Effectively Discharging Fiduciary Duties in IP-Rich M&A Transactions

Elvir Causevic* and Ian D. McClure**

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INTRODUCTION

Shareholders are becoming increasingly sophisticated about their companies’ innovation quality, because the financial outcome of their investment relies on innovation more heavily now than ever before.\(^1\) Most high quality innovation is protected by intellectual property (“IP”), and in technology (“tech”) companies, such protection involves a mix of patents, trademarks, copyrights, and trade secrets.\(^2\) The focus of this paper will be on patents.

The rapid shareholder awakening on innovation should be eye opening for corporate directors of IP-rich companies. With growing shareholder activism focused on IP value and IP risks, and with increasing importance of IP assets to overall company value,\(^3\) corporations should ensure that they appropriately

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consider the potentially material separate value locked in their IP portfolios, especially in merger and acquisition ("M&A") settings.

This is the central thesis of this paper: Non-core IP has been potentially material in at least half of over 1,000 public tech companies' M&A deals in the past five years. Yet this non-core IP is independently analyzed, separately traded to a different party from the M&A buyer, or specifically reported on only in a small fraction of those deals—less than ten percent. And of the remaining majority of tech M&A deals with potentially material non-core IP: Are those directors and their advisors maximizing the value available to the shareholders who paid for development or acquisition of that IP? How much of that IP was truly core to the business being sold, versus non-core that could have been transacted separately to generate incremental value to shareholders? Is it possible that the IP on a stand-alone basis is worth more than the company itself, in more than the rare instance where it in fact was separated and separately sold? Why is the proper assessment of strategic alternatives with respect to IP, and its independent valuation, an exception rather than a rule?

IP business professionals have long ago identified common misconceptions about the value of and leverage created by IP—but very few companies and their boards have adopted formal measures to systematically generate independent shareholder value from their IP, whether as a going concern or in the M&A context. Misconceptions about IP continue to be pervasive in the industry.

4. Id.


7. See id. (estimated by searching public filings using www.edgar.gov and www.capitaliq.com for IP-related disclosures or accounting in M&A transactions of the companies specifically listed in the report, using keywords such as “patent,” “intellectual property,” and “intangible”).

8. MIPS Techs., Inc., Proxy Statement (Form 14a) (Jan. 7, 2013) [hereinafter “MIPS Proxy”]. The entire operating business of MIPS sold for $100 million to Imagination Technologies in the M&A sale process, while a portion of its patent portfolio was sold in a separate patent sale process for $350 million to a consortium of 11 buyers, with transactions closing simultaneously.


10. McClure & Causevic, supra note 1; Elvir Causevic, To sell or not to sell? Myth v reality in IP monetisation, INTELL. ASSET MGMT. (Dec. 2013), http://www.iam-media.com/Intelligence/IP-
Such misconceptions include (1) all of a company’s IP is “core,” without any “non-core” IP with independent value, and closely linked with, and necessary for protection of, their products; (2) value from IP can only be generated through risky litigation or a “patent troll” business model, and; (3) the company’s current advisors are providing competent and adequate advice relating to IP value. The potential negative impact to the business as a result of these misconceptions could be serious, as is described in this article, and further becomes exacerbated by the growing materiality of IP, which in turn implicates the directors’ fiduciary duties. In the M&A context, courts examine materiality and fiduciary duties under a magnifying glass. One example is a duty of loyalty related to oversight of patent risk-taking by the corporation while it operates as a going concern, which may generate IP-related liabilities that, when discovered in due diligence, derail or impair the M&A process. This article addresses the significant and growing matter with respect to a corporation and its board of directors.

Directors, with the help from their advisors, can solve this challenge. Directors’ traditional duties of care and loyalty each take on a new aspect when viewed through the lens of assessing the potentially material independent value from IP. New issues of competence and independence of advisors necessarily arise in light of Revlon and Van Gorkom, as directors now must undertake the analysis of strategic alternatives related to the company’s IP, and assess the independent value of IP in various contexts. Advisors need to respond by adopting new service offerings to meet the needs of the increasingly complex M&A market, while specialist IP investment banking advisors, now few in number, need to expand their reach and offer their best practices to the broader market. These actions will serve shareholders, and will ultimately further incentivize proper allocation of capital to future research and development (“R&D”) activities.

Faithfully discharging complex fiduciary duties of directors in corporations undergoing IP-rich M&A deals is possible, however. With reasonable incremental effort, while utilizing an existing framework of available competent

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Monetisation-Yearbook/2013. Authors have direct experience with shareholders, boards, and management teams at leading technology and healthcare companies, and their investment banking, legal and accounting advisors; unpublished proceeds from five recent “Corporate Governance and IP” private conferences the authors organizes with the team at Black Stone IP, LLC, since the Fall of 2015 in New York City, Washington D.C., San Francisco, Detroit and Austin, which included two most recent former Chief Judges of the Court of Appeals for the Federal Circuit (the designated and exclusive appeals court for all patent matters), former Director of the U.S. Patent and Trademark Office, AMLAW 100 outside counsel, and over 30 senior IP and business executives from leading global technology companies from the US, Europe, Japan, Korea and China.

13. McClure & Causevic, supra note 1; Revlon, 506 A.2d at 173; McClure, supra note 3.
14. Revlon, 506 A.2d at 173 (regarding fairness of buyer’s offer to the shareholders).
15. Smith v. Van Gorkom, 488 A.2d 858 (Del. 1985) (emphasizing the need for external professional advice on strategic alternatives).
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and independent advisors, directors can maintain core M&A process timing and simultaneously maximize value for the shareholders by leveraging a company’s IP.

This paper is organized as follows: Part I broadly reviews the value of IP in the modern economy and its increasing importance to shareholders. Specifically, in Part I we will discuss the value of patents as part of M&A transactions, based on recent publicly announced deals. Part II will explore common misconceptions that fiduciaries of IP-rich companies hold, by offering specific examples of each of the types of misconceptions and explaining how they impact fiduciary duties in an M&A context. Part III will discuss sources of director liability, starting with the review of standard duties of care and loyalty in the IP-rich M&A context. Further, in Part III we will review the materiality of IP to the overall M&A transaction, by leveraging securities law jurisprudence and Securities and Exchange Commission (“SEC”) guidance on materiality, all as applied to IP.

I. VALUE OF IP IN TECHNOLOGY COMPANIES AND THE ECONOMY

Intangible asset value across all 500 companies comprising the S&P 500 index are estimated to account for over eighty percent of the total value of the S&P 500 index, while tangible assets represent only the remaining twenty percent. It follows that in most tech M&A deals, intangible assets likely include a material portion of the value being transacted. In tech companies, the company’s IP is typically the most valuable intangible asset. Between patents, copyrights, trademarks, and trade secrets/know-how, it is patents that often lead the value equation, and present the most complexity, risk, and value-creation opportunity. This is in part because today’s tech companies are complex conglomerates of various technology offerings, often with a rich history of innovation, plus prior acquisitions of other innovators, all of which generated large pools of valuable IP, typically some core to the business, and some non-core.

There has been much discussion about the value and importance of patents in the past several years, particularly relating to the America Invents Act enacted in the United States in 2013, and similar activities around the world. In 2016, the U.S. Commerce Department published a report entitled “Intellectual Property

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17. WESTON ANSON, THE INTANGIBLE ASSETS HANDBOOK 1 (ABA sec. of Bus. Law 2007), available at apps.americanbar.org/buslaw/newsletter/0058/materials/book.pdf (defining types of intellectual property and highlighting that IP issues “are even more important in a merger, acquisition, corporate reorganization, or bankruptcy environment”).

and the U.S. Economy: 2016 Update,” which used thorough econometric analysis to demonstrate that IP-intensive industries support at least 27.9 million American jobs and contribute more than $6.6 trillion dollars to, or 38.2% of, U.S. gross domestic product (“GDP”).

A significant body of credible academic research—including a recent study commissioned by the U.S. Congress and prepared by the U.S. National Academies of Science and of Engineering—has confirmed that a strong patent system is vital to the innovation economy.

At the same time, patents were in focus because of non-practicing entities (“NPEs”), organizations whose main purpose is licensing patents, also unhelpfully called “patent trolls” by some industry participants. The patent troll critics highlight the prevalence of low-quality patents and the abusive litigation that results, citing one—unfortunately suspicious—estimate of the “$29 billion patent troll problem.” Others in the industry see patent licensing as a useful market mechanism, when high quality patents are being enforced to reward the innovators. There are a number of successful reforms under way in the legal system to allow high quality patents to be enforced, while weak patents can be quickly and inexpensively invalidated. Even the critics of the patent trolls now acknowledge that the impact of frivolous patent litigation is showing signs of abatement since 2013, so that the focus can return to protecting and disseminating genuine innovation using high quality patents.

