



BSA Comments on Notice of Proposed Rulemaking

Revision to Rules of Practice Before the Patent Trial and Appeal Board

**Federal Register Notice 2025-19580
Docket No. PTO-P-2025-0025**

December 2025

I. Introduction

The Business Software Alliance (BSA)¹ respectfully submits this comment in opposition to the US Patent and Trademark Office's (USPTO) Notice of Proposed Rulemaking (NPRM) entitled, "Revision to Rules of Practice Before the Patent Trial and Appeal Board," 90 Fed. Reg. 48,335 (Oct. 17, 2025).

Representing tens of thousands of American inventors and their employers – together holding hundreds of thousands of patents in a sector vital to US economic and national security – BSA members are long-standing supporters of the USPTO and critical stakeholders in the US intellectual property (IP) system.

However, BSA is deeply concerned that the NPRM would weaken, rather than strengthen, that system. The proposed changes would hollow out a core safeguard of patent quality by shielding weak patents from review under the IPR process; a mechanism Congress designed in the America Invents Act (AIA) to ensure fairness, efficiency, and accountability in patent validity determinations. By erecting procedural barriers that limit the availability of IPR proceedings before the Patent Trial and Appeal Board (PTAB), the NPRM will undermine the structural integrity of the US patent system itself.

The NPRM is premised on an assertion -- that abusive or duplicative IPR petitions are overwhelming the US patent system -- that is not supported by evidence. For starters, in FY2024, out of the 3.9 million "live" US patents, [fewer than 350 patents](#) (i.e., 0.009%) were even partially invalidated by PTAB. More specifically, the USPTO's own data show that so-called "serial" and "parallel" petitions have declined steadily since 2019, representing less than 5% of all filings and a mere 0.3% of instituted IPRs. Finally, roughly 72% of patents asserted in federal court have never been challenged in IPR proceedings, confirming that the overwhelming majority of patent litigation proceeds without PTAB involvement. Far from documenting a pattern of abuse, the record demonstrates that the IPR process is functioning as Congress intended: as a targeted and efficient check against invalid patents.

By conditioning institution on extraneous factors—such as mandatory stipulations, prior adjudications, or speculative litigation timelines—the NPRM departs from the clear statutory standard in 35 U.S.C. § 314(a), which asks only whether there is a "reasonable likelihood" that a petitioner would prevail on at least one challenged claim. Replacing that objective threshold with discretionary policy preferences raises serious concerns under the *Loper Bright* standard of review, the Administrative Procedure Act (APA), and related governing law.

BSA members support reforms to the PTAB's IPR process when those reforms increase predictability, fairness, and legal certainty for all participants. Unfortunately, the NPRM does the opposite. It imposes a one-sided set of restrictions that would advantage patent assertion entities and foreign competitors at the expense of US innovators, manufacturers, and service providers—and, ultimately, the American workers and consumers who depend on them. These changes risk encouraging abusive litigation practices and, in

some cases, could even heighten the exposure of US firms to trade secret theft by foreign adversaries via judicially compelled discovery.

BSA cannot support an NPRM that advances such a one-sided set of restrictions that favor patent assertion entities, non-practicing entities (NPEs), foreign sovereign wealth funds, and even technology competitors from adversary nations at the expense of US manufacturers, service providers, and other job creators, as well as the US workers who depend on those jobs.

BSA urges the USPTO to withdraw or substantially revise the NPRM. The Office should instead pursue balanced reforms that uphold the statutory intent of the AIA, maintain a robust and accessible IPR process, and ensure that the United States remains the global leader in innovation and intellectual property protection.

II. About BSA

As an association of the world’s leading patent and copyright holders in Artificial Intelligence (AI), quantum computing, enterprise software, and other emerging technologies, BSA promotes policies that foster innovation, growth, and a competitive marketplace for commercial software and related technologies.

BSA members invest heavily in IP, holding hundreds of thousands of patents and standing among the top US patent holders in key technologies critical to our nation’s economic and national security, including AI, quantum computing, cloud computing, industrial automation, and electronic design automation.² The software industry accounts for over \$100 billion in annual US research and development (R&D) investments and nearly one quarter of total US private sector R&D expenditures.³

As innovators and responsible patent holders, BSA members have a direct and substantial stake in the IPR process established under the AIA. That process strengthens – not weakens – the US patent system by doing two critical things: (1) ensuring that issued patents are truly durable and enforceable, and (2) providing an efficient, expert forum to test and correct patent claims that the USPTO may have improvidently granted.

