THOMSON REUTERS | LEGAL EXECUTIVE INSTITUTE

Written Submission Remarks of

Robert N. Schmidt, MS, MBA, JD, PE, Esq.
Small Business Technology Council

New IP Financial Models: Innovation, Wall Street, and Patents

10:45 AM Panel

The Economic Impact and Value of Patents in a Volatile Market

Patent Policy: A Small Business Perspective

October 8, 2015
New York City

I am here today as the Co-Chair of the Small Business Technology Council[1] (SBTC), the high tech arm of the National Small Business Association (NSBA), which is the nation's longest running small-business advocacy organization.[2] Although NSBA has expressed its similar concerns elsewhere on behalf of a broader constituency,[3] today I speak on behalf of the 5,900 firms who participate in the Small Business Innovation Research[4] (SBIR) and Small Business Technology Transfer[5] (STTR) programs, as well as many of the small businesses who have grave concerns over the severe damage that the legislative, judicial, and executive branches are doing to the innovation ecosystem in America. I do so to primarily raise our concerns regarding the detrimental effects that "Patent Reform" bills such as H.R. 9, the so-called "Innovation Act," will have on small inventing companies. Due to time limitations, my remarks will focus primarily on the statutory effects of the Legislative Branch, but I will briefly mention the decisions being made by the Judicial and Executive Branches that are harming the ability of small inventing companies to protect their inventions.

Small business has been added to the list of universities, venture capitalists, technology startups, small inventor entrepreneurs, former patent commissioners, conservatives, liberals, and Patent Court judges that oppose legislation such as H.R. 9 and S. 1137, the Protecting American Talent and Entrepreneurship Act (PATENT Act), as currently written.[6] Crafting a narrow and targeted alternative to this harmful legislation is important to small business and inventors, as patents are critical to all innovative firms, especially SBIR firms. Patents are also critical for the American economy, as I will discuss.

Small Businesses employ 37% of scientists and engineers.[7] SBIR firms have received over 125,000 patents,[8] and small businesses create ***16.5 times*** more patents per employee than large firms.[9] And SBIR firms employ 7% of all of America's STEM workers.[10] While ostensibly aimed at curbing a small number and anecdotal instances of abusive patent litigation, the overbroad and sweeping proposed legislation in H.R. 9 will have the effect of suppressing patent rights of *all* patentees, and in particular, will harm the small high-tech, job-creating SBIR businesses, and thus the economy.[11] Simply stated, patents are far more important to small businesses' survival than to large businesses. And licensed patents are the only way universities can commercialize their research. We need a bill that helps, not harms, the legitimate patent rights of small businesses and universities.

SBIR firms receive a quarter of America's R&D 100 awards (the world's most valuable innovations) and create 58% more patents than all universities combined.[12] SBIR firms employ scientists that have received 11 Nobel prizes, receive one in every seven VC dollars, and were involved in 1,923 Mergers and Acquisition deals.[13] The Fortune 500 firms' share in generating key innovations has dropped from over 40% in the 1970s and early 1980s to just 6%. Large firms can and do survive without strong patent rights. Small businesses cannot. Weakening patent rights will threaten the very interests of universities and small businesses that Congress sought to protect in appropriating R&D funds, thereby undermining the taxpayers' important investment in research commercialization and domestic job creation. **Without strong patents, foreign interests will usurp American R&D and commercialize our efforts overseas.**

America is *now* presented with the choice between bills with distinctly different foci: H.R.9[14]/S.1137[15], or S.632, the appropriately-termed STRONG Patents Act of 2015.[16] H.R. 9,

which I believe should be more aptly named "The Ending the American Dream Act," clouds title to patents[17], weakens the patent holder's ability to economically enforce their patent,[18],[19] and undermines fund-raising and licensing activities.[20] In contrast, the STRONG Patents Act secures the user fees from diversion away from the Patent Office, ensuring that resources are commensurate with examination workload, and protects patent holders from large patent "Ogres" who would otherwise infringe their valid patents with impunity. H.R. 9 stifles the enforcement of patents and engenders the large monopolistic and market dominant firms, encouraging more Patent Ogre activity.

We must first understand the importance of the decision before America – weakening or strengthening patent rights. The Federal Reserve found that **patents are the number one indicator of regional wealth**,[21] more important than education or infrastructure. Being a high patenting community means the difference of **$8,600 in household income**.[22]

In 2012, Intellectual Property (IP) was responsible for sustaining more than **55.7 million jobs** in the U.S.[23] Intangible assets including corporate IP and brand recognition account for **84 percent of the value of U.S. public companies**.[24] Innovative methods of patent licensing can add up to **$200 billion in new annual growth** to the U.S. economy. IP-based business activities constitute approximately **55 percent of U.S. GDP**,[25] and in 2011, IP-based assets were valued at about $9 trillion.[26] These baselines should give us all pause, as they provide the missing context for the (inflated and erroneous,[27,28] but (even if it were true) relatively miniscule) alleged $29 billion per year costs of "troll" litigation that we keep hearing from proponents of H.R. 9. Thus, hasty decisions changing the patent laws would result in several orders of magnitude more risk, which can result in downturn shocks to our economy that are several times that caused by the housing crisis of 2008.

This debate on several aspects of patent legislation is primarily between the large market dominant IT firms and small players such as those that participate in the SBIR program. However, when it comes to patent legislation, it is far more important that Congress pay attention to the plight of small businesses who create 64% of all new private sector jobs.[29] The major IT firms supporting the Innovation Act: Google, Cisco Systems, and Microsoft combined have about 125,000 US employees.[30] SBIR companies employ over 500,000 STEM employees.[31] If those SBIR companies are infringed upon, (not trolled), but have their patented technology stolen, HR9 makes it all but impossible for them to defend their patents and many jobs will be lost.

The America Invents Act of 2011.

The America Invents Act[32] (AIA) was in part "sold" on stopping rampant litigation by so-called "Patent Trolls", and in part on harmonizing our patent system with that of the rest of the world (The AIA made our economy more like France). Instead, the AIA only caused much higher rate of litigation, surging to unprecedented levels.[33] Immediately after the AIA was passed, its proponents changed their tune and insisted that the new "Innovation Act" is needed to stop the "Trolls". However, as we have seen, neither the AIA nor the Innovation Act will solve the Troll problem. What already has largely quashed any Troll problem that might have ever existed are recent Supreme Court decisions in *Octane Fitness v. Icon*[34] and *Highmark v. Allcare*,[35] which

have the effect of reducing patent litigation. They relaxed the standards for awarding attorney fees and costs to the prevailing party.

The AIA made it harder to get a patent and harder to sustain it in post grant challenges in the Patent Office and in court. Substantially limiting the one-year grace period, made many inventors lose their patent rights due to prior disclosures and public use or sale. It also made it much more difficult to obtain funding as VCs generally won't sign non-disclosures. Inter Partes and Post Grant Reviews also added another nine months after patent issue to clear the title from potential infringers attacking the patentee's claims. As "time is money," this can be critically debilitating for new startups.

The AIA and recent court decisions are already causing a devaluation of American wealth. "*Publicly held corporations will have to report any material devaluation to shareholders and the Securities and Exchange Commission (SEC), resulting in a devastating impact on patent centric companies. Hardest hit will be the high tech and biotech firms, which contribute significantly to U.S. economic growth, particularly through job creation and whose innovations are primarily responsible for the United States' edge over global competitors."*[36,37] Other writings are also calling for a Mark to Market approach to devalue companies due to the declining value of patents in the US.[38]

The SBA produced a study on the effects of the America Invents Act.[39] Unfortunately, it did not get into the details of the economic effects of the Act. Although no detailed study has been performed on the economic effects of the AIA, one preliminary analysis by Richard Baker of New England Intellectual Property, LLC, has shown that **the AIA has cost the US economy about $1 Trillion**.[40] Until a more detailed analysis has been completed, this remains the most accurate estimate of the loss of American wealth due to the AIA.

The "Innovation Act" of 2015, HR 9.

The recent "Patent Reform" bills, such as last session's H.R. 3309 and its identical follow-up in this Congress, H.R. 9, have an insidious effect on small businesses. This proposed legislation will deprive small inventors of opportunities to get the best inventions to market because it will deter investors from making what would constitute riskier investments. By imposing: Loser Pays, Pay to Play, Disclosure of All Plaintiff Interested Parties, Fee Shifting Joinder, Covered Business Methods (CBM), Elimination of Post Grant Review Estoppel, Enhanced Pleadings and Limiting Discovery, Customer Stay, and Patent Term Adjustment provisions that are so onerous, only large corporations will be able to commercialize inventions. **The provisions will make small inventing companies "Toxic Assets" to investors.** H.R. 9's provisions micromanage procedures and adjudication in patent cases. It takes much discretion away from the judiciary in case-management based on their expertise and judgment for the particular case at hand. Only a few of the concerns will be discussed here for brevity.

