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Patent Board

Director of the United States Patent and Trademark Office (“PTO”)

Attention: Vice Chief Administrative Patent Judges

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Docket Number PTO-P-2018-0036

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**COMMENTS OF USIJ re DOCKET NO. PTO-P-2018-0036:
PROPOSED CHANGES TO THE CLAIM CONSTRUCTION
STANDARDS MANDATED BY 32 C.F.R., Part 42**

The Alliance of U.S. Startups for Inventors and Jobs (“USIJ”) respectfully responds to the request published May 9, 2018 by the U.S. Department of Commerce, U.S Patent & Trademark Office (“PTO”) regarding a proposed change in the legal standard employed for claim construction currently in use by the USPTO in Post Grant Review (“PGR”), Inter Partes Review (“IPR”) and Covered Business Method Patent (“CBM”) proceedings. The proposed rule would discontinue use of the “broadest reasonable interpretation” (“BRI”) standard for construing claims in such proceedings and instead would use the standard applied by district courts in assessing the validity of an issued patent, namely the standard set forth in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*). The

proposed rule also would require the PTO to “consider” prior rulings on claim construction of a U.S. District Court or the International Trade Commission in arriving at a proper claim scope for post-grant proceedings. USIJ strongly supports the changes.

USIJ is a coalition of over 30 startup companies and their affiliated executives, inventors and investors that depend on stable and reliable patent protection as an essential foundation for their businesses. A list of USIJ members is attached as Appendix A. USIJ was formed in 2012 to address concerns that legislation, policies and practices adopted by the U.S. Congress, the U.S. Supreme Court and the USPTO were placing individual inventors and research-intensive startups (“the invention community”) at an unsustainable disadvantage relative to their larger incumbent rivals, both domestic and foreign. USIJ’s fundamental purpose is to assist and educate Members of Congress and leaders in the Executive branch regarding the critical role that patents play in our nation’s economic system. In this endeavor, USIJ works closely with numerous other groups and coalitions within the invention community to insure that protection of the creative role played by individual inventors, startups and small companies is recognized as one of the primary objectives of the U.S. patent system.

OVERVIEW AND EXECUTIVE SUMMARY

USIJ believes that the proposed rule changes will be beneficial in several important respects to the administration of Title 35 and the constitutional objectives of the U.S. patent system: *i.e.*, “to promote the progress of science and useful arts.”

Investment in invention-dependent startups has diminished measurably against a landscape where U.S. patent rights have been steadily eroded. The *Phillips* standard for construction of granted patent claims has provided certainty and fairness to all beneficiaries of our patent system, but the recent availability of a parallel adjudicative system with a different patentability standard has had a negative impact on the perceived validity of all patents. Unlike traditional litigation, infringers can simultaneously argue for a broad construction in IPR proceedings, unhinged from the patent documents, prosecution histories, and previous judicial constructions, while taking advantage of the narrower Phillips construction when

claiming non-infringement. If IPRs are to truly take their place as a useful substitute for district court invalidity proceedings, as Congress intended, this gap must be closed.

Changes that align claim construction for all forms of contested litigation are a welcome first step toward the restoration of confidence within the invention community that stable and reliable patents might once again become a hallmark of the U.S. patent system. Patents can fulfill their promotional promise only if inventors, entrepreneurs and investors believe that their patents will be respected and honored as property rights. For large parts of the invention community, that belief no longer exists. Over the last 15 years, the combined impact of a Supreme Court that appears demonstrably hostile to the enforcement of patents, a Department of Justice and Federal Trade Commission that openly promoted the interests of infringers over those of patent owners in the context of standard setting, and the devastating impact on investors and entrepreneurs of post-grant proceedings created by the Leahy-Smith America Invents Act (“AIA”) has undermined the willingness and ability of investors and entrepreneurs to undertake high risk, long term investments that depend upon patents. If our country wants to retain its leadership and dominance of science and technology, and if our patent system is to serve its salutary promise of encouraging investment and innovation in the most important new technologies, it is imperative that we restore this lost confidence in our patent system. The proposed rule changes are a positive step in that direction.

