

IF THERE IS A GROWING ANTI-PATENT SENTIMENT, WHY NOT CREATE A PATENT SYSTEM THAT FOSTERS ONLY PRO-PATENT SENTIMENTS?

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Introduction – Are Anti-Patent Sentiments Actionable And, If So, Why Not Act?

Cursing the darkness is inexcusable *if those doing the cursing have access to a light switch within easy reach*. In this spirit, the paper that follows is not simply another lament that anti-patent sentiments may exist, but a query as to whether we may have ready access to a light switch. If so, it is then possible that today's brooding darkness over the state of the patent system might be needlessly self-inflicted—and readily remedied.

The jumping-off point for this exercise is a simple query. To what extent, if any, are negative sentiments surrounding the U.S. patent system rationally based? Put another way, do such sentiments reflect the manner in which key aspects of the patent system operate in practice, specifically in ways that some entities impacted by the U.S. patent system fairly assess as being undesirable to untenable? To the extent rational criticisms drive such views, laments over anti-patent sentiment could be quite actionable.

At the risk of invoking one analogy too many, it is worth reflecting that Saul of Tarsus and Saint Paul, while the same individual, are two names that engender quite different sentiments. Indeed, those sentiments with respect to Saul/Paul changed profoundly and almost instantaneously following a single journey to Damascus. We have, therefore, no less than divine authority that conversion experiences, if undertaken with enough sincerity and comprehensiveness, can reverse sentiments—and with remarkable alacrity.

While it is somewhat of an overstatement to suggest that any perceived anti-patent sentiments in the United States have reached biblical proportions, it is only logical that *anti-patent sentiments* that exist for entirely rational and addressable reasons can and should be redressed by the proponents of strong and effective patent laws. If so, what journey to Damascus must the patent system's defenders begin that might crush any rational anti-patent system views—and trigger a new era of pro-patent good feelings?

The first line of inquiry to this end is a simple one. Does the U.S. patent system today operate in a manner that *any effective system of property rights must operate* to merit wide acclaim for its economy, predictability, and simplicity, and promptness in settling disputes over the rights being accorded under the system?

An Effective Patent System Needs To Operate Like An Effective Property Rights System

To understand if there is a rational genesis for anti-patent sentiments requires identifying if there are offending elements of the contemporary patent system that any objective observer would find troubling in an effective property rights system. If such troubling features are found to exist, such a finding sets the stage for remediation.

At the outset it is worth putting any issue of anti-patent sentiment into perspective. There is strong evidence that there is nothing sentimentally wrong with a patent system grounded on according inventors exclusive rights for their discoveries. For most Americans, anti-patent sentiments, to the extent they exist at all, do not extend to—

- The mere idea of a granting a patent affording exclusive rights.
- An innate antipathy towards inventors that begrudges rewarding them for their discoveries.
- The economic rationale for according exclusive rights to patentees so that they might make—or attract from others—the investments that allow development and commercialization proceed.

How can we be confident that the core of any anti-patent sentiment does not go to the concept of what a patent is and what patents are intended to do? Part of the answer to that question comes from popular culture.

After decades of popular indifference (if not ignorance) about patents and their role in entrepreneurship, we now live in the *Shark Tank* era. This televised program has brought patents to prominence as contestants are regularly queried about the patent status of their innovative products or services.¹ The “sharks” are venture capitalist investors who over the years have provided the contestant-innovators—preferably those professing to have sought or secured patent rights—over \$100 million in venture capital² to bring such ideas through the development and commercialization stages.

Patents—at least in many quarters today—are the property rights that help make the American dream possible! In the popular mind, this is the pro-patent potential of the patent system. The upshot from *Shark Tank*—and the work of other venture capitalists who work with innovators—make it difficult to contend that any anti-patent sentiments are inevitably tied to the intrinsic manner in which patents protect discoveries of inventors with exclusive rights that then permit investments to be secured allowing such discoveries to be developed for commercialization.

If so, where, if at all, has the patent system run amuck—at least in the mind of its detractors? Do any such anti-patent sentiments represent *institutional* concerns, or are they merely *operational* ones?

Might anti-patent sentiments be confined to the on-the-ground manner in which patents today are sometimes secured, asserted, and enforced? If so, then might the devil in the anti-

¹ See <http://inventingpatents.com/category/shark-tank/>. “The hit ABC television series *Shark Tank* has brought patents to the mainstream. In each episode of *Shark Tank*, small entrepreneurs pitch their businesses to a panel of five big time investors (the “Sharks”). The entrepreneur asks for an investment in exchange for a percentage of the business. Before investing, the Sharks ask an array of probing questions, aimed to uncover the risks and opportunities inherent to the business. ... In practically every episode of *Shark Tank*, a Shark inquires about the entrepreneur’s patent protection.”

² ‘*Shark Tank*’ Stars Celebrate Season 8 Kickoff with \$100 Million Milestone, <http://variety.com/2016/tv/news/shark-tank-season-8-premiere-100-million-dollars-1201869080/>.

patent sentiment picture not lie in the existence of patents for inventors, but in the *operation of the patent system* in generating and asserting such rights?

Operational issues for the U.S. patent system are critically important for one compelling reason. The patent system *operates* as a property rights system. Property rights systems—to be effective ones—need to evidence certain operational characteristics.

What is often missing in any discussion of the operation of the patent system is the foundational principle that a strong patent systems must have the operational attributes of a high-functioning property rights system. Property rights systems—at least those worthy of respect—have as their core operational virtues of *transparency, objectiveness, predictability, and simplicity*.

Relative to the underlying value of the property right, in a high-functioning property rights system, the cost of establishing good title to the right is low, the confidence that the right is a valid one is high, and the cost of defending title to the right, if ever challenged, is typically modest. As a result, ownership of the right is a secure platform for enjoyment of the property.

A patent system that operates extraordinarily well as a property rights system would seem to be nearly impossible to condemn as an obstruction to innovation. On the other hand, than one that operates inefficiently and unpredictably might drag down development and commercialization of new technology in regrettable ways. In sum, an overwhelmingly poorly operating patent system, without any doubt, would have the potential to engender profound anti-system sentiments.

An instructive hypothetical exercise is to imagine how a worst-of-all-worlds patent system might operate in practice. *The patent procurement process would be long, expensive, and non-decisive*. Many patents might eventually issue, but many issued patents would be found to have defective claims that would be validated once challenged.

The patent system would spawn two competing industries: a multi-billion dollar patent procurement industry that might spew out over a million examined patent claims each year and a multi-billion dollar patent invalidation industry that would then cancel, revoke, or invalidate a substantial percentage of such examined patent claims once challenged.

Some patent owners would have scarce reason for joy, even when holding completely valid patent rights. Those rights, if ever challenged, could take years to successfully defend in the available enforcement regimes. The cost of defense—in the face of a determined infringer—could routinely exceed the underlying economic value of the patent asset itself. The grounds of possible attack on a patent claim would be many—including grounds not related to the merit of the invention, but alleged defects in the administrative process of securing the patent rights.

These characteristics of a worst-of-all-worlds patent system would result in patent owners and patent challengers complaining of what they would regard as litigation abuses. For example, rather than pursuing in any of its available defenses for invalidating a patent of no apparent merit, infringers accused of violating such non-meritorious patents could be routinely subject to

pay-up-and-shut-up lawsuits that they would be economically compelled to settle. Patent owners faced with the potential multi-million dollar legal costs to evict infringers of valid patent claims from the market might discover that patent grant was an economically unenforceable one—just an expensive piece of paper with no practical economic benefit to the innovator.

Such a patent law would be particular hard on new market entrants. Their most innovative new products might be saddled with non-meritorious patent infringement challenges—from competitors knowing the new entrant could not economically defend against the infringement claims however tenuous. Similarly, as noted above, holders of valid patent rights on innovative products under development could find those rights economically unenforceable, even if legally impeccable.

For such a poorly functioning property-rights system, it would be difficult to see how its operation could possibly promote progress in the useful arts. Those seeking to invest in the development and commercialization of new technologies would see the cost and unpredictability in any effort to enforce a valid patent as undermining the economic rationale for the investment, while the prospect of defending against non-meritorious patent infringement actions then poses a further existential threat to the viability of such commercialization investments.

