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Heather Hamel

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VALUING THE INTANGIBLE: MISSION IMPOSSIBLE?
AN ANALYSIS OF THE INTELLECTUAL PROPERTY VALUATION PROCESS

HEATHER HAMEL†

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† Heather Hamel is a Juris Doctor Candidate at William Mitchell College of Law, expected to graduate in 2014. The author would like to thank Dale Bjorkman, partner at Kagan Binder PLLC and adjunct professor at William Mitchell College of Law, for his extensive and constructive insight on this topic. The author would also like to thank Kent Akervik, Chief Financial Officer at Polaroid, for his thoughtful advice and suggestions. Finally, the author would like to thank Collen Sarenpa, Trademark Manager at Polaroid, for her invaluable guidance on trademark law.
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I. INTRODUCTION

In an era where intellectual property (IP) transactions account for a significant amount of activity in both the U.S. economy and economies worldwide, it is with little fanfare or surprise that most transactions lie at the mercy of the value of the IP to which the valuation pertains. In 2012, for example, Microsoft spent $1 billion to acquire 925 patents from AOL within a week of selling a separate bundle of patents to Facebook for $550 million. Another shining example is Ford’s purchase of the Jaguar brand for $2.5 billion in 1989 and the Land Rover brand for $2.7 billion in 2000. As these examples demonstrate, time and time again, the underlying impetus behind acquiring IP assets is the enhanced economic value added to a portfolio.

Recent statistics like these have magnified the need to accurately and precisely value IP and have also unearthed an interesting phenomenon. As individual determinative metrics used in IP valuation become readily apparent, such factors remain tools of imperfect recourse in the uncertain journey of solving the ultimate valuation equation. An additional challenge arises when such metrics seemingly fail to consider and account for potentially significant characteristics of our economy. One argument is that

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4 Id.
the chief and insurmountable challenge in considering such characteristics of our economy is the difficulty of adjusting valuation factors to reflect an ever-changing and unpredictable economy.

This comment proceeds in two parts. Part I analyzes current IP valuation metrics specific to patents, trademarks, and trade secrets. Throughout Part I, the author provides the reader with several valuation scenarios to facilitate thought around the aforementioned metrics. Part II seeks to justify why the valuation process underscores key market patterns in today’s economy, examining whether there should be more regulation of valuation techniques.

II. VALUATION FACTORS

The recent proliferation of IP transactions in the United States includes virtually all forms of transactions, ranging from joint ventures and mergers and acquisitions to venture capital agreements and security agreements for bank loans. Regardless of the chorus of the transaction, concepts considered in the valuation process remain seemingly specific to the nature of IP. This section will examine the various components in valuation techniques that are specific to each category of IP, as well as discuss why some approaches do not seem to reflect the entire gamut of considerations necessary in such an analysis.

A. Patent Valuation Factors

A variety of considerations are utilized in determining the economic value of a patent. These factors can be broken down into those that are certain—i.e., easily ascertainable from the patent’s “profile” itself, such as the years of enforceability left in the patent.

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5 See infra Part II.
6 Id.
7 See infra Part IV.
Other components are more subjective and carry more uncertainty, such as the economic impact or market value of the patent.

1. Patent Life

One easily ascertainable characteristic in the patent valuation process is the “life” of a patent that remains. This is often a crucial factor in the valuation analysis. A patent’s value may peak around ten to thirteen years from its filing date because this is when a patent has passed its highest likelihood of litigation, yet is still enforceable for enough years to be considered valuable. 8 To support this position, commentators have suggested that patents which were recently issued are less likely to have been litigated and therefore could still be proven invalid. It is this chance of invalidity that ultimately produces young, non-litigated patents that are of less economic value than older, litigated patents. 9 As such, litigated patents, if found valid and infringed, arguably hold the most value because they effectively prevented actual competition and often lead to settlement licenses or damage awards.

2. Patent Inventorship

Another easily ascertainable factor in the patent valuation process is patent ownership. One argument is that the greater the number of inventors listed on a patent, the higher the quality of the patent because more intelligence and time was dedicated to the patent. 10 While this analysis may seem logical, such considerations seem to undermine and overlook patents that could be of extremely

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9 Id.

10 Id. (“A higher number of inventors listed on a patent indicates that the patent is of higher quality than a patent that has a lower number of patent inventors listed. The reason is that more intelligent scientists or engineers believed in – and dedicated their time to championing – the technology behind the patent.”).
high worth or quality but name only one inventor. For example, while ten scientists could spend years developing and testing an idea that eventually becomes an issued patent, a single scientist in a garage-like setting could also unexpectedly stumble upon a groundbreaking solution and the “number of inventors” consideration thus becomes moot.