The *Phillips* approach to claim construction should be used for reviewing issued claims, because *Phillips* properly balances the interests of both the patent owner and the challenger in a way that BRI does not. The 2005 decision in *Phillips* reflects the culmination of more than 20 years of effort by the Federal Circuit and dozens of district judges to create a workable body of jurisprudence for addressing the many and diverse practical considerations raised by adversarial parties as to how the precise boundaries of a patent claim should be established – a determination that often is outcome determinative on the fundamental issues of infringement and validity. Building upon on its earlier decision in *Markman v. Westview Instruments*,¹ the Federal Circuit’s opinion in *Phillips* reviews the pros and cons of each of

¹ In *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (*en banc*), aff’d, 517 U.S. 370 (1996), the Supreme Court affirmed the Federal Circuit’s *en banc* ruling that claim construction is to be determined solely by the trial court, as a matter of law, and not by the jury as matter of fact. Even where the determination requires the resolution of factual issues based on the

several factors that might arguably provide guidance as to claim scope, including (i) whether and how the specification and drawings should be used in construing a claim, (ii) when and how to take into account the prosecution histories, (iii) what types of evidence should be admissible as to the scope of an issued patent claim, (iv) what role experts should play and how they should be considered by the trial court; (v) what role dictionaries should play in determining the actual meaning of words in a patent claim, and (vi) how to apportion the weight given to each of the factors under consideration. The *Phillips* decision sets forth a carefully considered and thoughtful methodology for managing the contested assertions of adversarial parties in construing patent claims. It should be used exclusively for reviewing the validity of patent claims after they are issued.

Closing (or at least narrowing) the gap between the power of the USPTO and that of a U.S. district court to find a patent claim invalid will reduce the ability of infringers to make strategic decisions around the likelihood that the same patent claim can be given two different constructional outcomes, depending upon which tribunal is ruling. Congress enacted the AIA with the expectation that post-grant proceedings before the USPTO would reduce the cost and complexity of patent litigation by transferring complex validity determinations to presumed experts who could pass on validity at far less cost than a district court could do. That premise was thwarted, almost from the outset, as large corporate infringers (and others) learned to use post-grant reviews as offensive weapons to make it difficult or impossible for smaller companies to enforce their patents. One mechanism that has worked well for this purpose is built around the interplay between district court litigation and PTAB proceedings. As noted above, the current rule allows an accused infringer to argue for a narrow claim scope in defending the issue of infringement before a district court or a jury, while simultaneously arguing that a broader scope be accorded the same claim in challenging validity in a PTAB proceeding.² The proposed rule changes will reduce

extrinsic evidence, it is still for the trial court to make the necessary finding in carrying out this process.

² It is axiomatic that patent claims must be accorded the same scope for the determination of validity as for infringement in an Article III court. To allow an administrative tribunal to employ a contrary practice is staggeringly unfair, and communicates loudly that startups and investors must think twice before launching new companies based on patented inventions.

substantially the ability of challengers to take strategic advantage of the existing disparity between the two standards.

Finally, we note that the use of BRI in the context of post-grant proceedings is itself an artificial construct that should be abandoned, at least in this context. The broadest reasonable interpretation of a patent claim had its origins as the **starting point** for the initial examination of a patent application. Once an applicant starts to amend the claims, however, and particularly where the applicant makes arguments that operate as disclaimers of claim scope or adds an inventor or expert declaration having the same effect, the examination process itself becomes the prosecution history that is a central part of an analysis under the *Phillips* approach. Stated differently, by the time a patent claim is granted, it has already moved beyond the BRI standard that existed at the outset, and it is grossly unfair to the patent owner for the process to revert to this highly subjective and essentially untethered methodology in defending its patent before the PTAB. In our view, it is difficult or impossible to state a rational argument for using the BRI standard for post-grant review of an issued patent, other than to allow the PTAB enhanced subjectivity in its power to destroy arbitrarily the property rights of a patent owner.

Nor is there any reason for allowing an administrative tribunal to ignore a district court ruling that would invoke some form of the doctrine of *res judicata* or *collateral estoppel* in another district court action between the same two parties. It is extremely harmful to inventor and investor confidence in the integrity of their patents when a patent claim that has survived an infringer's challenge to validity in district court collides with a USPTO rule that allows the same patent to be tossed out by a group of PTAB judges reading the same claim as if the file history did not exist and ignoring the legal doctrines that would bar the infringer from making the same argument in a different district court. The mere availability of such a pathway for challenge deprives the PTAB process of any semblance of fairness or objectivity.³

³ Judge Newman's compelling dissent in *Fresenius v. Baxter Int'l*, 733 F.3d 1369 (Fed. Cir. 2013) addressed the same issue in the context of an *ex parte* reexamination under the pre-AIA patent statute, noting that after the issue of validity had been finally decided by the district court in