It is, therefore, fairly straightforward to operationally define a *patent system* that would merit condemnation. It would be one in which a disturbing number of patents validly covering innovative products would be economically unenforceable against a determined infringer—and one under which the vast majority of accused infringers would find it to be uneconomic to defend against a determined patent owner asserting a non-meritorious infringement claim.

Aspects Of The U.S. Patent System That May Not Operate As Effective Property Rights

Is it possible that, in spite of decades-long efforts at patent reforms, we have operational aspects of a worst-of-all-worlds patent system in the United States—at least in the eyes of some rational observers? Objectively, there are reasons to believe that our patent system, whatever its great merits, can still be problematic in its actual operation for many persons impacted by it.

While the U.S. patent system has a great lineage—it is the system coddled by Jefferson and extolled by Lincoln—its contemporary use is not confined to the *Shark Tank* model of patent filings, *i.e.*, those made to be able to make or attract the investments needed for the development and commercialization of an inventor's useful and non-obvious discoveries. In this regard, it is worth reflecting on the extent to which the *business models* driving efforts to seek, obtain, and exploit U.S. patents are driven by other economic considerations that justify the pursuit of patents, but that have little to do with investing to create new products and services.

To this end, it is worth examining the emergence of at least three patenting models that do not have at their core promoting investments in development and commercialization.

The first of these is the so-called *patent-factory model* that has emerged over the past several decades.³ This is a model in which an entity determines to *super-intensively* and *preemptively* patent one or more areas of technology. This model depends upon the skill in making educated guesses on where new technological investments will be made by others. Based on those guesses, the patent factory then sets about speculatively “inventing” and seeking large numbers of patents where it appears likely that technology will head.

The patent factory model, if it results in a large enough patent portfolio, is business-justified on the basis that the cost of designing around or invalidating each of a raft of patents on a specific technology will be so economically unattractive that the only rational alternative for someone seeking to develop/commercialize technology in the patent-heavy area is to sign up to pay license fees as a means for securing passage around or through such a patent wall.

By the nature of the patent factory model’s royalty extraction objective, once one competitor in the marketplace takes on such a mass-patenting approach, it encourages other competitors to do so as well. The competitor-by-competitor amassing of patents in this manner affords significant protection against royalty demands—or even infringement actions—under a “mutually assured destruction” theory, *i.e.*, no one competitor will wish to provoke retaliatory royalty demands or infringement actions from the well-stocked patent arsenal of another competitor.

Closely tied to the patent-factory model is the *patent-aggregation model*.⁴ This model is based upon purchasing patents at wholesale and then licensing them out at retail, just as a factory model would for its internally generated patents.⁵

The aggregation model further encourages patent-factory activities by creating a marketplace for patents. To the extent that the wholesale-to-retail margins are high enough, becomes an attractive outlet for private equity investors—not investing in the patented technology’s development for commercialization, but investing in the prospective royalty-based or litigation-based monetization of the patents themselves.

³ “A patent factory is a company that generates patents but rarely builds products. The idea behind a patent factory is that the patented invention can be licensed out to generate an income. ... A patent factory files many patents for which only a few patents give positive returns. These returns enable the development of further patents ... until enough wealth is made and/or the ideas stop flowing. ... Usually a patent factory exploits specific market niches so the ideas and expertise captured in the IP can be exploited efficiently. Such patent exploitation often relies on the patent being able to be boot-strapped onto existing technologies to enable a near-term realization of license fees.” See generally <http://www.ip.com.au/1P/blog1p/?p=1545>

⁴ Justin R. Orr, *Patent Aggregation: Models, Harms, and the Limited Role of Antitrust*, 28 Berkeley Tech. L.J. (2013). Available at: <http://scholarship.law.berkeley.edu/btlj/vol28/iss4/8>.

⁵ Patents can also be aggregated for “mutually assured destruction” purposes. As Google noted in acquiring Motorola, “Our acquisition of Motorola will increase competition by strengthening Google’s patent portfolio, which will enable us to better protect Android from anti-competitive threats from Microsoft, Apple and other companies.” (<http://www.businessinsider.com/larry-page-motorola-acquisition-2011-8>). Reciprocally, “Nortel Networks, the defunct Canadian telecommunications equipment maker, says it has agreed to sell more than 6,000 patent assets to an alliance made up of Apple, Microsoft and other technology giants for \$4.5 billion in cash.” (<http://dealbook.nytimes.com/2011/07/01/apple-and-microsoft-beat-google-for-nortel-patents/>).

In this sense, the aggregation model has the potential to deflect venture capital from what might otherwise be higher-risk and possibly lower-return investments to develop innovative products for commercialization to potentially lower-risk, higher-return investments based on threatened litigation to secure royalty settlements.

Moving up the patent food-chain one more notch leads to the *patent troll* model.⁶ The patent-troll model can most uncharitably be viewed as the perverse perfection of the patent-factory and patent-aggregation models. The patent troll *modus operandi* involves sending out patent royalty demand letters by the hundreds to the thousands demanding relatively small amounts of tribute under patents that may have no possible merit.

Nonetheless, recipients of these demands may have no economically rational response other than to pay up. If the cost to the recipient of doing nothing more than answering a patent infringement complaint is less than the cost of demanded royalty, the patent troll has a viable business model. Indeed, it is a model that encourages ever more aggressive royalty-seeking efforts depending upon how long, unpredictable, and expensive the accused infringer's litigation alternative might be. For all these reasons, the patent troll model is one that an objective observer might see as little more than a legalized patent-shakedown business model.

In 2017, it is certainly worth asking how significant the patent factory, patent aggregation, and patent troll models have become in the overall operation of the U.S. patent system. One possible surrogate for getting some sense of the extent to which patenting is being done under one or more of these quantitatively focused patenting models is number of patents in force that relate to a particular commercial product.

Assuming that the patent factory, patent aggregation, and patent troll models were all running at full tilt in a particular technology area, that number could presumably be quite large.

It has been estimated, for example, that *today* as many as 250,000 issued U.S. patents relate to a single, handheld device, the smartphone.⁷ While the complexity of this technology might suggest that thousands or even tens of thousands of U.S. patents might be relevant to it, the

⁶ “A patent troll uses patents as legal weapons, instead of actually creating any new products or coming up with new ideas. Instead, trolls are in the business of litigation (or even just threatening litigation). They often buy up patents cheaply from companies down on their luck who are looking to monetize what resources they have left, such as patents. Unfortunately, the Patent Office has a habit of issuing patents for ideas that are neither new nor revolutionary, and these patents can be very broad, covering every-day or commonsense types of computing—things that should never have been patented in the first place. Armed with these overbroad and vague patents, the troll will then send out threatening letters to those they argue infringe their patent(s). These letters threaten legal action unless the alleged infringer agrees to pay a licensing fee, which can often range to the tens of thousands or even hundreds of thousands of dollars.” Electronic Frontier Foundation, *Patent Trolls*, at <https://www.eff.org/issues/resources-patent-troll-victims>.

⁷ *There Are 250,000 Active Patents That Impact Smartphones; Representing One In Six Active Patents Today*, <https://www.techdirt.com/blog/innovation/articles/20121017/10480520734/there-are-250000-active-patents-that-impact-smartphones-representing-one-six-active-patents-today.shtml>. The commentary in the article is worthy of note, “It definitely appears that there's something of a ‘bubble’ going on around smartphone patents—which is what happens when you have a hot emerging area, combined with ridiculously broad patents. It also makes for an astounding minefield for anyone new who wants to enter the space, especially if you don't have a massive war chest to license or fight in court.”

existence of hundreds of thousands of such patents relating to such a device provides at least some evidence that some significant percentage of patenting in this technology area is being done under an economic model for patenting that assumes monetization of the patents solely based upon the capacity for (or then need for a patent portfolio to defend against) mass assertion—a targeted competitor will be forced to pay rather than defend against the potential for a mass assertion of such patents absent its own hoard of potentially retaliatory patents.

Finally, the issue of patent quality⁸ has a strong tie to mass patenting models. The more patents that issue, the higher the probability that one or more patents in a mass portfolio will issue with claims that are expressed in broadly conceptual terms, that at best have questionable validity if ever litigated individually, and that then become effectively immune from being redressed in litigation given the ability to be simultaneously asserted in potentially large numbers. When mass patenting strategies meet patent quality limitations, the operation of the patent system runs the risk of devolving into a rights system in which the value of the property right is determined by the negative characteristics of the enforcement regime (its costs, unpredictability, and delays) and can be largely independently from the intrinsic merit of the underlying property on which the patent grant was based.

