No. 16-712

In The
Supreme Court of the United States

OIL STATES ENERGY SERVICES, LLC,

Petitioner,

v.

GREENE'S ENERGY GROUP, LLC, et al.,

Respondents.

On Writ Of Certiorari To The United States Court Of Appeals For The Federal Circuit

BRIEF OF AMICI CURIAE US INVENTOR, INC. AND 31 OTHER GRASS ROOTS INVENTOR ORGANIZATIONS IN SUPPORT OF PETITIONER

ROBERT P. GREENSPOON
Counsel of Record
FLACHSBART & GREENSPOON LLC
333 N. Michigan Ave., Suite 2700
Chicago, IL 60601-3901
Phone: (312) 551-9500
Fax: (312) 551-9501
Email: rpg@fg-law.com

Counsel for Amici Curiae Grass Roots Inventor Organizations

COCKLE LEGAL BRIEFS (800) 225-6964
WWW.COCKLELEGALBRIEFS.COM

TABLE OF CONTENTS

TABLE OF AUTHORITIES

TABLE OF AUTHORITIES – Continued

TABLE OF AUTHORITIES – Continued

Page

TABLE OF AUTHORITIES – Continued

Page

TABLE OF AUTHORITIES – Continued

Page

INTEREST OF *AMICI CURIAE*[1]

Amici include nonprofit inventor clubs and advocacy organizations. The nonprofit inventor organizations represent over 20,000 inventors, startup owners and executives and others interested in their success. The *amici* represent membership who have spent substantial portions of their lives inventing, building new companies and competing in new markets. *Amici* also educate and mentor new inventors and entrepreneurs. *Amici*'s and *amici*'s memberships' extensive experience with the patent system, new technologies and star-up companies, and the resulting ties to the health of the American economy, make them well situated to explain the importance of the issues presented in this case.

The Appendix contains a list of joiners to this brief along with a short description. All are inventor organizations, most of them clubs formed to help individual independent inventors succeed in bringing their innovative products ideas to market.

SUMMARY OF THE ARGUMENT

The Patent Trial and Appeal Board ("PTAB") has suddenly and drastically increased the probability that

[1] No counsel for a party authored this brief in whole or in part. US Inventor paid for the printing and filing of this brief. No other person or entity, or its counsel, made a monetary contribution to the preparation or submission of this brief. The parties have all consented to this filing, and the consents are on file with the Clerk.

a contested patent will be held invalid. This has reduced incentives to invent and patent. These effects harm society, do not reflect a "correct" adjudication of patent validity, and break society's bargain with inventors.

ARGUMENT

I. This Court Has Denounced the Harm to Society Caused When the Executive Branch Tries to Revoke Title to Property That It Has Issued

Patent Trial and Appeal Board outcomes have demoralized inventors. This new tribunal has reduced incentives to invent. Statistics show that nearly overnight, the chance of patent invalidation in an adversarial proceeding has almost tripled. In the Article III trial courts since 2000, statistics on final determinations on patent validity show invalidation **28.76%** of the time. But in the five-year history of the PTAB, final adjudications result in invalidity **76.61%** of the time.[2]

[2] Source: Docket Navigator. Report parameters for district court statistics sought final determinations from January 1, 2000 through August 8, 2017. The number of patent cases that included final determinations of "invalid" or "not invalid" totaled 10,553, while cases that included only final determinations of "not invalid" were 7,518. Report parameters for PTAB statistics sought final AIA trial determinations from inception of the PTAB to August 8, 2017. The number of patent cases that included final determinations of "unpatentable / canceled" or "not unpatentable" totaled 2,176, while cases that included only final determinations

This is near-total annihilation of property rights.[3] The PTAB figure actually undercounts the PTAB invalidity rate on a per-patent (rather than per-case) basis. A patent may survive a first PTAB procedure, only to be cancelled by a later PTAB procedure. What might appear statistically as a 50% cancellation rate on a per-case basis is actually 100% cancellation on a per-patent basis.

