

## **SPARK US Innovation Opposes the PREVAIL Act without Amendment**

### **EXECUTIVE SUMMARY**

**SPARK US Innovation opposes the Promoting and Respecting Economically Vital American Innovation Leadership Act (PREVAIL), introduced as S.2220 in the Senate and H.R.4370 in the House. In its current form, PREVAIL fails to address the core dysfunctions of the Patent Trial and Appeal Board (PTAB), which continues to undermine American innovation, investment, and national security.**

In 2007, the U.S. led in 60 of 64 critical technologies vital for economic and national security. Yet, by 2018, China overtook the U.S. in AI startup funding, capturing 48% globally compared to the U.S.'s 38%. By March 2023, China led in 37 critical technologies, and by August 2024, this number skyrocketed to 57. China has stolen its way to technological parity with the United States, but now it is out-innovating the U.S. To maintain that lead, China must continue to out-innovate us. This advantage can be traced to the strengthening of China's patent system, made even more consequential by the self-inflicted weakening of America's own.

Patents are creatures of monopolistic and global power. The failure of the U.S. government to uphold patent rights enabled Big Tech to monopolize by eliminating startup competition. This slowed American innovation, while China is innovating faster, especially as it relates to critical emerging technologies. China's advantage can be traced to the strengthening of China's patent system, made even more consequential by the deliberate self-inflicted weakening of America's own

Among the most damaging actions to American innovation was the creation of the PTAB, which has severely undermined the U.S. patent system. The PTAB was created to provide a fast, low-cost alternative to federal court patent validity challenges. Instead, it has become a patent invalidation engine, operating under a perverse incentive structure that financially depends on canceling patents. This structure disproportionately harms startups, small inventors, and entrepreneurs, especially in critical emerging technologies and has handicapped American innovation in ways no other country handicaps their own.

PREVAIL offers partial solutions to some of the PTAB's most serious problems, but it fails to address many core issues, leaving the PTAB's harm to American innovation in place. SPARK proposes a critical amendment to PREVAIL: require patent owner consent before initiating any PTAB proceeding. This reform eliminates the incentive to maintain artificially high invalidation rates and ensures the PTAB serves its intended role as a streamlined alternative to litigation. Mandating patent owner consent will create a balanced environment for inventors, leveling the playing field and reinforcing the U.S. as a global leader in innovation.

### **SPARK US Innovation, LLC**

SPARK US Innovation, LLC (SPARK) is dedicated to advancing the future of critical emerging technology startups, entrepreneurs, and inventors through effective policy reform in the United States. We strive to create a policy environment where the conception, protection, and commercialization of technologies critical to American economic and national security prosper thereby enabling the United States to take back the global technological lead from China.

## Patent Trial and Appeal Board

The PTAB was created within the U.S. Patent and Trademark Office (USPTO) by the America Invents Act (AIA) of 2011. It was intended to offer a faster, less expensive alternative to the federal court for challenging the validity of issued patents and to improve patent quality. In practice, however, the PTAB has failed.

The PTAB has become a destructive force on U.S. innovation, invalidating in whole or in part 84% of the patents it fully adjudicates. Rather than streamlining disputes, lowering costs, and improving patent quality, it has added years to litigation and imposed millions of dollars in additional costs on patent owners. This has chilled early-stage investment particularly in startups developing critical emerging technologies.

Though PREVAIL is marketed as a fix for the PTAB's deep flaws, it misses the root of the problem: a perverse incentive structure that pressures the PTAB to invalidate patents at exceptionally high rates. PREVAIL fails to address these incentives and instead offers inadequate remedies that leave the core dysfunction untouched.

### The PTAB's Perverse Incentive Structure

The PTAB<sup>1</sup> exists solely to invalidate issued patents; it has no other function. Only parties seeking to challenge a patent's validity, typically infringers or their representatives, can file a petition. In effect, the PTAB operates as a patent invalidation service catering to those seeking to invalidate patents.

PTAB operations are intended to be entirely funded by fees from PTAB trials. However, since the PTAB's inception, petition fees have covered only about half of trial costs incurred by the PTAB, with the shortfall subsidized by funds transferred from patent examination. This practice reduces patent examination resources thereby harming patent quality. The PTAB shortfall, and the resulting transfer of funds from examination, incentivizes USPTO management to ensure a continuous flow of PTAB challenges.