In addition to SBTC's prior documents opposing H.R. 9,[41] below are the comments addressing the listed questions about H.R.9 (and some other past Senate and House bills). The SBA Office of Advocacy has also expressed similar concerns.[42]

- **Loser Pays:** American laws do not apply "loser pays" provisions to consumers, corporations, protected groups, or any other class of private litigants. This provision singles out litigants with limited resources; it would create substantial chilling effects on small entities'

(patentees or alleged infringers) ability to enforce their legal rights. The prohibitive risks of loss would prevent patentees with legitimate claims from asserting their patents and would likewise force small business innovators wrongly accused of patent infringement to settle without having their day in court. Why should patent litigants with limited means be singled out as the only class that should bear this burden? Small business inventors will be deterred from exercising their rights, resulting in loss of jobs. More perniciously, the smaller firms will be further deterred from investing to develop such rights, as they will need a $5-10 million legal war-chest before they try to enforce any patents. The large multi-national companies know that smaller companies cannot afford to pay the larger business's legal costs if they lose, and so may act assuming small businesses will not take the chance. We have already seen large companies ignoring small companies' patents. Officers of some of America's largest corporations tell small companies they don't care about small company patents, even though they may be infringing. Thus, "loser pays" will further allow large "Patent Ogres" to infringe with impunity.

- **Bonding or "Pay to Play":** This provision has been part of a number of House and Senate bills in the past. (E.g.: last Congresses S. 1612 by Sen. Hatch.[43]) They required the inventor plaintiff to post a bond or certify that they can pay the alleged infringers legal fees should they not prevail. This puts enforcing a patent beyond the financial capability of all but the largest and wealthiest of small businesses. Pay to Play would result in almost all of the over 5,000 active SBIR companies being unable to enforce their patents. This is probably the most heinous provision of proposed patent bills. The problem is that the patent(s) is the major asset of most small companies. If it is declared invalid, the value of the company plummets. So even if the entrepreneur wants to pledge his entire company for the bond, it will likely be insufficient. Since the entrepreneur has likely already pledged his house for a credit line, this will mean that posting a bond will be impossible for almost all small companies. Thus, Congress will be telling most Americans, they are "just too poor to invent or enforce their patents."
- **Disclosure of All Plaintiff Interested Parties:** requires both investors and licensors to be disclosed where the patent is the primary asset of the company. This will discourage commerce in two ways. First, in the early stages of company formation, it will require Angel investors to break one of their major priorities: anonymity. This provision will discourage Angels from investing in the smallest companies, when outside funding is hardest to obtain. Secondly, it will dampen licensing activities. When a licensee needs time to incorporate the licensed invention into their product, they normally do not want to alert their competition as to where they are moving in the market. This will disclose the fact that the licensee is adding a new feature or an entirely new product line.
- **Fee Shifting "Joinder":** makes investors and others personally liable for the legal fees of the alleged infringer if the small business plaintiff does not prevail (possibly on each and every claim). This provision eliminates a basic tenant of corporate law, protecting investors from personal liability, thereby making patents a "toxic" asset. This provision is antagonistic to investment in new technologies. Here, the problem becomes that almost no one will want to invest in new technology companies. It is concerning that angel groups may collapse due to fears of the liability of enforcing patents. The National Venture Capital Association[44] has expressed its concerns about this provision a number of times.[45,46] Note also that the joinder provision in HR 9 is asymmetric – it only applies to patentees. No similar provision is provided for recovering fees and costs from Interested Parties of non-prevailing alleged

infringers who cannot pay. **Thus, HR 9 discourages investments in patentees and incentivizes investments in infringers.**

- **Covered Business Methods (CBM):** provisions were removed from HR3309, but were still in some prior Senate bills (e.g.: S.866 last year by Sen. Schumer[47]). The AIA limited CBMs to a "financial product or service." It allowed post-grant review proceedings, to be made at any time until September 16, 2020, clouding their title for years. However, some legislation proposed to make the transitional proceedings of Section 18 permanent and expand the definition of "covered business method patent" to include data processing patents used in any "enterprise, product, or service." This means that any party sued for or charged with infringement ca*n always* challenge an extremely broad range of patents at the PTO. The request for a proceeding need not be related to financial products or services and can be submitted any time over the life of the patent. This would have far-reaching implications, because data processing is integral to everything from cutting-edge cancer therapies to safety systems that allow cars to respond to road conditions in real time to prevent crashes. Subjecting data processing patents to the CBM program would thus create uncertainty and risk that discourage investment in any number of fields where we should be trying to spur continued innovation.
- **Elimination of Post Grant Review Estoppel:** Under the AIA, a Post Grant Review prohibits the petitioner from later arguing *"any ground that the petitioner raised or reasonably could have raised during that post-grant review*." The proposed legislation deletes "or reasonably could have raised." This provision would reverse a long and hard-fought compromise reached during the AIA legislation. This will allow a defendant to bring multiple sequential Post Grant Reviews or other litigation in an effort to defeat the patent holder by burning the inventor's financial resources and time with effectively perpetual litigation. It would also now allow the infringing petitioner to assert in a civil action or at the International Trade Commission (ITC) "that the claim is invalid on any ground" even though the petitioner could hav*e reasonably* raised *the issue* during that post-grant review. This provision is another example of how small business inventers can be driven to extinction by exhausting their resources while trying to enforce, or even just keep, their patents.
- **Enhanced Pleadings and Limiting Discovery:** – H.R.9 and other bills (former S1013) have a provision that dictates enhanced pleadings requiring that the plaintiff produce substantially more information, and a provision limiting discovery prior to claim construction. Patent suits are among the most complicated and detailed, with many variables. The trial judge is the closest to the case and legislating how that judge manages the case will damage the trial judge's ability to bring a fair solution to both parties. This provision is unduly burdensome and raises pleading standards only on patent owners, requiring detailed particularities in alleging infringement. Glaringly missing are similar requirements that defendants making counterclaims or filing declaratory actions show with particularity why they do not infringe or why the patent is invalid, thus stacking the deck even further against the inventor. In an already expensive and complicated process, these two elements require the patent holder to spend more money up front and operate with less information than is needed. These are particularly onerous to small business inventors as they curtail the patent holder's ability to enforce a patent and reduce the ability of the judge to manage the case effectively. In addition to legislating court procedure, enhanced pleadings will cause delays in filing suit and add additional costs. It is anticipated that there will be more disputes about the adequacy of the complaints which will also increase the cost of litigation. And, limited discovery will

"delay resolution" to the "disadvantage of patent owner" even with "meritorious claims." Thus, the alleged infringer is incentivized to draw out the claim construction ruling.

- **Customer Stays:** present a problem for patents that focus on "use" rather than manufacture. The inventor is left with no way to enforce her patent when she can't sue a manufacturer as the manufacturer is not violating any claims of the patent, and they can't sue the end users ("Customers") until she prevails against the manufacturer. This may put the inventors in a Catch-22, where they will have no remedy. It also encourages foreign manufactures to collude to receive a "get out of jail card" and infringe with impunity. A much more thorough description of the problems with customer stays is shown here.[48] The problem is that this provision encourages foreign manufacturers, assemblers and parts suppliers to conspire with one another and with American retailers, arranging for the lowest value, least accessible, least answerable party to handle suits for patent infringement instead of any infringer having the liability. This has the impact of driving more manufacturing jobs overseas, further hurting the American economy.
- **Patent Term Adjustment (PTA):** Section 9(e) of HR 9 would eliminate Patent Term Adjustment (PTA) award for the PTO's failure to grant a patent within three years of its filing date (so-called "B delay" PTA) if such PTO delay is incurred after an applicants' statutorily-provided Request for Continuing Examination (RCE). This proposed section of H.R. 9 is being pushed by the PTO. It would modify 35 USC §154(b)(1)(B) (codifying 37 CFR § 1.703(b)(1) – the PTO's original erroneous construction of the PTA statute) that did not award any PTA for "B delay" once an RCE has been filed. In so doing, it would overrule the Federal Circuit decision in *Novartis*.[49] The provision would apply only to applications pending on–or filed after–the date of enactment. Of course, the problem with this provision's application to pending applications is that applicants may have already made decisions about filing RCEs (and not ex parte appeals, for instance) based on the PTA law prior to HR 9 and this retroactive effect would be unfair and may present a constitutional problem. Thus, it appears we have somewhat of an *ex post facto* law applying to prior applications that are pending. The problem that the SBTC sees with this change, however, is less about PTA credits and more about its effect of eviscerating the effectiveness of RCEs, and by implication, the quality of examination ***before*** RCEs must be filed. It is important to note that PTA is *not* awarded for RCE delays caused by the applicant. Because applicants would stop tolling PTA credit after filing an RCE, time lost due to PTO delays in prosecuting RCEs is taken away from the patent term. The PTO would have no incentive for prompt prosecution after an RCE is filed. This could embolden the PTO in its reach for rejections, issuing lower quality and incomplete office actions, which the applicant must "take or leave" if he does not want to suffer additional uncompensated delay by filing an RCE. Thus, harm can befall applicants who do not even file RCEs. To some degree, as much as the PTO insists that RCEs are being abused, they keep the PTO honest. It is SBTC's opinion that this entire section of the law (H.R. 9 Section 9(e)) should not be included in any pending legislation and that Congress' original intent as ruled in *Novartis* be followed; as it is not really about PTA – it is about chipping-away at the statutory right in § 132(b) for continued examination to get the claims patentees need for protecting their inventions.