Sound legal reasons (explained by Petitioner in its merits brief) compel reversal. But also, this Court should reverse to roll back a Constitutionally unsound experiment. The PTAB's existence devalues the contributions of United States inventors, to everyone's detriment.

When an investor evaluates a start-up company before investing, patents factor into the investment decision. The patents secure start-up financing. Investors must calculate the eventuality of taking control of patents that secure the investment. Reducing the value of patents affects the *ex ante* calculation of all investors, throughout the economy. This in turn reduces the

---

of "not unpatentable" were 509. The respective percentages calculate to 76.61% and 28.76%.

[3] A different data source (Lex Machina) led one researcher to conclude that the percentage of PTAB final adjudications invalidating at least one patent claim is **84%**. "Are More than 90 Percent of Patents Challenged at the PTAB Defective?," IPWatchdog Blog, http://www.ipwatchdog.com/2017/06/14/90-percent-patents-challenged-ptab-defective/id=84343/ (last accessed August 22, 2017).

availability of start-up capital. Only incumbent large companies benefit from such a state of affairs.

Inventors (and perhaps even more so, investors) now perceive that Patent Office grants – even after rigorous examination and the payment of large fees – are suddenly worthless more than three times out of four. The decision to patent yields negative returns. This Court, in a land patent context, has already observed how society is harmed when title to property granted by the Government might be revoked by decisions of Executive Branch employees:

> And the title does so pass in every instance where, under the decisions of the officers having authority in the matter, a conveyance, generally called a patent, has been signed by the President, and sealed, and delivered to and accepted by the grantee. It is a matter of course that, after this is done, neither the secretary nor any other executive officer can entertain an appeal. He is absolutely without authority. If this were not so, the titles derived from the United States, instead of being the safe and assured evidence of ownership which they are generally supposed to be, would be always subject to the fluctuating, and in many cases unreliable, action of the land-office. No man could buy of the grantee with safety, because he could only convey subject to the right of the officers of the government to annul his title.

Moore v. Robbins, 96 U.S. 530, 533-34 (1878).

The patent grant in a PTAB regime is "fluctuating" and "unreliable" in exactly the way that this Court meant. Nothing has changed since *Moore v. Robbins* to undermine the Court's observation that "safe and assured" indications of ownership of government-granted property are essential in a civil society. So long as Executive Branch revocation proceedings are possible, an invention patent is merely an entitlement. As an entitlement, it is not property. If it is not property, it cannot attract capital. If it cannot attract capital, it cannot secure start-up financing and the formation of new companies to foster competition with incumbents while creating new jobs.

Scholars observe that one key function of a patent is to serve as a "beacon." It signals the presence of secure rights into which capital might invest. F. Scott Kieff, *On the Economics of Patent Law and Policy, in* Patent Law and Theory: A Handbook of Contemporary Research 3, 34-43 (Toshiko Takenaka ed., 2008). Acting as a beacon, the patent may then promote "bargaining." *Ibid.* at 42. Since the scope and rights within an invention patent are reasonably well defined, knowledgeable marketplace actors may negotiate at arms-length to arrive at an economically efficient price for the technology embodied within it. *Ibid.* at 42-43. This is often a royalty payment.

But the onset of the PTAB with its strong shift in outcomes has distorted the beacon and bargaining effects. With patents less attractive, inventors increasingly favor trade secrecy as their mode of protection (if it is even available). Trade secrets almost by definition

create no beacon for attracting investment. And when bargaining over patent rights does occur at arms-length, valuations have plummeted. Since the existence of the PTAB, patent valuations have declined by over half. [4]

Meanwhile, the factors that demoralize inventors do not exist in the federal courts. Such factors include:

- A proceeding structured to be asymmetrical and involuntary against inventors. The best outcome for an inventor is to maintain the status quo (*i.e.*, avoid patent cancellation). An inventor can only lose at the PTAB; there is no way to win damages or an infringement judgment.[5]
- A proceeding in which Congress permits the agency to tilt the scales in favor of cancellation. Property rights at the PTAB receive their "broadest reasonable interpretation," which is more likely than Article III-court-based interpretations to "read on" the prior art and thus result in invalidity.