Nearly all PTAB petitions have copending litigation in federal court, meaning infringers are choosing between two venues. To attract these filings, the PTAB must offer a more favorable outcome, specifically, a significantly higher invalidation rate than federal courts. This creates a perverse incentive: the PTAB must invalidate patents at exceptionally high rates simply to remain in business.

### The USPTO Acts on the Perverse Incentives

USPTO management has a demonstrable history of acting on perverse incentives by taking actions to increase invalidation rates and ignoring actions to reduce invalidation rates. The PTAB's perverse incentive structure has created such deep-rooted problems that meaningful reform through legislation is nearly impossible without first addressing those incentives. Below are examples of these persistent issues.

- On multiple occasions, when an original panel of APJs refused to invalidate a patent, the USPTO stacked the panel with new APJs so the patent would be invalidated. The [USPTO retaliated against the whistleblower](#) who brought this to light.
- Administrative patent judges ("APJ") have no code of conduct and often handle cases where their [former employer is a party](#). This sort of conflict biases APJ's to invalidate the patent.

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<sup>1</sup> The PTAB has two functions: it takes appeals from patent examination before issuance, and it invalidates issued patents. In this document, PTAB refers only to the side that invalidates issued patents.

- The same APJs who institute trials also preside over them causing bias to invalidate.
- The low burden of proof (preponderance of the evidence) as compared to district court (clear and convincing).
- The identities of real parties in interest are often concealed by third-party challengers like Unified Patents, whose list of clients includes Chinese and Big Tech multinationals.
- USPTO management has declined to raise petition fees to a level that covers the PTAB's actual costs, leaving a shortfall of up to 50%. On top of that, the USPTO offers substantial refunds to petitioners if their petitions are not instituted, further compounding the financial imbalance.
- Shockingly, the USPTO implemented a bonus program for APJs that actually gives [APJ's significant bonuses to invalidate patents](#).
- There are no limits on inter partes review (IPR) petitions. Serial petitions by multiple, similarly situated challengers are common.
- In 91.8% of trials, one or more APJs have no experience nor education in the technology being adjudicated and in 43% of petitions, all APJs lack the requisite experience and education.
- Prior art considered during examination can be reasserted in IPR.
- Patents are invalidated based on a subjective obviousness standard (KSR), where reasonable experts can reach opposite conclusions, and neither can be definitively proven wrong.
- Examiners cannot testify to defend their decisions.
- Limited discovery favors the challenger (i.e., onerous mandatory initial disclosure obligations regarding the patented subject matter with no such corresponding obligations for the infringing subject matter).
- Federal court litigation is often stayed while a PTAB trial is pending, giving accused infringers a significant advantage. During this time, they face no risk of an infringement finding, while patent owners face the serious risk of invalidation, dramatically skewing settlement negotiations in favor of the infringer, prolonging litigation, and driving costs for the patent owner.
- Claim cancellations at PTAB are retroactive, destroying the presumption of validity and encouraging infringement.
- Time lost at PTAB trials and appeals is not restored to a patent's term if the patent is upheld.

These examples demonstrate that USPTO management acts on perverse incentives to maintain high patent invalidation rates by creating a litigation environment that favors its primary users – accused infringers and third parties seeking to invalidate patents.

### **PREVAIL Will Fail Under the Perverse Incentive Structure**

Proponents of PREVAIL claim it addresses key flaws in current PTAB rules that enable predatory tactics against startups, entrepreneurs, and inventors in critical emerging technologies. The bill introduces standing requirements, raises the burden of proof to clear and convincing evidence, mandates a code of conduct, and claims to curb serial petitions.

However, PREVAIL fails to tackle many other serious issues, including bonuses for Administrative

Patent Judges (APJs), the abuse of the KSR standard for obviousness, the lack of relevant experience and technical education among APJs, the re-litigation of previously considered prior art, the PTAB's severely limited discovery process, staying federal court litigation, petition fees lower than cost, and more.

Even if the PREVAIL Act could address every current problem, its effectiveness would still be undermined by the PTAB's perverse incentive structure. The possible changes to rules, policies, and incentives (collectively "rules") that govern PTAB proceedings are virtually limitless. And the PTAB is a political court that is constantly evolving with significant changes made by each new administration. Congress cannot possibly anticipate or codify every potential rule that could affect how patents are invalidated at the PTAB.