Requiring the PTAB to apply the same legal standard to claim construction as would a district court also will simplify the work of lawyers trying to advise clients, which in turn will restore confidence in the reliability of patents. It is important to note in this context that the greatest impact of any rule of law is not found in decided cases but in how decided cases are translated by thousands of lawyers and businesses into actual behavior. The vast majority of business decisions to enforce patents, to grant or take licenses, or to try designing around existing patents are not based on the outcome of judicial or PTAB proceedings, but rather are made in consultation between companies and their legal counsel who have tried to assess claim scope, the likelihood of infringement findings, and the possible penalties if uncertainties break the wrong way. For the same reason that uncertainty in litigation raises risk levels and reduces the significance of patents as incentives, so too does a system where choice of forum and the likelihood of an irrational outcome must be factored into a good faith effort to determine whether or not a patent is valid.

**THERE IS NO LOGICAL REASON TO APPLY
DIFFERENT STANDARDS FOR ISSUED PATENTS**

Whatever may be the underlying logic of using a BRI approach to claim construction in the initial examination of patent claims, it is difficult to find any persuasive reason for using it to assess the validity of an issued patent when a district court faced with the same question would apply an entirely different and far more insightful and granular set of rules for that purpose. While the outcome may not always differ, there certainly are situations where the current practice has led to different outcomes.⁴ In *PPC Broadband v. Corning*, 815 F.3d 734, 743 (Fed. Cir. 2016), for example, the Federal Circuit affirmed a finding of unpatentability by the PTAB, noting that, under the *Phillips* approach, the claim would have survived the challenge, but noted that “while the construction [would not be] the correct construction under *Phillips*, it is the broadest reasonable interpretation of [the term in dispute

favor of the patent owner and affirmed on appeal by the Federal Circuit, it is offensive to basic principles of finality and also to the constitutional separation of powers for the panel majority to allow an administrative agency to entertain further efforts by the infringer to avoid responsibility for its infringement when another district court would not be allowed to do so.

⁴ As noted previously, even in the examination of an application for patent, claim scope originally defined by BRI becomes qualified and narrowed by the arguments and claim modifications advanced by the applicant, so that at the end of the process, if the patent finally issues, the actual scope of claims is better reflected by *Phillips* than by BRI.

and] we must uphold the Board’s construction.” Even more troublesome was the outcome in *Seagate Tech v. Enova Tech*, IPR 2014-00683 (PTAB 2015), where the PTAB simply ignored a prior claim construction arrived at by an Article III judge in a U.S. District Court and used the broader construction to find the patent invalid. Outcomes such as these, even if not large in number, are communicated like a wildfire through both the invention community and the infringer community, undermining inventor and investor confidence in their own patents and emboldening infringers to give patents owned by others the back of the hand.

Disrespect for the property rights of smaller companies faced with infringement by large, well-resourced incumbents has always presented enforcement difficulties, but that problem has worsened significantly in the wake of the post-grant reviews created by the AIA. Statistical data reflecting the use of post-grant review petitions shows overwhelmingly that these petitions are directed, by and large, against the patents owned by companies that are far smaller than are the petitioners. Considering the enormous cost of bringing a lawsuit for patent infringement, the inability to predict a positive outcome, and the avenues available to infringers to defend, prolong or interfere procedurally with the speedy resolution of key issues, it is not surprising that inventors and their investors have begun to cede the domain of patent protection to the large incumbents. As noted at the outset, the use of the *Phillips* standard instead of BRI will not solve all the problems, but is a step in the proper direction and, as a symbolic reflection of the views of the new management of the USPTO, will be most helpful in restoring investor confidence in the U.S. patent system.

***PHILLIPS* FURTHERS THE PUBLIC NOTICE FUNCTION OF PATENT CLAIMING BY PROMOTING UNIFORMITY IN CONSTRUCTION**

The need for clarity as to the coverage of patents has been a primary objective of our system for nearly 200 years. In 1836, Congress recognized the desirability of informing members of the public as to what a patent covered, or more accurately what the patent had removed from the public domain. To this end, Congress created the requirement that inventors draft claims that point out with particularity the invention for which protection was sought.⁵ This

⁵ The 1836 Act provided that the applicant “shall particularly specify and point out the part, improvement, or combination, which he claims as his own invention or discovery.” Act of July 4,

public notice function for patent claims has been a key feature of the U.S. patent system ever since and underpins a significant portion of patent jurisprudence.