---

[4] "Is the Patent Market Poised for Rebound in 2015?," IP-Watchdog Blog (Dec. 11, 2014), http://www.ipwatchdog.com/2014/12/11/is-the-patent-market-poised-for-rebound-in-2015/id=52593/ (last visited August 22, 2017). Richard Baker, a senior IP licensing executive who is on the Board of the Licensing Executives Society, stated "the dollar value of patent sales are down 83% and the number of patents sold is down about 50%, and this is just in the last two years, but the most striking piece of data is that the average price per patent has gone down about 55%. So you [see] a dramatic drop in value."

[5] This asymmetry explains why small inventors have trouble obtaining contingency fee counsel to assist at the PTAB.

- A proceeding whose outcomes will change subject to shifting Executive Branch priorities. The Director of the Patent Office may "stack" (and has already stacked)[6] panels with additional judges for the purpose of overturning an original three-judge panel's determination in a case.

- A proceeding subject to the political process. The Director – a political appointee – has the unreviewable power not to institute, or to terminate the institution of, any proceedings. 35 U.S.C. §§ 314, 315(d); 37 C.F.R. § 42.108.[7] "[T]he PTO is permitted, but never compelled, to institute an IPR proceeding." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (citing use of the term "may" in 35 U.S.C. § 314(a)).

- A proceeding subject to external influences. The PTAB has no judicial code of conduct, and

---

[6] *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, ___ F.3d ___, 2017 U.S. App. LEXIS 15923 (Fed. Cir. Aug. 22, 2017) (Dyk, J., concurring) (noting reconstitution of 3-judge into 5-judge panel to reach opposite result on joinder, questioning "whether the practice of expanding panels where the PTO is dissatisfied with a panel's earlier decision is an appropriate mechanism of achieving the desired uniformity [in PTO decisions]."); *Yissum Research Dev. Co.*, Nos. 2015-1342, 2015-1343, Oral Arg. at 43:17-42, 48:00-06 (USPTO Solicitor stating the Director stacked panels because she had to "be able to make sure that her policy judgments [were] enforced by the Board" in any given case).

[7] 35 U.S.C. § 314(a) states only that the Director shall "not authorize" PTAB proceedings unless the petition meets the "reasonable likelihood" threshold. Congress never required the converse. That is, Congress does not require the Director to institute a PTAB trial every time a petition *does* meet the threshold.

its judges have presided over disputes involving parties they only recently represented while in private practice, finding in their favor. "USPTO Response to FOIA Confirms There are No Rules of Judicial Conduct for PTAB Judges," IPWatchdog Blog (May 31, 2017), http://www.ipwatchdog.com/2017/05/31/uspto-response-foia-confirms-no-rules-judicial-conduct-for-ptab-judges/id=83914/ (last visited August 22, 2017).

- A proceeding where PTAB judges perceive that their jobs depend on the continued popularity of PTAB trials. Comments by the Acting Patent Office Director signal that PTAB judges understand the link between continued popularity of PTAB trials, and keeping their jobs.[8] A reasonable observer would question whether keeping the PTAB popular among accused infringers requires tilting outcomes in their favor. *See Caperton v. A.T. Massey Coal Co.*, 556 U.S. 868, 872 (2009) (procedural due process absent when reasonable observer might question the neutrality of a tribunal's decision makers); *see also Concrete Pipe & Prods. of Cal., Inc. v. Construction Laborers Pens. Trust for Southern Cal.*, 508 U.S. 602, 617-18 (1993) (due process requires, at

[8] Ryan Davis, "USPTO Chief Predicts Supreme Court Will Uphold AIA Reviews," Law360 (June 29, 2017) ("Don't worry about your jobs. We're going to win that case," he told the judges and attorneys in attendance at the gathering in Alexandria, Virginia. "And you heard it here first: It's going to be a 9-0 decision in the agency's favor.").

minimum, decision-making by an "adjudicator who is not in a situation which would offer a possible temptation to the average man as a judge which might lead him not to hold the balance nice, clear and true.").