3. Net Present Value

For patents examined in license negotiations, one of the most standard processes in patent valuation is the determination of the net present value of royalties to be earned. A well-known example of patent valuation through the anticipated net royalty revenue facet is the twenty-five percent rule. This rule suggests that the licensee pay a royalty rate equivalent to twenty-five percent of its expected profits for the patent or the product that incorporates the patent. Although the implications of this rule have been criticized and examined by many, the rule has been historically used as a bedrock technique in patent license valuation.

4. Overhead Expenses

Patent valuations using potential licensing revenue models must account for operating and overhead expenses in addition to revenue. For example, in a competitive environment requiring high support costs, a patent could be considered less valuable than in an environment where profits run high and support costs are few. An example of a high support-cost environment could
include the medical device industry where FDA compliance and regulatory changes cause patent side-costs to increase.

“Omission of any of these [overhead] expenses overstates the amount of economic benefits that can be allocated to the IP. In a comparison of two items of IP, the property that generates sales, captures market share, and grows, while using less selling and/or support efforts, is more valuable than the one that requires extensive advertising, sales personnel, and administrative support.”

As can be seen, a valuation process that bases licensing royalty revenue solely on gross profits is unrealistic because of the numerous overhead and operating costs. A precise valuation method should take such factors into consideration. But this seems easier said than done. In order to account for operating costs of an entity, the entity would need to know how many resources are allocated to that specific piece of IP, where those resources are specifically allocated, and what the net cost is of those resources. Accounting for these considerations in a precise manner is often complicated, time consuming, and indefinite, calling into question the value of this technique.

5. Quality and Length of Patent Specification

Another position is that the quality and length of both patent specifications and claims serve as indicators of patent value. One theory to support this idea is that specifications that contain embodiments disclosing future inventions or derivatives thereof

15 See id. (citing GORDON V. SMITH & RUSSELL L. PARR, VALUATION OF IP AND INTANGIBLE ASSETS 362 (2d ed. 1994)).
possess more value than those that do not include future or alternative embodiments because the disclosures become possible prior art relative to future applications. Additionally, it is possible that the mere number of words in a specification and the number of figures increase the value of a patent for the same reasons.\(^{17}\) Other indicators that strongly correlate to increased patent value include: a larger number of independent and dependent claims, a smaller number of words per independent claim, and a smaller number of different words per independent claim.\(^{18}\)

Although these factors are frequently considered in a valuation process, it is again not difficult to see why they can be misleading in a valuation process. Just because a specification has a greater number of pages does not necessarily mean that the patent is of high quality. This might be a “quick and easy” way to analyze valuation considerations for a large number of patents in a single portfolio, but it is extremely critical that the content of the specification be analyzed.

In addition, the number of claims, the number of words per claim, and the number of independent and dependent claims could easily be misleading in the valuation process. Although these considerations might be beneficial in that there is a greater scope of protection embodied in the patent, more words, theoretically, create more grounds for invalidation during an adverse proceeding. The converse is that the more elements in a claim, the narrower the scope of the patent. In theory, the narrower in scope a patent is, the lesser likelihood of invalidity, but the lesser likelihood of infringement as well because of the ease of design-around. As can be seen, the scope of protection in a patent can weigh heavily in valuation considerations.

\(^{17}\) *Id.*

\(^{18}\) *Id.* (“In sample after sample, we find that higher patent maintenance rates are significantly correlated to the following: a larger number of independent and dependent claims; a smaller number of words per independent claim; a smaller number of different words per independent claim.”).
6. Ability to Trigger Sales

Aside from licensing revenue and quality of patent claims and drawings, the ability of a patent to trigger different kinds of sales is also relevant to patent valuation.\(^{19}\) Patents that influence consumers to buy a product, or a newer version of an existing product, are seen as more valuable because of their ability to trigger end product sales.\(^{20}\) Examples of these patents might include technology that causes consumers to buy the newest version of a cell phone or a computer.\(^{21}\) Patents are also more valuable when the main driving force behind the purchase of a product is the patented feature.\(^{22}\) Examples of these types of patents include those covering the active ingredients in pharmaceuticals and the adhesives used Post-it Notes.\(^{23}\) The ability of a patent to generate an add-on sale also increases its value.\(^{24}\) For example, once a certain technology is acquired, that technology might drive more consumer traffic to an online retail store for the

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\(^{19}\) See Wanetick, supra note 8.