Finally, patents are now a required global business tool with an increasing ability to enforce rights internationally at an unprecedented level, compared to

19. Id.
23. FTC Report, supra note 21.
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any other time in history.\textsuperscript{26} According to a recent U.S. congressional hearing on economic and security risks posed by China, Chinese local patenting (as a measure of R&D growth) was noted to be at the heart of their Thirteenth Five-Year plan (spanning 2016–2021),\textsuperscript{27} and enforcement of IP rights in China is at its fastest growth rate ever.\textsuperscript{28} In a supra-EU initiative, a number of European countries have banded together to create the Unified Patent Court, which will allow pan-European, post-Brexit patent litigation to be centralized.\textsuperscript{29} It is set up much like the Court of Appeals for the Federal Circuit, which hears all patent appeals in the U.S., and will allow legal and equitable relief to be granted simultaneously in multiple jurisdictions.\textsuperscript{30}

Shareholders are becoming increasingly knowledgeable about companies’ innovation and the patents that protect it, as the quality of their investment increasingly relies on their innovation.\textsuperscript{31} This shareholder awakening toward patents should in turn be eye-opening for corporate patent holders. With increased shareholder activism and sophistication regarding patent value and patent risks,\textsuperscript{32} corporations should ensure that they implement appropriate accountability for the importance of IP information to M&A and other material corporate events.\textsuperscript{33}

A. Patent-Only or Patent-Driven Transactions

While IP has been an important and material component of tech M&A transactions for a long time, in the past several years there also have been a series of patent-only, or patent-driven transactions involving publicly traded technology companies.\textsuperscript{34} Some of the better-known and larger patent-only or patent-driven deals are listed below in Table 1.


\textsuperscript{29} Marianne Schaffner et al., The Impending Launch of the Unified Patent Court, LEXOLOGY (Mar. 15, 2017), http://www.lexology.com/library/detail.aspx?g=208d084f-6b45-44a4-93f2-3bfbf1fbeb1f.

\textsuperscript{30} Id.


\textsuperscript{32} McClure, supra note 3.

\textsuperscript{33} McClure & Causevic, supra note 1.

\textsuperscript{34} Internal Houlihan Lokey Inc. database based on research from public sources.
Rudimentary analysis of this snapshot of reported patent-only or patent-driven transactions reveals several insights. First, buyers and sellers can be either operating companies or non-practicing entities (patent monetizers such as WiLan, Unwired Planet, Rockstar and Round Rock). Next, the “price per patent” varies widely, from a low of a few thousand dollars, to a high of well over $1,000.

Table 1: Sample of Larger Patent-Only and Patent-Driven Transactions

<table>
<thead>
<tr>
<th>Announce Date</th>
<th>Buyer - Seller</th>
<th>Disclosed Value ($M)</th>
<th>Price per Patent ($K)</th>
<th>Disclosed Asset Count</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/2/2015</td>
<td>WiLan - Qimonda (Infineon)</td>
<td>$33</td>
<td>$4.7</td>
<td>7,000</td>
<td>Memory and semiconductor manufacturing</td>
</tr>
<tr>
<td>12/23/2014</td>
<td>RPX - Rockstar</td>
<td>$900.0</td>
<td>$225</td>
<td>4,000</td>
<td>Smartphone technology</td>
</tr>
<tr>
<td>4/17/2014</td>
<td>Lenovo - Unwired Planet/Ericsson</td>
<td>$100</td>
<td>$700</td>
<td>$142</td>
<td>Smartphone technology – also included patent license to 2,000 Ericsson patents</td>
</tr>
<tr>
<td>4/4/2014</td>
<td>Lenovo - NEC</td>
<td>$200</td>
<td>$21</td>
<td>4,800</td>
<td>Smartphone technology</td>
</tr>
<tr>
<td>1/24/2014</td>
<td>Qualcomm - HP</td>
<td>$278.0</td>
<td>$135</td>
<td>1,426</td>
<td>Fundamental mobile operating system techniques</td>
</tr>
<tr>
<td>7/2/2013</td>
<td>Dialog Semi - iWatt</td>
<td>$113.0</td>
<td>$1,027</td>
<td>110</td>
<td>Digital power AC/DC ICs and LED ICs, purchase price allocation out of total consideration of $345M</td>
</tr>
<tr>
<td>2/28/2013</td>
<td>Allad Security Trust - MAPS</td>
<td>$350.0</td>
<td>$703</td>
<td>498</td>
<td>Semiconductors</td>
</tr>
<tr>
<td>12/18/2012</td>
<td>n/RPX - Kodak</td>
<td>$525.0</td>
<td>$477</td>
<td>1,100</td>
<td>Relate to digital imaging technology</td>
</tr>
<tr>
<td>7/1/2012</td>
<td>HTC - S3</td>
<td>$300.0</td>
<td>$1,111</td>
<td>270</td>
<td>Graphics</td>
</tr>
<tr>
<td>6/28/2012</td>
<td>Intel - InterDigital</td>
<td>$375.0</td>
<td>$221</td>
<td>1,700</td>
<td>3G, LTE, and 4G connectivity</td>
</tr>
<tr>
<td>4/23/2012</td>
<td>Facebook - Microsoft</td>
<td>$550</td>
<td>$917</td>
<td>600</td>
<td>Subset of ADS patents (after being licensed to Microsoft)</td>
</tr>
<tr>
<td>4/9/2012</td>
<td>Microsoft - ADK</td>
<td>$1,356</td>
<td>$1,142</td>
<td>925</td>
<td>Internet, browser, cookie and other patents (also includes license to additional 300 patents)</td>
</tr>
<tr>
<td>9/1/2011</td>
<td>Sterling Partners - Mossad (Conversant)</td>
<td>$590.0</td>
<td>$209</td>
<td>2,822</td>
<td>Patented semiconductor and wireless/wireline communications internet protocol</td>
</tr>
<tr>
<td>8/25/2011</td>
<td>Google - Motorola</td>
<td>$5,500</td>
<td>$498</td>
<td>12,000</td>
<td>Smartphone technology - Purchase price allocation, out of total of $12.4B</td>
</tr>
<tr>
<td>7/1/2011</td>
<td>Rockstar - Nortel</td>
<td>$6,500.0</td>
<td>$750</td>
<td>6,000</td>
<td>Wireless and wired communication devices</td>
</tr>
<tr>
<td>11/1/2010</td>
<td>CPTN Holdings - Novell</td>
<td>$450.0</td>
<td>$510</td>
<td>882</td>
<td>Software - Syndicate: MSFT, Apple, EMC, Oracle (DOJ altered some deal terms, open source concerns)</td>
</tr>
<tr>
<td>12/30/2009</td>
<td>Round Rock - Micron</td>
<td>$400.0</td>
<td>$89</td>
<td>4,500</td>
<td>Chip-making technology, patents on photo imaging, telecommunications and search engine technology, as well as the largest RFID patent cluster</td>
</tr>
</tbody>
</table>

35. Internal Houlihan Lokey Inc. database based on research from public sources. Listed deals are patent-only transactions, with the exception of Google-Motorola, where Google acquired Motorola in part for its patents, allocating $5.5 billion of its purchase price, see John Letzing, Google Say Patents, Tech Were Less Than Half Motorola’s Price, WALL ST. J. (July 24, 2012), http://blogs.wsj.com/digits/2012/07/24/google-says-patents-tech-were-less-than-half-motorolas-price/. 36. FTC Report supra at note 21. Ian McClure, Accountability in the Patent Market Part II: Should Public Companies Disclose More to Shareholders?, 26 FORDHAM INT’L. PROF. MEDIA & ENT. L.J. 417, 421–22 (2016) (detailing a host of patent acquisitions by both operating and non-operating companies over the past ten years).
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over a million dollars per patent.\textsuperscript{37} Finally, only two of the deals involved core IP (Nortel and Kodak, both related to bankruptcies), while the rest of the deals are based on a portion of the sellers’ IP portfolio, presumably non-core IP.\textsuperscript{38}

However, possibly the most interesting IP deal data is missing from Table 1, either because the IP deals were not reported,\textsuperscript{39} or more importantly because the IP deals never happened separate from the M&A deals.\textsuperscript{40} Over 1,000 tech M&A deals with an estimated total value of over $500 billion took place during the similar five-year period as the under-20 IP deals in Table 1, with an estimated total IP value under $20 billion.\textsuperscript{41} Over one-third of those 1,000 M&A deals are categorized as “hardware” or “semiconductors,” which are virtually all very likely to have contained a material IP component.\textsuperscript{42} Over half of the deals listed are for “software,” with likely a majority containing a significant IP component. The remaining deals in “IT services” or “internet” probably contain less of an IP component, so they can be excluded from the analysis. The high likelihood of material non-core IP presence in these 1,000 reported tech M&A deals is further confirmed by a review of all of the top individual deals listed in the report, and an estimate based on industry experience in assessing whether the target had material non-core IP.\textsuperscript{43} PricewaterhouseCoopers (“PwC”) notes that in 2014 “[i]nternet titans Google and Facebook led the way, expanding into new technologies such as virtual reality, artificial intelligence, satellite systems, and [internet of things].”\textsuperscript{44} Each of these areas is traditionally patent-intensive. Finally, to help substantiate the point that patents are not traditionally considered, the PwC report, while otherwise thorough and comprehensive, never mentions the words “patent,” “intellectual property” or “intangible asset.”\textsuperscript{45} This is the central thesis of this paper: IP is material in nearly half of all tech M&A deals, yet it is publicly and independently analyzed, traded or reported in only a small fraction of those deals—significantly less than ten percent. What about the remaining ninety percent of these deals?