The Optimal Patent System As Property Rights System: Defining The Ideal

How would the mass patenting models differ if—in an ideal patent world—patents were fully processed to issuance in the USPTO on the day they were initially sought, with overly broad or otherwise invalid patent claims never being issued, and patent infringement claims all decided on their merits almost immediately upon filing, through a summary judgment process that was limited to the question of whether the issued claims in fact covered the accused subject matter?

Such an idealized patent system might make the pursuit of a patent-factory model, a patent-aggregation model, or a patent-troll model an exercise in futility. For the aggregator, mass assertion strategies could become instantaneous mass extinction events. For the troll, the cost to file a meritless complaint for patent infringement would exceed the cost for the accused infringer to secure a summary judgment of non-infringement—the troll’s litigation arbitrage value would go negative! Under an idealized patent system, seeking patents for any type of nefarious purpose would represent an act of complete futility.

What would remain, therefore, would be a patent system in which the sole rational economic justification for seeking a patent was the assurance that, should a patent actually be issued on the application, it would secure valid rights over an innovation being developed for possible commercialization—and any attempt to infringe the patent would be swiftly, certainly, and inexpensively be quashed. The patent system would focus on its prime rationale of allowing

⁸ “High-quality patents enable certainty and clarity of rights, which fuels innovation and reduces needless litigation. To ensure we continue issuing high-quality patents well into the future, we established the Enhanced Patent Quality Initiative (EPQI). We are strengthening work products, processes, services, and how we measure patent quality at all stages of the patent process.” <https://www.uspto.gov/patent/initiatives/enhanced-patent-quality-initiative-0>.

investment in development and commercialization of inventions to be made or secured by the rights holder or its licensee.

Patent rights under such a patent system would exhibit extreme consonance with the constitutional purpose of the patent laws to promote progress in the useful arts. The legal and administrative *overhead* in such a system could be negligible. For a typical patented invention, the costs of securing and, if need be, enforcing such a patent would be a pittance compared to the underlying economic value of the patented subject matter.

In a nutshell, the idealized patent rights system would have more of the prime virtues of effective real property rights systems. Title to the property would be readily and accurately determinable—and disputes over property rights would be relatively scarce. The ability to use title to the property as collateral would give a creditor or investor little reason for discounting the value of the property in such a transaction. As a result, transactions affording access to the property rights could involve significant exchanges of economic value that could be readily concluded.

Moreover, such an idealized property rights system need not operate in some type of splendid legal isolation. Because an ideal patent system would be designed to promote innovation, it would be tuned to operate in a manner reflecting the most ruthless use of technological innovation imaginable. All aspects of the patenting process would incorporate the best-available information technology tools.

As examples, cognitive computing capabilities would be used to digest patent applications filed electronically, would be used to search massive databases of prior art electronically, and would be enlisted to assure that machine-translation capabilities made accessible in the English language any non-English disclosures pertinent to patentability. Patent examination would be facilitated and accelerated with computing machines producing draft patentability analyses for the benefit of patent applications and patent examiners alike.

The Keystone “Property Rights” Reforms: Creating A Zero-Based Patenting Paradigm

While an idyllic patent system may be beyond reach, it does suggest how—if the patent community had the courage and determination—the operational aspects of the existing U.S. patent system might be moved far closer to the ideal. One question that might be asked in this regard is what a U.S. patent system would look like if it were to be rebuilt from the ground up—with the premise that the new patent system would destroy any rational ground for holding anti-patent sentiments.

Such a new patent system—a zero-based patenting paradigm—would ooze the properties of promptness, predictability, accuracy, and, efficiency in granting patents that characterize our present patenting paradigm inconsistently, if at all. While it would ultimately need to be grounded in the practicality of what can be done, there would be no reason not to begin the zero-based quest aspirationally.

Looking at operational reforms aspirationally would be a marked change from the recent past. Out of political necessity, patent reform efforts over the past 65 years have been tragically limited in their impact on the patenting paradigm. The 1952 Patent Act's goal was a slavish recodification of all the existing patent law save for its singular contribution of the statutory standard for non-obviousness replacing judge-made law.⁹

It took until 1984 for a follow-on patent reform law of any significant substance to pass Congress. The Patent Law Amendments Act of 1984 reflected a serious effort at making important and discrete reforms to the patent law by adding a set of inventor-friendly features that avoided certain work of co-workers from becoming prior art, as well as relaxing the requirements for being added as a joint inventor to a patent filing.¹⁰ However, its operational impact on the patent system was necessarily limited.

The next major change to U.S. patent law under the Uruguay Round Agreements Act of 1994¹¹ offered a new twenty-year patent term from filing, but this bill by design offered no more than treaty-mandated changes to U.S. patent law—albeit its geographic non-discrimination provisions made the first-to-invent principle used in the United States to determine priority of invention absurdly anachronistic.

The 1999 reforms to the patent law under the American Inventors Protection Act were modest efforts at moving the U.S. patent system more toward 20th century norms.¹² The most notable achievement was the 18-month mandated publication of most pending U.S. patent applications, coupled with a bizarrely complicated law on “patent term adjustment” designed to further the prospect that issued U.S. patents would have same 17-year patent life accorded under the pre-URAA 17-year patent term measured from the date of patent grant. If anything, the laudable transparency introduced into the patent law was offset at least in some small part by greater complexity in ever figuring out what the term of the patent would be.

If there were one legislative effort since the 1836 Patent Act that could be fairly characterized as a concerted effort at countering anti-patent sentiments with *operational* improvements, it would be the Leahy-Smith America Invents Act. This 2011 law tossed aside the archaic first-to-invent system in favor of the simplicity, fairness, and economy inherent in a first-inventor-to-file principle for awarding patents. It eliminated all the subjective aspects of determining whether an issued patent was valid. This included a host of loss-of-right-to-patent provisions in the pre-AIA law and the “best mode” invalidity defense. The driving philosophy underlying AIA patentability determinations was that they should be more property-like, *i.e.*, more transparent, objective, predictable, and simple.¹³

⁹ Patent Act of 1952, Pub. L. No. 593, § 103, 66 Stat. 792, 798.

¹⁰ See, *inter alia*, Patent Law Amendments Act of 1984, Pub. L. No. 98-622, § 103, 98 Stat. 3383, 3384.

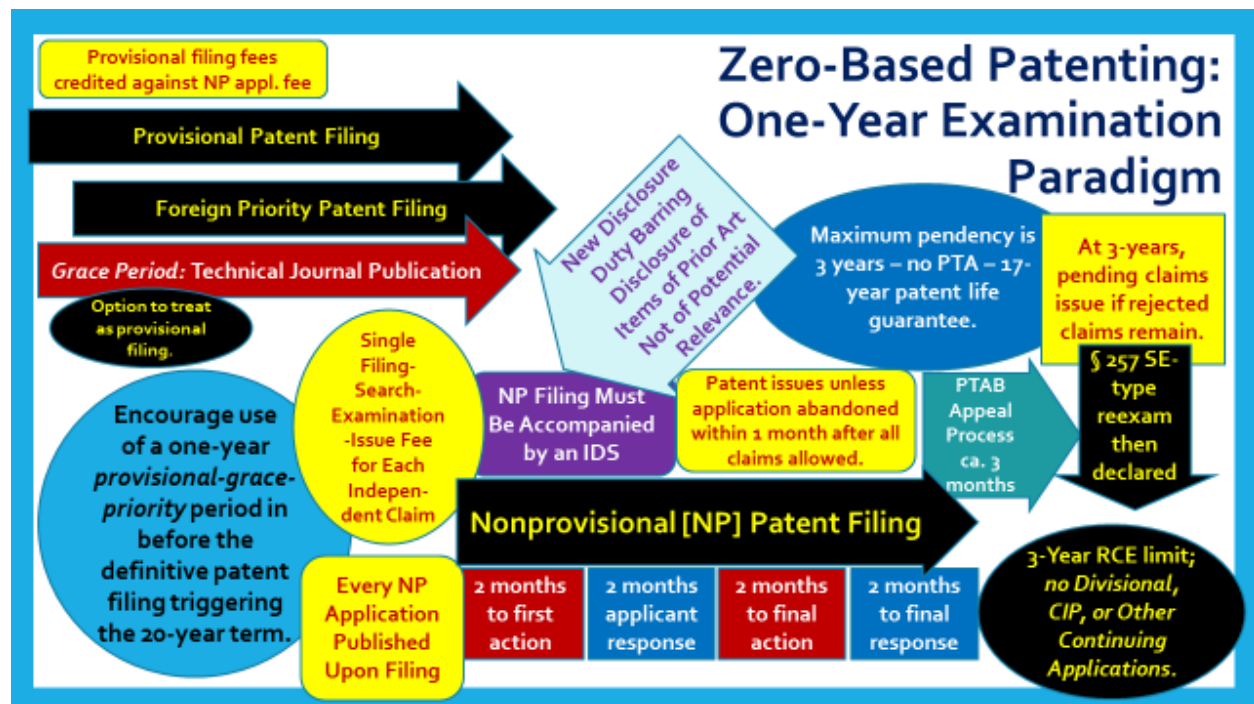
¹¹ Uruguay Round Agreements Act, Pub. L. No. 103-465, § 101, 108 Stat. 4809 (1994).