\(^{20}\) Id. (“For instance, some ten years ago Intel and Microsoft were able to spark sales of personal computers when they introduced new semiconductors and software. Consumers willingly retired perfectly good PCs as they raced to embrace PCs with the greatest processing power and snazziest software.”).

\(^{21}\) Id. (“Similarly, patents that increase the utility for existing or new users are generally very valuable. Examples of this can be found in the patents behind the features on cell phones. Finally, patents are valued dearly when the patented feature is a primary factor in the demand for the product. This is to say that the patent is the product.”).

\(^{22}\) Id. (“Finally, patents are valued dearly when the patented feature is a primary factor in the demand for the product. This is to say that the patent is the product.”).

\(^{23}\) Id.

\(^{24}\) See Wanetick, supra note 8.
company, inherently increasing overall sales.\textsuperscript{25} An example of this is Amazon’s One-Click patent.\textsuperscript{26}

A last example of a sale trigger worth considering in a patent valuation includes the ability of that patent to generate sales in a new market.\textsuperscript{27} Typically, a patent licensor will seek a lower royalty rate from a licensee when entering that technology into new markets (i.e., markets in which the licensor does not participate) as compared to existing markets.\textsuperscript{28}

While the ability of a patent to trigger a sale seems absolutely relevant to the value of the patent, these actual values are extremely unpredictable and difficult to ascertain. Numerous considerations need to be accounted for and known, such as what price the technology would eventually sell for, what the upgrade (if any) is worth, socio-economic concerns, potential competitors on the horizon, and more.

7. Stage of Development

The stage of development of the patent is yet another key factor to consider in a patent valuation process.\textsuperscript{29} Generally, patents that have not entered the market or are in the prototype stage are considered much less valuable than those patents that have been fully commercialized.\textsuperscript{30} This blanket statement seems logical, but is subject to important exceptions. As discussed, overhead costs become increasingly relevant when patents are

\textsuperscript{25} Id.
\textsuperscript{27} See Wanetick, supra note 8.
\textsuperscript{28} Id. ("[T]he total royalties generated by a licensee pioneering a new market are likely to be substantial. Secondly, licensees penetrating new markets do not pose the profit denigration issues for licensors that competing licensees represent.").
\textsuperscript{29} Id.
\textsuperscript{30} Id.
commercialized, so patents that have not entered the market could end up costing the buyer more resources to actually utilize and exploit.

However, a patent that has been fully commercialized into a product may be less valuable than a patent that has yet to be commercialized. Tomorrow’s hot new technology is uncertain. A commercialized patent, while making revenue, may only achieve a nominal return on investment and have little potential to add to tomorrow’s product. Whereas, a patent yet to be released to the market may have a great deal of potential.

8. Future Considerations

In valuing a patent, some have even gone as far as to suggest that considering the specific law firm or patent examiner tasked with filing the patent application can affect the value.31 As can be seen, there are a variety of factors considered in the patent valuation process, some more readily ascertainable than others. Such determinations again pose the recurring problem of translation into some sort of combinable economic value to assign to a portfolio. It is for this reason that the valuation process can seem somewhat inaccurate and easily manipulated.

9. Author’s Examples

Before further explaining factors used in other types of IP valuation, two examples and a following discussion are provided to exemplify the truly inherent difficulty of patent valuation.

31 See Wanetick, supra note 8 (“Services such a [sic] PatentCafe rate and rank law firms on their history of writing patents that successfully sustain invalidity challenge. Patents drafted by law firms that score highly on such rosters are generally of higher quality than patents that score poorly on such surveys. Patents that are granted by patent examiners with longer tenures and more impressive records of granting patents that successfully sustain invalidity challenge are statistically more valuable than patents without such lineage.”).
First, consider a case in which an independent engineer develops a technology that becomes a highly sought-after component of nearly every smart phone in the market. In this example, the technology that is soon patented (patent “A”) is of extremely high value because of its ability to trigger sales and induce consumers to buy the newest version of a smart phone. Patent A also has a high net present value of royalties when the technology is used under license. Without surprise, the inventor is able to license the technology to smart phone manufacturers at a nearly unprecedented royalty rate, thus making patent A extremely valuable.