Through their sustained investments in cutting-edge technologies, the thousands of patent applications they file each year in the United States and abroad, and their active participation in IPR proceedings to reinforce patent quality, BSA members have consistently advanced a stronger and more resilient US patent system. Their continued leadership in innovation depends on preserving an IPR framework that promotes both accountability and excellence in the administration of patent rights.

III. Summary of Recommendations

BSA respectfully urges the USPTO to withdraw or substantially revise the NPRM. If USPTO does not withdraw the NPRM, we recommend the following:

1. Before proceeding further, conduct the Regulatory Impact Analysis that is legally required under Executive Order 12866 and 13563, given the rule’s likely annual economic effect in excess of \$100 million and its substantial impact on innovation, litigation costs, investment, and competition.
2. Retain the existing “reasonable likelihood” standard without additional preconditions to institution;
3. Eliminate the mandatory stipulation requirement; and
4. Clarify that prior adjudications and parallel proceedings may inform – but not dictate – discretionary denials.

IV. Analysis of Key Proposals

Below we analyze the four main proposals in the NPRM.

A. Mandatory Stipulation Requirement (§ 42.108(d))

BSA strongly opposes the proposed requirement that petitioners stipulate not to pursue invalidity defenses under 35 USC §§ 102 or 103 in any other forum as a condition of IPR institution. This categorical mandate is contrary to statute, unsupported by data, and unjustifiably punitive toward legitimate operating businesses that rely on the IPR process to ensure patent quality.

First, the proposal would invert the statutory framework established by 35 U.S.C. § 315(e), which expressly preserves a petitioner’s right to raise invalidity defenses in court when the PTAB declines to institute, terminates a proceeding, or never issues a final written decision. Congress deliberately crafted that safeguard to prevent defendants from being penalized merely for invoking PTAB review. Nothing in the statute authorizes the USPTO to compel petitioners to preemptively waive these rights as the price of admission to the IPR process.⁴

Second, the proposal would violate the plain text of 35 U.S.C. § 282(b), which guarantees every defendant in a patent infringement action the right to assert patentability defenses, including those under §§ 102 and 103. Forcing potential IPR petitioners to relinquish these rights *ex ante* is an unauthorized and extra-statutory restriction that undermines Congress’s explicit design for judicial and administrative balance in patent adjudication.

Third, the USPTO’s own evidence contradicts the rationale for imposing such stipulations. The Patent Public Advisory Committee’s (PPAC) *Inter Partes Review Study* (Nov. 2024) found that over 92% of claims invalidated through IPR relied on prior art never considered during initial examination, and that 47% of that prior art originated outside the examiner’s reasonable search field. These findings confirm that IPRs perform a critical corrective function, identifying invalid claims that the examination process missed—not merely re-litigating old issues. Imposing mandatory stipulations would suppress meritorious petitions and discourage the very submissions that enhance patent quality.

Finally, by coercing petitioners to choose between preserving statutory defenses and accessing the PTAB, the proposal would drive disputes back into the federal courts—precisely the inefficiency the America Invents Act sought to eliminate. Instead of promoting fairness or efficiency, this rule would undermine Congress’s intent that IPR serve as a “faster, cheaper alternative to litigation,” while burdening both innovators and the judicial system alike.

B. Bar on Instituting IPRs for Previously Adjudicated Claims (§ 42.108(e))

BSA strongly opposes any categorical prohibition on instituting IPRs where a court or the USPTO has previously addressed the patentability or validity of a claim. Such a rule would unjustly prejudice later petitioners who face materially different facts, products, or legal circumstances than those in an earlier proceeding. A policy that burdens all subsequent challengers with the actions or omissions of unrelated prior litigants is fundamentally unfair, legally unsound, and contrary to the principles of due process.

First, Congress already established in 35 U.S.C. § 315(e) the precise mechanism for limiting subsequent challenges. That provision applies only after a final written decision of the PTAB and reflects a deliberate legislative balance.⁵ Nothing in the AIA authorizes the USPTO to expand preclusion principles to (1) proceedings that never reached a PTAB final written decision, or (2) district court rulings issued under an entirely different legal standard.