Two other devious items have also been surreptitiously inserted into H.R. 9

- **Dishonest non-inventor filings**: *The America Invents Act* changed the American Patent System from First-to-Invent to First-to-File. One of the many arguments against this change

was that, with First-to-File, a person who obtained information about an invention could file before the inventor and get the patent. Those for the bill said that the person filing for the patent would have to execute an oath or declaration that he was the inventor, which they claimed would help stop dishonest filers. Now, in the *Innovation Act* (Manager's Amendment Version, Section 9 (h)(1)(B)(2) on page 75, lines 11-15, the language that said the filer "shall execute" is changed to "may be required to execute" an oath or declaration. So, again, The Innovation Act will make it easier to steal intellectual property. This language is also in the Senate's PATENT ACT, S.1137.

- **Allowing unreasonable assertion of defense:** On page 8, lines 14-16 (Manager's Amendment Version), there is text that strikes subsection (f) of section 273 of title 35, United States Code. There is no other description of what this section does. Section 273 is "**Defense to infringement based on prior commercial use.**" Subsection (f) is **Unreasonable Assertion of Defense.** If the defense under this section is pleaded by a person who is found to infringe the patent and who subsequently fails to demonstrate a reasonable basis for asserting the defense, the court shall find the case exceptional for the purpose of awarding attorney fees under section 285. So, striking subsection (f) will protect a guilty infringer who is using an unreasonable defense from the possibility of a fee reversal. An infringer will be able to assert false claims of prior use without penalty. Amazing! How many other unnoticed protections for corporate infringers are hidden in this bill?

The details of these and many more legislative "potholes" were previously described in my five part series in IP WatchDog. (See References[50,51,52,53,54]) SBTC and the NSBA have also made our strong opposition to the Innovation Act known to Congress and the Administration.[55,56,57,58,59] Many concerns similar to ours have also been expressed to the Senate Small Business and Entrepreneurship Committee by the SBA Office of Advocacy.[60]

One of the more disturbing "sales techniques" for H.R. 9 is the use of highly disputed 'facts' and flawed studies cited by proponents regarding the $29 billion direct costs,[61,62] and the $80 billion per year social cost.[63] These and other flawed "scholarship" have been debunked by 40 economists and law professors, and their letter[64] expresses serious concern that Congress will restructure the U.S. patent system based on flawed, unreliable, and unrepresentative studies of patent litigation, and it urges Congress to proceed with caution to ensure balanced, targeted, legislation.

An even more disturbing element of H.R. 9 is what is not in the bill. It does not correct the $1.7 Billion dollar "invention tax" which has been levied on inventors by diverting patent office fees to the general government fund. Ending fee diversion and using fees for sufficient examination is critical to improving the patent system.

H.R. 9 also does not correct the "Integrity Loophole." Here again is another provision that allows infringers to lie without penalty while holding patent owners to a strict standard of truth. This problem is every bit as important as solving the "troll problem." The court decision which opened up the problem is ***Lockwood v. Sheppard, Mullin, Richter & Hampton,*** *LLP,* 2009 WL 9419499 (C.D. Cal. Nov. 24, 2009) (holding plaintiff's state law claims premised on fraudulent and "sham" reexamination proceedings were preempted by federal law), *aff'd*, 403 Fed. App'x. 508 (Fed. Cir. 2010), *reh'g and reh'g en banc denied* (Fed. Cir. 2011), *cert. denied*, 132 S. Ct. 97 (2011). The court ruled that if a patent owner is victimized by fraud or deliberate abuse of post

grant reviews they no longer had the right to sue for damages, but must go to the PTO for redress. However, the PTO cannot award damages when it finds petitions to have been filed fraudulently.

In his response to former Sen. Bayh after the ruling, PTO Director David Kappos confirmed that the PTO has no authority to award compensation to patent owners who are harmed by such actions. Subsequently, the PTO has made it clear that they do not seek such authority, which is the province of the courts. Thus, we have an "integrity loophole" allowing unscrupulous parties from around the world to willfully and knowingly violate their oath to the PTO that their filings are being made in good faith, knowing that they cannot be held accountable for the severe harm they inflict. Even if the patent is eventually upheld, there is a cloud over the patent during the review, which can prevent the owner from securing venture funding or licensing the invention. Further, defending the patent takes about 2 years and costs about $300,000 (not counting company time) which is time and money that small businesses-- particularly start-ups-- don't have. A 2012 empirical study published in the *Columbia Science and Technology Law Review*[65] found that **one in four respondent practitioners reported some form of fraud or misconduct on the part of those challenging patents in reexamination**.

We are now seeing a new variation of abuse of post grant reviews as hedge funds are publicizing their challenges in the media to important drug patents to profit when they short the company's stock. Rachel King, a witness[66] at the Senate Small Business hearing talked about this growing problem. For affected companies, there is no way they can ever recover the losses (which were about $150M to Acorda). Specifically we agree with others who suggest that liability attaches whenever the filer of an IPR (or CBM, PGR, or reexam) **knowingly & willfully acts in a manner contrary to 37 C.F.R. 11.18 -- the PTO's own long-standing disciplinary rule, modeled on federal Rule 11.** Proposed language would remedy the hedge fund abuse of IPR's by giving the targeted companies a federal cause of action for damages. Among other things, *this PTO rule requires that a petition for IPR (*like any other paper filed before the PTO) ***"is not being presented for any improper purpose, such as to harass someone or to cause unnecessary delay or needless increase in the cost of any proceeding before the Office."***

Obviously, filing an IPR petition to drive down a company's stock price is such an "improper purpose" and would open hedge funds to liability under our proposed language. At least one prominent post-grant practitioner has agreed that the hedge fund abuse of IPR's is plainly an "improper use of the proceeding" but, as he points out here,[67] the most the PTO is currently empowered to do is award attorney's fees -- without the proposed remedy, the targeted companies will not be able to recover the damage done to their stock price and to their business as a result.

Former Federal Circuit Chief Judge Paul Michel has expressed his concerns[68] on the issue. It has been proposed by The Alliance to Prevent Fraudulent Attacks on Patents[69] that by restoring the patent owner's historic right to sue for damages the loophole will be closed. The SBTC, and its parent organization, the NSBA, were among the first to endorse these efforts. The importance of closing the integrity loophole has previously been mentioned in NSBA's "Patent Reform Newsletter."[70]

In a speech David Kappos made on March 13, 2015, [71] the former director of the United States Patent and Trademark Office (USPTO) made a number of statements, which are summarized in the footnotes. The most salient points are:

- Some reasonable level of disputes is inherent in an IP system whose success depends on flexibility, and patent litigation is no worse than in the past.
- The patent system has long time constants. The impact of present changes will only be realized many years down the line, and we have not yet felt all the effects of the AIA. Proposed changes are like addressing a hangnail with an amputation.
- Competitors are laughing at the prospect of the US significantly weakening its patent system and giving a leg up to our competitors.
- The data shows an irrefutable decline in patent litigation, not an increase. The number of litigants in new district court patent cases declined over 23% from 2013 to 2014, down to 16,089—the lowest level since 2009.
- All this data taken together screams that the AIA is working, and that "**whatever further tinkering is needed, it should take a light touch."** [Emphasis mine.]
- The denial rate in 2015 to date for attorney fees is only 48%. [Thus, we can see that in more than half the cases this year, attorney fees are already being awarded when requested. It is hard to understand why additional legislative action is required here. There is also difficulty in identifying a "prevailing party" in the common situation where a litigant prevails on some issues but not others, and how does one legislate a "reasonable fee."
- Problems with customer stays include: (1) customizable technologies where the retailer can modify the product, and (2) data shows that courts are readily using the customer stay authority. The facts demonstrate no necessity for congressional action in this area.

Monopolists and other large dominant firms[72,73,74] know that only other large firms, or patents, are the only market forces that can break their control of the market. These Monopolists and large dominant firms want to preserve their dominance in the field by using their vast influence and wealth to change laws in their favor, enhancing their market power.

H.R. 9 and past similar bills have also been opposed by the former head of the USPTO, David Kappos,[75,76,77,78,79,80,81] the former Chief Judge of the Federal Circuit, Paul Michel,[82,83,84,85,86] universities,[87,88,89,90,91,92,93,94] Venture Capitalists,[95],[96,97,98,99,100] entrepreneurs,[101,102,103,104,105] and conservatives.[106,107,108,109,110,111,112,113,114,115,116]

H.R. 9 and previous related Senate legislation do nothing to solve the Troll issue, but do make sure that small inventors can never afford to enforce their patents. They attempt to overturn 220 years of American growth by fundamentally changing the economy, from one that thrives on technical innovation to one that makes market dominance the primary criteria for continued success. HR 9 will substantially cut the potential value and job-creating incentives of new innovations. This will discourage innovation, slow the economy, and put American businesses at a disadvantage against foreign competition.

