



December 21, 2018

Robert Schmidt  
Co-Chairman

Mail Stop Patent Board

Kevin Burns  
Co-Chairman

Acting Deputy Chief APJ Judge Jacqueline Wright Bonilla or Vice Chief APJ Michael Tierney; PTAB Request for Comments 2018.

Jere Glover  
Executive Director

P.O. Box 1450

Alexandria, VA 22313-1450

Via email: [TrialRFC2018Amendments@uspto.gov](mailto:TrialRFC2018Amendments@uspto.gov)

Larry Nannis  
Treasurer

Reference: **Comments on Claim Amendment Practice and Procedures Before the Patent Trial and Appeal Board. Docket No. PTO-P-2018-0062.**

Kevin Burns  
New England  
Regional Chair

Matt Oristano  
Joseph Schwartz  
Mid-Atlantic  
Regional Chair

Dear Acting Deputy Chief APJ Judge Jacqueline Wright Bonilla and Vice Chief APJ Michael Tierney:

Ash Thakker  
Southeast  
Regional Chair

Mary Delahunty  
Southwest  
Regional Chair

Russ Farmer  
Mountain  
Regional Chair

Michael Browne  
Pacific  
Regional Chair

The Small Business Technology Council (SBTC) is pleased to submit comments on the above-captioned Request for Comments published in [83 Fed. Reg. 54319](#) (October 29, 2018), (“RFC”). SBTC is the nation’s largest association of small, technology-based companies in diverse fields. We are a council of the National Small Business Association ([www.NSBA.biz](http://www.NSBA.biz)) which is the nation’s first small-business advocacy organization. NSBA is a staunchly nonpartisan organization with 65,000 members in every state and every industry in the U.S. SBTC advocates on behalf of the 6000 firms who participate in the Small Business Innovation Research (SBIR) program. Although SBIR/STTR firms have received less than 1.7% percent of Federal R&D, SBIR/STTR firms have created over 20 percent of America’s major innovations, and as many patents as all universities combined; plus we are creating sustainable manufacturing and service jobs in the U.S. Small businesses produce 16 times more patents per employee than large patenting firms, which has a direct correlation with the increased job growth created by small businesses.

Roy Keller  
State Liaison

The subject proposed rule change is important to help reverse the devastating effects that the America Invents Act (AIA) has had on American innovation. Since the implementation of the AIA after its passage in December 2011, the United States has fallen from its long-standing position as number one to number eleven in Innovation<sup>1</sup> and number twelve in Patent Strength, behind countries such as France, Sweden, Japan, Great Britain, and Singapore.<sup>2</sup>

Paul Donovan  
Michael Squillante  
NIH Committee  
Co-Chairs

Ash Thakker  
Phase III Committee  
Chair

Russ Farmer  
DCAA Committee  
Chair

The Fortune 500 firms’ share in generating key innovations has dropped from over 40% in the 1970s and early 1980s to just 6%.<sup>3</sup> Large firms can and do survive without strong patent rights. Small businesses cannot. Weaker, narrower patent rights 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 have been, and will continue to usurp American R&D and commercialize our efforts overseas**

Patents have lost more than 2/3rds of their value since the AIA was passed in 2011. “The American Invents Act cost the economy about \$1.37 Trillion, or an amount equal to about 7% of the US GDP.”<sup>4</sup> The Federal Reserve found that patents are the number one indicator of regional wealth,<sup>5</sup> more important than education or infrastructure. Being a high patenting community means the difference of \$8,600 in household income.<sup>6</sup>

In 2012, Intellectual Property (IP) was responsible for sustaining more than 55.7 million jobs in the U.S.<sup>7</sup> Intangible assets including corporate IP and brand recognition account for 84 percent of the value of U.S. public companies.<sup>8</sup> 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,<sup>9</sup> and in 2011, IP-based assets were valued at about \$9 trillion.<sup>10</sup>

The life of a patent is limited already, and the PTAB prevents the immediate commercialization of new innovations. This has negatively affected America’s funding of new businesses. In 2006, 81% of the global venture capital came to the US, but since the AIA went into effect, the US’s share of global venture capital dropped to 54%.<sup>11</sup> Even worse, early-stage VC funding is imploding, dropping by about half since the AIA took effect.<sup>12</sup> And China is now filing significantly more patent applications than the US.

What this has meant for the American economy is that new inventing companies are not being created nor growing. In fact, in two-thirds of America’s metro areas, companies are dying faster than being birthed.<sup>13</sup> This is having a distressing effect on job growth from small companies. Holding a patent increases startup employment by 36%, sales growth by 51%, and probability of securing venture capital funding by 53%.<sup>14</sup> Thus, encouraging strong patents leads to more good paying new jobs.