Second, this proposal would punish later petitioners for the conduct of unrelated parties. It would attribute to new challengers the strategic choices, mistakes, or limitations of earlier litigants – parties who may

have had different incentives, resources, or exposure to risk.⁶ A prior litigant might have declined to pursue certain claims because of settlement dynamics, resource constraints, or minimal infringement exposure. Yet under this proposal, subsequent petitioners would be barred from presenting valid and distinct challenges through no fault of their own. This rule would invite gamesmanship and allow patent owners to manipulate the timing or outcome of earlier cases to block legitimate later reviews.

Third, the proposed bar collapses the distinct evidentiary and procedural regimes that Congress created for district court and administrative review. District courts apply a *clear and convincing evidence* standard and presume patent validity, while the USPTO – reviewing its own prior administrative action—operates under a *preponderance of the evidence* standard. Congress intended IPRs to serve as a complementary, corrective mechanism – a “second look” to ensure patent quality – not as a subordinate process subservient to Article III adjudications. The proposed rule disregards this statutory distinction and undermines the very balance the AIA was designed to achieve.

Fourth, the USPTO’s own [Patent Public Advisory Committee](#) (PPAC) has shown that IPRs uncover critical prior art that would otherwise remain hidden. The PPAC Inter Partes Review Study (Nov. 2024) found that over 92% of invalidated claims relied on previously unconsidered prior art,⁷ and that 47% involved art outside the examiner’s reasonable field of search.⁸ These findings confirm that IPRs are indispensable for maintaining patent integrity—especially in fast-evolving fields like AI, semiconductors, cloud software, biotechnology, and quantum computing, where relevant prior art often resides in non-patent literature, technical conferences, or foreign-language publications. A categorical bar would stifle this corrective function and entrench invalid patents, harming innovation and competition.

Fifth, the USPTO’s own empirical evidence refutes the need for this rule. Its [Multiple Petitions Study](#) – spanning seven years – shows that so-called “serial” petitions declined from about 9% of filings to 1.7%, with an institution rate of only 0.3%.⁹ More than 90% of patents before the PTAB face only one or two petitions.¹⁰ These data demonstrate that existing safeguards—including the General Plastic factors and the 2019 Trial Practice Guide—already address concerns about duplicative filings effectively.

Sixth, the proposed bar is inconsistent with IPR’s statutory design. The AIA established IPR as a replacement for *Inter Partes* Reexam which was sunset. *Inter Partes* Reexam had a lower standard for institution (“substantial new question of patentability” rather than “reasonable likelihood”) and yet there was no discretionary denial. If the request met the (lower “substantial new question”) standard, it was instituted. The AIA was intended to make it easier, not harder, to challenge the validity of patents in an efficient manner and as a substitute for district court litigation. To prevent serial and duplicative challenges, the institution threshold was raised to “reasonable likelihood: and filing constraints like the one-year litigation bar and estoppel provisions were added to and ensure IPR functions as a substitute, not an addition, to litigation. For the USPTO to now categorically block IPR petitions based on these new discretionary denial bases is inconsistent with the purpose of the AIA and its design to sunset *Inter Partes* Reexam.

Finally, this proposal defies the core purpose of the IPR system: to “improve patent quality and restore confidence in the presumption of validity by providing a meaningful opportunity to challenge improvidently granted patents.”¹¹ A categorical preclusion rule would diminish that opportunity, weaken patent quality, and erode confidence in the system Congress built to preserve it.

BSA therefore urges the USPTO to reject this categorical bar and instead adopt an approach that respects statutory limits, protects innovation, and upholds the integrity of the US patent system.

C. Denial When Parallel Litigation Will Likely Conclude First (§ 42.108(f))

BSA strongly opposes transforming litigation timing into a categorical bar that automatically prohibits institution of IPR whenever a parallel district court trial is projected to conclude first. Such a rule would be unlawful, arbitrary under the APA, and directly contrary to congressional intent.

Many of the grounds of concern with respect to §42.108(f) overlap with the concerns outlined above §42.108(e). We refer you to the concerns as stated above. We also supplement our comments as follows:

First, litigation schedules are inherently speculative and subject to manipulation. District court trial dates frequently shift due to claim construction disputes, discovery issues, judicial workload, or settlement discussions. This proposed timing bar would create a perverse incentive for patent holders to file in fast-moving jurisdictions—or to accelerate or delay schedules strategically—solely to trigger a discretionary denial. Codifying a rigid “race-to-trial” rule would invite forum shopping and gamesmanship, undermining both fairness and procedural integrity.

