#### Written Testimony

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I'm Paul Morinville. In World War II, my grandfather was a Navy Corpsman serving with the Marines as they island hopped across the Pacific and onto Hiroshima after the war ended.

He was my hero so as soon I turned 17, I joined the Marine Corps. The Marine Corps shapes the character of young men and women.

It taught me to stand up and keep going until the mission is completed. The Marine Corps made me a patriot, proud of my country and its heritage.

I worked at Dell in the 1990's. My first invention was invented there in late 1999.

I brought it to Dell executives, who told me to put it in a business plan and Dell would fund it. I left Dell on April 3<sup>rd</sup>, 2000 with high hopes and big dreams.

Within a few weeks the dot-com bubble collapsed, and Dell Ventures was shuttered. That ended my funding.

For the next four years, I kept inventing and over time my inventions became the industry standards in multiple areas of enterprise middleware. Today there is over \$50 billion dollars of infringing product on the market.

But it wasn't until 2011 that I was able to obtain funding again. I started working with the Purdue Technology Center to commercialize my inventions.

I hoped to create a couple of hundred tech jobs in Gary, Indiana -- one of the poorest areas of the country.

But in 2013, the 90% kill rate of PTAB was revealed. This turned my patents into junk assets.

My company was in a market controlled by Big Tech monopolies. If patents can't be defended, Big Tech just steals them and, using their huge markets and deep pockets, massively commercialize them. Big Tech has huge market reach, political influence, and in many cases is or owns the media.

So, my investors stopped investing. That's when I hopped in my pickup truck and drove to Washington.

Today, my mission is to educate the government about what the patent system means to America and Americans.

My mission will be complete when my government gives my rights back to me by restoring the patent system for individual American people.

The Patent Act of 1790, only the third Act of Congress, granted patents to "*he, she, or they*" at a cost that even a pauper could afford.<sup>1</sup>

At a time when most women and African Americans could not own property, both could own patents... and they did.

In 1809, Mary Kies became the first woman patentee for an invention of weaving straw hats. During the 1800's, more than 3,000 women patented 4,196 inventions and many made their living by licensing or commercializing their own inventions.<sup>2</sup>

In 1821, Thomas Jennings became the first African American patentee by inventing a method of dry scouring clothes.

Granville Woods, who people of the day called the "Black Edison", patented dozens of railroad related inventions in the late 19<sup>th</sup> century.<sup>3</sup>

The patent system leveled the field regardless of race, gender or economic status.

In many ways, it was the first equal opportunity law.

The patent system fueled the greatest economic expansion in the history of man, propelling America to lead the world in every technology revolution from potash processing to smartphones.

But for women, minorities and veterans, the patent system was a social and economic equalizer enabling them to invent things and build our largest and most powerful corporations.

An everyday American could unseat huge incumbents and take their place in society based solely on the merits of their contributions to society -- not on their money, power and lobbying.

But in just the last fifteen years, all of that has been destroyed.

<sup>&</sup>lt;sup>1</sup> See Patent Act of 1790, Ch. 7, 1 Stat. 109-112 (April 10, 1790) The First United States Patent Statute CHAP. VII. -- An Act to promote the progress of useful Arts.(a) Section 1 and 2

<sup>&</sup>lt;sup>2</sup> See The Democratization of Invention: Patents and Copyright in American Economic Development, 1790-1920, by B. Zorina Khan, 2005, Cambridge University Press

<sup>&</sup>lt;sup>3</sup> See http://www.biography.com/people/granville-t-woods-9536481

The government changed rules on prior art scope, invention priority, injunctive relief, venue, claim construction, error correction, disclosure requirements, mental step and abstract idea doctrine, invalidation procedures, damages models, fee reversals and much more.

Every single long held construct of patent law was changed. Many of these changes are the results of Supreme Court decisions often directly contradicting statutes and without any public debate. <sup>4</sup> Congress, thanks to the lobbying and political contributions by the biggest companies, optimized the patent system for corporations, the largest customers of the USPTO.

In the dust of this rubble, the USPTO set up the PTAB skewed to invalidate huge percentages of the very same patents that it just granted.