¹² Act of Nov. 29, 1999, Pub. L. No. 106-113, § 4001, 113 Stat. 1501, 1501A-552.

¹³ See Robert A. Armitage, *Understanding the America Invents Act and Its Implications for Patenting*, AIPLA Q.J. 40:1, 133 (2012), “without question, *transparent, objective, predictable* and *simple* are four words that should come to describe the hallmarks of the new patent law arising from this historic legislative achievement.” available at https://www.uspto.gov/sites/default/files/aia_implementation/armitage_pdf.pdf.

Since the AIA, much congressional focus has been on making the U.S. patent litigation system more responsive to patent invalidity claims, but with no focus on the work of the USPTO in issuing patents. Assuming that it would be utterly unacceptable to go another 175 years (*i.e.*, from 1836 to 2011) without a major patent reform bill with an *operational focus* becoming law, what should the priorities be for the Anti-Anti-Patent Sentiment Act of 2017?

One set of possible features of such a zero-based patenting paradigm are summarized in the chart below.



The core assumption of the above paradigm is that a ground-up rebuilding of the U.S. patenting paradigm would target a 1-year pendency period before the USPTO to determine patentability. Instead of *ex parte* patent appeals taking years to decide, the time from briefing to decision would be no more than a couple of months.

The patenting process itself would be far simpler. There would be no restriction requirements and no continuing applications of any kind—divisional applications, continuation applications, or continuation-in-part applications.

The patenting process would begin in earnest on the very day any nonprovisional application is filed. Nonprovisional applications would be publicly accessible upon filing. The patent applicant would be required to identify potentially relevant prior art at the time the nonprovisional application was filed—and would have incentives to further identify the possible relevance to patentability of the claims.

More importantly, patent applicants would be barred from submitting items of prior art of no possible relevance to patentability. Indeed, patent attorneys could be sanctioned for violating the prohibition on the submission of prior art of no possible relevance to patentability.

Only a single unitary patent application fee would be paid. A separate application fee would be required for each independent claim and a fee calculation algorithm would have the unitary fee vary based upon the length and complexity of the application and its claims. The filing fee algorithm would be used to determine the presumptive examination time—and patent examiners would be allotted time for examining an application in direct proportion to the magnitude of the unitary fee.

No separate fee, therefore, would be required for search, examination, or patent issuance. Only amendments to the specification, including the claims, could trigger additional fees. Once all pending claims in the application were found to be allowable, the patent would issue on the allowed patent claims within one month of notice to the applicant, unless the application were abandoned by the patent applicant.

While all patent application processing would be geared to the target of a one-year pendency, a patent applicant would be permitted to continue pre-grant prosecution for up to three years. At the 3-year point, unless the application had been abandoned, a patent would be issued on the claims then pending in the application.

If remaining issues of patentability were unresolved upon issuance at the end of the 3-year limit on pendency, then the examination of such claims would continue in a reexamination proceeding akin to the reexamination procedures that can apply following supplemental examination.¹⁴ In this manner, any issued patent claims found invalid would be canceled. In addition, competitors would have a prompt opportunity to seek timely post-grant review of any of the issued claims.

Moreover, the problematic provisions on patent term adjustment would be repealed. All inventors would have an effective post-issuance patent life of between 17 and 19 years, obviating any continued justification for PTA.

Consistent with the disclosure requirements outlined above, the patent applicant's duty of disclosure would be entirely reworked. It would reflect the realities of the contemporary patent system. Its rationale and provisions are laid out in Appendix I.¹⁵

The AIA's transparent, objective, predictable, and simple patentability standards would continue to apply. However, the law on patentability would be fully codified. The provisions in the Innovation Act would be enacted into law to fully codify the law on "obviousness-type" double patenting for first-inventor-to-file patents.¹⁶

¹⁴ 35 U.S.C. § 257.

¹⁵ See Robert A. Armitage, Response To The October 28, 2016 Federal Register Notice1 On Revision Of The Duty To Disclose Information In Patent Applications And Reexamination Proceedings, https://www.uspto.gov/sites/default/files/documents/rule56_f_armitage_27dec2016.pdf.

¹⁶ H.R. 9, 114th Congress. See House Report 114-235 (July 29, 2015), pp. 17-18 and pp. 47-51.

In addition, the Supreme Court’s implicit exception to patent eligibility, and its administration through the two-part test set out in the Court’s *Mayo* and *Alice* decisions, would be overruled in favor of a new statutory patentability requirement that limited patent eligible subject matter to claimed inventions that contribute to the useful arts, defined as any field of technology, with restriction or limitation.¹⁷

Finally, the “best mode” requirement that was fully disabled as an invalidity-unenforceability defense under the AIA would be repealed outright.¹⁸ In a similar manner, the unenforceability defense based upon inequitable conduct allegations would be similarly barred¹⁹ and the equitable defense of patent laches would be made moot.²⁰

When a patent infringement suit was brought, except in unusual circumstances, the only judicial defense would be non-infringement—the invalidity defense to patent infringement would be repealed. The court would construe the claims and, if there were a triable issue of fact, a jury could determine the issue of infringement and any damages.

In lieu of an invalidity defense to infringement, an accused infringer would have standing to bring a post-grant review-type proceeding in the United States Patent and Trademark Office to have any issue of patent validity reviewed. The normal one-year limitation on PGR procedures would apply.

In sum, the remaining law on patentability would reflect to utmost in simplicity and objectiveness. It would recognize as patentable any claimed invention that was—
sufficiently different from publicly accessible, prior disclosures;
sufficiently disclosed through the patent specification so that the claimed invention was identified in terms other than merely the function it is to perform or the result it is to achieve and was enabled for a specific and practical use;
sufficiently definite so that reasonable certainty exists as to what is and is not within the scope of the claim; and
sufficiently technological so that the claimed process, machine, manufacture, or composition of matter contributes to a field of technology.

In the USPTO, these would be the sole issues determining patentability and, once the patent issued, these would be the sole issues determining patent validity. The nature of these transparent, objective, predictable, and simple patentability criteria should limit the discovery

¹⁷ See Robert A. Armitage, *Response To The October 17, 2016 Federal Register Notice1 On Patent Subject Matter Eligibility: Exploring The Legal Contours Of Subject Matter Eligibility Roundtable 2, December 5, 2016*, at <https://www.uspto.gov/sites/default/files/documents/Armitage%20Response%20to%20USPTO%20Federal%20Register%20Notice%20on%20Patent%20Eligibility%20%20%20.pdf>.

¹⁸ See generally Robert A. Armitage, *The Leahy-Smith America Invents Act: A Look Back to See What’s Ahead*, 2013 IPO Annual Meeting at http://www.visiond.com/IPO2013/MATERIALS/ArmitageRobert_paper.pdf. See pp. 26-28 for a discussion of the repeal of the “best mode” requirement.

¹⁹ *Ibid.*, pp. 24-25.