Second, the proposal conflicts with established federal practice of staying parallel litigation to allow the PTAB to complete its expert review. Federal courts and the US International Trade Commission (USITC) routinely stay patent proceedings out of respect for PTAB’s technical expertise and to avoid wasteful duplication. Turning timing into a mandatory basis for denial would reverse that long-standing comity, erode interbranch coordination, and increase duplicative and inconsistent adjudications.

Third, the USPTO’s own data confirm that IPRs advance patent quality regardless of litigation timing. As reflected in prior USPTO and PPAC studies, IPR proceedings consistently identify critical prior art that was never considered during initial examination and often falls outside an examiner’s reasonable search field. Far from duplicating district court litigation, IPR serves as a complementary, expert-driven process designed to identify and correct examination errors swiftly. A rigid “first-to-finish” rule would deny access to this corrective mechanism based solely on speculative litigation schedules rather than the merits of the petition.

The Office should reject any categorical timing bar that substitutes procedural formalism for substantive merit review and undermines the efficiency and fairness that IPR was created to achieve. Instead, the Office should adopt an approach that respects statutory limits, protects innovation, and upholds the integrity of the US patent system.

D. Extraordinary Circumstances Exception (§ 42.108(g))

BSA recognizes the importance of preserving flexibility in the institution process but strongly cautions that the proposed “extraordinary circumstances” exception, as drafted, confers sweeping and unreviewable discretion on the Director. Without clear criteria, procedural safeguards, or avenues for meaningful review, this provision risks arbitrary, inconsistent, and potentially inequitable outcomes – in conflict with both the APA and fundamental principles of due process.

To ensure compliance with the APA and to promote transparency and predictability, the USPTO should clearly define what qualifies as “extraordinary circumstances.” Appropriate examples might include:

- Evidence of fraud on the Office or intentional misconduct in prior proceedings;
- Matters involving national security or public safety; or
- Newly discovered prior art that could not reasonably have been located or presented earlier despite due diligence.

Moreover, any invocation of this exception should be accompanied by a written, reasoned explanation articulating the factual and legal basis for the decision. That explanation should be made part of the administrative record to facilitate appellate review under 35 U.S.C. § 319.

Absent these clarifications, the proposed rule would replace discretion with uncertainty – creating a system where similarly situated parties could face divergent results with no clear standard or recourse. BSA therefore urges the USPTO to cabin the scope of the “extraordinary circumstances” provision, align it with established administrative principles, and ensure that all exceptions are exercised transparently and subject to review.

V. Broader Legal and Economic Implications

Collectively, the NPRM proposals discussed above risk systemically impeding the availability of IPR proceedings, while also undermining Congress’s purpose of establishing the IPR process as an efficient, expert-led mechanism to challenge invalid patents. The NPRM, if implemented as proposed, would undermine the statutory design of the AIA and impose significant economic, innovation, and administrative consequences. These impacts extend beyond private litigation costs and raise broader concerns regarding national competitiveness, regulatory discipline, and administrative legality. The discussion follows:

A. Economic Impact of Restricting Access to IPR

IPR was created to serve as a cost-effective alternative to district court litigation. Empirical data confirms that PTAB proceedings reduce total litigation costs by billions of dollars each year. By forcing validity disputes back into Article III courts, the NPRM would erase these savings. Each case denied IPR review would impose dramatically higher attorney fees, expert witness costs, and management burdens on businesses—diverting critical resources from R&D, engineering, and workforce investment. The rule would thus increase costs for innovators and consumers alike, reversing over a decade of efficiency gains Congress achieved through the AIA. For more information, please Annex I.

B. National Security Impacts of Restricting Access to IPR

Invalid patents distort markets, raise licensing costs, and deter investment in advanced technology sectors such as artificial intelligence, quantum computing, biotechnology, and semiconductors. Empirical research shows that a single major patent assertion entity (PAE) lawsuit can reduce a defendant’s R&D investment by an average of \$160 million over two years. Curtailing IPR—the most efficient mechanism for challenging low-quality patents—would magnify this chilling effect.

If IPR ceases to function as Congress intended, US manufacturers and technology leaders will face greater exposure to abusive litigation from entities that acquire questionable patents, often backed by foreign sovereign wealth funds or state-affiliated investors. Such actors can exploit US courts not only to seek inflated settlements but also to use discovery to obtain access to sensitive trade secrets, critical technologies, and confidential technical data. In doing so, they pose serious risks to US economic security and strategic technology leadership. For more information, see Annex II.

VI. Legal Analysis

The following discussion: (1) assesses USPTO’s statutory authority to advance the proposals under the NPRM; and (2) assesses the NPRM’s compliance with administrative law requirements.