- Agency capture. Certain accused infringers appear repeatedly at the PTAB, whereas patent owners who bring cases against such repeat defendants likely appear in only one or a few matters.

These factors do not apply to Article III trial courts, particularly with Article III judges' lifetime tenure and protection from salary reduction.

It takes little effort to find examples where the PTAB reached questionable outcomes, following the incentives and operating within the structure that Congress enacted.

A father in Texas invented a better water balloon toy. It lets parents and kids fill 100 water balloons in less than a minute with one garden hose connection. Since he had a patent (the "beacon") and could negotiate transfer of rights (the "bargain"), he joined forces with an established toy company to market the invention. It became the best selling toy of the summer in 2015-2017. But a well-funded New Jersey company noticed the product and decided to infringe. A federal district court granted a preliminary injunction against the knockoff, which was then affirmed by the Court of Appeals for the Federal Circuit in 2017. *See generally Tinnus Enters., LLC v. Telebrands Corp.*, 846 F.3d 1190 (Fed. Cir. 2017). Even though the district court

made its determination (affirmed on appeal) that all invalidity defenses "lack substantial merit" (as it must to render the injunction in the first place), the PTAB sided with the infringer and found the same defenses successful. *Id.* at 1202 n.7. The PTAB canceled the patent, and by doing so, created a direct conflict with the Article III outcome. To date, the inventor and his sponsor have spent over $17 million defending the patents. "$17 million: The Real and Staggering Cost to Patent in the US in the PTAB Age," IPWatchdog Blog (July 16, 2017), http://www.ipwatchdog.com/2017/07/16/real-staggering-cost-getting-patent-ptab/id=85639/ (last visited August 22, 2017).

Another inventor came up with a better system to allow consumers to use credit cards without compromising the security of their credit card numbers. As is typical, the district court stayed his lawsuit against the credit card company infringer. During this stay, the inventor convinced the most expert examiners within the Patent Office (the "Central Reexamination Unit") of the patentability and validity of his patent over particular prior art that the infringer had uncovered. But nearly simultaneously, the PTAB came to the opposite conclusion. It canceled the patent over the same prior art. The Federal Circuit reversed, in a decision favoring the inventor. *See generally D'Agostino v. Mastercard Int'l, Inc.*, 844 F.3d 945 (Fed. Cir. 2016). Nonetheless, on remand the PTAB issued remand decisions that reached the same patent cancellation result – yet again in conflict with the expert examiners within the very same government agency. *D'Agostino v. Mastercard Int'l, Inc.*, IPR 2014-00543, -00544, Paper 38

(PTAB July 28, 2017). Another appeal is now required, during which the district court stay remains in effect.

Anecdotal evidence thus comports with statistics. The PTAB and its very existence demoralize inventors, just as Congress structured it to do. Highly motivated inventors can achieve litigation successes as these two have, yet still face significant and new obstacles to defending their patents and commercial markets. PTAB tribunals stand in the way. Such tribunals issue ruling after ruling in conflict with Article III trial courts adjudicating the same issue, in conflict with Article III appellate courts whose supervisory pronouncements seem to go ignored, and even in conflict with more expert branches within the Patent Office itself.

The larger economic effect of the PTAB has been sudden. In the United States, the number of angel and seed stage funding rounds dropped 62% in the first quarter of 2017.[9] United States startups are now at a 40-year low.[10] More United States companies are going out of business than are starting up for the first time in American history.[11]

---

[9] http://www.siliconvalley.com/2017/04/04/silicon-valley-investing-slump-continues-fewer-startups-get-funded/ (last visited August 22, 2017).

[10] http://money.cnn.com/2016/09/08/news/economy/us-startups-near-40-year-low/index.html (last visited August 22, 2017).

[11] http://www.washingtonpost.com/business/on-small-business/more-businesses-are-closing-than-starting-can-congress-help-turn-that-around/2014/09/17/06576cb8-385a-11e4-8601-97ba88884ffd_story.html (last visited August 22, 2017).