These two metrics alone render patent A extremely valuable, setting aside the analysis of any other valuation metrics that, when considered alone, might render patent A less valuable. For example, in a vacuum analysis of the inventorship metric, patent A would be of comparatively lower value to other patents that name many more inventors. Or, in a vacuum analysis of the patent life metric, the patent A would again be of comparatively low value if it has not been challenged and is only in its first or second year of enforceability. Last, in a single analysis where only the quality and length of the patent specification is examined, patent A could have a very short specification of low quality and thus be less comparative value in light of this factor alone. But these factors do not seem to matter in such a valuation of patent A solely because of its ability to trigger sales.

Consider a second case in which a chemical composition is developed in the commercial sanitation market. The chemical composition was perfected over the course of five years by seven scientists working for a Fortune 500 company, all of which are named as inventors on the issued patent (patent “B”). Patent B is now ten years old and its validity has been challenged once by a top competitor in which patent B’s company prevailed. Further, patent B is licensed to many competitors at a royalty rate that is among the highest ever recorded in patent B’s technology market. One downfall associated with the economic profit of patent B is
the overhead cost incurred by environmental regulations for the disposal of compositions using patent B. However, patent B’s specification was prepared and prosecuted by a highly renowned law firm and is of top quality in the eyes of many patent attorneys.

After examining all of the metrics as applied to patent B above, patent B seems highly valuable for a diversity of reasons. Unlike patent A, patent B can hinge its high value on a variety of factors even when those factors are considered alone. Whether the factor considered is longer patent life coupled with successful enforceability or even the high number of inventors, patent B is arguably of high value simply because of the number of valuation metrics that it satisfies. Here too, however, lurks an interesting thought: satisfying a greater number of patent valuation metrics undoubtedly makes any patent valuable, but what about when such a patent is compared to a patent that satisfies only one or two metrics, but that second patent is perceived as higher in value than the first patent?

In particular, after patent A and patent B are given a valuation price tag, patent A would most likely be more valuable in the eyes of any consumer when compared side-by-side. Perhaps this is due to the smart phone technology market that patent A sits in as compared to patent B’s commercial market. More consumers demand and are exposed to the technology in patent A, while only a small percentage of the general population demand or perhaps recognize the significance the composition in patent B. Does this example prove that the most important (and perhaps only) factor that should be considered in a valuation analysis is the ability to trigger end sales? Or does this example prove that the most important metric should be recognition of the patented technology?

Such scenarios raise intriguing questions about precisely what should be considered in a patent valuation analysis, but nonetheless give us strong insight on the inherent difficulties in the valuation process. While patent A and patent B would most likely never be compared side by side for a valuation because of their difference in
technology, the key point to be extracted is that obtaining a high valuation for any patent does not absolutely rest on any patent satisfying a number of valuation metrics or even particular valuation metrics. Instead, the formula to valuation lies in a black box that may never be opened, while variables to the formula are used in ways particular to patent in question.

B. Trademark Valuation Factors

Much like patent valuation, trademark valuation has its own set of factors unique to the nature of trademarks. While other types of IP such as patents or trade secrets are sometimes acquired to shut a competitor out even if the IP is never used, trademark law requires that owners actively use their marks to secure and maintain their rights. After all, without a brand name, consumer demand for some similar products could plummet. This can be seen in markets where many similar products are for sale but those with “stronger” brands are seen as more desirable products and therefore more valuable.32 One example of this is the popularity of the Apple products in the smartphone market, specifically the iPhone.33

1. The Value of Registration

Unlike patent rights, trademark rights are granted through both common law and statute. Common law trademark rights are rights that are not established through state, federal or other jurisdictional registration of a mark, but instead are based solely on the use of a mark.34 These common law marks can still be valuable in

situations where the marks act as a successful tool for challenging or opposing a registered mark or form the basis for filing an application to register the mark. Although it is possible to successfully prevail against another by simply asserting common law trademark rights, registering a mark arguably provides more value to any given mark because it acts as a security blanket for the owner.

Even registrations at the state level can be of unseen value to the registrant. Such state registrations can discourage another from seeking federal rights to the same mark because the state registrant might, in fact, have senior user rights throughout the mark’s “pocket” of use (i.e., the state). In which case, the federal registration would be unenforceable in that zone. While the value to a state registration, on its face, is protection in that state, the greater value is that it might deter others from seeking federal registration rights.

In addition to registrations being valuable for the stand-alone reason of deterring others, registration is necessary for recognition of rights in some foreign jurisdictions. Some countries will not recognize marks unless they are registered, regardless of the use of the mark in that country. As such, registration seems to be highly valuable, both in the United States and worldwide.

(“Federal registration is not required to establish rights in a trademark. Common law rights arise from actual use of a mark and may allow the common law user to successfully challenge a registration or application.”).