A. BSA Urges USPTO to Withdraw or Substantially Revise the NPRM, which Exceeds the USPTO’s Statutory Authority Under the AIA

Under the APA, courts are to “hold unlawful and set aside” agency rules that are: (a) not “in accordance with law;” (b) unconstitutional; (c) “in excess of statutory ... authority;” or (d) “unsupported by substantial

evidence.”¹² As current drafted, the NPRM proposes regulations that would fall short of each of these legal standards.

Several NPRM proposals – particularly § 42.108(d) (mandatory stipulation), § 42.108(e) (bar on claims previously adjudicated), and § 42.108(f) (first to finish rule) – exceed the USPTO’s delegated authority under the AIA and directly contradict its statutory design by adding pre-institution prerequisites Congress did not enact and by expanding estoppel beyond 35 USC § 315(e).

The Supreme Court has made clear that an administrative agency may not rewrite clear statutory terms to suit its own sense of how the statute should operate.¹³ Yet the NPRM would do precisely that, by transforming a merits-based institution inquiry under 35 USC § 314(a) – which requires only a “reasonable likelihood” that at least one challenged claim is unpatentable – into a procedural bar conditioned on stipulations, prior court rulings, or speculative litigation timelines.

Under the Supreme Court’s recent decision in *Loper Bright Enterprises v. Raimondo*, agencies are no longer entitled to *Chevron*-style deference when interpreting statutes. Stated differently, an agency is not permitted to ‘interpret’ a statute to mean whatever it thinks best serves policy goals when Congress has not clearly given it that authority. Here, the AIA contains no language authorizing the USPTO to require preemptive waivers of statutory defenses, deny IPR institution based solely on earlier district court validity findings, or transform the timing of parallel litigation into a categorical bar.

The NPRM also undercuts US Supreme Court jurisprudence that addressed the IPR system. For example, in one case, the Court explained that IPR process was intended as a process for the USPTO to “revisit and revise earlier patent grants.”¹⁴ In another case, the Court underscored the role of the IPR process was to “weed out bad patent claims efficiently.”¹⁵ Opining on efforts to raise obstacles to IPR institution, the Court criticized procedural steps that would operate to “save bad patent claims.”¹⁶

The proposed rules are vulnerable to invalidation as contrary to law and in excess of statutory authority.¹⁷ BSA therefore urges the USPTO to withdraw or substantially revise the NPRM to ensure compliance with the AIA’s statutory text and binding Supreme Court jurisprudence.

B. Absent a Full Withdrawal, BSA Urges USPTO to Reconsider the Rule with the Benefit of Reasoned Decisionmaking Required by the APA

Even assuming *arguendo* that the USPTO possesses the legal discretion to act as it seeks to do here, the NPRM would fall short of the requirements of EOs 12866, 13563, 14219, and 14192.¹⁸ Agencies must engage in reasoned, evidence-based decisionmaking, examining “the relevant data and articulate a satisfactory explanation for its action.”¹⁹ Despite clear evidence of a multi-billion dollar impact (including from prior Congressional Budget Office scoring),²⁰ the NPRM lacks a Regulatory Impact Analysis, fails to meaningfully quantify economic effects, omits a robust cost-benefit evaluation, cites to misleading statistics, and neglects to analyze less burdensome alternatives.²¹

Most fundamentally, the NPRM rests on a premise – that abusive or duplicative IPR petitions are overwhelming the US IP system – that is unsupported by substantial evidence. “Serial” and “parallel” petitions have declined steadily since 2019 and account for a mere 0.3% of all instituted IPRs.²² Even more telling: Fewer than 0.004% of all live patents in FY 2024 – just 141 out of 3,900,000 live patents – were fully invalidated by the PTAB, while 349 patents were partially upheld and partially invalidated, with others fully upheld or otherwise addressed.²³ Stated differently, out of the 1,037 patents in PTAB proceedings ending in FY 2024, only 14% were fully invalidated.²⁴ The NPRM’s assertion of systemic abuse is contradicted by the agency’s own data.

