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June 7, 2018

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The Honorable Thomas Massie 2453 Rayburn House Office Building United States Congress Washington, DC 20515 The Honorable Marcy Kaptur 186 Rayburn House Office Building United States Congress Washington, DC 20515

Subject: Support for "Restoring America's Leadership in Innovation Act of 2018"

Dear Congressman Massie and Congresswoman Kaptur:

The Small Business Technology Council (<u>www.SBTC.org</u>) is writing to express our support for your bill Restoring America's Leadership in Innovation Act of 2018 (RALIA), We believe this bill is extremely important in starting to restore the significant decline in American innovation since the passage of the very damaging America Invents Act (AIA).

SBTC is the nation's largest association of small, technology-based companies in diverse fields. SBTC is a council of the National Small Business Association (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. With 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 (**Figure 1**); plus we are creating sustainable manufacturing and service jobs in the U.S. As patents are critical to the success of small businesses, SBTC has been fighting for years for stronger,¹ not weaker, patents.

Although it was obvious to SBTC's members that the America Invents Act would be extremely harmful to small business and independent inventors, the full effect of its devastation is now just being felt. The value of patents and patent assets has <u>decreased</u> by over $60\%^2$ in the first few years after passage of the AIA (**Figure 2**). America has now fallen to being tied with Italy for number $12/13^3$ (from first place) in patent rights. America has dropped to number 11 in Bloomberg's Innovation Index (behind France and Israel), and <u>our slide in innovation is expected to continue</u>.⁴

We certainly appreciate your leadership and work in helping to improve America's competitive position in innovation by helping to restore stronger patent rights. We also support the STRONGER Patents Act introduced by Rep. Stivers and would encourage you to vote for it if it is the only bill to reach a vote on the House floor. But we believe that the RALIA bill is better as it will strengthen patents even more than the STRONGER Patents Act. And strong patents will help improve innovation.

Your RALIA bill will help reverse the detrimental effects of the AIA which has caused a shift in economic power to China and elsewhere overseas. China is overtaking America



in patenting.⁵ (See **Figures 3, 4, & 5.**) Patents protect new products and services and the equity they require, and are a key driver for America's future economic strength.

Inventors pay tens of thousands of dollars⁶ out of pocket to obtain a patent and frequently wait years for it to issue.⁷ Inventing is also high risk, only 5% of patents are licensed or commercialized.⁸ Despite the odds against inventors, they still work to make their dream come true. If they are successful in getting a valuable patent, then they have to enforce it in today's *"efficient infringement"*⁹ environment. The decreased use of injunctions encourages prolonged litigation. Before the AIA became fully effective, litigation cost \$3-5 million and took 3-5 years.¹⁰ Now it takes even longer and is more expensive for the patent holder.

The declining power of American patents has also played a part in the declining investment by venture capital (**Figure 6 & 7**) and by angels (**Figure 8**). This has caused a decline in startups, adversely impacting the economy¹¹ (**Figures 9, 10, & 11**). This has been particularly detrimental to "flyover" states like Ohio and Kentucky (**Figure 12**).

Patents are critical for small business success (**Figure 13**). They are the shield that allows a company's equity shares and capital expenditures to have protection in building the markets for America's innovative new products. America has been dissipating this shield for several years. I want to thank you for starting to rebuild it.

SBTC is also pleased to work with you to attempt to obtain other sponsors for the RALIA. We would be glad to address stronger patent rights and other issues with you in person.

Sincerely, Small Business Technology Council

Jere W. Glover Executive Director

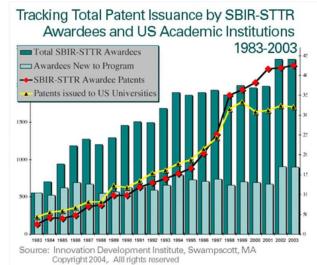
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Kevin Burns Co-Chairman



Figure 1.

Figure 2









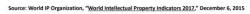


Figure 5

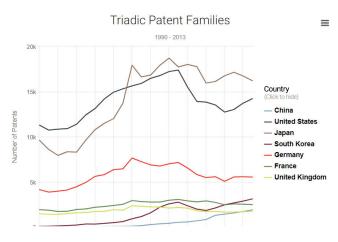


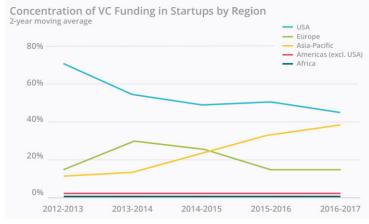
Figure 5 In 2014, China's State Intellectual Property Office (SIPO) processed 34.6 percent of all patent applications in the world. With over 920,000 total applications, China processed 160 percent more application than the United States.