²⁰ *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F. 2d 1020 (Fed. Cir. 1992) specifying a presumption of laches after 6 years of prosecution delay is mooted given the maximum pendency of any application for patent limited to three years, coupled with the end of continuing application practices.

needed from the inventor to determine if a claimed invention has been validly patented. *Nothing in the law of patentability should preclude an accurate and complete determination of patentability within the one-year period that is the goal for ex parte patent examination and nothing should preclude any of the post-grant procedures from determining patent validity issues in the same one-year period.*

The notorious “inter partes review” procedures would disappear. More than 80% of such procedures take place as an adjunct to a district court infringement action and the new post-grant review procedure supplanting the invalidity defense to infringement would take the place of IPRs for such litigations. Otherwise, correcting the AIA’s legislative error in the judicial estoppel would allow the AIA’s PGR procedure to be better and more complete substitute for the remaining 20% of IPRs—and force all such post-issuance patent validity challenges to be brought, if at all, promptly after a patent has issued. The patent factory model, patent aggregation model, and patent troll model would fall from favor as the *innovation model* ascended as the only economically rational ground for seeking and enforcing a patent.

Conclusions

What if the patenting process were utterly simple, with the USPTO committed to issuing the majority of patents within a single year—and with no patentee every enjoying less than 17 years of post-issuance patent life? Similarly, what if any questions of patent validity could similarly be resolved in less than a year by the USPTO—with the public having a categorical right to raise any issue of patentability in an issued patent promptly after the patent has issued? And, what if the underlying standards for patentability were fully codified—in ways that were entirely transparent, objective, predictable, and simple? Could a patent system be built occasioning little need for discovery of the inventor and largely limiting patentability and patent validity determination to publicly accessible information?

If the above could be accomplished—and the AIA has already taken the patent system much of the way along this journey—the resulting patent system could have all the hallmarks of an effective property rights system. The existence of valid property rights could be determined promptly and economically—and with a high degree of certainty. Equally, illegitimate assertions of patent property rights could be vanquished relatively quickly and inexpensively. The result would be a patent system could operate with an effectiveness as a property right system that would be hard to deny. It would be one in which the role of patent factories, patent aggregators, and patent trolls would be negligible. Economically viable patenting models would tightly align with promoting progress in the useful arts—using the prospect of patents to make or secure investments in developing and commercializing new technology.

Such a patent system should pose insuperable challenges for anyone attempting to arouse anti-patent sentiments. What’s not to like about a patent system replete with such virtues and devoid of its old vices? If this be so, then let’s stop the indulgence of cursing the anti-patent sentiments that are about and instead take up the cause of eliminating any justification for them. Starting at ground zero, we can build something more efficient, far simpler, much fairer, and demonstrably better that would be a wonder to behold.

APPENDIX I

RESPONSE TO THE OCTOBER 28, 2016 FEDERAL REGISTER NOTICE²¹ ON REVISION OF THE DUTY TO DISCLOSE INFORMATION IN PATENT APPLICATIONS AND REEXAMINATION PROCEEDINGS

ROBERT A. ARMITAGE – CONSULTANT, IP STRATEGY & POLICY

Michelle K. Lee
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office
Alexandria, VA 22313-1450

Under Secretary Lee:

Thank you for the opportunity to provide comments in response to the Notice of Proposed Rulemaking relating to the duty to disclose information in patent applications and reexamination proceedings. The United States Patent and Trademark Office is to be commended for initiating this rulemaking effort in 2011²² and resuming it with this second opportunity to provide comments. As detailed below, this effort by the Office holds the potential to be of singular importance to the operation of the patent system.

While the 2011 *Therasense*²³ decision of the Federal Circuit was a motivating force behind the present effort at rulemaking, that decision represents only one of several factors that the Office should take into account any effort to modernize the regulations addressing its duty of disclosure. The comments below focus on the implications of three such factors.

The first of these three factors is the enactment of the Leahy-Smith America invents Act.²⁴ It provides a set of compelling reasons to rethink the duty from the ground up, independently from any *Therasense*-related considerations.²⁵ Of particular note is its limitation on prior art to publicly accessible information, abolishing the former dependence on dates of inventions in the determination of the scope and content of applicable prior art. The AIA took major steps toward rendering patentability determinations dependent solely on publicly available information.

²¹ Fed. Reg. 81:74987-89 (Oct. 28, 2016)

²² The earlier notice of proposed rulemaking was published in the Federal Register (76 Fed. Reg. 43631) on July 21, 2011. Comments were due on September 19, 2011.

²³ *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (*en banc*).

²⁴ Pub. L. No. 112-29, 125 Stat. 284 (2011).

²⁵ Commenting on the implications of the AIA on the duty of disclosure at the time of its enactment, I noted, “the USPTO can and should rethink the duty of disclosure placed upon patent applicants, particularly with respect to information available to the public. ... A proper reworking of the USPTO’s own rules on disclosure is needed to end the era in which over-loading the examiner with information, and then under-analyzing this information overload as to possible relevance to the patent examination, is the best way to protect the applicant’s interests.” Robert A. Armitage, *Understanding the America Invents Act and Its Implications for Patenting*, AIPLA Q.J. 40:1, 131 (2012).

Second, the duty to disclose is closely tied to the quality objectives that the Office has established.²⁶ Perversely, the current formulation of the duty encourages *quantity* over *quality* in the information patent applicants provide to patent examiners during the patent examination process. The current incentives to *over disclose* and *under explain* items of prior art results in an applicant-examiner dialogue that is less productive and less candid than it would be if the duty were formulated to optimally serve the interests of patent examiners, inventors, and the broader public.

Third, any new rulemaking on information disclosures will apply in an era when IT will be increasingly dominated by artificial machine intelligence and cognitive computing capabilities. The availability of these new IT capabilities suggest a rethinking of a disclosure regime that was initially written out when accessing and communicating information often meant searching the cabinets containing a library's card catalog and discussing the results on a rotary-dial telephone.

A Ground-Up Rethinking Of The Duty To Disclose Should Be Undertaken By The Office

The current 37 C.F.R. § 1.56 or “Rule 56” derives from a rule that was originally conceived and promulgated in 1977.²⁷ Because the major consequences of the “important to a reasonable examiner” materiality standard under this 1977-vintage rule were largely unintended, the 1992 version of the Rule 56 switched to a definition of materiality that turned in part on *prima facie* unpatentability.²⁸ It was the standard that reminded in force when the Federal Circuit's *Therasense* decision defined the type of *material misconduct* that merited the mandatory unenforceability sanction whenever misconduct arose from an intent to deceive.

Whatever the justification for the courts to hold patents unenforceable for the intentional omission of material information or material misrepresentations, it does not logically follow that such a justification should form the framework for amending Rule 56's disclosure requirements. Indeed, it arguably makes no sense for the Office to look backward at court decisions to determine the nature of a rule that might best assure patent examinations are accomplished with accuracy, completeness, and efficiency.

Rather, any new Rule 56 should be forward-looking. It should be based on the dominance of the three factors summarized above. In brief, by setting *Therasense* aside, a new Rule 56

²⁶ See Robert A. Armitage, *Advancing Patent Quality across the IP Community*, “What Would A Zero-Based Patenting Paradigm Look Like?”, https://law.duke.edu/sites/default/files/centers/cip/patentqualityconf/slides_robert-armitage_fundamental-predicate-reforms.pdf.

²⁷ See 42 Fed. Reg. 5593 (Jan. 28, 1977). The 1977 incarnation of Rule 56 was modeled after an SEC disclosure obligation with respect to information material to investors. It was in part intended in part to preclude inundating investors with *unimportant* information *i.e.*, *TSC Industries, Inc. v. Northway, Inc.*, 426 U.S. 438, 449 (1976), “An omitted fact is material if there is a substantial likelihood that a reasonable shareholder would consider it important in deciding how to vote.” Unfortunately, the implementation of identical standard, *mutatis mutandis*, by the Office in the 1977 Rule 56 encouraged disclosure of information that was entirely inconsequential to patentability, since such information was deemed to nonetheless be regarded as nonetheless material.

²⁸ See 57 Fed. Reg. 2021 (Jan. 17, 1992).

should simply define those disclosure practices will best support more *accurate, complete, and efficient patentability determinations* in the decades of the 2020's and 2030's.

In particular, it is vital for the Office to put into context the dramatic changes to the patent system in the forty years since 1977. The 20th century U.S. patent system was characterized by a highly subjective law on patentability, in which many types of patentability-related information were not publicly available. Moreover, the patent examination process was a secret dialogue between applicant and examiner with no public input permitted before a patent issued. Often, the only public inkling a patent was being pursued for a claimed invention came with the grant of the patent on the invention. Public input into the patenting process post-issuance was equally meager, particularly compared to the comprehensive post-issuance review process that is now available for all patents issued under the AIA' first-inventor-to-file principle.