II. Near-Total Patent Annihilation at the PTAB Is Not a "Correct" Outcome that "Restores" Some Sort of Balance

Those who say that the PTAB systematically gets it right are wrong. Advocates of the PTAB cannot point to evidence of a "just so" story in PTAB adjudications of invalidity. The PTAB does not just happen to adjudicate patents that are coincidentally almost three times more likely to be invalid than those adjudicated in federal courts.

As already reported, the apples-to-apples controlled comparison shows stark differences. In federal court, patents are invalid **28.76**% of the time in final determinations. But at the PTAB, the number is **76.61**%.

One cannot dismiss these statistics by suggesting that the institution decision process ensures that primarily "bad" patents go to a final written decision after a full PTAB trial. PTAB-reviewed patents are almost all in litigation. Patents in litigation are likely to be the most commercially viable ones. It is absurd to say that as a class these are "bad" patents, since it is more accurate to say that they are "important" ones. Likewise, federal court proceedings weed out less meritorious invalidity attacks just as the PTAB's institution decisions do. Parties in federal court can be expected to settle cases more frequently where there is a low likelihood of an invalidity judgment – the functional equivalent of a PTAB-style no-institution decision within an Article III setting.

Nor is there any weight to one of the original justifications of the PTAB – the "troll" narrative. The "troll" narrative posits that entities who have no operations other than to buy patents go around suing successful companies with "bad" patents, hurting the economy. Supposedly the PTAB addresses this problem. But in practice, operating companies (including start-ups) suffer PTAB invalidity decisions just like individual inventors, research institutions, universities and licensing companies. The Petitioner in the present proceeding is itself an operating company who suffered a patent cancellation decision at the PTAB.

The "troll" narrative itself is flawed.[12] Its history is well documented. In the 1990's, Intel developed it to deflect attention from its own litigation misconduct in a pending case. *See generally*, Raymond P. Niro, *Who is Really Undermining the Patent System – "Patent Trolls" or Congress*?, 6 J. Marshall Rev. Intell. Prop. L. 185 (2007). Intel's conduct was so unusual, and judicial temperament so inflamed, that the Wall Street Journal ran a story on it. *See generally*, *id.*; *see also* Dean Takahashi, *Intel's Bold Steps to Thwart Foe in Patent Case*, Wall St. J., Apr. 16, 1999, at B1. Intel's patent counsel then started to describe the patentee in the press as a "patent troll" – ostensibly to transform defamatory barbs into protected First Amendment

[12] Data actually support that non-practicing entities tend to bring more meritorious patent cases than do operating companies. "Why NPEs Lose Less Often in Court Than Operating Companies," IPWatchdog Blog (Feb. 25, 2014), http://www.ipwatchdog.com/2014/02/25/why-npes-lose-less-often-in-court-than-operating-companies/id=48256/ (last visited August 22, 2017).

opinion. *See* Niro, 6 J. Marshall Rev. Intell. Prop. L., at 188. From that moment forward, the "patent troll" epithet planted itself in the popular consciousness.

Started as a targeted PR campaign to deflect attention from corporate misfeasance against a small patent owner, the "troll" epithet continues to be misused today. The Federal Trade Commission recently issued a report noting that use of "troll" terminology in policy debates is unhelpful, and should be avoided. Patent Assertion Entity Activity: An FTC Study (October 2016), at 17 ("In the Commission's view, a label like 'patent troll' is unhelpful because it invites pre-judgment about the societal impact of patent assertion activity without an understanding of the underlying business model that fuels such activity.").

Questions have also arisen over the credibility of legal scholarship that perpetuates the "troll" terminology and its related narrative. Google (and its parent company Alphabet) is one of the world's largest technology companies, and is also a frequent patent infringement defendant. Google has reportedly funded legal "scholarship" to disseminate law review articles and related literature in support of the "troll" narrative, and in support of weaker patent rights. Brody Mullins and Jack Nicas, *Paying Professors: Inside Google's Academic Influence Campaign*, Wall St. J., July 14, 2017.