Figure 4



Figure 6

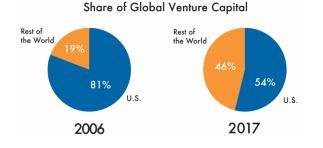


Startup Genome, Global Startup Ecosystem Report, 2018, page 11, <u>https://startupgenome.com/all-report-thank-you/?file=2018</u>



Figure 7





Source: 4Q 2017 Pitchbook, "<u>NVCA Venture Monitor</u>," January 15, 2018

Figure 9

2. Annual difference between firm births and deaths in the U.S. economy

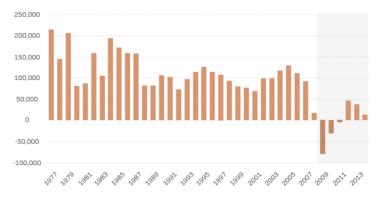


Figure 11





Figure 8

Decline in Angel and VC # Seed Deals in Last Three Years of ~46%





Figure 10

3. Firm birth (startup) and death rates

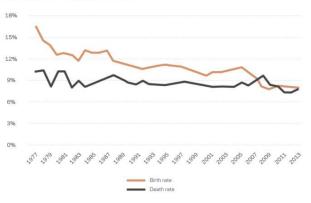


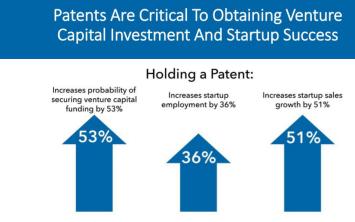
Figure 12

13. The 20 metro areas with the largest declines in firms 2010-2014

Metro Area	Change in firms 2010-2014	Change in employment 2010-2014	Change in employment 2006-2014
Cleveland - Elyria- Mentor, OH	-712	65,600	-28,400
Milwaukee - Waukesha - West Allis, WI	-627	33,000	-16,400
Virginia Beach - Norfolk - Newport News, VA-NC	-455	12,600	-38,300
Youngstown - Warren - Boardman, OH-PA	-420	14,100	-1,200
Hartford - West Hartford - East Hartford, CT	-406	16,300	-12,300
Tucson, AZ	-405	-2,400	-34,300
Providence - New Bedford - Fall River, RI-MA	-383	25,100	-30,000
Cincinnati - Middletown, OH-KY-IN	-371	57,900	2,100
Memphis, TN-MS-AR	-369	16,900	-26,200
Charleston, WV	-369	-1,100	-6,300
Honolulu, HI	-361	25,200	6,300
Toledo, OH	-354	11,700	-22,600
Cape Girardeau - Jackson, MO-IL	-349	-300	-2,100
Knoxville, TN	-333	24,000	5,200
Duluth, MN-WI	-305	2,200	2,700
Mobile, AL	-302	-400	-9,100
Wichita, KS	-276	9,600	4,700
Dayton, OH	-270	13,400	-46,800
Louisville/Jefferson County, KY-IN	-266	45,900	16,800
Topeka, KS	-250	400	-1,500



Figure 13



Source: USPTO Economic Working Paper, "The Bright Side of Patents," December 2015



References:

¹ http://sbtc.org/house-judiciary-marks-up-and-sends-innovation-act-to-house-floor/

² An augmented market approach to patent portfolio valuation, Jack Lu, IAM, Sept/OCT 2016, http://www.iammedia.com/Magazine/Issue/79/Features/An-augmented-market-approach-to-patent-portfolio-valuation

Create, US Chamber International IP Index, Sixth Edition, February 2018, Figure XI: Scores, Category 1: Patents, Related Rights, and Limitations.

⁴ 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-innovationranking-again-as-u-s-falls.

⁵ "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.

⁶ HIGH TECHNOLOGY ENTREPRENEURS AND THE PATENT SYSTEM: RESULTS OF THE 2008 BERKELEY PATENT SURVEY, BERKELEY TECHNOLOGY LAW JOURNAL,

Stuart J.H. Graham, Robert P. Merges, Pam Samuelson, & Ted Sichelman, http://ssrn.com/abstract=1429049 The Berkeley study found that the average out-of-pocket cost to obtain a patent was over \$38,000 (not including invention costs).

⁷ Many of SBTC's members wait 6-8 years (and we have an example of a 12-year wait) for a US patent to be issued in arts such as medical devices or aerospace.

8 The Real Patent Crisis Is Stifling Innovation, Forbes, JUN 18, 2014,

https://www.forbes.com/sites/danielfisher/2014/06/18/13633/#2bc12036f1c0. "Of today's 2.1 million active patents, 95 percent fail to be licensed or commercialized."

⁹ Adam Mossoff & Bhamati Viswanathan, Explaining Efficient Infringement, May 11, 2017, https://cpip.gmu.edu/2017/05/11/explaining-efficient infringement/.

10 For Most Small Companies Patents Are Just About Worthless, Forbes, OCT 4, 2013,

https://www.forbes.com/sites/toddhixon/2013/10/04/for-most-small-companies-patents-are-just-about-

worthless/#3dfbbee33ef3 .¹¹ 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.