As an example of why the "Patent Reform" does not solve the Troll issue, Virginia Gavin, owner of Appligent Inc., and a member of the NSBA, having received two demand letters and paid twice, was extremely anti-troll. Once she understood each and every provision of HR 3309, she stated, **"There is NOTHING in this bill that will help me and several items that will harm my business."** Thus, NSBA opposed HR 9.[See footnote 3] Others will come to the same conclusion once they have studied the details H.R. 9.

H.R. 9 will also severely impact licensing in America. Licensees may become responsible for the court costs of the patent litigation winner should their licensor lose. More importantly, the

licensee's business plans may be disclosed months or years prior to their anticipated market announcement as the courts reveal the existence of the license, and thus the licensee's planned technology path to the competition, foreign and domestic. Weakening patents and the resulting decline in licensing will also directly hurt universities.

The STRONG Patents Act of 2015.

Small business inventors do support legislation proposed in the STRONG Patent Act of 2015, proposed by Senator Coons, http://www.coons.senate.gov/patents. This legislation will protect companies from trolls but will not hurt small inventors.[117] It subsumes the prior TROL Act,[118] which was supported by the SBTC.[119]

SBTC supports the STRONG Act even as currently written because it does no harm to small inventors or the American economy, and because it has many attractive amendments such as making Inter Partes and Post Grant Reviews fairer for the patent holder. That said, the STRONG Act can be improved by:

- Incorporating clarifying language into 35 USC 102 that would provide clear and reliable provisions to restore the one-year grace period. This will ensure that public use and on sale activities less than one year prior to filing an application do not constitute a bar to obtaining a patent.
- Legislating a clear rule of law for patentable subject matter, thereby removing the immense judge-made ambiguity and uncertainty regarding eligible and ineligible subject matter.
- Providing greater elasticity for punitive behavior for small inventors and startup companies when they have acted in good faith and they make honest mistakes when attempting to enforce their patents, as even the Supreme Court has trouble telling us inventors the metes and bounds of terms like "abstract", and patent claims require parties to define the metes and bounds of every single word in a claim.
- Extending the protections ensuring expedited procedures accorded in Section 111(c)(2) of the STRONG Act to small business concerns in order to also provide such expedited procedures for small business concerns that assert patents.

Weakening Patent Laws will Hurt the Economy, a Survey of Small Business Inventors

As a summary to how weakening patent laws will affect the economy? *Save the Inventor* did a survey and found:[120]

- 3 out of 4 inventors say they would stop inventing if weakened patent laws couldn't protect their ideas from infringement by larger companies or foreign knock-offs.
- 8 out of 10 inventors say they would not hire new employees if patent laws were weakened.
- 9 out of 10 inventors say they would be less likely to get funding from investors if patent laws are weakened.
- 2 out of 3 inventors say that if they had to pay the legal fees for the opposing side in a patent infringement lawsuit, it would discourage them from bringing new ideas to market.

- 9 out of 10 inventors say that if a large corporation could tie up a patent infringement case in the courts while continuing to sell products that infringe upon their ideas, it would be harmful or devastating to their business.
- 9 out of 10 inventors say their business would be harmed if weakened patent laws made it easier for foreign manufacturers to knock off their inventions.
- 9 out of 10 inventors say their business would be harmed if patent laws are weakened.-

THE COURTS

Over more than a decade, the courts have been weakening the value of patents. This will be covered by others in this conference and elsewhere. [121,122,123,124] A very brief listing of a few of these cases is listed here just as a short example. Comments below give a thumbnail summary of the Court's or court watchers comments about the cases. The author suggests others have provided a thorough review and the reader should look to the references cited and elsewhere for additional information on how the courts have weakened patent rights over the last decade.

- eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388 (2006) (injunctive relief more difficult to obtain
- *KSR International v. Teleflex*- 550 U.S. 398 (2007) lower courts must be more open in considering whether inventions are "obvious"
- *MedImmune v. Genentech*- 549 U.S. 118 (2007) the Supreme Court thinks we have too many patents and it's too hard to invalidate them
- Bilski v. Kappos- 561 U.S. 593 (2010) subject matter eligibility, the machine-or-transformation test is not the sole test for determining the patent eligibility of a process
- Alice Corp. Pty. Ltd. v. CLS Bank Intern., 134 S.Ct. 2347 (2014) (subject matter eligibility)

ADMINISTRATIVE AGENCIES

The White House has been pushing for anti-troll legislation,[125] and H.R. 9 is also largely supported by the USPTO.[126] This will continue to suppress companies desire to apply for patents, thus reducing the number of patents granted and therefore reducing the wealth of the US.

The number of US patent applications continues to go down. It dropped by 1% in 2014 from 2013. [127] And, according to Drew Hirshfeld, Commissioner of Patents, the level of applications has dropped another 1.8% in 2015 versus an expected growth of 3-4%.[128] This is not at all surprising after talking to inventors and small business people.[129] They say they have stopped inventing as there is no longer an economic incentive to do so. Statistics bear this out as the percentage of patents issued to small entities of US origin has dropped from 28.21% in 2012, to 25.84% in 2014.

Perhaps equally as disheartening is that the reduced number of US applications has now been surpassed by foreign filings. The Utility Patent Applications, Foreign Origin Percent Share has now risen to 50.7%.[130] Even worse, the number of Utility Patent Grants, Foreign Origin Percent

Share is 51.9%, meaning that foreign applications are being approved at a higher rate than US applications. This is causing some US inventors to file first in other countries, such as Germany. This is an item for concern; and one must ask, are US inventors losing faith in the US Patent System? And what effect will this have on the economy?

Obtaining a patent is also becoming more difficult. In a recent conversation with an examiner in Tech Center 3600, he stated he used to grant about 25% of his patents. Post *Alice*, he said that has dropped to about 5%. When a small business inventor has only one chance in 20 of obtaining a patent in some are units, why would anyone go to the expense of inventing?

A final concern about administrative actions is the negotiation of the Trans Pacific Partnership (TPP) agreement.[131] Requiring the publication of patent applications 18 months after filing is particularly onerous for small businesses. First, small businesses frequently do not file international patents due to the cost. From personal experience, we have many patents with 6-8 year pendencies, many of which do not have foreign filings. Publishing at 18 months after filing means our "secret sauce" will be provided free to the world 4-7 years before it is even protected in the US. Secondly, publication removes the option for using a trade secret should the patent not be granted. As shown above, these small business patents are more valuable than other patents, so that means that the US will be providing its foreign competitors the ability to practice the best technology before small US firms can bring it to market. Since much of this technology came out of university and small business research grants from the Federal Government, US taxpayers will be subsidizing the growth of foreign firms to the detriment of US citizens.

Summary and Conclusion

Patents are the number one indicator of regional wealth. Weakening patents will reduce American wealth. Small businesses produce the most valuable patents and create the most jobs. Executive, Judicial, and Legislative decisions which weaken the rights of small businesses to enforce their patents will reduce jobs, weaken the economy, and reduce innovation in America. Congress should reject both H.R. 9 and S.1137 and support a bill like S. 632, the STRONG Patent Act.

I thank Thompson Reuters for allowing me to present this material which is updated from the similar materials I presented to the Senate Small Business and Entrepreneurship Committee earlier this year. I would be happy to answer any questions.

Robert N. Schmidt, BS, MS, MBA, JD, PE. Esq.
Fort Myers, FL
216-374-7237
rschmidt@CleveMed.com

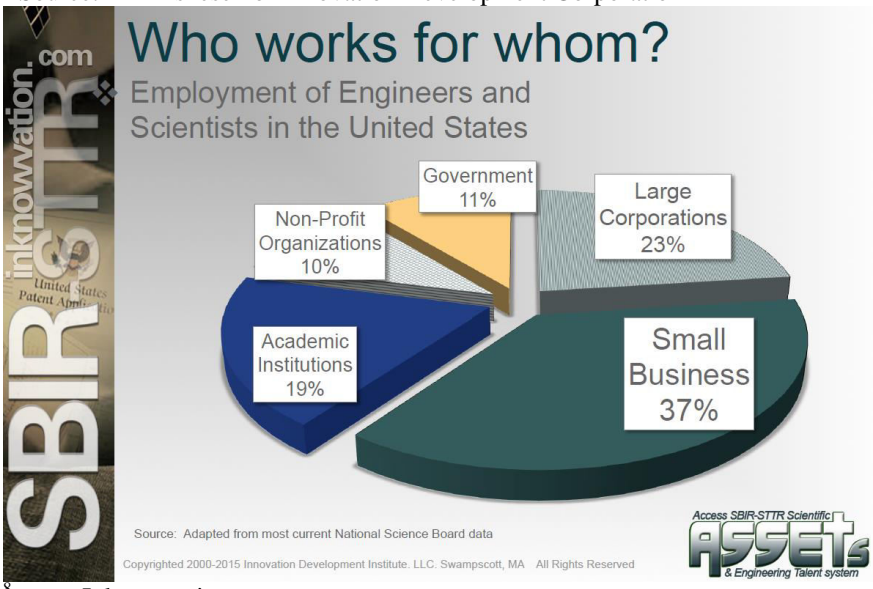
National Co-Chair, Small Business Technology Council (www.sbtc.org)
Board Member, National Small Business Association (www.nsba.biz)
Corresponding Member, IEEE-USA Intellectual Property Committee
Patent Attorney (USPTO #30,889)
Professional Engineer (Ohio, # 40821)
Attorney (Ohio, #0002719)