The non-transparency, subjectivity, unpredictability, and complexity that were the hallmark of this 20th century patent system's patentability requirements made an accurate, complete, and efficient patentability determination by a patent examiner highly dependent on the patent applicant being forthcoming with both patentability-relevant information that was not publicly accessible and with publicly accessible information that otherwise could be impossible for the patent examiner to uncover from even the most diligent search of the Office's mostly manually searchable collections of items of prior art. It was understandable that a 1992 duty of candor would be ensconced in rulemaking in a didactic manner, lecturing the patent applicant on the necessity to be forthcoming with information disclosures that, without which, the secret process of examining patent applications could not hope to come to an accurate conclusion.

Today, patentability is determined based on criteria that were designed by the AIA to be as transparent, objective, predicable, and simple as possible. The process of patent examination is not simply public, but immediate, contemporaneous public access to most patent application files is available through the Internet. Pre-grant submissions of prior art by members of the public are not just permitted—they must be considered by patent examiners before issuing a patent. Post-grant review by the Office's administrative patent judges assures that public input can result in the prompt correction of any error in a patentability determination by a patent examiner once a patent has been issued.

In brief, every premise that motivated the Office's efforts in the 1970's, 1980's, and even 1990's in drafting the original versions of Rule 56 has now been turned on their head.

Just as important, advances in information technology continue to erode the role of patent applicant as a preferred, much less unique, source of publicly accessible information relevant to patentability, particularly with respect to items of possible relevant prior art. Today, relevant information that can be readily gleaned from highly sophisticated electronic searching abilities.

Moreover, as noted above, any new Rule 56 will operate in an era of vastly more competent information technology capabilities. Artificially intelligent machine translations and cognitive searching capabilities will increasing mean that machines will be the most intelligent and comprehensive agents for searching, analyzing, and reporting on the significance of items of relevant prior art to patent examination.

For all these reasons, as the Office looks to reformulate Rule 56 obligations in the form of a new rule for the 2020's and 2030's, it should discard its historic and increasingly obsolete focus on applicant disclosures being needed to secure access to items of prior art that might not otherwise come before the patent examiner. It should take seriously the need dissuade patent applicants from submitting to patent examiners more than a relatively few items of prior art likely to bear on the patentability of the invention being claimed. Lastly, and perhaps most importantly, it should provide incentives for patent applicants to make *intelligent* disclosures, specifically disclosures that identify the possible relevance of items of information being submitted.

The Overarching Objective For Applicant Disclosures Of Items Of Prior Art Should Be To Afford Patent Examiners An Understanding Of The Possible Relevance Of Each Item

One comment²⁹ to the Office made in connection with the 2011 notice—and summarily rejected by the Office in its latest Federal Register notice³⁰—proposed addressing these emerging factors by limiting an applicant's duty of disclosure to non-public information. The intent of so limiting the duty to disclose was to afford the Office a lever. Should the applicant nonetheless proceed with the non-mandated disclosure of items of prior art, the Office could then require that such disclosures include a concise description of the possible relevance to the patentability of a claim being examined.

The comments below assume that the Office will continue to reject such a limitation on the duty to disclose. Given this premise and consistent with the comments above, the proposals for modifying Rule 56 laid out below focus on an alternative mechanism under which patent applicants will have incentives to make fewer, but more intelligent disclosures of items of prior art than under the current Rule 56.

First, the proposed Rule 56 would limit any required disclosures of items of prior art to those needed for an accurate and complete examination of a patent application. Specifically, absent some possible relevance to the patentability of a claim being examined, the submission of an item of information would be considered *verboten*. Submissions of prior art of no possible relevance lead to inefficiency in patent examination by diverting examining resources to reviewing materials having no bearing on patentability. Such materials lack any potential for making the patent examination process more complete or accurate.

Second, proposed Rule 56 offers incentives that should encourage patent applicants to voluntarily provide a representation to the Office as to the nature of the possible relevance to patentability of any item of prior art submitted to the Office.³¹ By identifying the possible

²⁹ See comments of Eli Lilly and Company (Sept. 19, 2011), proposing a limitation of the duty to non-public information, available at https://www.uspto.gov/sites/default/files/patents/law/comments/x_ac58-e_elililly_20110919.pdf. I was privileged to have represented Lilly in the preparation and submission of these comments on behalf of Lilly.

³⁰ See 81 Fed. Reg. 74995.

³¹ The new paradigm for a reformulated Rule 56 set out below specifically asks the Office to reconsider its response to Comment 18 in the July 21, 2011 notice, "The contemplated required explanation [of the relationship of the prior art to the claimed invention] is not included in this currently proposed rulemaking." Comment 18 had

relevance of such item of prior art that is submitted, such quality disclosures will contribute to the efficiency of patent examination, as well as to its accuracy and completeness.

Additionally, in the AIA era, the Office needs a balanced approach to disclosure obligations of all who submit information to the Office. Disclosure duties should be identically formulated for both patent applicants and those appearing before the Office adverse to a patent applicant or a patentee. With the public now empowered to make information disclosures that can result in cancellation of a patent once issued, it is of the utmost important to discourage all forms of fraudulent conduct by patent opposers.

Thus, the dramatically greater role of the public in the patenting process suggests that any new iteration of Rule 56 ought to define obligations of any and all individuals submitting information to the Office in a more comprehensive manner, by speaking equally to patent applicants and non-applicants as they conduct themselves before the Office.

Finally, as noted above, the proposed Rule 56 assumes that the Office might be willing to revisit its position on the non-inclusion in any new rules of a requirement for some explanation of why the submission of an item of prior art could be of possible relevance to patentability. In this regard, the new approach below offers a framework for a new Rule 56 that would differentiate between (1) items of information that are truly *material* to the patentability of a claimed invention being examined, (2) items of prior art that are merely *relevant* to a complete examination (whether or not ultimately material), (3) items of prior art that are of *possible relevance* to a complete examination, and—lastly—(4) items of prior art that are of no possible relevance to the examination of the patent application.

For an item of prior art to be submitted it would need to be of possible relevance to patentability—and patent applicants would have incentives for identifying accurately that possible relevance. By parsing information into these four categories for Rule 56 purposes, the proposal below seeks to end any motivation for prior art *over-disclosure*—by barring non-relevant disclosures—while providing strong incentives against *under-explaining* items of prior art that patent applicants do submit to the patent examiner.

In a dramatic break from the past, this proposed Rule 56 would separate out relevant information for which its non-disclosure or misrepresentation to the Office could be actionable misconduct by its submitter from irrelevant information for which disclosure to the Office could itself be actionable misconduct by virtue of its wrongful submission.

The “Duty Of Disclosure” Starting Point – The Comprehensiveness Of The Criminal Law And Its Statement Of The Obligations With Respect To Disclosures

requested that “the Office should not require applicants to explain or clarify the relationship of the prior art to the claimed invention as suggested by the Office in the previous notice of proposed rulemaking” and further “suggested that, if the Office requires such an explanation, applicants should be given a safe harbor so that such explanation would not be regarded as an act of affirmative egregious misconduct.”

In the post-AIA era of patentability being determined through publicly available information, in which patent examination is typically a public proceeding in which the full patent examination record is contemporaneously (and ubiquitously) made immediately available to the public—and one in which the public has the ability to submit publicly available information to the Office to be considered during examination (and again in post-issuance proceedings) after the patent has issued—the role of the applicant in the patent examination proceeding should be no different from that of any other individual or organization appearing before, or otherwise having dealings with, any entity within the federal government, in making any submission of any type.