The PTAB invalidation rate is a shocking 84%.<sup>5</sup> Only 16% of patents survive unscathed. The cost of defending a PTAB assault is \$450,000.

But only commercially valuable patents are challenged at the PTAB. These are the patents that inventors have put their trust in, betting their careers and sometimes their entire life savings to commercialize or license, only to have that trust betrayed and then to lose everything.

Even if their patent is never challenged at the PTAB, the market effects of the huge invalidation rates harms all inventors by making investors, customers and others believe that their patents cannot be defended.

It is a CEO's fiduciary duty to shareholders to steal patented inventions and massively commercialize them thus running the inventor into the dustbin of history. This "Efficient Infringement" enables high stock prices which fuels CEO pay and CEOs earn hundreds or thousands times more than workers.<sup>6</sup> Stopping change and disruption pays.

Most contingent fee attorneys and investors have left the patent business for more predictable investments.

Individual inventors are now defenseless against that theft.

Inventors are duped into revealing their trade secrets under a false promise that they are going to get patent protection only to have that protection destroyed after the fact with no way to take the secret back.

<sup>&</sup>lt;sup>4</sup> https://www.ipwatchdog.com/2016/06/06/supreme-court-legislated-patent-reform/id=69646/

<sup>&</sup>lt;sup>5</sup> https://www.usinventor.org/2019/03/25/inventors-to-senate-ip-subcommittee-venue-hardship-efficient-infringement-ptab-crisis/
<sup>6</sup> <u>https://www.vox.com/recode/2019/5/2/18522927/ceo-pay-ratio-tech-employee-salary-2018</u>

https://www.usatoday.com/story/money/2019/04/17/these-ceos-make-1000-times-more-than-their-employees/39350499/

The SUCCESS Act is intended to increase the participation of women, minorities and veterans in the patent system.

It also extended the USPTO's temporary fee setting authority.

The PTAB has not been financially solvent – it loses money. So the USPTO transferred fees paid for examination and maintenance to the PTAB to make it solvent. More recently the USPTO increased fees to try to make PTAB self-sufficient.

This diversion of applicant and owner fees grabs resources intended to grant better patents and transfers those resources to the PTAB to destroy patents.

The only reasonably expected result that can come from this is to create lower quality patents with higher invalidation rates.

With the passage of the SUCCESS Act, the USPTO raised fees for examination and maintenance. This significant fee increase makes it more likely that women, minorities and veterans will be forced to abandon patent applications and issued patents.

The goal of the SUCCESS Act is to encourage women, minorities and veterans to invent new things and patent them.

It is unfortunate that the SUCCESS Act has been used to achieve an opposite result.

The Constitution secures a patent for an *inventor*, a human being, not a corporation. Somehow this simple fact is lost by current patent theorists, lobbyists and lawmakers.

The foundation of America law is to protect of the fruit of one's labor. The labors of one's mind must also be protected. If nobody discloses their inventions, innovation in America will collapse.

This is proving to be true. China is taking the lead in many technologies critical to our national and economic security.

This is directly related to China improving their patent system, while we were busy destroying ours. Today tech inventions are protected in China, but not here.

We responded to China's threat with a trade war that is hobbling China's tech companies apparently to protect our own big tech monopolies from superior Chinese products.

But the root of the problem is that our patent system is destroyed. We have done next to nothing to fix it again to protect big tech monopolies by eliminating the threat of creative destruction served up by inventors with better inventions.

Big tech monopolies are built on business methods and software. These are the inventions that are core to their business models and the very type of inventions that cannot get a patent issued and are invalidated in courts and the PTAB.

If business methods and software cannot be patented, big tech cannot be challenged, and their monopolies are untouchable.

If you can't measure it, you can't manage it. The first step to including more women, minorities and veterans is to measure it.

But the USPTO cannot determine who is inventing what. Small inventors are grouped in with huge universities with multimillion-dollar endowments.

If a small inventor licenses a patent a large entity, no matter what the license pays, they are classified as a large entity.

And we should no lump in inventors who assign their rights to big corporations. People who don't use a patent to attract investment to startup a company or license it are not real inventors. They do not understand why patents matter.

But none of that makes any difference if we do not fix the underlying issues that affect women, minorities and veterans.