\textsuperscript{37} Your patent portfolio: how much is it worth and what are you going to do about it?, DLA PIPER (June 2012), https://www.dlapiper.com/en/us/insights/publications/2012/06/your-patent-portfolio-how-much-is-it-worth-and-w__/ (pointing out that in recent high value patent transactions price-per-patent for otherwise would all be considered strong patents, or at least similar patents, have ranged from $78,000 to $2.1 million).

\textsuperscript{38} Internal Houlihan Lokey analysis of patent assets sold versus retained, by examining USPTO patent assignment database at www.uspto.gov, and patent analytics tool Innography at www.innography.com.

\textsuperscript{39} See Erginsoy, supra note at 6; and McClure supra note 3.

\textsuperscript{40} See Erginsoy, supra note at 6.

\textsuperscript{41} \textit{Id}.

\textsuperscript{42} \textit{Id.} (verified by patent counts at U.S. Patent & Trademark Office for companies listed in the report, and sampling CapitalIQ data provider for other M&A deals and the targets patent holdings).

\textsuperscript{43} Houlihan Lokey review, supra note 34.


\textsuperscript{45} \textit{Id}.
B. Identifying the Presence of and Estimating the Financial Value of Non-core IP

Assessing the financial value of company’s IP is a complex endeavor, and involves the interplay of three core elements: legal, technical, and financial analysis. Typically, the value of IP is only concretely determined during litigation and, in the case of patent litigation, each of these three core elements is represented. Patent litigation involves attorneys, technical experts with experience in the particular technology being litigated, and damages experts with experience in financial patent valuation. Valuation of IP for strategic alternatives analysis in the M&A context—outside of the litigation context—requires similar analysis, performed on the entire IP portfolio containing core and non-core IP.

The first step of the analysis is identification of any non-core IP, by comparing the company’s product portfolio to its IP portfolio, and finding IP that is not directly related to the company’s central business. Next, the non-core IP is mapped to key potential infringers—third parties whose products are covered by the company’s non-core IP. Then, the business, reputation, ecosystem, and counter-assertion risks must be considered holistically to assess key target infringers.

Next, a field of buyers or licensees for non-core IP needs to be created. This list of buyers is typically much broader than just the potential infringers. For example, if Company A has non-core IP, and it is infringed by Company B’s products, then the first option may be for the infringing Company B to simply buy or license that non-core IP. But also, Company B’s fiercest competitor (who may not infringe at all) may want to buy the non-core IP to create leverage against Company B. Finally, Company C, a non-practicing entity, may be interested in the non-core IP to start a new licensing program, or to supplement an existing broader licensing program.

After the list of potential buyers or licensees is created, the company can iterate forecasted scenarios in order to yield several strategic alternatives on how to best leverage the non-core IP. Then, for each of those scenarios and for each leveraging option, the company can generate a separate high level estimate of financial valuation, accounting for infringement exposure, reduced by any encumbrances (such as existing licenses/cross-licenses, customer/supplier relationships, etc.), and discounted for cost of licensing, litigation, counter-assertion, and other risks. The result is very similar to a typical M&A strategic alternative analysis, where the board is presented with the most important alternatives, and the board assesses the value and risks of each such alternative.46

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There are typically three key sources of non-core IP, as can also be seen by analyzing the IP holdings of the sellers in Table 1 above, and the technology in which IP was traded:

1. Excess over what is required to provide protection and coverage of core businesses (Microsoft buying AOL’s patents, Unwired Planet leveraging Ericsson’s patents, Mosaid leveraging Nokia’s patents, NEC acquiring InterDigital’s patents);
2. Prior R&D efforts that resulted in valuable inventions, but have not been productized (S3, portion of Kodak, portion of Nortel); and
3. Prior acquisitions that brought with them material IP that is not used in the current core businesses (HP’s prior acquisition of Palm, Microsoft’s prior acquisition of AOL patents a portion of which was then resold to Facebook, AOL’s prior acquisition of Netscape and ICQ).

Finally, cross-licenses with balance of payments are also indicators of value. A cross license is an agreement between two companies who each hold patents, through which they license their patents to each other. A more recent trend is to not just do a broad, cash-free cross-license, but to account for the relative value of each side’s patents to the other, with a party supplying the lesser value making up the difference. In 2011, one of the larger publicly announced cross-license agreements took place between NVIDIA and Intel, with Intel paying NVIDIA a balance of $1.5 billion. While many such cross-licenses exist, very few are reported to shareholders. Their existence significantly affects IP value and requires thorough independent analysis.

For illustrative purposes, let us consider the NVIDIA and Intel cross-license in a hypothetical scenario of Company A and Company B, with a large cross-license between them, where Company B paid a significant amount to Company A. What other competitors of Company A could be licensed with those same patents, and when will that value be realized? If Company A comes “in play” to be sold in an M&A process, will the directors, management and advisors separately value the remaining IP rights and insist that the buyer pay for them

49. NVIDIA Corp., Current Report (Form 8-K) (Jan. 10, 2011) (disclosing entry into a cross-license agreement with Intel, and Intel paying $1.5 billion).
50. McClure, supra note 36.
separately, and if not, how will they realize that excess value for the current Company A shareholders?

II. MISCONCEPTIONS ABOUT COMPANIES’ IP

For well over a decade, IP business professionals have been highlighting opportunities for companies with rich IP portfolios to leverage the value of their investments. However, an analysis of the literature referenced above continues to highlight common misconceptions held by companies and their board members. Some of the most common misconceptions are described below.

A. Misconception: All patents owned by the company are core—needed to cover and protect the company’s products and services (or they are all needed for defensive purposes against competitors)

As has been amply described in the IP business and academic research literature, this scenario is rarely the case, as most companies have an overabundance of IP assets far beyond what is required to protect their products or abate competitive risk. Most technology companies have had a string of acquisitions, unmarketed but meaningful R&D investments, and discontinued product lines—each generating substantial estates of patent value that is non-core to its operating business.

Separately, a company’s excess non-core IP is often not threatening to its own key competitors, since the non-core portfolio was built for a different purpose—as such it has no value to the operating business of the company.

B. Misconception: No operating company would want to buy our non-core IP

While most existing non-core IP is not relevant to the company’s competitors, it is important to note that owning IP that is not related to a company’s products can be the most powerful defensive deterrent. In cases where a company holds non-core IP pointed at a competitor’s highly profitable growth areas, this IP can be used against its competitor’s products in markets where the company itself is not present. As a matter of fact, companies should build into their portfolios IP that is not related to their own products, but is highly targeted against a competitor’s key growth area. Acquiring IP from others who

51. See Rivette & Kline, supra note 9.
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have an excess in the technology area where competitors are present, or who have exited that technology area, can fill this gap. Filling this gap is one of the important drivers of demand in the patent markets. For example, consider Company A that builds phones and laptops, and has patents covering phones and laptops. Its biggest competitor, Company B, builds phones, laptops, and servers, and makes most of its profits from servers. Company A should acquire server patents, even though Company A itself has no products in that area, because it can use those server patents to reduce its cross-license exposure to Company B. This is also a potential defensive strategy against large operating companies who are also aggressive patent licensors. The exposed licensee companies rarely organically develop IP that is infringed by an aggressive licensor’s operating businesses, and acquiring such IP is important in eliminating or reducing their exposure to the aggressive licensor’s IP.

In summary, very few companies have current and relevant mapping between current products/services and their core IP and the categorization, valuation, and usage strategy for their non-core IP. IBM, for example, uses this strategy well, and is known for organically developing excess non-core IP that is targeted not toward its own business, but rather toward the budding businesses of others in markets where IBM is not present. Through a series of transactions, IBM has repeatedly shown that one of its strategies is to assert its portfolio against growing companies and complete a transaction that includes a sale of its non-core assets to the target. In effect, through this now-seasoned process, IBM demonstrates to each target the gap in the target’s portfolio: a lack of patents pointed at others’ pressure points that might be used to counterbalance its own patent exposure at the negotiating table through, for example, a more favorable balance of royalty payments or, in a best case scenario, a non-royalty bearing cross-license. A review of recent deals indicates that IBM has sold over 15,000 of its patents, and many of these transfers likely had this similar purpose.

Examples include:

- In January 2014, Twitter acquired 900 patents from IBM for $36M after IBM filed a patent infringement claim against Twitter.
- In June 2014, Pure Storage acquired over 100 patents from IBM after IBM asserted its patents against Pure Storage.