Member: North Coast Angel Fund I & II, Ohio Tech Angels I

4415 Euclid Ave., Suite 400
Cleveland, OH 44103-3757
Chairman & CEO
Cleveland Medical Devices Inc. www.CleveMed.com
Orbital Research Inc. www.OrbitalResearch.com
Great Lakes NeuroTechnologies Inc. www.GLNeuroTech.com
NeuroWave Systems Inc. www.NeuroWaveSystems.com
Flocel Inc. www.Flocel.com

References:

[1] www.sbtc.org
[2] www.nsba.biz
[3] www.nsba.biz/?p=9389, "NSBA has previously urged lawmakers to oppose this bill [H.R. 3309, identical to HR 9] due to the rushed process in bringing the bill to the floor, the lack of small-business input throughout the process and the inclusion of several provisions that create an undue or unfair burden on small, innovative firms, including, but not limited to: fee-shifting, pay-to-play, and covered business methods, which would disproportionately affect small-business inventors and make the cost of defending patents too burdensome to litigate"; www.nsba.biz/wp-content/uploads/2013/10/Patent-Coalition-Letter.pdf; www.nsba.biz/wp-content/uploads/2013/12/NSBA-Letter-in-Opposition-to-the-Innovation-Act-HR-3309.pdf; www.nsba.biz/?p=7273.
[4] https://www.sba.gov/offices/headquarters/oca/resources/6827
[5] https://www.sba.gov/offices/headquarters/oca/resources/6828
[6] http://sbtc.org/wp-content/uploads/2015/07/Joint-Statement-from-AAU-APLU-BIO-IA-MDMA-NSBA-NVCA-PhRMA-SBTC-USIJ-on-H.R.-9.pdf
[7] Source: Ann Eskesen of Innovation Development Corporation



[8] www.Inknowvation.com
[9] https://www.sba.gov/sites/default/files/sbfaq.pdf
[10] Source: Ann Eskesen of Innovation Development Corporation

Analysis of extent to which SBIR-STTR Awardees by State and overall are a factor in US STEM employment

State	Number of SBIR-STTR Awardees	Calculated SBIR-STTR employment	STEM Jobs (2011 data)	% STEM employment being SBIR connected	STEM jobs as percentage of total employment	Percentage of all US STEM jobs
		Notes 1	Note 2		Note3	
AK	28	488	19,902	2.45%	8.01%	0.29%
AL	281	11,592	79,700	14.54%	5.43%	1.16%
AR	71	388	40,087	0.97%	4.24%	0.58%
AZ	378	6,990	123,994	5.64%	6.06%	1.81%
CA	4,514	110,067	895,461	12.29%	7.06%	13.06%
CO	742	12,200	167,347	7.29%	8.85%	2.44%
CT	334	7,612	88,996	8.55%	6.39%	1.30%
DC	88	1,156	72,143	1.60%	15.26%	1.05%
DE	63	1,601	24,847	6.44%	7.20%	0.36%
FL	707	13,637	294,372	4.63%	4.66%	4.29%
GA	347	5,164	171,747	3.01%	5.38%	2.51%
HI	95	1,316	22,186	5.93%	4.59%	0.32%
IA	122	2,069	57,066	3.63%	4.60%	0.83%
ID	86	1,628	34,725	4.69%	6.89%	0.51%
IL	563	7,279	260,730	2.79%	5.38%	3.80%
IN	246	3,941	106,432	3.70%	4.40%	1.55%
KS	93	979	64,069	1.53%	5.95%	0.93%
KY	130	1,306	60,908	2.14%	4.18%	0.89%
LA	84	1,531	59,848	2.56%	3.89%	0.87%
MA	1,797	53,214	249,900	21.29%	8.84%	3.65%
MD	1,061	22,529	202,100	11.15%	9.98%	2.95%
ME	105	1,671	22,397	7.46%	4.60%	0.33%
MI	567	10,291	231,148	4.45%	6.85%	3.37%
MN	308	8,056	157,681	5.11%	6.93%	2.30%
MO	206	3,941	118,544	3.32%	5.42%	1.73%
MS	58	705	31,658	2.23%	3.74%	0.46%
MT	102	1,125	19,447	5.78%	5.59%	0.28%
NC	515	7,859	184,958	4.25%	5.73%	2.70%
ND	36	1,160	12,893	9.00%	3.74%	0.19%
NE	58	1,115	38,768	2.88%	5.08%	0.57%
NH	169	4,578	35,069	13.05%	3.55%	0.51%
NJ	674	16,762	225,629	7.43%	42.79%	3.29%
NM	312	6,075	45,908	13.23%	1.44%	0.67%
NV	85	1,399	32,548	4.30%	5.40%	0.47%
NY	1,090	20,848	392,267	5.31%	5.46%	5.72%
OH	740	14,332	242,913	5.90%	5.60%	3.54%
OK	108	2,275	57,176	3.98%	4.68%	0.83%
OR	302	6,486	87,500	7.41%	6.38%	1.28%
PA	948	22,723	273,038	8.32%	5.59%	3.98%
RI	97	3,402	20,750	16.40%	5.29%	0.30%
SC	113	1,449	73,464	1.97%	4.97%	1.07%
SD	49	456	13,825	3.30%	4.20%	0.20%
TN	229	4,726	84,300	5.61%	3.76%	1.23%
TX	954	21,282	579,264	3.67%	6.46%	8.45%
UT	301	6,757	66,055	10.23%	6.56%	0.96%
VA	1,064	38,928	302,219	12.88%	10.32%	4.41%
VT	69	1,319	15,991	8.25%	6.47%	0.23%
WA	615	13,336	238,417	5.59%	10.02%	3.48%
WI	311	8,043	120,704	6.66%	5.21%	1.76%
WV	44	696	23,021	3.02%	4.06%	0.34%
WY	49	622	11,620	5.35%	5.48%	0.17%
Totals	22,108	499,104	6,855,732	7.28%	6.20%	100%

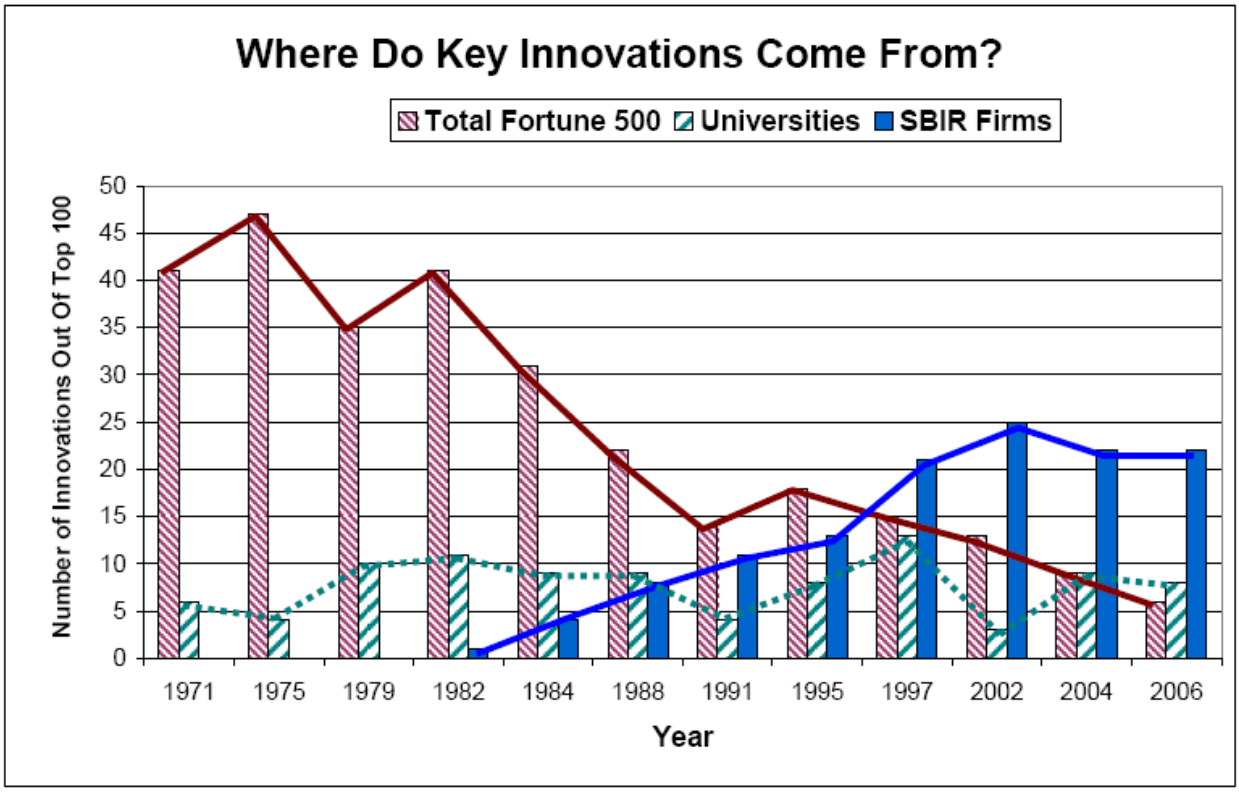
Notes:

Note 1 Tracking by Innovation Development Insitute of employment in SBIR-STTR involved firms is by 12 ranges: small for lower ranges (1-4; 5-9 etc) to large for limited number of larger firms (250-499). Firms having exceeded SBIR Size standards (500 employees) are designated 500+ (not small) Except for those Awardees only recently SBIR-STTR graduated and then only for those employment numbers at time of last award, latter not factored into estimated employment numbers used inthis analysis

Note 2 Source data: EMSI | Economic Modeling Specialists International.