Just patenting an invention can cost tens of thousands of dollars. Commercializing inventions often requires millions of dollars.

Big corporations have this kind of money. But that cost is too high for women, minorities and veterans.

You don't have to believe me. At the most recent PPAC meeting on May 1<sup>st</sup>, three PPAC members took to task the USPTO chief economist for his report that failed to deal with the main barrier for women to get patents and to grow their businesses – lack of investment.

A stable and predictable patent can attract investment. That was the case for the first 215 years of our patent system.

For two years I drove across the country in my pickup talking to inventor clubs and recruiting the 13,000 activists of US Inventor.

Go to any small town in about any state and find the biggest and oldest mansion. It was probably built by an inventor. Their stories are told in small town libraries and historical societies across America. It is our story. It is America.

These mansions represent the effects of a working patent system enabling everyday Americans to achieve the American Dream.

We all want more women, minorities and veterans to climb social and economic ladders. But to do that a patent must be capable of attracting investment.

It must be a presumed valid exclusive right. And can't cost so much to obtain and defend that nobody can do it, as it does today.

\$450,000 to defend just one PTAB procedure is outrageously expensive for small inventors, especially if there is only a 16% chance that the patent will escape unscathed.

If it does escape, you gain nothing. The only difference is that you are a lot poorer and your patent's term is several years shorter.

Director Iancu has taken very important steps by eliminating BRI and switching Phillips. This will eventually help.

But the PTAB kill rate has barely changed. Far too many meritorious inventions are still being destroyed.

We need a lot more work. US Inventor is happy to help. I am too.

### **Overwhelming Financial Burden for Inventors**

AIPLA reports that the average cost for an AIA trial is \$450K. Only 16% patents emerge the PTAB intact. Small businesses built on a patented technology don't have \$450K to wager on a 16% chance of holding on to their primary asset. Furthermore, we have been in contact with many inventors and small business owners that have retained unqualified counsel for these high stakes litigations. These attorneys are unaware of the latest guidelines, precedents, and strategies. Inventors lack access to effective advocacy when attacked in AIA trials by aggressive litigators allied with hostile PTAB APJs.

**Example 1:** Jan 24, 2019 / IPR2018-01129. Emmy award winning inventors Glenn Sanders and Howard Stark are not "patent trolls" asserting "bad patents". These pioneers of digital wireless microphones built their company Zaxcom in reliance on their U.S. patents. Now their competitors are using their technology and the PTAB is helping them by unwinding the patent grant, declaring their invention obvious 14 years after the fact.

**Example 2:** April 3, 2019 / IPR2018-01754. The PTAB ignored the §315(b) time bar and permitted GoPro to file an IPR 2.5 years after they had filed a declaratory judgment against inventor Michael Kintner's company 360Heros. The once growing business has drastically downsized and Kintner has informed US Inventor that he does not have funds for a legal defense of his patent at the PTAB. Contingency firms rely on damages to recoup their investment, but in the PTAB there is no monetary compensation for the inventor that prevails.

**Example 3:** April 30, 2019 / IPR2019-00233. Apple refused to pay inventor Mark Kilbourne for his remote control deadbolt, so they asked the PTAB to revoke his patent. The panel ruled that it "would have been obvious" to combine an old-style deadbolt with a Swiss army knife! This type of reasoning jeopardizes every patent ever issued. Kilbourne runs a small business manufacturing his invention and this unnecessary and duplicative PTAB trial imposes an extreme burden and risk to his business.

### Word Games Used to Invalidate Patents

A common tactic employed by infringers and the PTAB is to interpret the words and phrases in the patent broader than intended by the inventor, and to use that stretched interpretation to invalidate the patent. Egregious examples include construing "no arcing" to mean "a little arcing", "single merchant" to encompass multiple merchants, and "gasoline" to include butane.

**Example 1:** January 10, 2019 / IPR2018-01043. American inventor Ryan Jurgenson greatly improved the reliability of magnetic disk drive heads. But the USPTO helped a Japanese infringer by cancelling the patent. The PTAB adopted broader construction of several terms than what the inventor claimed, effectively accusing him of claiming rights to an earlier invention. The Article III courts would have applied the plain an ordinary meaning for the terms and resolved any ambiguity in favor of upholding the patent. Unable or unwilling to incur the cost of a full PTAB trial, the patent owner elected to dismiss the case.