With the end of the 19th and 20th century systems of examining patent applications in secret in a manner that was devoid of any public input into the pre-issuance or post-issuance patenting processes, there is nothing special about the patent applicant’s responsibilities of candor and good faith in such governmental dealings compared to than any other filer, submitter, or communicator.³²

Congress has enacted a comprehensive criminal statute to which nothing more arguably needs to be added by the Office to define the *disclosure conduct* obligations of those appearing before it. That statute appears in 18 U.S.C. § 1001(a) and states—

[W]hoever, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowingly and willfully—

- (1) falsifies, conceals, or covers up by any trick, scheme, or device a material fact;
- (2) makes any materially false, fictitious, or fraudulent statement or representation; or
- (3) makes or uses any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry...³³

This statement of *criminal liability* immediately suggests the form and content for a duty of disclosure to the Office under a new 35 U.S.C. § 1.56(a)—

(a) REQUIREMENTS WITH RESPECT TO DISCLOSURES.—

- (1) IN GENERAL.—An individual submitting information in a matter before the Office must not—
 - (A) falsify, conceal, or cover up by any trick, scheme, or device a material fact;

³² The opening of 1992 Rule 56 now (obsoletely) reads more like a fine essay than clear rulemaking and should for that reason alone be jettisoned from any modified rule, *i.e.*, “A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability.” While the foregoing is undeniably true, it is a universal truth as it relates to dealings with instrumentalities of the federal government. The same can now be said for submissions of all types to all governmental bodies before which applicants of all types make petitions seeking some governmental action. Rebuilding Rule 56 from the ground up proceeds from the assumption that this prose can be safely retired.

³³ 18 U.S.C. § 1001(a)

(B) make any materially false, fictitious, or fraudulent statement or representation; or

(C) make or use any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry.

The above obligation with respect to disclosure would fully implement the principle that no special or different standard or other duty for disclosure out to apply to different categories of submitters of information to the Office in connection with any matter or proceeding before the Office. It reflects the post-AIA reality that the public can now play an essentially equal role with patent applicant in the quest for quality patent examination and further reflects that that role may likely grow as new information technology tools come online and continue their exponential improvement in that capability.

The Office Should Define Materiality In Terms Of Relevancy—With The Two Goals Of Both Assuring Disclosure Of—And Limiting Disclosure To—Possibly Relevant Information

The Office faces two equally formidable needs in its quest for quality and efficient examination of patent filings. The first challenge is assuring that all possibly relevant information to the patentability of the claimed inventions that it examines can be carefully considered by the patent examiner. The second is that such information not be lost within a sea of information of no possible relevance to patentability that has been submitted for the examiner's consideration.

In the artificial intelligence/cognitive computing chapter of the “Information Age,” the greatest challenge to an accurate and complete examination will not be identifying items of information (such as individual prior art disclosures) themselves, but *intelligently* identifying why a particular item of information is of possible relevance. But another way, it is not the quantity of information that might be produced for an examiner to consider but the useable *quality* of such information being submitted.

As the IT capabilities relentlessly progress over the next several decades—offering startlingly new information technology capabilities—the Office will have an even more critical need for new regulatory tools aimed at assuring that the examination process is not swamped by disclosures of inconsequential prior art whose disclosure is stimulated by a misdirected “duty of disclosure” focused on sanctions for non-disclosures rather than incentives for quality disclosures.

Put in more pedestrian language, a “duty of disclosure” should not encourage—as existing Rule 56 does—submitting prior art haystacks to the Office, but should rather should encourage an *identification* of each of the needles therein and their possible relevance to patentability of any claim under examination. Put yet another way, if the Office is to define a duty of disclosure with respect to prior art, that duty should be two-fold. First, that duty should only permit the disclosure of *possibly relevant* of the prior art—with any submission containing an *identification of the possible relevance*. Second, that same duty should affirmatively bar the

disclosure of any information for which the disclosing individual cannot identify any *possible relevance*.

If an accurate, complete, and efficient patent examination were the objective of the patenting process, the second element of that two-part duty would be self-evident. More broadly, it should be self-evident, that all governmental entities conducting business with the public should have the inherent right to bar the submission of information for which an individual appearing before the entity can ascribe no possible relevance.

Given modern information-generation and information-submitting capabilities—not to mention the “information flooding” practices of some patent applicants in making disclosures to the Office—the time has come for the USPTO to promulgate an admittedly unprecedented rule barring the disclosure during examination of information, particularly items lacking any possible relevance to patentability.

Such a new Rule 56 would start with a definition of *materiality* designed to assure the public that sanctions for patent applicant misconduct could be available in the situation where an invalid patent claim issued—or could have issued—based on the non-disclosure or misrepresentation information that, had it been properly before the examiner, would have permitted a new ground of rejection to have been made with respect to the claim. Otherwise, it would be triggered by relevance to the examination of a claim being considered by the patent examiner.

The proposed text for such a *relevance*-based *materiality* standard is as follows, *i.e.*, a new Rule 56(a)(2):

(2) MATERIALITY; RELEVANT PRIOR ART.—

(A) RELEVANCE TO AN EXAMINED CLAIM REQUIRED FOR MATERIALITY.—Information or its misrepresentation is not material to the examination of an application for patent unless the information or its misrepresentation is relevant to the patentability of a claim being examined in the application.

(B) RELEVANT PRIOR ART.—An item of prior art that has not previously been considered by the Office during examination of an application is relevant to the patentability of a claim in the application if, taking account any prior art that may already be under consideration by the Office, consideration of the item not previously disclosed would allow the Office to reject the claim as unpatentable on a new ground that could not have been raised without a citation to such item.

(C) MATERIALITY LIMITATION.—Notwithstanding subparagraph (B), information or its misrepresentation is not material to the patentability of a claim in an application if, were such claim to be patented on the application, the claim would not be invalid.

The above definition of materiality and its subsidiary definition of relevant prior art would then permit the drafting of a *duty not to disclose* that would be triggered by the absence of any *possible relevance* to the examination of a claim. This could be accomplished through the following text, as a new Rule 56(b)(1) and (2):

(b) ITEMS OF PRIOR ART NOT TO BE DISCLOSED.—

(1) IN GENERAL.—An individual who submits one or more items of prior art to the Office in connection with the examination of a patent application must limit such a submission of prior art to items for which such individual has a good faith belief that each submitted item is possibly relevant to the patentability of at least one claim being examined in the application.

(2) POSSIBLE RELEVANCE.—An individual item of prior art is of possible relevance to the patentability of a claim under paragraph (1) if a reasonable possibility exists that such item could qualify as relevant to patentability, as set out under subparagraph (a)(2)(B).

Any New Rule 56 Should Provide Incentives For Patent Applicants To Provide Concise Descriptions Of The Possible Relevance Of Items Of Prior Art Being Submitted.

The proposed duty not to disclose outlined above should not place patent applicants in the proverbial damned-if-they-do-and-damned-if-they-don't dilemma. The most straightforward manner in which the Office can assure that no such dilemma can exist is through a series of “safe harbor” provisions that would serve the interests of the Office and the public in assuring that disclosed items of information be accompanied by concise descriptions of the possible relevance of each item to patent examination.

In this regard, three such “safe harbor” provisions are essential. The first of the three would provide that a submitter's disclosure of an item of prior art could not violate the disclosure prohibition whenever accompanied by a concise statement setting forth the submitter's good faith belief as to the item's possible relevance to examination. In this way, the submission of an item of information, with a characterization of its possible relevance, would avoid altogether the possibility that the non-disclosure obligation had been breached.

The first of the three “safe harbors” suggests, however, a need for a second one. Submitters will understandably protest that their characterizations of possible relevance could themselves increase exposure to misconduct allegations based upon the potential for generating allegations of misrepresentations.

To obviate such concerns, the second “safe harbor” would provide that the content of such a representation of possible relevance could not be cited in support an allegation of Rule 56(a) misconduct.

Finally, to avoid complaints by patent applicants that such characterizations of possible relevance could be construed as some sort of admission, a third “safe harbor” would apply. Under this last “safe harbor” representations of possible relevance would not admissions as to materiality or even relevance.

These “safe harbors” would comprise a new Rule 56(b)(3)—

(3) SAFE HARBORS.—

(A) NO VIOLATION OF PROHIBITION.—A submitter’s disclosure of an item of prior art shall be deemed not to violate the prohibition on disclosures under paragraph (1) if the submitter’s disclosure of such item is accompanied by a concise statement setting forth the submitter’s belief as to the item’s content that is of possible relevance to the examination of the application in which it is disclosed.

(B) REPRESENTATIONS AS TO CONTENT AND POSSIBLE RELEVANCE.—No representation by a submitter that is made in the manner described under subparagraph (A) may be cited in support of a contention that a disclosure requirement under subsection (a) has been violated.