35 Frequently Asked Questions about Trademarks, USPTO, http://www.uspto.gov/faq/trademarks.jsp#_Toc275426712 (last modified Apr. 23, 2013, 10:26 AM) (“Common law rights arise from actual use of a mark and may allow the common law user to successfully challenge a registration or application.”).

36 Id.
2. The Value of Exclusivity

Another factor relevant in a trademark valuation analysis is the exclusivity of the mark. In other words, if a mark is exclusive to only one or a few classes of goods or services, it might be less valuable than a mark that is so exclusive that it could be registered under any class. For example, “Ritz” is a famous brand for both hotel chains and food. In terms of strict exclusivity, “Ritz” would be less valuable than a mark that is most likely to be registerable over any amount of classes, such as Google. Google could file registrations for apparel, electronics, or even pens and pencils, and probably succeed. Whereas, Ritz hotels would most likely have a difficult time obtaining registrations for classes they do not already use their brand on, for example if they tried to register on containers for food. As such, the determination of whether a mark is exclusive or used by others is critical in the trademark valuation process.

3. The Value of Consumer Recognition

Consumer recognition is undoubtedly critical to the valuation of a mark. Marks that are deemed “famous,” either through a registration or court proceeding, are given a greater scope of protection because of their high recognition among consumers. Such marks are given nearly absolute protection in preventing others from registering the mark even in completely unrelated classes. Arguably, these marks are the most valuable trademark rights that anyone can hold because of the ability of the owner to prevent others from using the mark in nearly any way, shape or form.

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4. Valuations on Popular Marks: Author Examples

The values that some experts have placed on well-known marks are astonishing. In 2011, Forbes ranked Google as the most valuable trademark, with an estimated worth of $44.3 billion.38 This value of the Google trademark was twenty-seven percent of Google’s overall value.39 Yet, also vital to its valuation analysis is the fact that Google is just one of many famous marks that could someday become a “generic mark.”40 In a more recent study, Apple topped the list for the most financially valuable trademark in 2013, with a brand value of an estimated $104 billion.41 Microsoft and Coca-Cola followed with brand values estimated at $56.7 billion and $54.9 billion, respectively.42

The question is raised as to how these brands are actually valued to such precise numbers. First and foremost, consumer recognition seems to play a major role as an indicator of the value of the above brands. Exclusivity also seems to play a critical role, as Google, Microsoft and Coca-Cola (the “A” brands) are all

39 Id.
40 Sean Stonefield, The 10 Most Valuable Trademarks, FORBES (Jun. 15, 2011, 11:22 AM), http://www.forbes.com/sites/seanstonefield/2011/06/15/the-10-most-valuable-trademarks/ (“Google, in the filing for its initial public offering, worried that the term ‘Google’ could one day become synonymous with ‘search’ - resulting in both a loss of trademark protection and reduced brand value.”).
42 Id. (“Forbes valued the brand on three years of earnings and allocated a percentage of those earnings based on the role brands play in each industry (e.g. high for luxury goods, low for airlines). We applied the average price-to-earnings multiple over the past three years to these earning to arrive at the final brand value.”).
marks that are exclusive to their respective owners and not used by others in different classes. Last, the A brands have extensive registration rights worldwide. Just like patent valuation, these A brand valuations seem to hinge on a variety of factors. Here however, perhaps all trademark valuation metrics are satisfied for such valuable marks, as opposed to patents where satisfaction of all metrics is not so strongly correlated with higher valuations.

To test this theory, consider the Coach brand, used primarily for clothing and accessories. While consumer recognition of the Coach brand is high, the brand arguably holds less consumer recognition than Google, Microsoft, or Coca-Cola. Moreover, in terms of exclusivity, the term “coach” is used by many other companies and thus the brand is not as exclusive as the A brands. Finally, the Coach brand has most likely not prosecuted registrations throughout the world as some of the “A” brands have. In fact, in 2012, the Federal Circuit ruled that Coach was not a “famous” brand and therefore could not obtain anti-dilution protection afforded to famous marks.\footnote{Coach Servs., Inc. v. Triumph Learning LLC, 668 F.3d 1356 (Fed. Cir. 2012) (Coach Services, who owns the Coach brand for apparel and accessories, opposed the registration of the COACH mark for test preparation material by a company called Triumph Learning. Triumph Learning prevailed at the TTAB level and on appeal).} What was the Coach brand eventually valued at? According to the study that valued Coca-Cola, Google, and Microsoft, Coach’s value came in at #45 with an estimated value of $10.5 billion. As such, these findings seem somewhat consistent with the theory that correlation exists between brand value and the metrics of consumer recognition, brand exclusivity, and registration rights worldwide.