57. John Rath, Pure Storage Buys 100 Patents from IBM to Protect Itself from Lawsuits, DATACENTERKNOWLEDGE (June 23, 2014),
In March 2012, Facebook paid IBM at least $83M for 750 patents, after it became subject to 22 patent infringement lawsuits following announcement of its then upcoming IPO.\(^5^8\)

Google currently owns over 2,400 original IBM patents, with the vast majority (2,369) of these patents acquired in 2011.\(^5^9\)

Other notable owners of IBM patents include Cisco (268), Ebay (281), Microsoft (50), Mitsubishi (44), Samsung (34), Yahoo! (27), TomTom (23), Alibaba (20), and Tivo (6).\(^6^0\)

C. Misconception: Patents (core and non-core) have the same value to the M&A buyer as they do to the seller, and the potential buyer will pay for that value

In a typical tech M&A transaction, unless the seller company has successfully monetized some of its IP and done so systematically to establish a separate and consistent revenue stream, it is rare that the buyer will separately value and pay for the seller company’s non-core IP.\(^6^1\) The common response from the buyers of public companies is that the market has already “priced in” any and all IP value into the enterprise value of the seller and thus the sale price. Also, buyers will say that they are not in the IP monetization business so won’t benefit financially from incremental non-core IP, and as such, don’t want to pay for it separately. Part of the reason for this response may be that the buyer may not have any genuine use for the seller’s non-core IP (in either their own R&D or for defense against buyer’s existing competitive/licensor threats).

Separately, and perhaps more importantly, the act of the merger may destroy the value of seller’s non-core IP in buyer’s hands. This is because the buyer’s existing set of license and cross-license agreements, across the buyer’s own ecosystem, will very likely apply to the newly acquired patents—and will thus eliminate otherwise licensable value, which up until the merger was available to the seller, who did not license their patents to the same parties the buyer is licensed to. This happens because typically cross-license agreements provide that the respective licenses apply to all of a party’s subsequent patent


60. Id. ("Please note this data is based only on public patent assignment data, and unrecorded patent transactions have not been included in our analysis.").

acquisitions. For example, consider three companies: A, B, and C. If Company A and Company B have a cross-license agreement, and Company A now buys Company C, after the merger closes Company C’s patents will also now likely be licensed to Company B, which they were not prior to the merger. The independent licensing value of Company C’s patents was diminished or destroyed by the merger itself.

Thus, as a result of a combination of these and other factors, buyers typically assign little to no value to, or deeply discount the value of, seller’s non-core IP in their own valuations, and buyers’ advisors typically do not value IP separately at all.

D. Misconception: Management will tell the directors if the company’s non-core IP has material value

While CEOs of most tech companies generally understand the reasons to have strong IP, they are typically not versed in strategic patent leverage, patent monetization strategies, or the associated risks. As expected, they rely on their general counsel and the IP team. The general counsel and their IP department are typically staffed for, and focused on, day-to-day operational IP issues (patent prosecution at the various global patent offices, license agreements, and, as it arises, litigation), rather than strategic IP monetization. At best, the relevant portions of the IP portfolio are mapped to current products/services and ongoing R&D, and there is often no budget or time to seriously explore the value and strategic alternatives of non-core IP, or opportunities presented by third party IP available for acquisition. Unfortunately, corporations do not treat assessment of patent value and patent risk in the same manner as other compliance matters (environmental, antitrust, tax, etc.). The emergence of patent trolls has only made matters more complex, as frivolous patent litigation drains away scarce internal IP resources. Even if the management team undertook the complex process of thoroughly understanding the strategic alternatives and value of non-core IP, and formalized the IP risks analysis from competitors and aggressive operating company licensors, it is necessary to keep these analyses up to date. Changes in the patent market, M&A activity, and rapid product line shifts can dramatically alter the IP ecosystem and landscape of a company within as short  

62. Mark S. Holmes, Patent Licensing: Strategy, Negotiation, Forms, PRACTISING LAW INST. PRESS INTELL. PROP. LAW LIB. (giving examples of language to limit the effects of acquisition on existing licenses).


65. McClure, supra note 3.
a span as one year, especially in fast moving markets such as consumer electronics and semiconductors.

Hence, it is more often than not that the management team, despite its expertise and experience, does not have a formal and current assessment of the value of non-core IP, and as such, the directors do not have that information readily available either.\textsuperscript{66}

\textit{E. Misconception: Our outside patent counsel will alert us about who infringes our non-core IP}

A Company’s outside patent counsel is typically not asked (or equipped) to assess the company’s entire large portfolio for validity or infringement—they are typically engaged and staffed to work on specific, focused subsets of assets, not the entire portfolio, primarily due to cost and complexity.\textsuperscript{67} The primary functions of outside IP counsel focus on advising on strategy with respect to new patent prosecution, where they do take a broader view, and on providing on-demand transactional assistance with specific license agreements or litigation. The patent prosecution, patent and license transaction, and patent litigation are three separate efforts that, even if all reside within one full-service outside counsel, are rarely closely coordinated. Patent monetization most closely sits within the litigation group, as they are the ones typically equipped to analyze infringement and damages. However, as Figure 1 below shows, patent litigation is very different from assessing strategic alternatives and financial value for the entire portfolio—mainly because patent litigation focuses on very few assets and against only one target, usually in an extremely complex, protracted legal battle with millions of dollars of expenditures.\textsuperscript{68}

Assessing strategic alternatives with respect to potential monetization requires a very different process that arrives at estimates of validity, infringement, and damages across the entire IP portfolio, and uses a wide range of possible scenarios in a game-theory-like fashion. This approach, by itself, would not be a good litigation approach, as it is not detailed enough to withstand the rigorous patent litigation process. Also, litigation counsel employs external technical and damages experts with litigation experience, at hourly rates comparable to their own, and rarely have in-house resources for fast-track expert review and infringement analysis, or financial modeling for a company’s entire IP portfolio.

\textsuperscript{66} Sterne & Laurie, supra note 63.
Also, while outside counsel do get involved in licensing, litigation, and settlement discussions from a financial perspective, they typically see very few patent transactions, as this is not their core competence. As such, their ability to assess the market value of non-core IP or the likelihood that Company A may buy Company B’s patents is quite limited, by design.

Outside counsel also may have new conflicts of interest that arise when considering broad patent monetization, as defined by the rules of professional conduct. Consider an example of outside counsel advising two separate clients: a semiconductor company and a consumer electronics company that buys from that semiconductor company. Absent litigation or some business dispute between the two, there is likely no conflict of interest. However, if the semiconductor company asks this hypothetical outside counsel to assess the value of its portfolio broadly, the outside counsel may develop a conflict. Since it is entirely possible that the exposure of the consumer electronics company to

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69. MODEL RULES OF PROF’L CONDUCT R. 1.7(a)(2) (2013) (“A concurrent conflict of interest exists if . . . . (2) there is a significant risk that the representation of one or more clients will be materially limited by the lawyer’s responsibilities to another client, a former client or a third person or by a personal interest of the lawyer.”).
the semiconductor company’s patents may far exceed the value of the current commercial relationship between the two, the counsel would be potentially adverse to its consumer electronics client. If the proper advice by the outside counsel to the semiconductor company would be to enforce its patents against the consumer electronics company, who is the counsel’s other client, this would present an unavoidable conflict to one or other of its clients. Since a typical IP monetization strategy may consider hundreds of potential targets, the issue of potential new conflicts needs to be carefully considered.

Finally, the cost structure of the analysis of IP monetization is dramatically different from litigation. Patent litigation costs on average $5 million, and lasts years, where patent monetization strategy development typically lasts six or so weeks and costs a fraction of the litigation costs. Hence, most outside counsel are not equipped to rapidly assess strategic alternatives with respect to non-core IP, nor are they equipped to provide financial valuation of the IP in various monetization contexts.

F. Misconception: Our advisors will value our core and non-core IP as part of the M&A process

Financial value of a company’s IP portfolio is typically not measured or reported by public companies, due to arcane accounting and tax rules.70 Those practices have been undergoing major reform under international accounting standards, but these processes can take many years to develop and implement.71 Most public companies report only raw patent ownership counts in their public filings, and do not comment on any value of their patent portfolio.72 For example, Table 1 above listed many large patent-only transactions, some in the billions of dollars. Most of those patent owners who transacted never recorded or recognized in their company’s public financial disclosures any independent value of the patents prior to the transactions taking place—they were not “carried on the books,” so that the shareholders had no idea of the value of the patents.73 Issues of materiality should be considered as well, since the materiality of the patent value could be different in the operational perspective as compared to the transactional perspective. In the case of AOL’s $1.05 billion patent sale to Microsoft, some of the former AOL shareholders sued the company after that patent transaction closed, alleging that they were not told about AOL’s non-core patent value, and so uninformed, they sold their shares in advance of the deal announcement and missed the share value appreciation after that patent

71. McClure, supra note 36.
72. Id.
73. Id.
transaction closed.\textsuperscript{74} Even if patent value was to be measured and reported, companies’ traditional accounting and audit firms perform only the financial accounting methods to assess value, without regard for how that value is impacted by actual patent infringement or validity, both of which analyses require technical experts and attorneys. In fact, validity and infringement are critical assumptions that, when assumed away, likely render the financial analysis meaningless, especially for the purposes of assessing actual strategic alternatives or accurate market value estimates of the non-core IP portfolio.\textsuperscript{75} A few of the leading accounting and financial advisors do have in-house IP practices, but most of their efforts focus on tax considerations related to IP, and these departments are staffed primarily with accountants and financial valuation experts, not technical experts or IP attorneys. Hence, traditional accountants and financial advisors are typically not equipped to assess technical or legal issues related to validity and infringement on which their analysis critically relies, and cannot provide any substantive guidance on market value of non-core IP, either in a going concern or an M&A context.\textsuperscript{76}

