there is no silver bullet, no quick fix. There must be a commitment in the organization to orient itself around IP, and processes have to be reorganized to become IP-driven.

The following are a few examples of how an organization might best order itself to become IP-driven:

- 1) Patent procurement and enforcement decisions should be made on the basis of the size of the market and how much of the market the organization might feasibly be able to protect with legal protection. One commentator suggests that “product differentiators” become the focus for patent protection. Product differentiators are “product functions, features, and other characteristics that induce customers to buy one company’s product rather than that of its competitors.”^{xx}

A couple of notes about this strategy:

- A) To effect the strategy, the most elegant technical advance *may not be* the item that receives patent protection (i.e., patent procurement decisions cannot be exclusively *engineering driven*); and
 - B) Once a “product differentiator” is established, all efforts flow from that. For example,
 - Engineers need to think about designing products to fit a perceived market need;
 - Counsel need to understand the differentiation to be able to protect it legally; and
 - Marketers need to understand the differentiator to communicate external messages to the marketplace. These messages need to “sync up” with the area that is legally protected.^{xxi}
- 2) The organization would be wise to consider changing its paradigm of viewing intellectual property merely as something to be protected (i.e., bringing cost to the organization), and rather consider it to be

something to be leveraged (i.e., something that brings value to the organization). Thus, notions about in-house IP departments as “cost centers” necessarily fall. If an organization accomplishes its goals with respect to intellectual property protection, the in-house IP Department *could* be characterized as a “profit center.”

- 3) Scorecards, where companies note and reward the number of patents filed, are probably not the best technique to achieve a value-based IP system. A scorecard system rewards proliferation of invention, without regard to *value* of the innovation to the organization.

There are many other techniques to aid an organization interested in Intellectual Asset Management. To be most effective, the particular techniques should be tailored to the needs of the organization at issue, and the process overseen by experienced professionals who understand that creating *value* for the organization is the key objective.

And all of this brings us back to the Federal Circuit Court of Appeals. One wonders if, in its efforts to bring standardization and harmonization to the patent laws, members of that Court could have foreseen that a new trend, perhaps even a new industry, would spring up around Intellectual Asset Management. Regardless of whether it was foreseen or not, no one can doubt the role of the Federal Circuit Court of Appeals in enhancing the perception of value of patents in America. That is to say, no one can doubt that the Federal Circuit Court of Appeals has helped to elevate U.S. patents from their graveyard status of two decades ago to the corporate jewels they are today.

ⁱ Federal Circuit Act 1982, 96 Stat. 25 (April, 1982).

ⁱⁱ Burton, Bruce, Presentation to MILE, “IP Management Issues for e-Business”(Spring 2000).

ⁱⁱⁱ State Street Bank & Trust Co. v. Signature Fin’l Group, Inc., 149 F.3d 1368, 1375 (Fed. Cir. 1998), *cert. denied*, 119 S. Ct. 851 (1999).

^{iv} Recent CAFC decisions have reinforced the principles of State Street. See, e.g., AT&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1357 (Fed. Cir. 1999), *cert. denied*, 1999 WL 506519 (U.S. Oct. 12, 1999).

^v This description distinguishes such material from unpatentable mathematical algorithms, which are abstract ideas that do not meet the statutory test for patentability.

^{vi} State Street, 149 F.3d at 1375.

^{vii} USPTO today

^{viii} *Id.*

^{ix} Study by Professor Jean Lanjouw of Yale University and Mark Schankerman of the London School of Economics.

^x les Nouvelles, June, 1998.

^{xi} Report of Economic Survey 1999, American Intellectual Property Law Association.

^{xii} Kenneth Crosin, “Management of IP Assets,” AIPLA Bulletin (2000 Mid-Winter Meeting Issue).

^{xiii} Kevin Rivette & David Kline, Rembrandts in the Attic, p. 123 (Harvard Bus. School Press 2000).

^{xiv} The Delphi Group, “Delphi Group Research Identifies Leading Business Applications of Knowledge Management” (press release, 29 March 1999).

^{xv} In re Caremark Int’l Inc. Derivative Litigation, 698 A.2d 959 (Del. Ch. 1996).

^{xvi} *Id.* At 970.

^{xvii} “Intellectual Property Management and Board Liability,” Practising Law Institute, Advanced Securities Workshop (PLI Order No. BO-004Y Aug. 1998) at 457-58.

^{xviii} One example of a company that offers this service is Aurigin Systems, “Intellectual Asset Management (IPAM)” software, www.aurigin.com.

^{xix} David C. Drews, “Obtaining a Tax Deduction for Unused Patents,” Patent Strategy and Management, Vol.1, No. 3 (July 2000), citing BTG International statistics.

^{xx} Michael B. Einschlag, How to Evaluate Patent Portfolios with ‘Product Differentiators’, Patent Strategy and Management (June 2000).

^{xxi} One advantage of such a coordinated effort is that, if the patent is ever tested, it will be relatively easy for the patent holder to establish the link between the patented feature and demand for the patented product, when seeking to prove commercial success or lost profits damages.