A 2014 article by two Boston University law professors calculated "troll costs" at $29 billion per year. James Bessen & Michael J. Meurer, *The Direct Costs*

from NPE Disputes, 99 Cornell L. Rev. 387 (2014). But the article and its conclusion drew immediate criticism from other scholars who specialize in empirical study of the patent system. *See generally* David L. Schwartz & Jay P. Kesan, *Analyzing the Role of Non-Practicing Entities in the Patent System*, 99 Cornell L. Rev. 425 (2014). One flaw in the "$29 billion" figure "cost" headline is that it includes all licensing and royalty fees paid to inventors and their sponsors. *Id.* at 438. Economists do not considered fees and royalties paid to rights holders as economic "costs." Instead, "[a]ccording to standard economic terminology, these figures are 'transfers' contemplated by the patent system, not 'costs.'" *Ibid*. Indeed, the very structure and purpose of the patent system encourages transfer payments to rights holders. That is the fuel that drives the engine of innovation.[13]

This Court should consider closely the origin, motives and logical flaws within the "troll" narrative. Other litigants and *amici* will tout that "trolls cost $29

[13] Whatever "costs" society does bear from the existence of patent licensing business models also brings essential social benefit. Nonpracticing entities provide liquidity to patent markets, allowing individuals to profit from their intellectual property. James F. McDonough III, *The Myth of the Patent Troll: An Alternative View of the Function of Patent Dealers in an Idea Economy*, 56 Emory L.J. 189, 223 (2006) (noting that despite often being described derogatorily as "trolls," "patent dealers" serve the public interest "by increasing patent liquidity and decreasing risk, . . . serv[ing] as a focal point for the patent market[, and] encourag[ing] people to invent around patents.").

billion per year" in their briefs in this Court, and consequently the PTAB's asymmetrical outcomes are just fine. It should hold no persuasive force when they do.

III. The PTAB Breaks Society's Bargain with Inventors

Trials conducted by the PTAB transform the United States patent system. The United States now mows down more than three quarters of the patents that get litigated – near total annihilation. This infusion of misused power into the Executive Branch breaks two bargains on which the patent system, and its careful calibration of rewards for innovation, is based.

First, patents under the current Patent Act reflect a bargain of disclosure in exchange for rights for a limited term. In applying for a patent, the inventor commits to let her idea become public upon issuance. Once the patent vests (through issuance), the United States consummates its part of the bargain. This is by allowing the holder to enjoy exclusive rights in the invention. But a legal regime that guarantees invalidity over three quarters of the time breaks this bargain. Worse is when the same agency that granted the patent revokes it. The inventor cannot "unscramble the egg," and seek trade secrecy protection retroactively, once she discovers that her rights are worthless. Plus, when this legal regime comes into being suddenly and without warning (as occurred with the PTAB), the inventor cannot have predicted or reacted to the change.

More fundamental is that the PTAB breaks the constitutional bargain. The Founders recognized that rights for a limited term in inventions are "civil rights." In other words, they stand at the same level of dignity that the Founders attributed to common law rights (such as the copyright). *See* The Federalist No. 43 (J. Madison) ("The copyright of authors has been solemnly adjudged, in Great Britain, to be a right of common law. The right to useful inventions seems with equal reason to belong to the inventors. The public good fully coincides in both cases with the claims of individuals."); *see also* Adam Mossoff, *Who Cares What Thomas Jefferson Thought about Patents? Reevaluating the Patent "Privilege" in Historical Context*, 92 Cornell L. Rev. 953, 967 (2007). Rights to inventions were so important to the Founders that the Constitution requires Congress to pass laws to "secure" such rights. U.S. Const. art. I, Sec. 8, Cl. 8. Congress does this through invention patents. Patents are the statutory wrapper around common law rights.