\textit{G. Misconception: Our investment bankers will consider strategic IP alternatives}

Most investment bankers are not equipped to perform IP financial valuation, or to investigate strategic alternatives with respect to IP.\textsuperscript{77} They typically do not seek outside expert IP advice in connection with most technology M&A transactions, unless specifically alerted by the company of the significant value of non-core IP.\textsuperscript{78} Very few investment bankers have specific experience with IP, and if they do, their teams rarely include the combination of technical experts, IP attorneys, and IP valuation experts required for a proper industry-standard analysis. There are relatively few IP-only deals in general, which means that most bankers have not been able to build the ample experience required to assess IP strategic alternatives. Their traditional strengths in relationships and understanding market dynamics are critical for M&A transactions, but cannot be

\textsuperscript{74} \textit{In re AOL Repurchase Offer Litig.}, 966 F. Supp. 2d 307, 309–10 (S.D.N.Y. 2013).
\textsuperscript{77} Berman, supra note 9.
\textsuperscript{78} Id.
leveraged well with respect to IP. Thus, directors cannot rely solely on most investment bankers to advise on IP strategic alternatives.

**H. Misconception: Monetizing our patents will make us a “patent troll” and selling them will risk counter-litigation**

While many companies have valuable non-core IP, a very small subset of them have mastered the IP business in parallel with their traditional operating products/services business they primarily focus on. Those few who have successful in-house IP licensing programs generate high-margin revenues that increase shareholder value, while maintaining a long-term balance between their various business and IP activities, often deriving revenues from the same customers for both product/service and IP income streams. The chart below shows a sample of publicly available annual revenues (or estimates) of a cross-section of such companies. Many are missing from this chart since their IP revenues are not publicly reported (such as GE, Sony, Philips, Skyworks, etc.), but are well known in the industry for their successful IP revenue generation in parallel with their ongoing product/service businesses.

Industry best practices have emerged based on the experience of these successful IP monetizers. They include (a) monetizing a critical mass of only very high quality patents covering important inventions; (b) offering patents for license or sale to a broad group of companies; (c) asking for commercially

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79. Ludlow, *supra* note 64, at 4 (noting that under ten companies have generated significant IP licensing revenues).

80. *Phelps & Kline, supra* note 9.
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reasonable royalties when licensing; (d) keeping together single-technology IP portfolios (as opposed to splitting them to demand separate royalties utilizing different third party monetization entities); (e) demonstrating sufficient proof of infringement; and (f) continuing to invest monetization revenues into new R&D for next generation high value inventions or products. Conversely, a few companies have learned when their IP monetization “went too far” and upset the delicate balance in their ecosystem, by deploying what some consider overly aggressive monetization tactics such as “patent privateering.”

Out of hundreds of successful licensing campaigns, based on operating companies selling patents to non-practicing entities, only one publicly reported counter-assertion litigation against the original owner resulted: Google’s suit against British Telecom (“BT”) in response to BT’s broad monetization campaign against Google. Hence, when done in line with industry best practices, IP monetization creates very few risks, and even the most assertive of licensors manage to avoid blowback litigation and reputation damage, while generating significant revenues and value for their shareholders’ prior R&D and M&A investments.

III. SOURCES OF DIRECTOR’S LIABILITY: OVERVIEW OF FIDUCIARY DUTIES IN IP-RICH M&A DEALS

A director’s core duties of care and loyalty—and the constituent duties of good faith, confidentiality and disclosure—are each highlighted and can be scrutinized by the courts in depth in the context of M&A or other material corporate events. When IP value is material relative to the company value, especially if a significant proportion of IP is non-core, the discharge of traditional director duties naturally extends to being informed about the financial value of non-core IP and considering strategic IP monetization alternatives. The following sections will walk through the traditional and recently imposed duties of directors and their advisors, with a commentary on how they apply specifically in the context of IP-rich M&A deals.

81. Tim Sparapani, *Attack of the Patent Privateers*, FORBES (Sept. 2 2015), http://www.forbes.com/sites/timsparapani/2015/09/02/attack-of-the-patent-privateers/ (describing how, in author’s view, some patent owners split up single-technology portfolios into multiple sections, and then partner with different third party monetization entities to enforce the same nucleus of inventions against an alleged infringer through multiple parallel licensing efforts, in an attempt to extract excessive royalties).


A. General Duties

The General Corporation Law of the State of Delaware ("DGCL") generally provides the framework for duties of the directors of the board of a Delaware corporation. Directors are entrusted with a responsibility to protect the interests of the corporation and its shareholders. In making their decisions, directors have the traditional duties of care and loyalty, as well as, in certain instances, a duty of full and fair disclosure to the shareholders. A critical presumption exists under Delaware law that directors make decisions in accordance with their duties, known as the "business judgment rule." The business judgment rule, or "bare rationality test," is the default standard, whereby directors are presumed to be making decisions on an informed basis, in good faith, and in honest belief that their actions are taken in the best interest of the shareholders and the company. In connection with the duty of care, this presumption is subject to a highly deferential standard of review, and is purposefully difficult to overcome by plaintiffs. It acts as a strong shield for director actions, since the Delaware courts do not want to second-guess directors’ business decisions, so long as those decisions can be attributable to some "rational corporate purpose." DGCL section 102(b)(7) allows Delaware corporations to adopt charters that exculpate directors from personal liability for breaches of duty of care. Insurance is also available to cover the directors’ liability under DGCL section 145.

B. Traditional Duty of Care to Inform Oneself in IP-rich M&A Transactions

The duty of care requires directors to reasonably inform themselves prior to making a business decision. They need to be informed of all relevant developments relating to the business, relying on their outside advisors as necessary. They are supposed to review all pertinent documentation, perform a reasonable inquiry, and then take time to deliberate, and, finally, act. Although there is no statutory codification of the duty of care in the DGCL, it is included in the Model Business Corporation Act, under sections 8.30 and 8.31, which have been adopted by many states.

86. Id.
89. Lafferty et al., supra note 83, at 843.
90. See U.S. LEGAL, STATE CORPORATION LAWS, http://corporations.uslegal.com/basics-of-corporations/state-corporation-laws (last visited Mar. 15, 2015) (stating the majority of states have adopted the Model Business Corporation Act ("MBCA") as the basis of their own state laws, though each of these states has modified the provisions of the MBCA).
Effectively Discharging Fiduciary Duties in IP-Rich M&A Transactions

There is a long history of cases defining and refining directors’ duty of care. One of the earliest relevant cases relating to the director’s duty of care in an M&A setting, the Van Gorkom decision, laid out the requirement that directors need to have “sufficient opportunity to acquire knowledge concerning the problem” and inform themselves of “all material information reasonably available to them.”

A particular requirement of the fact specific inquiry into whether the board fulfilled its duty of care concerns whether the directors consulted with competent and independent legal and financial advisors. In IP-rich M&A deals, the competence of many financial advisors in assessing IP valuation and strategic alternatives of IP monetization is uncertain, as described above. Legal advisors are typically competent in IP but are not best suited for accurate estimates of potential infringement of the entire large portfolio across a wide range of potential infringers, also as described above.

For the reasons described in the “Common Misconceptions” section above, directors typically cannot rely on their traditional advisors to provide comprehensive strategic alternatives with respect to the company’s IP, and specifically to its non-core IP. When non-core IP value is material compared to the overall company value, directors should question the company’s officers prior to an M&A transaction, and request competent IP valuation and strategic alternative advice to evaluate options for extracting value from non-core IP.

The goal of directors in IP-rich M&A deals should be to undertake sufficient actions to be able to defeat any attempt to rebut the business judgment rule presumption. One way to accomplish this is for the board to engage competent and independent IP advisors to assist the board in valuing non-core IP and evaluating strategic alternatives with respect to non-core IP.

If the board determines that there is indeed material value in non-core IP, and that the best strategic alternative is to sell the non-core IP, separate from the M&A process for the core business, then the board should consider running a separate IP auction process. This was the case in MIPS and Yahoo! Such a non-core IP auction should preferably be run in a way “to ensure the proper conduct of the auction by truly independent advisors selected to, and answerable only to, the independent directors.”


93. MIPS Proxy, supra note 8; Yahoo! Annual Report (Form 10-K) (Mar. 5, 2017) (reporting non-core patent sale through its subsidiary Excalibur IP).