This is why patents are important. And **the more, broader, and stronger patents America has, the wealthier our nation is**. The current inability of patent owners to effectively amend their patent claims in AIA PTAB proceedings has been devastating to inventors who face “all or nothing” revisions to claims when newly-discovered prior art is cited against their patent. The current regulations ensure we have fewer and narrower patents. The PTO needs procedures that provide patent owners a substantive opportunity to amend challenged claims and ensure a fair and equitable resolution of patent disputes. This will assist inventors to obtain claims that cover inventions that were developed at significant cost.

With regard to specific wording recommendations, we refer to others who have even more experience in PTAB practice than the SBTC. We particularly hope that the USPTO reviewers will incorporate the comments submitted by the IEEE-USA. Incorporating the IEEE-USA comments into PTAB practice will help small inventing entities strengthen their patent rights.

Instead of submitting specific wording change recommendation comments, the SBTC suggests that the USPTO adopts a broad set of principles that will help the US economy, company growth, investment in American firms, and job creation for American workers. SBTC’s

recommended guideline is that whenever deciding on rule changes within the USPTO, officials should ask themselves, will these changes help create:

- More patents
- Broader claims
- Stronger, more enforceable patents

If the answer is no, then the rule change should be rejected as it will harm the American economy. If the rule will promote more, broader, and/or stronger patents, the rule should be adopted.

The SBTC is happy to continue our support of the Patent Office and the strengthening of patent rights, particularly for small firms and individual inventors. Please feel free to contact me with any questions at [rschmidt@CleveMed.com](mailto:rschmidt@CleveMed.com) or on my cell phone at 216-374-7237.

Sincerely,  
Small Business Technology Council



Robert N. Schmidt  
Co-Chair  
Patent Attorney (USPTO #30,889)  
Professional Engineer (Ohio, # 40821)

#### References:

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<sup>1</sup> The U.S. Drops Out of the Top 10 in Innovation Ranking, Michelle Jamrisko and Wei Lu  
January 23, 2018, <https://www.bloomberg.com/news/articles/2018-01-22/south-korea-tops-global-innovation-ranking-again-as-u-s-falls>

<sup>2</sup> *Create*, US Chamber International IP Index, Sixth Edition, February 2018, Figure XI: Scores, Category 1: Patents, Related Rights, and Limitations.

<sup>3</sup> FRED BLOCK AND MATTHEW R. KELLER Where Do Innovations Come From? Transformations in the U.S. National Innovation System, 1970-2006, THE INFORMATION TECHNOLOGY & INNOVATION FOUNDATION, JULY 2008, [http://www.itif.org/files/Where\\_do\\_innovations\\_come\\_from.pdf](http://www.itif.org/files/Where_do_innovations_come_from.pdf)

<sup>4</sup> Richard Baker, President of New England Intellectual Property, LLC, PatentlyO Guest Post: America Invents Act Cost the US Economy over \$1 Trillion, June 8, 2015, <https://patentlyo.com/patent/2015/06/america-invents-trillion.html>

<sup>5</sup> 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.*

<sup>6</sup> 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.

<sup>7</sup> Global Intellectual Property Center, US Chamber of Commerce, 2012. <http://www.theglobalipcenter.com/ip-creates-jobs/>

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<sup>8</sup> Based on the value of S&P 500 firms. <http://www.oceantomo.com/ocean-tomo-300/>

<sup>9</sup> Robert Litan and Hal Singer, Unlocking Patents: Costs of Failure, Benefits of Success, [http://www.ei.com/downloadables/EI Patent Study Singer.pdf](http://www.ei.com/downloadables/EI_Patent_Study_Singer.pdf)

<sup>10</sup> 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](http://www.sonecon.com/docs/studies/Value_of_Intellectual_Capital_in_American_Economy.pdf)

<sup>11</sup> “And in three of the last four years, at least half of the top ten largest venture investments in the world have occurred outside the U.S.” Statement of Scott Kupor Managing Partner, Andreessen Horowitz Chair-elect, National Venture Capital Association before the U.S. Senate Small Business Committee on “Searching for Capital: How Venture Capitalists and Angel Investors Fund Entrepreneurs and Startup Companies” July 14, 2016.

<sup>12</sup> 3Q 2018 PITCHBOOK-NVCA VENTURE MONITOR, Angel & seed quarterly deal value slipped from \$2.1B to \$1.6B and deal count, which has been on a slow descent, tumbled from 1,005 to 785 deals closed, a 21.9% decline in just the last quarter.

<sup>13</sup> Dynamism in Retreat: Consequences for Regions, Markets, and Workers, Economic Innovation Group, Feb 2017, <http://eig.org/wp-content/uploads/2017/07/Dynamism-in-Retreat-A.pdf>.

<sup>14</sup> USPTO Economic Working Paper: “[The Bright Side of Patents](#),” December 2015