To further test the theory, consider the MTV brand, which is used for television and other media. In terms of exclusivity, the MTV mark is most likely not used by any others because of the distinctiveness of the mark. The owners of the MTV mark could,
in theory, have a greater chance of registering their mark in various classes than could the owners of the Coach brand. However, the MTV brand has much less consumer recognition than the A brands. The MTV brand arguably does not have as many worldwide rights as the A brands, presumably because its popularity was very centric to the United States. In fact, in 2012, the MTV network and its parent company were sued by a brand licensee in Latin America for not registering MTV trademarks in the territories in which the brands were licensed.44 How does the MTV brand value rank in comparison to the A brands and the Coach brand in the same study? MTV came in at #98, with an estimated brand value of $5.6 billion. This analysis of the MTV brand with respect to the above theory shows some consistency. Even though MTV has arguably more exclusivity than Coach, it also has arguably less worldwide rights and consumer recognition than Coach. As such, in theory, because two of the three primary factors were not heavily in MTV’s favor, MTV was ranked as less valuable than Coach.

5. Conclusion

Just like patent valuation, the test of trademark valuation seems very blurry, but we see stronger correlations with respect to brand value and fulfilling the above factors. In conclusion, consumer recognition, combined with a mark’s exclusivity and abundance of registrations seems to drive trademark valuation.

C. Trade Secret Valuation Factors

The factors used in a trade secret valuation are similar to those used in patent valuation. However, trade secrets, unlike patents, lack identifiable “profile” benchmarks to help determine value, such as the number of listed inventors, number of claims, and

“life” of the invention. Additionally, due to the proprietary nature of trade secrets, it is important that trade secret valuation takes place as early as possible. If the trade secret is valued or has some history of valuation, a plaintiff will more likely be able to establish its value in court, which will help enhance damages in the case of trade secret theft.

i. Retrospective Valuation

One method used in trade secret valuation examines the cost to develop the trade secret.45 Such an analysis might consider factors such as time or labor put into the development of the trade secret, often highlighted in a research and development budget.46 One claim is that this research and development theory is not enough to properly ascertain the value of a trade secret. This is because, in theory, trade secrets that were inadvertently stumbled upon or developed in a split-second would hold a much lower value than those trade secrets that were developed through years of research and expenditure of costly resources.47 “A brilliant flash of insight may cost a trade secret owner very little while an arduous process of developing a new formula, for example, may incur years of salaries and inputs.”48 Another explanation is that the research and development costs are “only a measure of the resources committed to [a trade secret’s] creation.”49 One proposed resolution is to measure trade secrets prospectively instead of retrospectively.50

46 Id. (“The replacement cost is the amount the defendant would have spent to independently develop the Trade Secret.”).
47 See Malackowski, supra note 19.
48 Id. at 17.
49 Id.
50 Searle supra note 45, at 17.
The proposed resolution makes sense in the case of some well-known trade secrets. For example, Coca-Cola’s research and development budget for its coveted formula, while unknown, does not represent the value of the Coca-Cola brand itself, estimated to be $79.2 billion in 2013. Additionally, the value of the Google brand, estimated to be $47.3 billion in 2013, cannot possibly represent the resources spent creating Google’s proprietary search algorithm that many think make the search engine one of the most popular and highly utilized today. These top brands are just two examples of brand strength that do not seem to correlate to a retroactive resource expenditure analysis.

### ii. Prospective Valuation

While it seems somewhat logical to measure the value of a trade secret retroactively, one opinion is that a prospective valuation of a trade secret reflects a more accurate value, although these future values might be harder to ascertain. A prospective valuation seems more accurate for trade secrets because the value is ultimately determined by how coveted the trade secret is, among

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52 Bruce Watson, Shhh: 10 Make-or-Break Trade Secrets, DAILY FINANCE (July 5, 2010, 8:06 PM), http://www.dailyfinance.com/2010/07/04/trade-secrets/ (“Many factors contribute to Google’s position as the top search tool for the Web, but the biggest is its proprietary search algorithm, PageRank. Rather than simply ordering sites based on their mention of a particular search term, PageRank factors in the number of links to and from a site; in so doing, it considers not only the site’s content, but also its place in the Web.”); Our History In Depth, GOOGLE, http://www.google.com/about/company/history/ (last visited Nov. 25, 2013) (providing that in 1998, a Google co-founder gave the technology giant its first investment of $100,000).
other considerations. For example, a trade secret comprising a business’s client list would most likely be considered much less valuable than KFC’s well-known handwritten recipe for their products because of the highly coveted nature of the KFC trade secret recipe. This exemplifies the need to consider both retrospective and prospective characteristics.