Each step of the duty of care analysis, along with the specific actions taken by the board with respect to IP should be documented, as described recently by Leo Strine, Chief Justice of the Delaware Supreme Court.95

C. Patent Monetization Potential and Patent Infringement Liabilities Demand Greater Oversight to Comply with the Duty of Loyalty

The director’s duty of loyalty requires directors to act in good faith in the best interest of the company and not in the pursuit of the director’s personal interest. In IP monetization specifically, it is important to verify whether a director has an actual or perceived conflict of interest. Over the course of potentially aggressive IP assertion, this conflict could exist where a director has an interest in, or has a current or anticipated relationship with a company that may be the target of an assertion, such as being on the infringer’s board of directors or its significant shareholder. This inquiry is separate from any financial or legal conflict of interest. If an IP-related conflict exists, any conflicted directors should recuse themselves.96

Separately, patent monetization is viewed quite negatively by some large companies, particularly some larger technology companies in Silicon Valley, who consider any patent monetization to be “patent trolling.”97 Some companies claim that there is a patent troll crisis and accuse any other company seeking to enforce any of its patents of behaving like a patent troll.98 Similarly, some view selling patents to a licensing company as “feeding the patent trolls.”99 This anti-patent context may influence some directors to shy away from seriously considering options that generate short-term financial returns from either licensing the company’s patents assertively, or from selling them to a licensing company, for fear of being labeled a patent troll. While legally a weak issue which could be extremely hard to prove or litigate, such director behavior can be subject to subsequent questioning, as avoiding those patent monetization options would hypothetically afford benefits to directors themselves (such as future employment as directors), ahead of the benefits of the director’s corporation.100

On the flip side of patent monetization, where the director’s company may be the infringer, prior studies have highlighted that a board has a duty to monitor the corporation’s own risk-taking by willful or inadvertent infringement of third party patents. Specifically, the duty of oversight detailed in In re Caremark, which requires scienter, was further examined in Stone v. Ritter in the context of whether oversight is required by the duty of care or the duty of loyalty. This duty can be an important point of interest in an M&A transaction, where financial and other liabilities must be disclosed to the buyer. If a company has taken excessive patent risks and incurred patent infringement liabilities for which it has not had proper board oversight—and as a result there is a delay in deal closing or decrease in the acquisition price—there may be a risk of director liability.

An example of this scenario played out recently in the Foxconn acquisition of Sharp, wherein last-minute disclosures by Sharp identified extensive financial liabilities, including those attributable to previously undisclosed patent infringement liabilities. Similarly, undisclosed patent liability resulting in a $750 million settlement for infringing Carnegie Mellon University patents came shortly before the ousting of the directors and CEO of Marvell Semiconductor.

D. Materiality Considerations Required to Trigger Duties of Care and Loyalty

The critical question to ask with respect to IP is one of materiality—is the value of the company’s IP portfolio, especially its non-core IP portfolio, financially material relative to the overall value of the company? If it is, then the inquiry above, regarding duties of care and loyalty should be undertaken. Of course, before the question of whether IP is material can be answered, it is necessary for a corporation to undertake a formal analysis first of what is its core versus non-core IP, and then to perform a financial valuation of the non-core IP. Determining financial value of non-core IP is a complex endeavor that is highly context dependent, as will be discussed more below.

Both the U.S. Supreme Court and the Delaware courts have found that before any liability can be found, materiality must be determined. In TSC Industries v.

101. See McClure, supra note 3 at 228.
102. Id. at 232.
103. Id. at 238.
104. JC Torres, Foxconn Sharp Deal in Danger Due to Financial Liabilities, SLASH GEAR (Feb. 29, 2016), http://www.slashgear.com/foxconn-sharp-deal-in-danger-due-to-financial-liabilities-29429388 ("It seemed that things were going both companies’ way until Sharp reportedly disclosed to Foxconn at the 11th hour the total amount of possible liabilities it had, around 350 billion yen or $3.1 billion. Those would come from possible tax claims, intellectual property lawsuits, and damages from patent infringement lawsuits.").
Northway, the Supreme Court confirmed that the question of materiality “is an objective one, involving the significance of an omitted or misrepresented fact to a reasonable investor.”\textsuperscript{106} The Court held that a “fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.”\textsuperscript{107} The Court further held a fact is material if “disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the ‘total mix’ of information made available.”\textsuperscript{108} The Court was also concerned about setting the materiality threshold too low, as to avoid having shareholders buried in an “avalanche of trivial information.”\textsuperscript{109}

Building on the Court’s decision, the U.S. Securities and Exchange Commission, in its Staff Bulletin from 1999, rejected the notion of exclusive reliance on “[a] rule of thumb . . . [that] suggests that a misstatement or omission of an item that falls under a five percent threshold is not material in the absence of particularly egregious circumstances.”\textsuperscript{110} Instead, the SEC bulletin requires the assessment of materiality to consider TSC’s “total mix” of information.\textsuperscript{111}

Another context to consider is periodic public disclosure requirements, such as annual 10-K filings or 8-K filings for material updates. In Matrixx v. Siracusano, the Supreme Court clarified that there is no “bright-line” test requiring “statistical significance” and that undisclosed information—statistically measurable or otherwise—that would “significantly alter[] the ‘total mix’ of information made available” in the eyes of a reasonable investor could well be material.\textsuperscript{112} In Matrixx, the Court considered whether a plaintiff bringing a securities fraud claim under the Exchange Act, section 10(b)(2), and SEC Rule 10b-5 must show that a pharmaceutical company’s undisclosed adverse event reports are statistically significant.\textsuperscript{113} The Court unanimously decided that statistical significance is not required, but “[s]omething more” is.\textsuperscript{114} Because the Court did not provide any guidance on what “something more” may be, some authors have commented that the decision “may initiate unnecessary disclosures of non-material information, hindering an investor’s informed decision-making.”\textsuperscript{115}

As for IP, most companies disclose the bare minimum about their IP, such as the total number of patent assets, without including the value of, and liabilities

\textsuperscript{107} Id. at 449.
\textsuperscript{108} Id.
\textsuperscript{109} Id. at 448.
\textsuperscript{111} Id.
\textsuperscript{113} Id. at 30.
\textsuperscript{114} Id. at 44.
related to, that IP.\textsuperscript{116} As a result, there is very little to study or benchmark in the periodic public disclosure context to inform the M&A context.\textsuperscript{117}

So, how much IP is material? If the value of the non-core IP that could be independently monetized by the seller prior to the acquisition (where the buyer will not pay an incremental value) is greater than five to ten percent of the value of acquisition consideration, is that non-core IP material? In the case of MIPS, non-core IP was 350 percent of the value of the company prior to the transaction. The courts and the SEC have refused to endorse a rule of thumb, but the discussion of the “five percent” may give the directors some guidance. The materiality should be considered in view of risks to the M&A process. For example, if the value of the non-core IP is five percent of the total deal value, but the risks in achieving that incremental value far outweigh the potential benefits of IP monetization, then likely IP monetization should not be further considered. In any case, the consideration by the board of the issue of materiality of non-core IP, regardless of the ultimate decision to monetize IP or not, will likely help to ensure that the board’s decisions receive the protection of the business judgment rule, as described above. Keeping good records of any analysis that resulted in a decision to abandon IP monetization will be critical in helping defend against liability, if an issue arises later.\textsuperscript{118}

\textit{E. Revlon Duties: Directors as “Auctioneers”}

The board’s duties change when considering a transaction involving a change of control, first described in detail in \textit{Revlon v. MacAndrews}.\textsuperscript{119} The courts will examine the reasonableness of both the board’s decision-making process (including the information relied on) and the actions taken as a result. Under the enhanced scrutiny standard, the decisions need to be reasonable, not just rational, as is the test under the business judgment rule.

Under \textit{Revlon}, where the board of directors is deciding on matters involving sale of control or change of control, its fiduciary duties shift from a long-term focus on behalf of shareholders and the company to obtaining the highest value reasonably available for shareholders in the short term. When triggered, the \textit{Revlon} duty changes the board’s duty to become auctioneers to get the best price in the short term for shareholders. The duty is triggered only when the board of directors actually adopts or recognizes that a sale or breakup of the company is inevitable. The board must consider not only price, but also:

\begin{itemize}
\item [116] McClure, \textit{supra} note 36.
\item [117] Id.
\item [118] Strine, \textit{supra} note 95.
\item [119] 506 A.2d 173 (Del. 1986).
\end{itemize}
- the offer’s fairness, feasibility, likelihood of financing and risk of not closing;
- the bidder’s identity and prior background; and
- the effect of the bidder’s business plans on shareholder interests.

The actual sale process is still protected by the business judgment rule, as long as there is no self-interest, the board is well-informed, and shareholders approve in an uncoerced vote with good disclosure. The duty involves a requirement that the board be fully informed on all material information and its impact on shareholders, actively explore reasonable alternatives, and evaluate financial valuation (usually by retaining reputable, conflict-free financial advisers). Delaware law applies a materiality standard in disclosures that treats an omitted fact as “material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.” The disclosure point is important, as shareholders ought to be told about the value of the IP if it is material.

