

My name is Arnold Beal and I am a 69-year-old independent inventor and owner of four patents, all related to a unique new engine design. I am concerned about protecting my patent rights as intended by our forefathers and granted by the U.S. Patent & Trademark Office. For independent patent holders like myself, it is crucial that a generation of laws, regulations, and court decisions that have discouraged innovation by failing to secure to inventors the exclusive rights to their discoveries are reversed. Women, minorities, and veterans who attain patents as a result of the SUCCESS Act and following legislation will be harmed if the patent system remains in its current state.

We must increase the enforceability of issued patents, especially those issued to the independent inventors as they are most often attempting to start and build a business around their innovation without large company funding. Thanks to the PTAB and lack of strong enforcement in court, patents cost inventors far more than is ever returned. Patents are just liabilities. If the recommended legislation does not include increased protection of patents, we will end up destroying the businesses and lives of the very individuals and employees we intend to help. I also support increasing the number of women, minorities, and veterans who hold patents.

Because of other inventors' experience with the PTAB with exorbitantly high costs and ultimately resulting patent infringement, I am reluctant to invest further in additional patents on my engine development and my business development, especially if my patent rights can suddenly belong to another entity not having the original rights to the innovation. These outcomes obviously affect my decision to/not to innovate and invest. Brief examples of this damaging decision making are summarized below.

- A. Josh Malone, Bunch O Balloons – Josh's invention was copied by Telebrands who flooded the market with knock-offs. The effort to enforce his patents resulted in 4 district court cases, 8 PTAB cases, and 13 appeals, costing over \$20 million.
- B. Alex Sevrinsky, Paice – Alex invented a torque drive system for hybrid vehicles. The technology was successfully license to Toyota, but Ford, Volkswagon, and Hyundai opted to eliminate his primary patent by filing 26 IPR petitions. The dispute led to 4 district court cases, 44 PTAB cases, and 34 appeals and millions of dollars in legal expense.
- C. Roman Chistyakov, Zond – Roman invented a plasma metal thin film deposition technology used for semiconductors and razor blades. Intel, Toshiba, Fujitsu, GlobalFoundries, Gillette and others gang-tackled Zond with 125 IPR petitions costing them millions of dollars. The PTAB construed Roman's invention of a plasma "without arcing" to cover prior art plasmas with "a little arcing" and cancelled 10 patents with 371 claims. Zond was growing with over 20 employees at the start. All are now gone.

If an idea is successful, big companies will want to use it. They are happy to go to court. Most inventors can't afford the legal fees, so the big company immediately gets to "win" the trial and take the patented product for free. On the small chance that the inventor can afford to go to court, there is an even smaller chance that the big company would ever lose. And even if they lose, there is no punishment more than being forced to pay a reasonable royalty. If the company takes the inventor to the PTAB, their likelihood of success goes through the roof. The very worst-case scenario for an infringing company is that they have to pay a royalty, so of course they choose to infringe. The patent system has been turned backwards and protects infringers far better than inventors. If these problems are not addressed, the women, minorities, and veterans who invest their lives and livelihood in patents, at the encouragement of the USPTO and Congress, will be utterly destroyed like the examples above.

Patents are the foundation for innovative companies. Due to extremely high PTAB invalidation rates, investors are not funding innovative companies built on patented ideas. It is incomprehensible that the Patent Office is attacking inventors in these proceedings – the complete opposite of promoting innovation! According to the 2017 AIPLA Report of the Economic Survey, the estimated mean cost of a post-grant proceeding through appeal runs at \$450,000.00. The underrepresented classes being discussed would be ruined by a single IPR. In order to provide patents of value women, minorities, and veterans, the USPTO must stop taking back patents from inventors.

Additionally, the "exclusive right" promised on the patent as granted by the U.S. PTO must be enforced. The 2006 eBay decision revoked the inventor's ability to decide how her invention is produced and by whom. The inventor cannot determine the price, quality, brand, included features, materials, factory location, working conditions, environmental sustainability, or any other concern. The legislative recommendation should include bolstered access to injunctions for individual inventors.

Finally, infringers must not profit by using an invention without permission. Current law limits most inventors who win in court to only a "reasonable royalty", which in many cases does not cover legal fees and is too little to serve as a deterrent against large corporations with deep pockets. Few inventors, particularly the underrepresented classes being discussed through the SUCCESS Act, can afford the millions of dollars and years required to enforce their patents in court. Even after winning, the inventor gets a small percentage of the profits while the infringer keeps the rest. Infringement is a good business decision under current law. The legislative recommendation must include more severe penalties for willingly infringing on patents.

I appreciate the USPTO's willingness to hear from real inventors. We support the intention behind the SUCCESS Act, but after watching the lives of many of our own be utterly destroyed because they believed in the patent system, we know that this legislation will not achieve its goal – the goal of bringing success to women, minorities, and veterans through patents – unless the patents actually provide the protection promised.

Sincerely,
Arnold J. Beal