A corollary to the public notice function of patent claims is that the manner in which the words of a claim are construed to establish the metes and bounds of what is protected must be the same without regard to the particular court or tribunal that is making the determination and must also be applied the same way irrespective of whether the inquiry is patent validity in light of prior art or patent infringement. Disparity in how patent claims are construed undermines the public notice function of having claims in the first place and subjects the patent owner's property rights and business decisions to unnecessary and undesirable risks. Such disparity also gives rise to wasteful and expensive types of forum shopping, *i.e.*, angling strategically for particular courts perceived as more favorable to one side or the other.

Congress established the Federal Circuit in 1982 to effect a widely perceived need for more consistent application of federal patent law.⁶ At the time, the regional circuit courts of appeals varied widely in their handling of patent disputes, often leading to a race to the courthouse in important cases. This, in turn, led to expensive venue fights designed to steer the ultimate appeal to the regional circuit most likely to rule favorably on the merits for the winner of the venue fight. The Senate Report on the Act identified "patent law as an area in which the application of the law to the facts of a case often produces different outcomes in different courtrooms in substantially similar cases."⁷ Congress thus created a centralized national court with exclusive appellate jurisdiction to hear cases arising under the patent law

1836, Ch. 357, § 6, 5 Stat. 117, 119. That same requirement, although worded a bit differently, remains today as 35 U.S.C. §112.

⁶ Federal Courts Improvement Act, Pub. L. No. 97-164, 96 Stat. 25 (1982) (merging the Court of Customs and Patent Appeals with the United States Court of Claims to create the United States Court of Appeals for the Federal Circuit).

⁷ S. Rep. No. 97-275, at 5 (1982), *reprinted in* 1982 U.S.C.C.A.N. 11, 15.

to insure “a more uniform interpretation of the patent laws and thus [contribute] meaningfully and positively to predicting the strength of patents.”⁸

It is precisely to this need for consistency that the *Phillips* decision is addressed. Having concluded in its earlier ruling in *Markman* that claim construction should be carried out by the district judge, not by a jury, the Court in *Phillips* performed an extensive and detailed review of various ways in which district judges, and indeed the Federal Circuit itself, had approached claim construction in the past. With particular emphasis on its earlier ruling in *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582-83 (Fed. Cir. 1996), wherein the Court set forth a hierarchy of sources to which a trial court should look for guidance as to the meaning of claim language, the Court recognized the tensions that may develop between the customary and ordinary use of words in claim language with the specification, the testimony of experts, the identification of persons skilled in the relevant art and role to be played when dictionaries conflict on a pivotal point. After this extensive and highly nuanced discussion of methodology, the actual ruling by the Court was to carve back on the freedom of trial judges to elevate dictionaries and other forms of extrinsic evidence over what is found in the claim language itself, as interpreted by the written specification in light of relevant parts of the file history, and read by a person skilled in the field of the invention:

“It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. Such person is deemed to read the words used in the patent documents with an understanding of their meaning in the field, and to have knowledge of any special meaning and usage in the field. The inventor's words that are used to describe the invention – the inventor's lexicography – must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology. Thus the court starts the decision making process by reviewing the same resources as would that person, *viz.*, the patent specification and the prosecution history.”

⁸ *Hearings on H.R. 6033, H.R. 6934, H.R. 3806 and H.R. 2414, Before the Subcomm. On Courts, Civil Liberties and the Admin. of Justice of the House Comm. on the Judiciary, 96th Cong., 797 (1980).*

This intensive search commanded by *Phillips* for what the inventor considered to be the invention and what the examiner viewed as the invention, fully defined as to the methodology used in arriving at a conclusion, is a far cry from simply reading a claim as if the rest of the world did not exist, which is the fundamental flaw in BRI.

THE PTAB SHOULD ARTICULATE THE REASONING BEHIND ITS CLAIM CONSTRUCTIONS AND SHOULD ADDRESS THE *PHILLIPS* PRINCIPLES

USIJ recognizes that it will require greater effort for a PTAB panel to articulate its rationale for a claim construction under the *Phillips* approach than would be the case using BRI. We respectfully submit that this added burden is not a reason to continue the use of BRI. It is inherently unfair to a patent owner and those who rely on the integrity of patent protection to invalidate a patent claim based on prior art that – had it come into existence after the priority date of the patent – would not have infringed the same claim. It is time for the USPTO to rid itself of post-grant review processes that have been dominated from the outset by nonsensical syllogistic reasoning, with the apparent aim being the arbitrary destruction of patents for the benefit of infringers.