When a company owns a significant IP portfolio, and the value of which rises to the materiality bar (as is the likely case in most technology companies), strategic alternatives regarding IP should be considered with special care during M&A and other critical corporate events. The required external professional advice on strategic alternatives, as “mandated” by Van Gorkom, ought to be, in the IP context, obtained from qualified IP specialist advisors, not merely traditional advisors who may not be competent in IP. The IP specialist advisor needs to have demonstrated a material experience in IP quality assessment, financial IP valuation, infringement analysis, evaluation of existing licensing arrangements, and the interplay of IP rights and current customer obligations. This last point is often critical: for example, many semiconductor companies with large patent estates can derive more value from some of their customers by licensing their IP to them (assertively if necessary), rather than continuing to ship products to those customers at cut-rate prices that do not account for the company’s IP rights.

If the company is up for sale, it is the board’s duty to inform itself adequately. The court in Revlon minced no words when it said that the role of the board of directors transforms from “defenders of the corporate bastion to auctioneers charged with getting the best price for the stockholders at a sale of the company,” meaning that the directors’ duty shifts from considering long-term value (i.e., acquiescing to an otherwise infringing client to maintain good will in the market)

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to the duty to “get the best short-term price for stockholders.” This is a dramatic change, within which the value of IP rights, degree of risk taking, and assertiveness in monetization should all be considered. Under *Revlon*, the directors now have the burden of proving that they were adequately informed and acted reasonably.\(^\text{122}\) This advice typically cannot be obtained from traditional advisors without expertise in financial valuation of the IP or in considering strategic alternatives with respect to IP.

What matters most is the effort and discretion that the directors place on the exploration of strategic alternatives, not so much the substance of the specific decision, as described in *Lyondell*:

> *Revlon* duties do not arise simply because a company is “in play.” The duty to seek the best available price applies only when a company embarks on a transaction—on its own initiative or in response to an unsolicited offer—that will result in a change of control. [The Acquirer’s] Schedule 13D did put the Lyondell directors, and the market in general, on notice that [the Acquirer] was interested in acquiring Lyondell. The directors responded by promptly holding a special meeting to consider whether Lyondell should take any action. The directors decided that they would neither put the company up for sale nor institute defensive measures to fend off a possible hostile offer. Instead, they decided to take a “wait and see” approach. *That decision was an entirely appropriate exercise of the directors’ business judgment.*\(^\text{123}\)

Again, it is not the ultimate decision, but typically the lack of attention paid to an important element or an important alternative that creates liability. If the board considers IP strategic alternatives, and ultimately decides not to do anything with its IP, the business judgment rule will likely provide cover from liability.

One example of this is the series of MIPS Technologies IP and M&A transactions that closed simultaneously in February of 2013, where that semiconductor company’s lukewarm $125 million enterprise value was dramatically increased to $475 million in a matter of months. This added value was created from the execution of three separate deals related to the monetization of its non-core IP: \(^\text{124}\)

1. Signing a broad non-exclusive IP license with its biggest customer, Broadcom, for $25 million (thus setting a comparable price for MIPS’ IP to other licensees);
2. Selling the company’s approximately 400 non-core patents for $350 million to a consortium of eleven other technology companies; and

\(^\text{122}\) Paramount Commc’ns, Inc. v. QVC Network Inc., 637 A.2d 34, 45 (Del. 1994).
\(^\text{124}\) MIPS Proxy, *supra* note 8.
3. Concurrently selling the remaining semiconductor core business to Imagination for $100 million, which kept about 100 of MIPS’ core patents.

Had MIPS’s directors considered only the long-term value to shareholders, rather than getting the best available short-term price, they probably would not have marketed the patents as aggressively as they did, for fear of alienating customers and competitors by making IP demands. Had they avoided the separate patent sale, and included the non-core patent in the company sale for $100 million, they would have “undersold” the value of the company and its patents, thus potentially creating a liability with respect to their duty to the shareholders.

F. In re Trados Guidelines Relating to Potential Unfairness of the Process

As already described in this article, the post-trial opinion of In re Trados should also be carefully considered in the context of IP-rich M&A. In Trados, a desktop and enterprise translation software company brought on a number of rounds of venture capital (“VC”) funding as it struggled to grow. The resulting board consisted of members of those VC’s. Specifically, three directors were principals of the VC firms that nominated them, two directors were members of Trados management, one was nominated by a VC firm as an “outside” director—it was not a principal of the VC firm—but had business relationships with the VC firm, and one was nominated by a VC firm as an “outside” director and was not affiliated with the VC firm. After the company was acquired for $60 million by SDL, a five percent shareholder brought suit alleging the price and sale process were not fair.

The court determined that the board was conflicted, and therefore the entire fairness standard applied. Reviewing both the process and the price, the court determined that the entire fairness standard was met because, taken as a whole, the ultimate price was fair. However, the court went out of its way to note that the sale process was not fair because, among other things, the bankers hired by the conflicted board pursued a result that was favorable to the preferred shareholders, but did not consider value to the common shareholders to whom a fiduciary duty is owed. In highlighting the shortcomings of the process, the court stated “[t]here was never any effort to explore prices above $60 million or to consider whether alternatives to the Merger might generate value for the common.” Further, the court emphasized that the board did not form a special

126. Id.
127. Id. at 52–77.
128. Id. at 60 (emphasis added).
committee to independently assess alternatives, and the bankers did not provide a fairness opinion from the perspective of the common shareholders.\footnote{Id. at 65.} Potential takeaways from \textit{Trados} in the IP context include:

- The court noted that an independent special committee could be important when boards or its advisors face conflicts—here the potential IP-related conflicts as discussed above. The decision to aggressively monetize IP, or to sell IP to a licensing entity, to generate revenues could be challenging for some directors or advisors in view of their other relationships, then personal stockholdings, or their concerns for future employment. The court recognized the web of Silicon Valley relationships in the VC-backed start-up community as potentially giving rise to a conflict, even if no direct financial conflict could be shown;\footnote{Id. at 62.} and

- A board’s fiduciary duty is owed to its common shareholders, and alternatives must be considered that would maximize value to the common shareholders, and not just a liquidity event that primarily benefits preferred shareholders. If a simple, low risk sale of a company and all its IP will generate sufficient returns only for one class of shareholders, while a more complex and riskier process involving a separate IP sale process can generate value for all classes of shareholders, then the directors should at least consider the riskier strategic alternative, in fairness to all shareholders. The directors may ultimately decide that the less risky, lower value process which does not monetize IP is the best course of action, but only after they properly considered reasonable strategic alternatives and a fair process.

**CONCLUSION**

Faithfully discharging complex fiduciary duties of directors in corporations undergoing IP-rich M&A deals is possible within the M&A timeline, provided that companies undertake reasonable incremental efforts that utilize competent and independent advisors available in the marketplace today.

The ideal scenario is that the directors regularly evaluate IP opportunities and risks on a going concern basis, like regularly reviewing other aspects of the business (financial reporting, regulatory compliance, tax, corporate social responsibility, and cybersecurity risks, to name a few). The IP landscape changes rapidly, and may warrant an annual formal review of value and strategic options with respect to IP, performed by competent and independent IP advisors. In this
scenario, when an M&A event or another critical corporate event occurs, the
directors have the initial work of IP analysis “on the shelf” and ready to deploy
alongside their other analyses to assess the entire value creation framework in
the M&A context.

A more likely scenario is that IP comes into focus just prior to, or even during
an ongoing M&A process. In this scenario, also supported by competent and
independent IP advisors, the directors can follow a set of steps outlined below to
assure that they are properly considering alternatives with respect to IP.

The first question the directors should ask is, “How much non-core IP does
the company have, and what is its financial value in various contexts?” If the
answer to that question is that there is a significant amount of IP that may have
material financial value, then the second question is, “What are all the strategic
alternatives available to realize the value of non-core IP, in view of the risks of
each option?”

The answer to the second question should contain an unconstrained analysis
of multiple options, with at least some of the options considering a hypothetical
highly assertive monetization strategy pointed at key customers, suppliers, and
partners, if those parties have significant infringement exposure to a company’s
IP. The analysis should include an estimated financial valuation for each
monetization scenario, and lay out the risks associated with each option, so the
directors can weigh the alternatives in full, like they do with other material
decisions.

The strategic alternatives analysis should also include a “sum-of-the-parts”
analysis and consider, at least hypothetically, scenarios such as breaking up the
company into an operating entity and an IP entity, creation of a special purpose
vehicle (“SPV”) for monetization, sale of non-core IP to a licensing entity or a
financial sponsor, and other reasonable options. Some additional examples of
monetization strategies are shown in Appendix 1 below.

Finally, the directors should ask, once the best strategy is chosen based on
the initial estimates, “What actual valuation is reasonably achievable in the
market for non-core IP for the chosen scenario?” Financial valuation of an IP
portfolio in a specific context is a highly fact-specific inquiry. Several industry
standards have developed for IP valuation, and after considering the issues of
validity and infringement, a formal financial valuation of the chosen
monetization option should be undertaken. Some examples of types of valuation
analysis and critical questions considered are outlined in Appendix 2 below.