iii. Market Models

Several market models are also used to value trade secrets through both prospective and retrospective methodologies. The fair market value is the first of these models. The fair market value model determines worth by assessing the price that a buyer would pay a seller for the trade secret. The various factors that can be used to measure the fair market value include benchmark sales and surveys of members in the industry. However, it is challenging to use the fair market value model when there is no marketplace for the trade secret in question or when there is little value with which to compare the trade secret. Examples of these types of trade secrets include an advance in the method of manufacturing a proprietary product, corporate proprietary information such as an organizational structure, or negative know-how (knowledge

53 R. Mark Halligen & David A. Haas, The Secret of Trade Secret Success, FORBES (Feb. 19, 2010, 8:30 PM), http://www.forbes.com/2010/02/19/protecting-trade-secrets-leadership-managing-halligan-haas.html (“KFC recently built a brand new, high-tech home for the colonel’s handwritten Original Recipe from 1940. The new FireKing digital safe weighs more than 770 pounds and is encased in two feet of concrete with a 24-hour video and motion-detection surveillance system. That kind of security wouldn’t be needed if people didn’t try to steal the recipe.”).

54 See, e.g., Searle, supra note 45, at 17-18.

55 Id.

regarding what does not work).\textsuperscript{57} These variables, all of which could be considered trade secrets, have no marketplace and therefore nothing to compare.\textsuperscript{58} As can be seen, the fair market value method is not applicable in all trade secret valuations, and should not be utilized as a general method of valuation because of the narrow scope of applicability.\textsuperscript{59}

\textit{iv. Net Present Value of Future Cash Flows}

A more attractive alternative to trade secret valuation lies in the net present value of future cash flows.\textsuperscript{60} Because trade secrets are one of the types of IP that depend most on future cash flow, and a future cash flow analysis in trade secret valuation is particularly useful.\textsuperscript{61} Factors in the future cash flow equation include the total amount of future cash flow, the discounted basis of the future cash flow as a present value, and the probability of the future cash flow occurring.\textsuperscript{62} When these values can be assigned a number, an economic value of a trade secret is calculated by multiplying the three variables together.\textsuperscript{63} One difficulty this method faces is determining the fraction of future cash flow actually attributable to the trade secret and not other factors, such as marketing or branding.

\textit{v. Trade Secret Definition}

As with trademarks, we must look to the definition of a trade secret to determine exactly how a trade secret extracts its proprietary value. These considerations include: (1) how much of the information is known outside of the realm of the business seeking protection of information as a trade secret; (2) how much

\textsuperscript{57} Id.
\textsuperscript{58} Id.
\textsuperscript{59} Id.
\textsuperscript{60} Id.
\textsuperscript{61} Id. at 87.
\textsuperscript{62} Anson, supra note 56, at 87.
\textsuperscript{63} Id.
the information is known by people within the business seeking protection of information as a trade secret; (3) what measures have been taken by the company to guard the secrecy of the information; (4) the value of the information proposed to be protected as a trade secret; (5) the amount of resources, including time or effort or money, expended by the business to develop the proposed trade secret; and (6) how easy it would be for others to acquire or duplicate the information. In a trade secret valuation, these components are crucial to the determination of the quality of a trade secret, and therefore the value.

Because of the highly proprietary nature of trade secrets, even using market methods to place a value on a trade secret can yield inaccurate results because of marketplace unpredictability, as discussed in section IV. As such, no single method is applicable to trade secrets, but prospective valuation methods yield more accurate and reliable valuations than those methods that solely consider retrospective analysis.

III. Valuation: Is it Reflective of Our Economy?

While some might contend that the above factors considered in the general valuation process are sufficient to reflect the characteristics of the marketplace, there seems to be a strong disconnect between such considerations and the true nature of today’s economy. First, the valuation process does not seem to fully account for unpredictable market trends, such as changes in consumer demand of a particular technology field or brand name. Second, the valuation process does not reflect today’s economy because it apparently lacks accountability for unforeseen demand in foreign territories or jurisdictions. Third, the valuation process cannot possibly account for unforeseen governmental actions that could greatly increase or decrease the value, worth or demand of any given technology if regulation standards were implemented.