There is speculation among patent practitioners that because final written decisions, in the aftermath of the *SAS* decision,⁹ must now consider all grounds raised in a petition, that panels will decide to forego the careful articulation of the rationale used in claim construction. That would be a mistake for both the USPTO and those who are regularly before it. We strongly urge the USPTO to adopt a procedure that defines the disputed terms in a patent claim only once and in accordance with the *Phillips* methodology, and that records the claim construction analysis as a permanent record for the benefit of the parties, a reviewing court and any future parties addressing the same claim.

RESTORATION OF CONFIDENCE IN THE INTEGRITY OF PATENTS IS OF PARAMOUNT CONCERN TO USIJ

We close our comments to the USPTO regarding the proposed change in the legal standard employed for claim construction currently in use by putting this question in a larger context.

⁹ *SAS Institute, Inc. v. Iancu*, 138 S.Ct. 1348 (2018)

The creation of a judicial mechanism for encouraging and protecting the creativity of authors and inventors is one of the most fundamental building blocks of this nation's economic and industrial policy. Based on the authority of Article I, Section 8, clause 8 of the U.S. Constitution, the first Patent Act of 1790 was one of the first statutes adopted by the first Congress. Amended many times thereafter to keep up with changing worlds of technology and commerce, the U.S. patent system has proven over time to provide an extremely important incentive for allowing inventors, entrepreneurs and investors to undertake risky and expensive R&D programs having long development cycles without fear that their investments and efforts will be snatched by larger incumbents with far more resources.

It is difficult and perilous to start any new company from scratch. The process requires visionary people willing to give up secure jobs, take risks and join companies that have a significant probability of failure. It also requires investors with a strong appetite for risk who are willing to invest in an often distant prospect of returns sufficient to justify such risk. For technologies having a long development cycle, these prerequisite conditions simply cannot exist without the security provided by a properly functioning patent system. Enforceable patents are essential to protect startups from the predatory behavior of would-be competitors anxious to copy any new product or technology once it is proven workable. Enforceable patents are also essential to allow those startups to attract the capital needed to build companies that can bring such products to market. Without enforceable patents, there is simply no reason for investors or entrepreneurs to take the risks involved in challenging entrenched market players. Which, of course, is why some large entrenched incumbents have labored so tirelessly for the last 15 years to eliminate the threat of upstart entrepreneurs invading their markets with new and better technology. If trampling on the property rights of smaller companies has become the permanent business model for larger ones, neither will survive, and our country's economic system will stagnate.

While not all businesses and not even all startups depend on patents for their success, many of the companies that invest heavily in R&D to create breakthrough technologies that are beyond the capabilities or outside the interest of established companies do require patents to protect their investments and efforts from larger competitors who can simply copy their inventions, once proven, and beat them in the market. On this point, the U.S. patent system

today faces a serious crisis of confidence. Increasing numbers of inventors, entrepreneurs and investors no longer trust their U.S. patents to provide the types of protection that are required to justify long term commitments of time and resources in risky ventures. The result is that some of the most critical technologies needed in this country for national defense and national well-being are being abandoned by those most likely to come up with genuinely new ideas and technologies.

Some who advocate for weakening the patent system will argue that venture capital investment in this country is alive and well and that only those who would abuse the system want to see patent protections significantly strengthened. They will point primarily to growth in levels of overall VC investment in the U.S.¹⁰ This argument draws erroneous conclusions in at least two respects. First, while the total amount of worldwide venture capital has increased impressively in recent years, the U.S. share of total worldwide venture capital investment has declined substantially as patent protection has diminished. Figures provided by the National Venture Capital Association (“NVCA”) show that the portion of venture capital invested in the U.S. shrank from 90% of the worldwide total in the late 1990s to 75% a decade ago to 54% in 2017. The primary beneficiaries of this shift have been companies in Asia, largely China, which has emerged as a serious challenger to U.S. dominance in strategic technologies. Second, and even more telling, is a pronounced shift in the types of venture investments being made in the U.S. – away from new products and technology sectors having long development cycles and high risks of failure (*i.e.*, investments that require patent protection) and toward more easily commercialized economic sectors for which patents are not so important. Even though total venture capital investment in the United States increased nearly fourfold over the past 15 years, the portions committed to some of the most important strategic sectors needed for national defense and national well-being have declined. This bodes poorly for the future of our country, because