What Congress leaves undefined is left to the discretion of USPTO management. If PREVAIL becomes law, USPTO leadership will still need to ensure the PTAB maintains significantly higher invalidation rates than federal courts to remain financially viable. To achieve this, they can simply implement new rules that restore high invalidation rates, rendering PREVAIL's reforms ineffective.

This sets up a recurring cycle: Congress passes reforms, the USPTO adjusts the rules to maintain the PTAB's incentive structure, and Congress must legislate again to counter the new rules. This cycle could repeat for years.

Meanwhile, already weakened early-stage investment in U.S. startups will remain depressed. If Congress fails to fix the core problems of incentives, American innovation will continue to fall behind global competitors, particularly China. America may never reclaim its leadership in innovation.

## Why PREVAIL Falls Short

While PREVAIL makes an effort at tackling issues such as standing, APJ code of conduct, and the separation of APJs between institution and trial, it overlooks many of the PTAB's most serious flaws and the reforms it includes are unlikely to be effective enough to make a meaningful difference.

For example, one of PREVAIL's most promoted reforms is its proposal to raise the standard of evidence for invalidating patents as a solution to the PTAB's exceptionally high invalidation rate. Currently, the PTAB applies a "preponderance of the evidence" standard, meaning a patent can be invalidated if it is deemed more likely than not to be invalid—a relatively low bar. In contrast, federal courts require "clear and convincing evidence," the highest standard in civil litigation.

Supporters of the PREVAIL Act argue that this discrepancy explains the PTAB's much higher invalidation rates. However, raising the standard alone is unlikely to produce meaningful change, largely because the determination of obviousness remains highly subjective, allowing for broad discretion regardless of the evidentiary threshold.

*Beyond the Evidence Standard: The Role of Obviousness.* While the difference in evidence standards is notable, the core issue lies in the legal test for obviousness, which underpins nearly all PTAB patent invalidations. Understanding the evolution of the obviousness test is critical to assessing its impact on invalidation rates.

*The Teaching-Suggestion-Motivation (TSM) Test.* Historically, obviousness was evaluated using the Teaching-Suggestion-Motivation (TSM) test, an objective framework. Under TSM, a patent was considered obvious only if the prior art contained explicit teachings, suggestions, or motivations to combine existing elements to create the claimed invention. For instance, a research paper might suggest combining

specific elements to achieve the invention. This test relied on tangible evidence from prior art, making it less susceptible to subjective interpretation.

*The KSR Subjective Test.* In 2007, the Supreme Court's decision in KSR Int'l Co. v. Teleflex Inc. replaced the TSM test with a more subjective standard. Under the KSR test, obviousness is determined by imagining a Person Having Ordinary Skill in the Art (PHOSITA) and assessing whether they would consider combining prior art references to produce a "predictable result" or deem the invention "obvious to try." This approach relies heavily on the subjective judgment of the test evaluator, who must adopt the perspective of the PHOSITA.

*Implications of the KSR Test.* The KSR test's subjective nature introduces significant hindsight bias, as evaluators may unconsciously use the invention itself as a lens to assess prior art. This subjectivity allows reasonable evaluators to reach conflicting conclusions without definitive proof of correctness. Consequently, the choice of evidence standard – whether preponderance or clear and convincing – has minimal impact on PTAB invalidation rates under the KSR framework. The test's reliance on subjective judgment overshadows the effect of a stricter evidence threshold.

The subjective nature of KSR, rather than the evidence standard, is the primary driver of the PTAB's high invalidation rates compared to federal courts. So, raising the PTAB's evidence standard to clear and convincing evidence is unlikely to reduce invalidation rates unless the KSR test is reconsidered or replaced.

In another example, PREVAIL inadequately addresses the issue of excessive petitions. Although it attempts to limit multiple petitions from a single petitioner, it fails to restrict others from doing so. This loophole allows industries to overwhelm patent owners with serial petitions, significantly increasing costs, risks, and delays in achieving justice.