(C) NO ADMISSION OF RELEVANCE.—No statement made under subparagraph (A) may be cited by the Office or the courts as an admission that an item is material in fact to patentability or otherwise of any relevance in fact to patentability, including as an admission that such item could be relied upon by the Office in support of a rejection of any claim in an application.

With these “safe harbor” *carrots* removing any downside from the providing such concise descriptions of possible relevance, what remains is the upside—in the form of a *stick*. Providing an item of prior art without such a characterization opens the submitter to the prospect of misconduct allegations if the item of prior art is found to be of no possible relevance to the examination of any claimed invention.

A further incentive for making accurate descriptions of possible relevance for items of prior art being submitted is essential for the proposed Rule 56 to work as intended. This further incentive as based on the position taken by the Supreme Court in *Microsoft Corp. v. i4i L.P.*, 564 U.S. 91 (2011).

The Supreme Court in this appeal determined that—in the course of applying the clear and convincing evidence standard to presumptively valid patents—the factfinder should take into account whether the patent examiner previously considered on the merits information being presented by a party challenging the validity of the presumptively valid patent. For prior art *not before the Office*, a jury instruction can be appropriate that the no issue of deferring to the Office’s judgment arises with respect prior art not before the Office.

With this decision in mind, the Office can and should define what prior art the Office considers on the merits in determining patentability. Moreover, the Office should do so by limiting such prior art to three sources.

The first prior art source would be prior art actually cited by the patent examiner in support of the rejection of a claim. The second source would be prior art properly submitted under 35 U.S.C. § 122(e) by members of the public. The third source of prior art before the Office would be that submitted by the patent applicant containing an accurate description of the possible relevance to the examination of the claims.

By collecting these three limitations together, the Office would create a fairly compelling incentive for submitters to take seriously both the duty not to disclose and the upsides from carefully, concisely, and accurately laying out for the patent examiner the possible relevance of information for which a duty to disclose may exist. The text for implementing this last incentive could appear in a new Rule 56(d)—

(d) EFFECTS OF INFORMATION DISCLOSURE.—

(1) CONSIDERATION BY THE OFFICE.—For the purposes of this section, no item of prior art shall be deemed to have been considered by the Office in determining the patentability of the claims in an application unless such item was—

(A) relied upon by the Office in support of a rejection of at least one claim in the application;

(B) submitted in the application, by or on behalf of the applicant, together with a concise statement accurately identifying the content of the item that is possibly relevant to patentability; or

(C) submitted to the Office by a third party in connection with the application in a preissuance submission meeting the requirements under 35 U.S.C. § 122(e).

(2) OTHER PROCEEDINGS.—In determining the validity of a patent in a proceeding in which the patent is presumed to be valid, only prior art deemed under paragraph (1) to have been considered by the Office in the application on which the patent issued shall be regarded as having been before the Office in the examination of the patent.

The Office Should Require An Affirmative Disclosure Of Any Known Prior Art Of Possible Relevance To Patent Examination

As a final matter, any new Rule 56 should continue to place patent applicants under an affirmative duty to disclose to the Office items of prior art of possible relevance to patent examination. A simple means to this end is to require a statement that the patent applicant has no knowledge of any relevant prior art, except where the patent applicant has submitted with the filing of the patent application one or more items of possibly relevant prior art.

This could be accomplished with a new Rule 56(c)—

(c) REQUIRED STATEMENT IN LIEU OF PRIOR ART DISCLOSURE.—Unless a submission in an application has been made at the time the application was filed identifying one or more items of possibly relevant prior art, a statement must be submitted in connection with the filing of the application that the applicant for patent has no knowledge of any relevant prior art.

Conclusions

The present rulemaking efforts presents the Office with an historic opportunity to open a new chapter in the long saga of the duty of candor and good faith before the Office and—for the first time—remove the incentives that have long sustained the plague of over-disclosing and under-explaining prior art that all but makes a mockery of the duty. Moreover, the enactment of the AIA makes an overhaul of Rule 56 more than ripe. The AIA marks the start of a new era in which patentability criteria are to be focused exclusively on publicly accessible information.

Taken as a whole, the approach laid out above is designed to optimize applicant-examiner interactions now that the requirements for patentability have been made more transparent, objective, predictable, and simple. The intent is not just to produce a more efficient patent examination, but one more accurate and complete. Adopting proposed Rule 56 offers a realistic hope to make greater sense out of a forty-year old disclosure system that has sadly come to make progressively less sense, particularly in the context of patenting in the 21st century.

Attached: Appendix A, Proposed Revision To § 1.56 Disclosure of Information to the Office.

APPENDIX A: Proposed Revision To § 1.56 Disclosure of Information to the Office.

(a) REQUIREMENTS WITH RESPECT TO DISCLOSURES.—

(1) IN GENERAL.—An individual submitting information in a matter before the Office must not—

(A) falsify, conceal, or cover up by any trick, scheme, or device a material fact;

(B) make any materially false, fictitious, or fraudulent statement or representation; or

(C) make or use any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry.

(2) MATERIALITY; RELEVANT PRIOR ART.—

(A) RELEVANCE TO AN EXAMINED CLAIM REQUIRED FOR MATERIALITY.—Information or its misrepresentation is not material to the examination of an application for patent unless the information or its misrepresentation is relevant to the patentability of a claim being examined in the application.

(B) RELEVANT PRIOR ART.—An item of prior art that has not previously been considered by the Office during examination of an application is relevant to the patentability of a claim in the application if, taking account any prior art that may already be under consideration by the Office, consideration of the item not previously disclosed would allow the Office to reject the claim as unpatentable on a new ground that could not have been raised without a citation to such item.

(C) MATERIALITY LIMITATION.—Notwithstanding subparagraph (B), information or its misrepresentation is not material to the patentability of a claim in an application if, were such claim to be patented on the application, the claim would not be invalid.

(b) ITEMS OF PRIOR ART NOT TO BE DISCLOSED.—

(1) IN GENERAL.—An individual who submits one or more items of prior art to the Office in connection with the examination of a patent application must limit such a submission of prior art to items for which such individual has a good faith belief that each submitted item is possibly relevant to the patentability of at least one claim being examined in the application.

(2) POSSIBLE RELEVANCE.—An individual item of prior art is of possible relevance to the patentability of a claim under paragraph (1) if a reasonable possibility exists that such item could qualify as relevant to patentability, as set out under subparagraph (a)(2)(B).

(3) SAFE HARBORS.—

(A) NO VIOLATION OF PROHIBITION.—A submitter's disclosure of an item of prior art shall be deemed not to violate the prohibition on disclosures under paragraph (1) if the submitter's disclosure of such item is accompanied by a concise statement setting forth the submitter's belief as to the item's content that is of possible relevance to the examination of the application in which it is disclosed.

(B) REPRESENTATIONS AS TO CONTENT AND POSSIBLE RELEVANCE.—No representation by a submitter that is made in the manner described under subparagraph (A) may be cited in support of a contention that a disclosure requirement under subsection (a) has been violated.

(C) NO ADMISSION OF RELEVANCE.—No statement made under subparagraph (A) may be cited by the Office or the courts as an admission that an item is material in fact to patentability or otherwise of any relevance in fact to patentability, including as an admission that such item could be relied upon by the Office in support of a rejection of any claim in an application.

(c) REQUIRED STATEMENT IN LIEU OF PRIOR ART DISCLOSURE.—Unless a submission in an application has been made at the time the application was filed identifying one or more items of possibly relevant prior art, a statement must be submitted in connection with the filing of the application that the applicant for patent has no knowledge of any relevant prior art.

(d) EFFECTS OF INFORMATION DISCLOSURE.—

(1) CONSIDERATION BY THE OFFICE.—For the purposes of this section, no item of prior art shall be deemed to have been considered by the Office in determining the patentability of the claims in an application unless such item was—

(A) relied upon by the Office in support of a rejection of at least one claim in the application;

(B) submitted in the application, by or on behalf of the applicant, together with a concise statement accurately identifying the content of the item that is possibly relevant to patentability; or

(C) submitted to the Office by a third party in connection with the application in a preissuance submission meeting the requirements under 35 U.S.C. § 122(e).

(2) OTHER PROCEEDINGS.—In determining the validity of a patent in a proceeding in which the patent is presumed to be valid, only prior art deemed under paragraph (1) to have been considered by the Office in the application on which the patent issued shall be regarded as having been before the Office in the examination of the patent.