



Turbine Inlet Chilling/Generation Storage
Turbine Inlet Chilling
Modular Utility Systems
Waste Heat/Geothermal

Sept 9, 2019

The Honorable Chris Coons, Ranking Member
Subcommittee on Intellectual Property
Committee on the Judiciary
U.S. Senate
152 Dirksen Senate Office Building
Washington, D.C. 20515

RE: PTAB IPR Process is Killing Small Business IP Rights

Dear Senator Coons,

I have attached a copy of a letter that I sent to the US Patent Commissioner explaining the challenges that are posed to small businesses such as TAS Energy by the US Patent and Trademark Office (USPTO) interpretation of the America Invents Act (AIA). My letter goes into detail about these challenges but essentially the USPTO has created this Inter Partes Review (IPR) process which is conducted by a panel from the Patent Trial & Appeal Board (PTAB) at the USPTO. This IPR process is in response to AIA which now makes it very easy for patents to be invalidated by infringers thus making the entire purpose of the patent process of questionable value to inventors or to investors who might back these ventures.

TAS Energy is a company that I founded in Houston, TX whose primary purpose was to create a business around Turbine Inlet Chilling (TIC) for the large scale power generation business. Since our founding in 1999 we have created over 500 direct jobs here in Houston and multiple times more jobs through the large amount of outside purchases we make in the creation of our products which are sold worldwide and as a result TAS was the recipient of multiple E Awards from the US Dept of Commerce for its export achievements. I am the original inventor of our patented TIC process and have 5 patents to protect some of our key IP in that power market. Having this patent protection allowed TAS to attract investment capital to create these new products and to develop the TIC market. All of this was put at risk with an unexpected PTAB decision which essentially invalidated all our key TIC patents. This IPR process is relatively new since it was created about a year after the AIA passed Congress in Sept 2011. I was not even aware of it until one of our competitors started using it against us to nullify our patents. While the original intention of Congress was to reduce the amount of frivolous litigation lawsuits filed by patent trolls (ie Non-Practicing Entities), it is unfortunately being used to invalidate the majority of patents including those of inventors who created the inventions and whose companies are actively building products based on

these patents¹. This will put a severe damper on the value of patents and on an inventor's ability to get financing to enable them to create businesses based on their patented concepts.

Our company spent well over \$2 mill on our PTAB patent defense and we estimate our competitor spent about 2 to 3 times that amount. In addition to the extremely high cost for defending these patents, the uncertainty that it introduces and the distraction that these IPRs require of inventors and business owners makes the future value of ALL patents of questionable and possibly even negative value. The fact that nobody could predict with any accuracy whatsoever how the PTAB would rule in our case (even after 2 years and several million \$ had been spent researching this issue) is proof positive that there is no way a patent owner can feel confident their patent would hold up in an IPR proceeding. The mathematical odds are certainly slanted against inventors almost 3 to 1. Incidentally, it is interesting to note that since the PTAB ruled negatively against our TIC patents back in 2016 there have been no new TIC projects go forward in the USA since that time. Now that we no longer have any IP protection, our company has elected not to spend the money necessary to go out and create this market...without the market development efforts which are needed to create these TIC market opportunities there is no project for anyone to bid on. So in our case, everyone was a loser with the exception of the patent litigation attorneys...the losers included the public (rate payers), the competitive utilities, and the TIC industry which includes our competitor who also has not won a single US TIC project since that time as without TAS doing the project development work there was nothing for them to bid. TAS has survived only by moving into entirely different businesses which did not require the need for patents or IP protection (instead we now rely primarily on trade secrets, confidentiality and partnerships).

As a Houston inventor I am encouraged to hear that Congress is addressing the abuses which have been rampant since the introduction of the PTAB process. I was recently on a panel of inventors and IP Judges and was surprised to learn that many new US startups are actually going to China to have their inventions patented rather than the US as they felt they had more protections there than here. I would very much like to discuss this in more detail with your office or with the USPTO so that you can fully appreciate how this IPR process impacts US small business and job creation in a very negative way.

Sincerely,



Tom L. Pierson

Founder & Chief Technology Officer
TAS Energy

¹ The PTAB invalidated all claims of a patent in 71.8% of the trials against operating companies. That percentage escalates only slightly to 74.7% of the trials against patent trolls in which are all the claims invalidated. In other words there is only a 3% difference in patents that are totally invalidated by patent trolls vs actual practicing companies with the PTAB ruling against patent owners the vast majority of the time in either case.