### **Balancing Incentives Makes PREVAIL Work**

Fixing the PTAB's astronomical invalidation rates unquestionably requires balancing the incentives acting on the PTAB. Currently, when an infringer or its agent files a PTAB petition, the patent owner is forced into the PTAB and must respond. This mandatory participation biases the PTAB to favor the infringer because the PTAB's invalidation rate must be higher than federal court to attract the PTAB petition. Any legislation intended to fix the broken PTAB must balance these perverse incentives to remove systemic bias from the PTAB.

Requiring mutual consent from both parties before the PTAB institutes a petition eliminates systemic bias. If the patent owner can decline, the PTAB's invalidation rate will no longer drive petition filings. A high invalidation rate would prompt patent owners to withhold consent, while a low rate would deter infringers from filing petitions. This incentivizes the PTAB to align its invalidation rate with federal courts to maintain a balanced petition process.

The PTAB was created by Congress to be *faster and cheaper* than federal court, so the PTAB's value proposition to attract petitions becomes that it is a *faster and cheaper alternative* to federal court, which aligns the PTAB with the original intention of the AIA. Furthermore, mutual consent aligns with copyright law. For example, the Copyright Small Claims tribunal created under the Copyright Alternative in Small-Claims Enforcement Act of 2020 requires both parties to consent.

## The Balancing Incentives Amendment

The Balancing Incentives Amendment simply requires patent owner consent before a PTAB trial can be instituted. The following amendment is language from the Balancing Incentives Act of 2024 ([H.R.8132](#)):

1 **SEC. 2. REQUIREMENT FOR PATENT OWNER TO CONSENT**  
2 **TO THE FILING OF PETITION FOR INTER**  
3 **PARTES REVIEW OR POST-GRANT REVIEW.**

4 Title 35, United States Code, is amended—  
5 (1) in section 312(a)—  
6 (A) in paragraph (4), by striking “; and”  
7 and inserting a semicolon;  
8 (B) in paragraph (5), by striking the pe-  
9 riod at the end and inserting “; and”; and  
10 (C) by adding at the end the following:  
11 “(6) the owner of the patent consents to the fil-  
12 ing of the petition.”; and  
13 (2) in section 322(a)—  
14 (A) in paragraph (4), by striking “; and”  
15 and inserting a semicolon; and  
16 (B) in paragraph (5), by striking the pe-  
17 riod at the end and inserting “; and”; and  
18 (C) by adding at the end the following:  
19 “(6) the owner of the patent consents to the fil-  
20 ing of the petition.”.

The following table summarizes the key issues with the current PTAB system, whether PREVAIL addresses them, and how the Balancing Incentives Amendment resolves them.



## COMPARISON TABLE: PREVAIL vs. PREVAIL with SPARK's Amendment

Issue	Current Problem	PREVAIL	With SPARK Amendment
PTAB funded by petitions incentivizes invalidation	PTAB maintains high invalidation rates to stay funded	✗ No	✓ Disincentivizes biased invalidations
APJ bonuses tied to invalidation decisions	APJs financially rewarded for canceling patents	✗ No	✓ Disincentivizes biased rulings
Re-litigation of prior art already reviewed by examiner	Weakens presumption of validity and duplicates litigation	✗ No	✓ Disincentivizes re-litigation
No requirement for APJ expertise in technology being adjudicated	Most APJ panels lack education and experience in relevant technologies	✗ No	✓ Disincentivizes biased panels
Serial IPR petitions from multiple challengers	Drains patent owner resources and prolongs litigation	⚠ Partial (limits some)	✓ Disincentivizes excessive petitions
Low evidentiary standard ("preponderance of the evidence")	Easier to invalidate patents than in federal court	✓ Yes	✓ Disincentivizes abuse of discretion
KSR "obvious to try" standard encourages hindsight bias	Subjective and vague invalidations	✗ No	✓ Disincentivizes abuse of KSR at PTAB
Examiners cannot testify; patent owners have evidentiary burdens that petitioners lack	Skews discovery and evidentiary rules against patent holders	✗ No	✓ Disincentivizes one-sided process
Staying federal litigation favors infringers	PTAB gives infringer legal advantage while delaying resolution	✗ No	✓ Disincentivizes strategic abuse
Lack of mutual consent to PTAB review	Patent owners forced into biased system	✗ No	✓ Core SPARK amendment

✓ = Directly fixes or prevents the issue

✗ = Not addressed in PREVAIL

⚠ = Partial or insufficient fix in PREVAIL