[11] Patents are critical to the success of SBIR Program participants. The Innovation Act makes patents harder to get and to keep, which will likely retard some companies from commercializing, thus causing them to be removed from the program. This is another way the Innovation Act will decrease company success and employment in the US.

[12] http://www.itif.org/files/Where_do_innovations_come_from.pdf



SBIR firms receive about three to four times as many R&D 100 awards as Fortune 500 Companies, on a tiny fraction of the budget.

[13] www.inknowvation.com

[14] https://www.congress.gov/114/bills/hr9/BILLS-114hr9ih.pdf

[15] https://www.congress.gov/bill/114th-congress/senate-bill/1137

[16] http://patentlyo.com/media/2015/03/STRONG-Patents-Act-of-2015.pdf

[17] For example, See HR 9 section, 9(a) striking "or reasonably could have raised," allowing infringers to have multiple bites at the apple, prolonging Post Grant Review proceedings, increasing cost to the patent holder, and making it more difficult for small patent holders to raise money.

[18] For example, See HR 9 section 3(a), which makes it much harder for patent holders to plead before they do discovery, and they can't do discovery until after they plead.

[19] For example, See HR 9 section 3(b)(1), which requires the loser of a patent suit pay the prevailing parties legal fees. This is the most onerous provision of the bill for small patent holders who try to enforce their patent. Large firms typically spend several times as much on defense attorneys as plaintiffs spend on their legal costs. This significantly raises the risk, where the small company owner risks losing not only their company, but their house, and then their spouse and children.

[20] For example, See HR 9, where funders and licensees can be joined and become personally responsible for all legal cost of the prevailing parties should they lose. It also discloses licensees, publishing to their competitors their technology roadmap in the fact that they had licensed a technology, presumably for a commercial purpose.

[21] See Federal Reserve Bank of Cleveland, "Altered States: A Perspective on 75 Years of State Income Growth," *Annual Report 2005*. For more detail, see Paul Bauer, Mark Schweitzer, Scott Shane, *State Growth Empirics: The Long-Term Determinants of State Income Growth*, Working Paper 06-06, Federal Reserve Bank of Cleveland, May 2006, https://www.clevelandfed.org/en/Newsroom%20and%20Events/Publications/Working%20Papers/2006%20Working%20Papers.aspx and then Click on the PDF for WP-06-06 by Bauer *et. al*.

[22] Patenting Prosperity: Invention and Economic Performance in the United States and its Metropolitan Areas Jonathan Rothwell, José Lobo, Deborah Strumsky, and Mark Muro. At $4,300 per worker, that is $8,600/year for a two worker household. http://www.brookings.edu/~/media/research/files/reports/2013/02/patenting-prosperity-rothwell/patenting-prosperity-rothwell.pdf page 15.

[23] Global Intellectual Property Center, US Chamber of Commerce, 2012. http://www.theglobalipcenter.com/ip-creates-jobs/
[24] Based on the value of S&P 500 firms. http://www.oceantomo.com/ocean-tomo-300/
[25] Robert Litan and Hal Singer, Unlocking Patents: Costs of Failure, Benefits of Success, http://www.ei.com/downloadables/EI_Patent_Study_Singer.pdf
[26] See Kevin A. Hassett & Robert Shapiro, What Ideas Are Worth: The Value of Intellectual Capital And Intangible Assets in the American Economy, Sonecon (Sept. 2011) at 2, available at www.sonecon.com/docs/studies/Value_of_Intellectual_Capital_in_American_Economy.pdf
[27] Ron D. Katznelson, "Guest Post: White House "Patent Troll" Report Challenged under the Federal Information Quality Act," Patentlyo, http://patentlyo.com/patent/2015/04/challenged-federal-information.html
[28] Ron D. Katznelson, "A Federal Information Quality Act Challenge to the White House 'Patent Troll' Report," March 30, 2015, Social Science Research Network, April 6, 2015, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2587243.
[29] https://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf
[30]

Jobs of Major IT firms supporting the Innovation Act

	World wide	US	Outside US	% Outside US	References	
Google	52,069	28,633	23,436	45.0%	http://us.greatrated.com/google-inc	
Cisco	75,049	36,463	38,586	51.4%	http://www.forbes.com/companies/cisco-systems/	http://us.greatrated.com/cisco
Microsoft	99,000	59,730	39,270	39.7%	http://www.forbes.com/companies/microsoft/	http://us.greatrated.com/microsoft-corporation
Total	226,118	124,826	101,292	44.8%		

[31] SBIR involved firms employ about 8% of the 7,000,000 STEM workers in America. Source: Private Conversations with Ann Eskesen of the Innovation Development Institute, www.Inknowvation.com, March 2015. There are more than 500,000 STEM employees in the more than 22,000 current and former SBIR involved firms.
[32] Public Law, 112-29, Effective September 16, 2011, The Leahy–Smith America Invents Act (AIA), http://www.uspto.gov/aia_implementation/bills-112hr1249enr.pdf
[33] Ron D. Katznelson, "The America Invents Act at Work – The Major Cause for the Recent Rise in Patent Litigation," *IPWatchdog*, (April 15, 2013). At http://bit.ly/AIA-Litigation. (Explaining how changes in 35 U.S.C. §§ 299, 315(b), and 325(b) have changed lawsuit filing practices that caused the filing surge).
[34] http://www.supremecourt.gov/opinions/13pdf/12-1184_gdhl.pdf
[35] http://www.supremecourt.gov/opinions/13pdf/12-1163_8o6g.pdf
[36] http://amicourip.com/publications/microsoft_v_i4i.html
[37] http://smallbusiness.house.gov/uploadedfiles/5-21-2014_schmidt_revised_testimony.pdf
[38] Patent law changes in US mean there are potentially billions of dollars of write-downs on public company balance sheets, says Spangenberg, "*As a result of the changes in patent law, there are billions of dollars in potential write-downs on public company balance sheets for previous acquisitions. Perhaps this will cause the financial types to speak up about how this asset class is being devalued by well-intended, but fundamentally misguided, reform and judicial activism."* January 15, 2015. http://www.iam-magazine.com/blog/Detail.aspx?g=cc718b2d-407c-4840-a9d7-41ff77321943
[39] Josh Lerner, Andrew Speen, and Ann Leamon for Bella Research Group, "The Leahy-Smith America Invents Act: A Preliminary Examination of Its Impact on Small Businesses," June 2015, Under Contract Number: SBAHQ-14-Q-0011.