¹⁰ See “An Open Letter: Innovation Is Thriving,” published December 14, 2017 by the so-called High-Tech Inventors Alliance, a front group for Adobe, Amazon, Cisco, Dell, Google, Intel, Oracle and Salesforce. The statistics cited in the HTIA document are both incorrect and misleading, as shown in a responsive article entitled “Open Letter Exaggerates the Benefits of Recent Patent Reforms,” IP Watchdog, January 4, 2018 <http://www.ipwatchdog.com/2018/01/04/open-letter-exaggerates-benefits-patent-reforms/id=91379>.

it essentially cedes the most important new technologies to other countries and to a handful of giant international corporations driven by their own agendas and product roadmaps.

USIJ recently completed a study of investment data provided to NVCA by PitchBook.¹¹ The study, which is posted on the USIJ website (www.usij.org), is entitled “U.S. Startup Company Formation and Venture Capital Funding Trends – 2004 to 2017.” The study shows, for a number of strategic technology sectors, declines in both the relative numbers of companies receiving venture capital funding and the relative amounts of capital invested. These declines are shocking unless one believes that a handful of corporate giants, having international obligations in addition to their commitment to our country, are going to produce all the new technology needed for the next thirty years to deal effectively with cybersecurity, defense intelligence, artificial intelligence, machine learning, quantum computing, space travel, weapons systems, pharmaceuticals, medical devices, bioinformatics and numerous similar activities that are critical to national defense and well-being.¹²

While the declining VC investments in critical industries may not be fully attributable to the weakening of the U.S. patent system, it is impossible to argue that the two are entirely unrelated. The protection of inventions provided by U.S. patents today is little more than a shadow of the protection provided in 2004, before the systematic weakening began. At least part of the answer can be inferred from simple economics – venture capital firms invest the dollars that they raise from investors where they judge the risk-discounted returns to be the best. When patents are unreliable as business assets, the investments go to companies that

¹¹ PitchBook Data, Inc. provides a database service that tracks, among other things, investment and performance data for the venture capital and private equity industries across a broad spectrum of economic activities. The data is broken down into nearly 200 separate economic sector groupings.

¹² The study shows, for example, that between 2004 and 2017, the number of companies receiving funding to develop general purpose semiconductors fell from 1.16% of all companies receiving funding to 0.05%, a decline of roughly 96%. The capital invested in such companies fell from 2.03% of the total of all capital invested in 2004 to a vanishingly small 0.02% in 2017. Similar declines can be seen in fiber optics, new drug discovery, networking equipment, medical devices, biotechnology, computer hardware and a host of other industrial sectors that are core technologies if our country is to retain its position of technological dominance.

do not need to rely on patents. This seems fairly elementary and the USIJ study illustrates the point.

No one would argue that many of today's American technology giants have not been innovative in the design, manufacture and marketing of a most amazing array of useful and life-saving products on a global basis. But a static look at what may appear innovative today can be deceiving, because we also know from more than 200 years of experience that many of the most important breakthrough technologies that defined the last century in this country were brought about by individual inventors, entrepreneurs, startup companies and their investors. One need only to examine from our recent history people and companies such as (i) Ray Dolby and Dolby Laboratories, (ii) Chester Carlson and Xerox Corporation, (iii) Irwin Jacobs, Andrew Viterbi and the other founders of Qualcomm, (iv) Andy Grove, Gordon Moore and the founders of Intel, (v) Bob Swanson and the founders of Genentech, (vi) Bill Gates, Paul Allen and the other founders of Microsoft (and some of the other equally compelling stories) to recall that it has been individuals, not large companies, that brought these companies into being from startups to the major enterprises they have become today. The point is that individual inventors, entrepreneurs, startups and their investors always have accounted, by and large, for a large number of the genuine breakthroughs. Once a revolutionary new idea is proven workable, larger enterprises often swoop in to perfect, scale and market the new technology, but it is the creative mind of the inventor that provides the seed that our patent system was designed – first and foremost – to protect. It is precisely on this point where we see the most damaging effects of the last fifteen years of systematically reducing patent rights and raising the cost and risk levels for those trying to enforce their patents.