C. Absent a Full Withdrawal, The USPTO Should Conduct a Regulatory Impact Analysis Because the NPRM Is an “Economically Significant” Rule Under Executive Order 12866

The Trump Administration has articulated a robust policy of regulatory discipline, efficacy, and transparency. The absence of an RIA in support of the Affiliates Rule is inconsistent with this Administration Policy, which is reflected in the Administration’s 2025 policy directives, including: (1) Executive Order on Unleashing Prosperity through Deregulation (2025); (2) Implementing the President’s Department of Governmental Efficiency Initiative (2025); and (3) the Administration’s reaffirmation of EOs 12866 (1993) and 13563 (2011), which remain in force and collectively define the framework for responsible rulemaking.

Under EO 12866 §3(f)(1), a regulation is “economically significant” if it is likely to: (1) have an annual effect on the economy of \$100 million or more; or (2) materially affect the economy through a substantial impact on productivity, competition, employment, investment, innovation, or international trade. When a rule is economically significant, Executive Order 12866 § 6(a)(3)(C) requires the agency to conduct a Regulatory Impact Analysis that:

- Quantifies anticipated costs and benefits;
- Considers reasonable alternatives; and
- Demonstrates that the benefits of the proposed action justify its costs.

The relevant thresholds for economic significance are clearly satisfied here. In fact, economists projected that the Biden Administration regulatory proposal (“the 2023 proposal”), which the NPRM reinforces, could produce a net drop of \$482 million in lost US business activity and \$202 million in costs to the government.²⁵ A 2015 proposal to limit IPRs – which was sectorally limited and therefore less sweeping than the present proposal – was scored by the Congressional Budget Office at \$1.3 billion in additional costs over 10 years.²⁶

The NPRM contains no estimates of compliance costs, no discussion of litigation cost transfers to district courts, no analysis of effects on investment, employment, or innovation, and no comparison of regulatory alternatives (such as continued reliance on case-specific discretionary denials or refinement of Fintiv factors). This omission is inconsistent with Executive Orders 12866 and 13563, which require agencies to regulate only upon a reasoned determination that the benefits justify the costs.²⁷

In order to design a rule that achieves its objectives effectively and efficiently, USPTO should undertake an RIA. At present, USPTO lacks accurate and complete information on the potential cost/benefit trade-offs implied by regulatory design choices available under the NPRM. Alternative design choices could substantially mitigate some of the largest impacts, but – without a more complete analysis – USPTO will not know how to adjust its approach to improve outcomes under the NPRM.

A properly conducted RIA would provide USPTO with crucial insight into:

- The additional costs to litigants and courts if IPR is curtailed;
- The economic harm to startups and small businesses, which rely on IPR as a cost-effective alternative to district court litigation;
- The national security and trade secret risks posed by forcing sensitive technology disputes into broader discovery settings; and
- Alternative regulatory designs that would impose fewer economic burdens while meeting USPTO’s objectives.

Because the USPTO has not provided an RIA as required by law, the NPRM is vulnerable to judicial challenge under 5 USC § 706(2)(A) as arbitrary, capricious, and procedurally defective.

VII. Conclusion

BSA urges the USPTO to withdraw or substantially revise the NPRM. A balanced and accessible IPR system is essential to preserving the strength, predictability, and integrity of the US patent system. The proposed rule would upset that balance by restricting legitimate review, emboldening abusive litigation, and burdening courts, innovators, and consumers alike.

By curtailing access to PTAB review, the NPRM would push disputes into slower, costlier, and less expert forums, harming small and medium-sized businesses that depend on IPR as a fair and affordable means to defend against overbroad patents.

Annex I

Economic Impact of Restricting Access to IPR

The NPRM appears to be misaligned with efforts to restore American manufacturing in a “production economy”²⁸ as outlined in the Administration’s Trade Policy Agenda.²⁹ Instead, the NPRM will – in many cases – support adversary-backed companies and various NPEs that do not manufacture in the US.

NPEs buy up (often weak or invalid) US patents in order to assert them against manufacturers and other producers in the United States – hoping to secure a quick monetary settlement or a large US jury verdict windfall, such as the \$2.18 billion jury verdict against Intel. NPEs bring more than 50% of all US patent suits.³⁰ Between 2021 and 2023, 2 of the top 3 NPEs were based outside the United States, accounting for 78% of the US patent cases amongst them.³¹

As their top litigation target, NPEs focus on manufacturers in the United States. In recent years, NPEs sued 1,500 manufacturers in the US – or nearly 30% of the 5,000 companies facing NPE suits.³² Not only do NPEs not invest in US manufacturing, many do not even invest in US R&D, given that 69% of NPE-asserted patents are purchased from a corporate patent assignee, which itself is also often a foreign entity.³³