**Example 2:** April 8, 2019 / IPR2019-00025. PTAB rejected the definition of "gasoline" adopted by the inventor, examiner, and Illinois district court. They instead adopted their own unique definition of "gasoline" that includes all the distilled components of crude oil. Thus according to the PTAB "gasoline" includes butane. The PTAB refused to apply discretion under §314(a) and §325(d) and instead is interfering with the district court litigation, adding unnecessary cost and duplication.

**Example 3:** April 16, 2019 / IPR2019-00030. Corephotonics inventors developed a compact telephoto lens for smartphones. The USPTO is yet again assisting Apple by taking back the patent from the inventors. The invention is a tiny optical design with "total track length" of only 6.5mm. The PTAB construed "total track length" as "partial track length" so they could find prior art with a "partial track length" of 6.5mm. If inventors cannot rely on the USTPO to stand behind their patents then businesses like Corphotonics cannot afford to invest in R&D and innovation is discouraged.

# Administrative Patent "Judges" Are Not Experts

The idea of the PTAB being staffed with technologists that are subject matter experts has not played out. Most PTAB APJs have a bachelors degree with zero years of professional experience in technology. They are administrative lawyers, not technologists. Analysis of their written opinions often reveals superficial wordsmithing to support a conclusion at odds with the intent of the inventor, the examiner who approved the patent, and common sense.

**Example 1:** April 19, 2019 / IPR2017-02097. APJs at the USPTO overruled the examiner at the USPTO, who is an expert in micro-fluidics. John Gilbert, Manish Deshpande, and Bernard Bunner created an amazing device to precisely place particles into a moving stream, an important technology for biomedical research. The examiner allowed their patent noting that it was an improvement over the prior art such as a patent by "Wada", but the PTAB APJs (who have zero experience in microfluidics) falsely charged these inventors of claiming the same device as Wada and stripped them of their patent rights.

**Example 2:** April 19, 2019 / IP2018-01630. PTAB APJs that have zero experience with video compression technology violated several of the new rules and helped Netflix avoid paying the inventors for their asymmetric video compression technology. One APJ has a B.S. in computer science with no professional experience, one a degree in molecular biology, and another in materials science. They do have 30+ years combined experience disparaging patents as litigators and PTAB APJs. They are in way over their heads causing total chaos and destruction to the U.S. innovation economy.

**Example 3:** April 29, 2019 / IPR2018-00146. Rocky Snawerdt invented a secure fiber optic switch, extremely important technology. But he made the mistake of revealing his discovery to the USPTO who decimated his patent to help another big corporation. The task achieved by the panel was to find 3 or 4 components of Rocky's invention in the prior art, using his patent as a roadmap. That doesn't mean it was obvious. That's what an invention is – putting things together in a new way no one else thought of. These APJs have no experience in the technology and don't understand the law. What they are doing is analogous to a child assembling a jigsaw puzzle using the picture on the box as a guide. It has nothing to do with the technology, the invention, or the law.

# Interference with Article III Courts & Delayed Justice

PTAB was intended to be a faster, cheaper, alternative to district court. It has proven to be the exact opposite: slower, more costly, and in conflict with district court. It is only cheaper and faster when it puts the inventor out of business by cancelling his key patents or draining his bank account. Those that survive are hampered with millions of dollars of unnecessary expense and years of market growth lost.

**Example 1:** March 12, 2019 / IPR2018-01597. Steven & Mary Reiber's semiconductor wire bonding patent survived a validity challenge in district court, but the PTAB doesn't honor that holding. In addition the PTAB allowed Toshiba to play games with their corporate structure to get around the one year time bar.

**Example 2:** March 13, 2019 / IPR2018-01632. Bad Boy Mowers is a classic American success story. It was founded in Batesville, Arkansas in 2002 and has grown to employ 700 people to design, develop, and build their innovative zero-turn mowers. A company break-up spilled into district court with disputes over inventorship, validity, and infringement. Rather than let it play out in court, the PTAB jumped into the fray by overruling the examiner that had recently allowed the patent over identical prior art.