Thus since the Founding, patent rights have embodied society's return of rights to the inventor for bringing forth the fruits of intellectual labor for the good of all. *See* Mossoff, 92 Cornell L. Rev. at 992. This is the Constitutionally mandated reward for innovation. Abraham Lincoln (himself an inventor and patentee) summed it up best in his Second Lecture on Discoveries and Inventions: "The patent system added the fuel of interest to the fire of genius." http://www.abrahamlincolnonline.org/lincoln/speeches/discoveries.htm

(last visited August 22, 2017). With the PTAB, Congress and the Executive Branch diminish the rewards inventors have come to expect from inventing and patenting. This has had a negative effect of depriving rights holders of their investment-backed expectations. As this Court has stated, "courts must be cautious before adopting changes that disrupt the settled expectations of the inventing community." *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.,* 535 U.S. 722, 739 (2002).

In short, patent holders have a common law property right in a trade secret that they willingly give up in exchange for a patent. *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1003-04 (1984) (holding a trade secret to be a property right protected by the Taking Clause). People who surrender property when they file a patent application are not just filling out a form. They are actually letting the government disclose something that might have been protected at law in a different way. The disclosure itself extinguishes the trade secrecy property interest. *Id.* As such, the patent laws induce the surrender of one property right with the lure of securing another. But with the PTAB, the bargain breaks. This is untenable for the economic health of our country.

CONCLUSION

Grass roots inventor group *amici* urge this Court to consider that validity trials at the PTAB have suddenly and drastically increased the probability that a contested patent will be held invalid, reducing incentives to invent and patent. These effects harm society, do not reflect a "correct" adjudication of patent validity, and break society's bargain with inventors. For these reasons, grass roots inventor group *amici* respectfully support Petitioner in its effort to demonstrate unconstitutionality of validity trials at the PTAB.

Respectfully submitted,

ROBERT P. GREENSPOON
Counsel of Record
FLACHSBART & GREENSPOON LLC
333 N. Michigan Ave., Suite 2700
Chicago, IL 60601-3901
Phone: (312) 551-9500
Fax: (312) 551-9501
Email: rpg@fg-law.com

Counsel for Amici Curiae Grass Roots Inventor Organizations

Appendix
Inventor Groups Joining in this Brief

US Inventor, Inc., Highland, IN
As a 501(c)(4) nonprofit, we advocate in Washington DC and around the country on behalf of small inventors and startups for strong patent rights

Akron Inventors' Club, Akron, OH
The Akron Inventors' Club is dedicated to providing educational resources to the inventing community, including developing a business, fostering creativity, commercializing products, and increasing inventors' business skills while promoting awareness of intellectual property tools and encouraging honest and ethical business practices among industry service providers.

American Society of Inventors, Philadelphia, PA
We are the oldest continuously active inventor-help organization dedicated to assisting inventors for free through education and community service.

Central Kentucky Inventors Council, Winchester, KY
The Central Kentucky Inventors Council is committed to promoting independent innovation both in our communities and across the state. We help inventors, entrepreneurs and other creative people through education, support and networking.

Christian Inventors Association, Shelton, CT
We educate Christian inventors in what they need to know to be successful and to not be taken advantage of by dishonest operators.

Edison Innovators Association, Fort Myers, FL
The Edison Innovators Association is a non-profit educational assistance organization that provides information and assistance to inventors, innovators, and entrepreneurs at all levels.

Independent Inventors of America, Clearwater, FL
Independent Inventors of America was formed to educate inventors and get them involved in stopping legislation that is harmful to their interests. The Founding Members are heads of inventor groups nationwide.

Indiana Inventors Association, Indianapolis, IN
We provide programs and networking opportunities to assist independent inventors in their efforts to become successful.

Invention Accelerator Workshop, San Diego, CA
We encourage and enable the exchange of knowledge and know how among local inventors by organizing monthly meetings in a closed setting, that facilitates effective brainstorming and networking, thus increasing the odds for successful IP protection, product development and marketing.

Inventors Association of Arizona, Scottsdale, AZ
We help independent inventors navigate the difficult path from idea to market.