[40] Richard Baker, "Guest Post: America Invents Act Cost the US Economy over $1 Trillion," Patentlyo, June 8, 2015, http://patentlyo.com/patent/2015/06/america-invents-trillion.html.
[41] http://sbtc.org/wp-content/uploads/2015/03/Letter-to-Senators-asking-them-not-to-sign-the-Sen-Warner-Patent-Letter-03-13-20151.pdf
[42] http://sbtc.org/wp-content/uploads/2014/04/Advocacy-Letter-to-Senator-Landrieu-3_12_14.pdf
[43] https://www.congress.gov/bill/113th-congress/senate-bill/1612
[44] http://nvca.org/issues/patent-reform/
[45] http://nvca.org/?ddownload=1830
[46] http://nvca.org/?ddownload=1721
[47] https://www.congress.gov/bill/113th-congress/senate-bill/866
[48] http://sbtc.org/wp-content/uploads/2014/02/Letter-to-Office-of-Advocacy-regarding-Patent-Reform-2-13-2014-final.pdf See Appendix 6.
[49] *Novartis Ag v. Lee* 740 F.3d 593 (Fed. Cir. 2014)
[50] Robert N. Schmidt, Heidi Jacobus, Jere Glover, Why 'Patent Reform' Harms Innovative Small Businesses, Part I of V, April 25, 2014, IP WatchDog, http://www.ipwatchdog.com/2014/04/25/why-patent-reform-harms-innovative-small-businesses/id=49260/.
[51] Robert N. Schmidt, Heidi Jacobus, Jere Glover, Raising the Cost of Enforcing Patents: 'Patent Reform' Prices Small Businesses Out of the Inventing Business, Part II of V, April 27, 2014, IP WatchDog, http://www.ipwatchdog.com/2014/04/27/raising-the-cost-of-enforcing-patents/id=49268/
[52] Robert N. Schmidt, Heidi Jacobus, Jere Glover, 'Patent Reform' Will Keep Small Business Inventions From Being Commercialized, Part III of V, April 28, 2014, IP WatchDog, http://www.ipwatchdog.com/2014/04/28/patent-reform-harms-innovative-small-businesses-3/id=49276/
[53] Robert N. Schmidt, Heidi Jacobus, Jere Glover, 'Patent Reform' Tips Power in Favor of Infringers and Against Small Businesses, Part IV of V, April 29, 2014, IP WatchDog, http://www.ipwatchdog.com/2014/04/29/patent-reform-harms-innovative-small-businesses-4/id=49278/
[54] Robert N. Schmidt, Heidi Jacobus, Jere Glover, Why 'Patent Reform' Harms Innovative Small Businesses – Summary, Part V of V, April 30, 2014, IP WatchDog, http://www.ipwatchdog.com/2014/04/30/patent-reform-harms-innovative-small-businesses-5/id=49281/
[55] http://sbtc.org/wp-content/uploads/2015/02/SBTC-Request-to-Reject-Anti-Patent-Legislation-Feb-4-2015-1.pdf
[56] http://sbtc.org/wp-content/uploads/2014/07/SBTC-Letter-to-Speaker-Boehner-Supporting-TROL-ACT-7-22-14.pdf
[57] http://sbtc.org/wp-content/uploads/2014/05/R.-Schmidt-written_testimony_HSBC.pdf
[58] http://sbtc.org/wp-content/uploads/2015/01/SBTCPatentletter2pagecondensedversion.pdf
[59] http://sbtc.org/wp-content/uploads/2014/02/Letter-to-Office-of-Advocacy-regarding-Patent-Reform-2-13-2014-final.pdf
[60] http://sbtc.org/wp-content/uploads/2014/04/Advocacy-Letter-to-Senator-Landrieu-3_12_14.pdf
[61] Adam Mosseff, http://truthonthemarket.com/2013/03/15/the-shield-act-when-bad-studies-make-bad-laws/
[62] Adam Schwartz and Jay Kesan, Analyzing the Role of Non-Practicing Entities in the Patent System, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2117421.
[63] Ron D. Katznelson, "Questionable Science Will Misguide Patent Policy – The $83 billion per year fallacy," (February 1, 2014). Available at http://ssrn.com/abstract=2502777.
[64] The letter can be seen at: <http://cpip.gmu.edu/wp-content/uploads/2015/03/Economists-Law-Profs-Letter-re-Patent-Reform.pdf>.
[65] http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2158395
[66] http://www.sbc.senate.gov/public/?a=Files.Serve&File_id=cf221704-8083-4230-ae5e-88b6ce8598f7
[67] http://patentspostgrant.com/why-hedge-fund-ptab-filings-will-fail
[68] http://ptolitigationcenter.com/2011/08/the-reexamination-center-executive-interview-chief-judge-paul-r-michel-part-1-of-3/
[69] http://www.apfap.org/about.html
[70] *http://nsba.biz/leadershipcouncil/patent-reform-update/*
[71] Kappos speech on March 13, 2015, http://www.iam-media.com/files/Kappos%20speech.pdf Here are some of the most important quotes:

> *The recent "smartphone wars" are no more the harbinger of an inevitable innovation decline than were fights over sewing machines in the mid-1800s, the telegraph in the late 1800s, or airplanes in the early*

1900s. Some reasonable level of disputes is inherent in an IP system whose success depends on flexibility, and every generation has experienced this tension.

The key to successful maintenance of the patent system is recognizing that it is a system of long time constants. The impact of present changes will only be realized many years down the line. Addressing today's issues—which are real but not dire—through a massive overhaul of the system is like addressing a hangnail with an amputation: the immediate problem will be obviated, but a slew of graver, irreversible problems will arise in the solution's wake.

Competition from overseas makes the consequences of bad reform that much worse. And our overseas competitors are looking on right now, not knowing whether to laugh or cry. Those seeking to copy American innovation are laughing at the prospect of the US significantly weakening its patent system and giving a leg up to our competitors. Those seeking to have their countries strengthen their IP systems so that they too can enjoy the fruits of innovation are crying because the gold standard is being undermined.

*First and foremost, the data that the sky-is-falling alarmists are finding the hardest to swallow: an irrefutable decline in patent litigation. In 2013, reformers decried the unprecedented levels of patent litigation and built a reform narrative around "out-of-control" patent litigation, promising it would only soar to new heights unless reform was initiated, and *now*.*

Well, so much for that rallying cry: every credible study of 2014 patent litigation trends has reported that, from 2013 to 2014, there was a roughly 18% decline in the total number of patent suits nationwide. Recognizing the incongruity of this trend with the 2013 narrative, the storytellers have moved the goalposts. The new focus has shifted from recent trends to a selective look-back against 2010 levels. The sleight-of-hand lies in the apples-to-oranges comparison, as the increase in the number of patent suits since then has nothing to do with an increase in actual disputes, but rather with procedural changes altering the rules for joinder brought into effect by the AIA.

The fiction of an astronomical increase in patent litigation is undermined by the facts: adjusting for procedural changes of the AIA, patent litigation at the end of 2014 was actually commensurate with 2009-2010 levels. And in a recent comprehensive study of 2014 trends, it was revealed that the number of litigants in new district court patent cases declined over 23% from 2013 to 2014, down to 16,089—the lowest level since 2009.

All this data taken together screams that the AIA is working, and that ***whatever further tinkering is needed, it should take a light touch.*** [Emphasis mine.]

Turning now to raw data on denied motions for attorney fees under Section 285, U.S. district courts have ruled on 924 such motions since 2008. The denial rate hovered around 60% until 2013, when it increased to 67%. But it appears Octane Fitness and Highmark may be reversing the trend. Last year only 57.6% motions were denied, and the denial rate in 2015 to date is only 48%. [Thus, we can see that in more than half the cases this year, attorney fees are already being awarded. It is hard to understand why additional legislative action is required here.]

Those concerned about fee-shifting legislation beyond what the Supreme Court has already mandated judicially point to inherent problems, such as the difficulty in identifying a "prevailing party" in the common situation where a litigant prevails on some issues but not others, and the difficulty in legislating a "reasonable fee."

Another area where major reform is being urged is for covered customer stays. Facially, the notion that "mere users" of potentially infringing technologies should be dismissed from litigation predominantly targeting parties higher up in the supply chain seems perfectly reasonable. But there are two problems with the legislative approach. First, many technologies are highly customizable—meaning that the rigidity of a statutory fix is unlikely to adequately distinguish between infringement that is inherent in the technology (in which case a stay is appropriate) versus infringement caused by aftermarket modification (in which case the user is not properly dismissed from the action). Second, federal courts already have the authority to stay litigation against peripheral defendants. And once again the facts become problematic for the major reform narrative, as data show that courts are readily using that authority.

Hence, while hypotheticals of customers hauled into court for unwittingly using an infringing device purchased from a retailer may provide an effective lobbying tactic, the facts demonstrate no necessity for congressional action in this area.

[72] **Microsoft has a 93.4% Desktop Operating System Market Share, almost 17 times the 5.2% market share** for Mac, http://www.netmarketshare.com/operating-system-market-share.aspx?qprid=10&qpcustomd=0

[73] **Google has 88.1% of the global search engine market share, more than 21 times its nearest competitor at 4.13%.** http://www.statista.com/statistics/216573/worldwide-market-share-of-search-engines/

[74] **Cisco had a 42.5% market share of the North American X86 Blade Server Market** in 2Q CY 2014. http://www.cisco.com/c/dam/en/us/solutions/collateral/data-center-virtualization/unified-computing/cisco_ucs_market_share_infographic_final.pdf

[75] http://fortune.com/author/david-j-kappos/

[76] http://www.iam-media.com/files/Kappos%20speech.pdf

[77] https://www.youtube.com/watch?v=vYKN_lNRPO0

[78] http://www.ipnav.com/blog/former-uspto-head-david-kappos-patent-system-in-good-shape/

[79] http://scienceprogress.org/2013/05/software-patents-separating-rhetoric-from-facts/

[80] http://judiciary.house.gov/_files/hearings/113th/10292013/Kappos%20Testimony.pdf

[81] The Patent System Is A Boon -- Not A Drain -- To The American Economy Guest post written by David Kappos, http://www.forbes.com/sites/realspin/2014/06/10/the-patent-system-is-a-boon-not-a-drain-to-the-american-economy-2/

[82] Judge Michel: Patent Reform Bills Would Weaken Patent System, IP WatchDog, October 16, 2013, http://www.ipwatchdog.com/2013/10/16/judge-michel-patent-reform-bills-would-weaken-patent-system/id=45709/

[83] *The View from the Bench,* A Conversation with Paul Michel '66, Retired Chief Judge of the U.S. Court of Appeals for the Federal Circuit, "All the patent disputes on Capitol Hill were protecting some very specific interest, which is legitimate enough, but no one was looking at it from the standpoint of what's good for the system, what's good for the country, and what's good for the future. So I decided to leave the court in order to be free to speak out on patent reform issues and other matters." http://www.law.virginia.edu/html/alumni/uvalawyer/f12/michel.htm

[84] Interview With Chief Judge Paul R. Michel On US Patent Reform, "I do not favor the House bill and would only favor the Senate bill if the special interest provisions were deleted." July 14, 2011, . http://www.ip-watch.org/2011/07/14/interview-with-chief-judge-paul-r-michel-on-us-patent-reform/

[85] Former CAFC Chief Judge Michel on Patent Reform, Judge Michel wrote a piece for IP Watchdog where he argues that H.R. 1249 will torpedo patent rights. http://www.stevenslawgroup.com/california-legal-news/michel%20on%20patent%20reform

[86] Judge Michel Takes "Patent Reform" Bills To Task, In an interview with Intellectual Property Watch, former Chief Judge Paul R. Michel set forth, in one place, all of the most problematic (Ed.: read, "worst") features of the Leahy Smith America Invents Act, versions of which have been passed by the House and the Senate.