NPE litigation activity has far-reaching impacts on US manufacturing and other productive sectors:

- As of 2015, fully 11% of all US publicly-listed companies had been sued by an NPE – a percentage that has undoubtedly increased in the ensuing decade.³⁴
- Direct costs of such NPE litigation are high for US manufacturing and other productive sectors:
 - NPEs drain \$29 billion in cumulative direct costs from their US litigation targets every year.³⁵
 - In 2024 alone, patent plaintiffs secured over \$4.3 billion in patent awards against their US litigation targets – a 20% increase over 2023.³⁶ In a single case from 2021, a jury in Waco, Texas awarded a foreign-backed NPE a \$2.18 billion verdict against Intel for alleged infringement of a weak patent that was later found to be invalid.³⁷
 - The median cost for a US manufacturer or other producer to defend a single NPE-filed patent case can be as high as \$4.5 million in district court and \$8 million before the US International Trade Commission.³⁸
- Indirect costs of NPE litigation are high for US manufacturing and other productive sectors:
 - Manufacturers and other producers in the US that lost patent cases to NPEs have been shown to “reduce their investment in R&D by up to 20 percent.”³⁹ This comes to hundreds of millions of dollars in lost R&D spending.⁴⁰
 - Manufacturers and other producers in the US that are faced with NPE litigation reduce patent application filings and other activities indicative of positive knowledge spillovers.⁴¹
 - Frequent patent litigator activity correlates with a \$21.8 billion reduction in venture-capital investment over five years, undermining startup formation and growth.⁴²
 - NPE cases generate “\$80 billion in lost wealth for publicly traded companies in a single year.”⁴³ “Abusive patent lawsuits [force] ... successful businesses to delay hiring new workers, raising wages, and developing new products.”⁴⁴
- Conversely, the IPR process has produced cost savings and quality improvements:
 - As a quality metric, the Court of Appeals for the Federal Circuit (“CAFC”) affirms over 90% of PTAB IPR validity decisions, and reverses under 5% of such decisions.⁴⁵ These quality metrics are superior to district courts, which face a reversal rate more than twice that of the PTAB.⁴⁶

- “[M]edian litigation costs for IPRs ranging from \$100,000 to \$350,000 depending on the type of case and amount in controversy [while] ... median total patent litigation costs ranging from \$700,000 to \$8 million depending on the type of case and amount in controversy.”⁴⁷
- PTAB-related cost savings from 2014-2019 were estimated at \$3 billion.⁴⁸

Taken together, these analyses all converge on the same point: allowing NPEs and other assertion entities to ratchet up America’s patent litigation risk premium functions as a *de facto* tax on US manufacturing and innovation.

Annex II

National Security Impact of Restricting Access to IPR

The NPRM appears to be at odds with the Administration’s US national security and technology leadership objectives, as outlined in the President’s Executive Order 14179, “Removing Barriers to American Leadership in Artificial Intelligence,” and the AI Action Plan. The latter states, in part, that:

Maintaining American leadership in AI necessitates that the US government work closely with industry to appropriately balance the dissemination of cutting-edge AI technologies with national security concerns. It is also essential for the US government to effectively address security risks to American AI companies, talent, intellectual property, and systems.⁴⁹

There is already evidence that – by pushing more patent cases into district court proceedings – the NPRM will increase “security risks to American AI companies, talent, intellectual property, and systems.”

While the USPTO has framed its NPRM as a mere procedural adjustment, its attempt to resurrect a 2023 regulatory proposal raises significant national security concerns. By substantially restricting access to IPR, the NPRM would force a greater number of patent disputes into federal district court or International Trade Commission (ITC) litigation – forums that allow sweeping discovery into US companies’ most sensitive trade secrets, and critical and emerging technologies – sometimes with dual-use or military end use applications.

This NPRM touches upon three interrelated national security interests:

1. Protection of critical technologies that underpin US economic and national security – including semiconductors, quantum computing, artificial intelligence (AI), and cybersecurity tools.
2. Prevention of adversarial exploitation of US judicial processes – including via foreign government-funded patent litigation that allows access to trade secrets “lawfully” through court-ordered discovery rather than via cyber theft.
3. Preservation of IPR as a safeguard against these abuses. IPR is a streamlined mechanism Congress created for USPTO to take a “second look” at its own patent grants, so as to make necessary corrections, including weeding out any issued claims that do not meet statutory requirements. This corrective process allows parties to avoid discovery-heavy litigation that exposes sensitive information.