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64 Id. at 88-89.
Last, the mere concept of globalization encompasses factors that seem impossible to quantify for any given piece of IP. This section will discuss in detail the reasons why the common valuation processes do not seem sufficient in today’s economy.

Unpredictable market trends are one of the foremost reasons why the valuation process does not seem to sufficiently reflect the nature of today’s economy. Market trends such as consumer demand and technology life cycle yield unforeseeable discrepancies between the price tag placed on a piece of IP during the valuation process and the true value of that IP after the occurrence of such trends. This unpredictability is reflected in situations where patents are bought at a fraction of the price they eventually become worth, for example, when the patented invention is later encompassed in a device that takes off in the marketplace. Market unpredictability also seems relevant in trademark brand valuation, where brand values have the potential to either skyrocket or plummet based on consumer demand.

While this trend can be positive for technology or brand names that eventually succeed, the unpredictability of consumer demand can also result in major losses. The latter situation is exemplified in the IP arena of social networking. Take, for example, the well-known MySpace social network that was once popular among users, allowing them to share pictures, music, and other media. At the height of its popularity, the website was sold for $580 million to News Corporation, a multinational mass media company located in New York, New York. Just six years later, News Corporation sold the “long-suffering” website to an advertising network, Specific Media, for roughly $35 million, nearly 17 times less than its 2005 price. It can reasonably be assumed that the value of the

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66 *Id.*
website will continue to fall as other social media platforms rise to the top, such as Facebook.

Aside from market trend fluctuations in particular technology fields, unpredictability on a global scale exemplifies the unreliability of current valuation techniques. While one technology might seem obsolete or outdated in more technology-savvy areas of the world that same technology might still be in high demand in other countries that have limited or no access to more advanced technology. It seems next to impossible to account for these territorial differences as it relates to valuation, especially given the fast-paced nature of the technological world.

A third noteworthy characteristic of today’s ever-changing economy in light of the valuation process is the uncertainty of governmental regulation. In key industries commonly subjected to governmental regulation such as the pharmaceutical industry, valuation is extremely difficult. Some argue that governmental regulation is “stifling” America’s pharmaceutical industry, and it also seems that regulation is placing an extreme burden on the valuation process. Recently, a report by the President’s Council of Advisors on Science and Technology estimated that it costs an average of $1.2 billion to win FDA approval and bring a new drug to the market. For companies who actively engage in the acquisition of new pharmaceuticals, a drug’s valuation can be unreliable and unpredictable until the drug is approved by the FDA. Even after approval, these drugs may be subject to class action litigation or health risk recalls. The pharmaceutical industry is an example of just one industry where IP valuation seems extremely unreliable because of the unpredictable nature of the IP.

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68 Id.
Last, the penumbra of globalization effects makes the valuation process seem extremely inaccurate and unreliable. The value of any IP can fluctuate based on the unpredictable nature of globalization alone. One example of such a globalization effect includes new and useful technologies and the gray area that surrounds the release of those technologies. Examples of this gray area include oscillations in legal certainty, changes in consumer tastes, obstacles in technology developments and unseen foreign competition. This seems especially prevalent in the software, computer, and phone industries where new developments and improvements are constantly advertised to consumers as the “bigger and better” version of the current technology. Advertising alone seems to debase the value of any current technology, yet the decrease seems nearly impossibly to quantify.

It is not that these factors are not known as potential caveats in the IP industry, but instead these factors seem impossible to take into account during the valuation process because of their volatile nature. While the valuation process seems to exist as a regular practice without accounting for such considerations, it is for the above reasons that the valuation process does not seem to truly reflect the true nature of our economy, regardless of the awareness of these trends. Thus, the government might be the most obvious remedy to this problem by introducing regulation measures to significantly increase the consistency in valuation methods.

IV. CONCLUSION

The aspiration of this comment was to demonstrate that IP valuation may be one of the most challenging aspects of the already complex world of IP. Framing the mystery of IP valuation as a question around what valuation variables are used simply misplaces the focus of solving the valuation equation. Such variables provide surefire strength as a place to start, while leaving us to wonder what variables, or combinations thereof, should be the most critical elements in the equation. Unfortunately, the valuation techniques that we know do not speak clearly on the
subject. The general willingness, however, to structure the valuation process around a common set of analytical metrics provides us with some sort of framework to define the general equation used in the valuation process. One thing is for sure: not taking up the challenge of IP valuation comes at far too high of a cost to those involved. In the absence of clear valuation guidelines, only time will tell whether IP valuation will go the way of government regulation.