The interview focuses both on the special interest features of the Senate bill such as those invalidating tax strategy patents and expanding prior user rights. He also notes the weaknesses in the House bill potentially limiting PTO full access to all the user fees it collects. He notes the flaws in the one-year grace period for inventor-generated disclosures and opposes the additional burdens on patentees imposed by post-grant review.

Wearing my patent prosecutor hat, I see little to like about this bill. Its roots are in oft-parroted but flawed analyses that suggest the U.S. economy is somehow being damaged by "flawed patents." However, almost every feature of the bill simply makes patent protection more difficult to obtain, or weakens patent protection, for small start-ups and universities, as well as for mega-industries. Coupled with anti-patent decisions such as KSR, Bilski and Ariad, (the "jury" is still out on Prometheus, Myriad and Classen) pioneering inventions, particularly in early-stage technologies, are in for a very bumpy ride. http://www.patents4life.com/2011/07/judge-michel-takes-patent-reform-bills-to-task/

[87] http://innovationalliance.net/from-the-alliance/letter-innovation-alliance-universities-bio-among-others-claim-opposition-current-patent-bill/

[88] http://www.rsc.org/chemistryworld/2015/03/us-universities-warn-against-patent-reform-proposals

[89] http://www.ipnav.com/blog/growing-opposition-to-the-senates-approach-to-patent-reform/

[90] http://www.aminn.org/patent-legislation

[91] http://www.patentdocs.org/2015/01/big-ten-lobbies-congress-to-tread-lightly-on-patent-reform.html and http://www.aplu.org/members/councils/governmental-affairs/CGA-library/sample-big-ten-patent-letter-1-25-15/file

[92] http://thehill.com/blogs/congress-blog/technology/232699-junk-science-still-front-and-center-in-push-to-weaken-patents
[93] 40 economists and law professors, http://pdfserver.amlaw.com/nlj/patent%20march%2010.pdf
[94] Patent Law Gone Awry: How Bob Goodlatte's Bill Combines Useless Rigidity With Dangerous Discretion, http://www.forbes.com/sites/richardepstein/2015/02/13/patent-law-gone-awry-how-bob-goodlattes-bill-combines-useless-rigidity-with-dangerous-discretion/
[95] Statement of Robert P. Taylor House Subcommittee on the Courts, Intellectual Property, and the Internet, Feb. 12, 2015, http://judiciary.house.gov/_cache/files/84bf6fe6-a6c4-4d7f-9464-0cb5f481db7d/02.12.15-taylor-testimony.pdf
[96] http://venturebeat.com/2015/02/16/innovation-act-2-0-still-misses-the-point/
[97] http://nvca.org/issues/patent-reform/
[98] http://nvca.org/pressreleases/venture-industry-raises-concerns-goodlatte-patent-litigation-reform-bill/
[99] http://fortune.com/2011/09/02/how-the-new-bid-to-reform-patent-law-will-kill-jobs/
[100] http://www.ipadvocate.org/mibj/pdfs/Lauder_Buck%20Stops.pdf
[101] Anti-Inventor Legislation Being Proposed in Congress, FEBRUARY 19, 2015, http://economyincrisis.org/content/anti-inventor-legislation-being-proposed-in-congress
[102] BIO Statement Regarding the Reintroduction of the Innovation Act, https://www.bio.org/media/press-release/bio-statement-regarding-reintroduction-innovation-act
[103] http://www.aminn.org/patent-legislation
[104] http://thehill.com/blogs/congress-blog/technology/232371-celebrating-inventors-day-by-protecting-strong-patents
[105] https://www.bio.org/sites/default/files/Patent_Reform_Study.pdf
[106] http://www.washingtontimes.com/specials/conservative-blueprint-protecting-inventors/
[107] 24 Conservative organizations have joined together to send a letter to House and Senate leadership expressing opposition to H.R. 9, the "Innovation" Act, http://www.scribd.com/doc/258369625/Conservative-Patent-Letter
[108] Patent trolls, patent thieves, and the future of innovation, Originally published by The Hill, By Rep. Dana Rohrabacher (R-Calif.) and Rob Arnott, March 11, 2015, http://conservative.org/patent-trolls-patent-thieves-and-the-future-of-innovation/
[109] http://www.iam-media.com/Blog/Detail.aspx?g=e4cd3a12-d832-489a-8349-788ae97a5955
[110] Carly Fiorina excoriated a Republican patent reform proposal in a speech to inventors on Wednesday, comparing it to Obamacare and Dodd-Frank. 03/04/2015 http://dailycaller.com/2015/03/04/fiorina-dont-boil-the-oceans/
[111] http://conservative.org/road-to-cpac/rick-santorum-patent-reform-comes-at-the-expense-of-entrepreneurship-and-the-american-worker/
[112] http://www.redstate.com/diary/setonmotley/2015/02/17/media-report-patent-trolls-think-people-protecting-private-property/
[113] http://dailycaller.com/2014/12/04/the-conservative-case-against-patent-reform/
[114] http://www.washingtonexaminer.com/conservatives-slam-patent-reform-as-secret-obama-gift-to-google/article/2559389
[115] http://www.ipwatchdog.com/2015/02/24/conservatives-should-have-no-part-of-patent-reform/id=55163/
[116] http://www.precursorblog.com/?q=content/googles-anti-conservative-values-cpac-2015-google-panel
[117] http://sbtc.org/wp-content/uploads/2015/03/Letter-to-Senators-asking-them-not-to-sign-the-Sen-Warner-Patent-Letter-03-13-2015.pdf
[118] http://democrats.energycommerce.house.gov/sites/default/files/documents/Bill-Text-Targeting-Rogue-Opaque-Letters-2014-7-7.pdf
[119] http://sbtc.org/wp-content/uploads/2014/07/SBTC-Letter-to-Speaker-Boehner-Supporting-TROL-ACT-7-22-14.pdf
[120] http://www.savetheinventor.com/blog/what-do-inventors-think-about-weakening-patents
[121] Dennis Crouch, Most Cited Supreme Court Patent Decisions (2005-2015), March 11, 2015, Patentlyo, http://patentlyo.com/patent/2015/03/supreme-court-cases.html
[122] Robert Barnes and Alan Sipress, "Rulings Weaken Patents' Power," Washington Post, May 1, 2007, http://www.washingtonpost.com/wp-dyn/content/article/2007/04/30/AR2007043001668.html .
[123] Erin Coe, "Weakened Patent Rights Make Trade Secrets More Attractive," April 1, 2014, Law 360, http://www.law360.com/articles/523575/weakened-patent-rights-make-trade-secrets-more-attractive.
[124] Adam Mossoff, "EXCLUSION AND EXCLUSIVE USE IN PATENT LAW," Harvard Business Review, Vol 22, No. 2, 321-379, 2009, http://jolt.law.harvard.edu/articles/pdf/v22/22HarvJLTech321.pdf

[125] https://www.eff.org/files/2013/12/03/sap_on_h.r._3309.pdf
[126] http://www.uspto.gov/about-us/news-updates/statement-michelle-k-lee-legislative-hearing-hr-9-innovation-act
[127] http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm
[128] Drew Hirshfeld, Commissioner of Patents, presentation to the Intellectual Property Committee of the IEEE on September 4, 2015.
[129] This confirms the discussions that the author, Robert Schmidt, has had with scores of small business inventing companies and with independent inventors. They have already become so disheartened that they will never be able to make a profit, or even break even, that they have stopped inventing. Another example is watching what is happening to inventor groups like the Edison Innovators Association of Fort Myers, Florida. Previous meetings over the years and prior months would typically consist of 40-70 people, most of whom were in their 20s to 50s. A recent meeting only had about a 18 members; all but two were over 60 years old. American laws, court, and administrative decisions are wiping out the inventing class in America.
[130] http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.htm
[131] https://wikileaks.org/tpp-ip2/, see **Article QQ.E.11: {Publication of Patent Applications},** which requires "any patent application promptly after the expiry of 18 months from its filing date or, if priority is claimed, from its priority date, unless the application has been published earlier or has been withdrawn, abandoned or refused…"