Inventors Association of New England, Cambridge, MA
Our purpose is to educate and support the independent inventor through the combined expertise of club members and other resources.

Inventors Association of South Central Kansas, Wichita, KS
We provide education to independent inventors on all phases of the invention process.

Inventors Center of Kansas City, Kansas City, MO
ICKC is dedicated to providing inventors and product developers networks, resources and tools to develop ideas into viable products. We serve as a source of education and a guide to entrepreneurial success.

Inventors Council of Central Florida, Orlando, FL
Our mission is to provide a secure environment for inventors to submit their ideas for critical peer review and to nurture our members by providing guidance in making ideas profitable.

Inventors Council of Mid-Michigan, Flushing, MI
Our purpose is to help inventors pursue their dreams of bringing new and innovative products to market by providing education and business networking.

Inventors Network of Minnesota, Oakdale, MN
We are the largest and oldest inventors organization of its kind in Minnesota. Our mission is to assist our members in developing products and creating inventions at every step.

Inventors Network of the Capital Area, Alexandria, VA
Our mission is to help new and veteran inventors network and share information in all aspects of inventing – the creative process, prototyping, patenting, and marketing.

Inventors' Network of the Carolinas, Charlotte, NC
The Inventors' Network of the Carolinas is a non-profit support group connecting inventors to professional business resources that can guide and inspire the invention process, thereby creating successful commercial ventures. We are a member of the United Inventors Association, a national organization that connects many inventor support groups across America.

Inventors Network of Minnesota, Oakdale, MN
We are the largest and oldest inventors organization of its kind in Minnesota. Our mission is to assist our members in developing products and creating inventions at every step.

Inventors Network of Wisconsin, Green Bay, WI
We educate inventors and provide them with the tools to be successful.

Inventors' Roundtable, Denver, CO
We help inventors go from an idea to being successful in the marketplace.

Inventors Society of South Florida, Deerfield Beach, FL
The Inventors Society of South Florida is dedicated to the advancement of the Independent Inventor through

the use of Education, Motivation and Collaborative support.

Iowa Inventors Group, Iowa City, IA
To assist, disseminate and promote services, education and networking opportunities to independent inventors.

Music City Inventors, Nashville, TN
Our goal is to have a place for inventors, innovators, entrepreneurs and seasoned business people to come together, not only to share what they are looking for, but also to share the knowledge they have to help others reach their dreams.

National Innovation Association, Stuart, FL
National Innovation Association is a national association of inventors who work with children and schools to promote innovation.

North Florida Inventors and Innovators, Jacksonville, FL
North Florida Inventors and Innovators group is a grassroots effort to help educate new product developers on the business of inventing and innovating. We help new product developers by bringing in speakers and meeting monthly in order to help educate and make contacts for all the things that small business owners will need to try and help them be successful re: launching, patenting, copyrighting and trademarking their products.

Oklahoma Inventors Congress, Edmond, OK
We bring together members of the inventive community and unite them in the common causes of: mutual assistance; problem sharing and solving; learning the invention process; the study of Patent Law and Patent Office requirements and procedures; assisting in prototyping, testing, and evaluating new and useful inventions; and promoting the creation, development, licensing, marketing, and commercialization of worthy inventions of the membership.

Rocket City Inventors, Huntsville, AL
The purpose of Rocket City Inventors is to assist independent inventors in going from an idea to a successful product in the marketplace.

San Diego Inventors Forum, San Diego, CA
We motivate, educate and network inventors helping them to become entrepreneurs that create new jobs in our community.

South Coast Inventors, North Bend, OR
South Coast Inventors helps inventors learn to navigate the complicated path of product development, patent search and application, prototype construction, and marketing. Every member's expertise is drawn on to solve problems.

Tampa Bay Inventors Council, Tampa, FL
The Tampa Bay Inventors Council was founded in 1983 with the purpose of educating and advocating for inventors and helping them bring their ideas successfully to market.

Texas Inventors Association, Dallas, TX
We provide speakers and educational meetings to help independent inventors in their product development efforts.