**Example 3:** April 2, 2019 / IPR2018-01500. PTAB instituted review of a haptic feedback patent by prolific artificial intelligence and augmented reality inventor Louis Rosenberg. Once again Director Iancu's new rules are tossed aside by the PTAB. Rather than let the real court resolve the dispute at the jury trial this very week, the PTAB insists on inserting themselves into the middle of it. The same prior art considered in examination. Incorrect claim construction by the PTAB. The USPTO is taking the side of the multi-national infringer. More cost. More delay. Inventors betrayed by the USPTO. Nothing has changed at the PTAB.

**Example 4:** April 22, 2019 / IPR2015-01691. Geoff Gosling and Mogens Smed lost 4 years and 2/3 of their patent as the USPTO intervened to help their competitor escape liability for stealing their invention for joining modular office partitions. Now they have to decide if they want to pay an additional \$2-300K for another appeal to the Federal Circuit. A jury trial would have been faster, cheaper, and fairer. Small businesses like theirs cannot withstand 4+ years and millions of dollars fighting over their primary asset.

### Due Process, Takings, Appointments Violations

Barely one year ago, the Supreme Court ruled that patents are no longer property rights but are "public franchise rights" like the right to erect a toll bridge, thus revocation by the Executive branch does not violate separation of powers or 7<sup>th</sup> amendment. The American ideal used to be that anyone of any status could obtain a property right in exchange for revealing their invention to the world. Today only the wealthy elite can secure these rights.

**Example 1:** November 18, 2018 / CAFC 18-1489. DOJ attorneys argue that inventors are not entitled to compensation when their patents are revoked. The reasoning is that if the USPTO determines that they should not have issued a patent the inventor never had a patent to begin with. This argument ignores the fact that the agency applies stricter rules, guidance, burdens of proof, and procedures that often result in revoking a patent that would be upheld in an Article III court. If the USPTO is going to take back patents from inventors without a full and fair trial to decide their property right, then it must be presumed a taking has occurred and compensation is due.

**Example 2:** January 23, 2019 / IPR2018-00315. The USPTO continues to run roughshod over the 5th Amendment. The inventor Dr. Michael Masini was prohibited from testifying at the trial over his own patent. The PTAB doesn't care to hear his views on his improved artificial knee joint. The right to testify in person is one of the many fundamentals of due process absent from PTAB proceedings.

**Example 3:** April 1, 2019 / CAFC 18-1768. PTAB "judges" have near total power over deciding who owns the rights to patented inventions. They overrule real judges and juries. They overrule examiners. Their findings are given deference by the appellate courts. They alone decide which inventors get to keep their property rights and which ones don't. Yet the DOJ and USPTO say in their brief that APJs are merely inferior officers and do not need formal vetting required by the Constitution. Real judges have to be appointed by the President and confirmed by the Senate. But we are supposed to just trust these administrative patent "judges" without looking at their qualifications, associations, and sympathies.

If the USPTO is to be successful at encouraging participation of women, minorities and veterans in the patent system, the patent system itself must be improved making it fairer to all small entities. Today the deck is stacked against small entities at all levels.

The PTAB kills patents at unprecedented levels. The effect is to infect all patents with a presumption of invalidity, which encourages infringement and discourages investment.

Judicial exceptions to subject matter eligibility also kill patents at unprecedented levels. This affects all patents in the same way encouraging infringement and discouraging investment.

eBay v. MercExchange created a public interest test that must be satisfied for a court to order an injunction upon a finding of infringement. This test effectively makes it impossible for small entities to be awarded injunctive relief. This reduces the value of all patents especially by investors looking at early stage investments. It encourages infringement because the infringer can gain control of the market without the risk of losing it later.

Many other changes to patent law have crashed the patent system for women, minorities, veterans and all other small entities including negative changes to damages, venue, obviousness and more.

Women, minorities and veterans generally have very small patent portfolios often consisting of only a few patents. But today, small patent portfolios cannot be collateralized, sold or defended. Thus it is exceedingly difficult to return the investment of hard work and money that goes into patenting. It is not surprising that small entities, including women, minorities and veterans, have substantially slowed down in filing for patent protection.