For prior industry deals where separate IP analyses were completed, such as
with Kodak, MIPS, AOL, and Yahoo!,\textsuperscript{131} it shows that the entire scope of inquiry
can be completed within the time frame of the core M&A process, and at a cost

\textsuperscript{131} See Table 1, supra (note that Kodak was in a bankruptcy process, with a separate IP auction);
MIPS Proxy, supra note 8; and Yahoo! Annual Report (Form 10-K) (Mar. 3, 2017).
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similar to the cost of a traditional financial advisory work including a fairness opinion, all done in parallel with other typical M&A due diligence, transaction, and financing processes. If the directors determine that some form of IP transaction can reasonably generate incremental value to the M&A process, a separate non-core IP auction should be held by a competent and independent IP advisor, coordinated with the core M&A process. The directors, armed with IP strategic alternatives considering non-core IP value and risks, after making well-documented reasonable decisions, will now not only have discharged their duty to generate value for shareholders in the context of IP-rich M&A transactions, but they will have also insulated themselves from unnecessary liability, whether or not a separate IP auction was held, and if so, whether such an auction generated any value.
Appendix 1: Sample Patent Monetization Strategic Alternatives

- **Traditional (Single Buyer)**
  - **Description:** Sell IP Rights to single buyer in open market
  - **Process:** Identify un-utilized patent and technology assets during analytical review
  - **Outcome:** Receive cash up-front/revenue stream

- **Traditional (Consortium)**
  - **Description:** Sell IP Rights to consortium in open market
  - **Process:** Identify un-utilized patent and technology assets during analytical review
  - **Outcome:** Receive cash up-front/revenue stream (higher value than Single Buyer)

- **Triangle Leverage**
  - **Description:** Sell IP Rights to competitor’s competitors
  - **Process:** Identify IP Rights and target company’s ecosystem
  - **Outcome:** Receive cash up-front/revenue stream, plus enable strategic IP leverage to third parties

- **Third Party Risk Reduction**
  - **Description:**Sell IP Rights to friendly OpCos to defend against OpCos with assertive licensing programs
  - **Process:** Identify IP Rights and target companies with potential legal risk
  - **Outcome:** Receive cash up-front/revenue stream

- **Pool Member**
  - **Description:** Participate in patent pools
  - **Process:** Identify IP Rights which teach certain technical standards, identify other potential licensors with limited market presence, partner
  - **Outcome:** Receive revenue stream, Outsource licensing efforts and reduce risk
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- **Integrator Indemnification**
  
  **Description:** Sell IP Rights to integrator OpCos to help obtain indemnification from chip makers
  
  **Process:** Identify high value patent assets during analytical review, identify group of integrator OpCos and their indemnification challenges
  
  **Outcome:** Receive cash up-front/revenue stream, leverage IP

- **Two-Tier Sales**
  
  **Description:** Sell IP Rights to “friends and family” first
  
  **Process:** Identify un-utilized patent and technology assets during analytical review
  
  **Outcome:** Receive cash up-front/revenue stream

- **Combo**
  
  **Description:** Sell IP Rights to a combination of an OpCo+NPE
  
  **Process:** Identify un-utilized patent and technology assets, identify key named buyer, pair up buyer with an NPE for remaining unlicensed rights
  
  **Outcome:** Receive cash up-front/revenue stream (higher value than Single Buyer)

- **Exclusive Licensing Window**
  
  **Description:** License IP Rights exclusively outside current field-of-use
  
  **Process:** Identify valuable IP Rights and target non-competitive market
  
  **Outcome:** Receive cash up-front/revenue stream, IP+Tech

- **Strategic Buyer**
  
  **Description:** Spin-out un-integrated acquisition, IP+Tech
  
  **Process:** Identify patent and technology assets in non-core business area
  
  **Outcome:** Receive cash up-front/revenue stream
Appendix 2: IP Valuation Considerations

The valuation of a typical large patent portfolio can be viewed through three definitions of value:

1. The intrinsic value estimates the licensing and litigation value that MAY be achieved and will be appraised based upon the following value definition:
   - **Intrinsic Value**—“The valuation implied for a target by a discounted cash flow analysis. . .premised on the principle that the value of a company, division, business, or collection of assets can be derived from the present value of its projected free cash flow.”

2. Assuming an outright sale of the Patent Portfolio absent of the underlying business, Fair Market Value is defined as follows:
   - **Fair Market Value**—"The price at which the intellectual property would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell, both parties having reasonable knowledge of relevant facts."

3. Assuming a sale of the Patent Portfolio through a merger of businesses, the assets have been valued under the following definition:
   - **Fair Value**—"The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date."

There are three basic approaches for patent valuation:

1. **Income Approach**—Based on the present value of future economic benefits; utilizing a relief from royalty methodology and/or licensing income revenue methodology.
   - **Licensing Method**—Considers the development of a licensing program on either an exclusive or non-exclusive basis.
   - **Business M&A Method**—Considers the value of the IP and patents as part of a larger business transaction.

2. **Market Approach**—Based on recent sales of similar assets or businesses that aids in reconciling value relative to the Income Approach.

3. **Cost Approach**—Based on the economic principle of substitution: no prudent investor will purchase an existing asset for more than it will cost to create a comparable asset.

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133. FASB Accounting Standards Codification Topic 820, Fair Value Measurement (FASB 2015).
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Additional key factors to consider:

- **Royalty Base**—Historical and forecast revenue of products and services the Patent Portfolio could generate if the owner was able to license and/or litigate to the identified third parties.

- **Potential Infringer Identification**—Through technical due diligence, identify potential infringers that have forecast financial data. Review annual reports and technical product manuals to aid in determining evidence of use (“EoU”) and associated product revenues that is supported by the Patent Portfolio.

- **Market Penetration**—Probability of potential licensors entering into an agreement based on considerations of technical, legal, and attitude towards licensing.

- **Average Royalty Rate**—Determined from similar licensing agreements and “rule of thumb” guidelines. Selected royalty rates range from 0.5% to 2.0% depending on the end market.

- **Sources of Royalty Rates**—Houlihan Lokey qualitative assessment based on licensing expertise in prior deals, litigation and market data comprising:
  - Royalty rate databases, for deals publicly available;
  - Patent transactions and estimated effective royalty rates;
  - Patent litigation and estimated effective royalty rates; and
  - Court-adopted methodology for deriving royalty rates.

- **Custom Royalty Rate**—Individual company royalty rates adjusted +/- based on the following factors, qualitatively:
  - ASP of product and profitability of target’s product segment;
  - Customer/vendor relationship with Company;
  - Strength of target portfolio and risk to Company;
  - Target’s sophistication in IP markets and licensing; and
  - Impact of existing license agreements with Company (if partially licensed).

- **Royalty Rate Comparisons**—Important court-adopted framework is the set of fifteen “Georgia-Pacific Factors” for assessing impact of comparable license agreements. Some factors are:
  - Royalties received by owner for licensing the patent to other parties;
  - Rates paid by the licensee for the use of other similar patents;
  - Nature and scope of the license, whether it is exclusive or nonexclusive, etc.;
  - Commercial relationship between owner and licensees, such as whether they are competitors in the same territory in the same line of business or whether they are inventor and promoter;
  - Established profitability of the patented product, its commercial success and its current popularity;
  - Extent to which the infringer used the invention and any evidence probative of the value of that use; and
• Amount that patent owner and a licensee would have agreed upon at the time the infringement began if they had reasonably and voluntarily tried to reach an agreement.

• Expenses—Estimated costs of enforcement, including outside consultants, litigation and enforcement expenses and operating expenses.

• Tax Effect—Applied estimate of effective tax rates of potential infringers.

• Time Span—Based on the estimated remaining live of the Patent Portfolio.

• Discount Rate—Selection of a discount rate to determine the present value of potential future cash flows to similar industry participants and/or to a non-practicing entity (“NPE”) or corporation.

• Average estimated cost of licensing: i.e., 20% of royalty income. Licensing expenses have evolved with the changes in the patent market. Prior to 2012, patent pricing was high (e.g., Nortel & AOL transactions) and the cost to license was low with patent licensing margins routinely above 90%. The market, however, has changed and the underlying costs of licensing have risen for patent assertion. To that end, the following should also be considered to assist with determining patent licensing costs:
  • Personnel costs associated with infringement analyses;
  • Licensing costs of operating companies with similar licensing programs;
  • Shift and increase in litigation due to lower acceptance of contingency support from service providers for litigation;
  • Industry rules of thumb; and
  • The statistical operating margins of operating companies with significant licensing businesses is displayed in two tables below, obtained from Capital IQ:

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<tr>
<th>Operating Margins</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tr>
<td>Minimum</td>
<td>4.6%</td>
<td>30.8%</td>
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<tr>
<td>Median</td>
<td>60.9%</td>
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<td>59.3%</td>
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<tr>
<td>Average</td>
<td>51.3%</td>
<td>58.9%</td>
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<tr>
<td>Maximum</td>
<td>88.3%</td>
<td>87.2%</td>
<td>87.1%</td>
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<table>
<thead>
<tr>
<th>Company</th>
<th>Key data</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
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<tr>
<td>Texas Instruments</td>
<td>Licensing Revenue</td>
<td>$3,570.0</td>
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<td>Lic. Rev/Final Revenue</td>
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<td>N/A</td>
<td>N/A</td>
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<td></td>
<td>Operating licensing margin</td>
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