Multiple congressional hearings, Government Accountability Office (GAO) reports, Department of Justice (DOJ) warnings, and intelligence assessments have documented a disturbing trend: foreign adversaries are using US litigation to gain access to sensitive US technologies.

USPTO’s NPRM would remove a primary procedural safeguard against the exposure of US technologies to adversarial entities.

A. How the IPR Process Protects US National Security

The Inter Partes Review (IPR) process, administered by the Patent Trial and Appeal Board (PTAB), serves a crucial role in protecting US innovation and technology leadership. It provides a streamlined, expert-driven, and limited-scope review of patent validity without triggering the sweeping discovery processes inherent in district court litigation. This allows USPTO to ensure that US issued patents claims are valid and resilient, thus helping maintain US global technology leadership, while minimizing harmful collateral impacts.

Unlike district court or ITC litigation, IPR sharply limits discovery. Parties may rely on published prior art, expert declarations, and limited technical testimony. They are not subjected to compelled production of internal R&D reports, design schematics, fabrication protocols, or source code repositories. This limited scope is by design: to correct patent office errors efficiently, while avoiding coercive tactics where a plaintiff uses litigation primarily to gain access to a defendant's proprietary technology or to drive up litigation costs and force an early settlement.

By contrast, district court and ITC patent litigation opens the door to the most invasive discovery rules in the American legal system. Long before the court or ITC issues a determination on patent validity, a patent plaintiff may immediately demand:

- Interrogatories requiring detailed written disclosures of design processes, engineering decisions, product architecture, encryption methods, semiconductor layouts, or manufacturing tolerances;
- Requests for production of source code, CAD/CAM design files, lithography masks, process development kits (PDKs), chemical formulae, composite material recipes, and quantum key distribution algorithms;
- Depositions of engineers and scientists, including those holding security clearances or working in classified environments;
- Site inspections, including cleanrooms, fabrication facilities, propulsion testbeds, or sensitive defense manufacturing sites;
- Third-party subpoenas to suppliers of critical and emerging technologies, as well as federal contractors and suppliers to the defense industrial base or federal laboratories.

In no other standard civil litigation context – torts, contracts, antitrust, or employment – are defendants routinely compelled to hand over the deepest layers of commercial and even national security-related trade secrets. This degree of economic and national security vulnerability is usually confined to patent litigation.

B. Exposure of Sensitive US Source Code and Trade Secrets to Adversary-backed Entities via Judicially Compelled Discovery

In April 2025, OSTP Director Michael Kratsios warned of the adversarial threats due to “foreign access to sensitive data” and “misuse, theft, and disruption” of US science and technology resources. These threats are already materializing in US court proceedings, as adversaries seek to exploit judicial discovery processes to gain access to US critical technologies.

For example, in *Yangtze Memory Technologies Co., Ltd (YMTC) v. Micron Technology, Inc., et al.*, Case No. 3:23-cv-05792-RFL, YMTC used its US patents to sue Micron Technology. Subsequently, YMTC sought access to Micron Technology information, including 73 pages of sensitive source code, which Micron argued could irreparably harm its interests.

Nevertheless, the Northern District of California granted YMTC's motion, and the Court of Appeals for the Federal Circuit declined to intervene. Micron then filed an emergency writ of mandamus to the US Supreme Court, arguing the lower courts ignored national security concerns and failed to enforce the protective order's limits. Micron stated:

The district court's discovery order will require Micron to turn over to the agents of a Chinese state-owned chip manufacturer, in paper form, sensitive information about Micron's 3D NAND memory products, with no adequate justification. Once that production is made, it can never be undone.

Ultimately, the PTAB’s IPR process proved pivotal in safeguarding Micron’s intellectual property. In March 2025, the Northern District of California stayed the YMTC litigation to allow Micron’s IPR challenges to proceed before the PTAB.

These risks are also well catalogued in a Report of the White House Office of Trade and Manufacturing Policy (OTMP), which describes adversarial efforts to “[a]cquire key technologies and intellectual property from ... the United States, [and to] capture emerging high technology industries that will drive future economic growth and advancements in the defense industry.”⁵⁰ That OTMP report lists five main vectors of such efforts, while the 2025 Annual Threat Assessment of the Office of the Director of National Intelligence (ODNI) lists six.⁵¹ Other US government organs have focused on the risk of adversarial entities exploiting judicial discovery orders in patent proceedings. For example:

- A House Judiciary Committee hearing that included a warning from Daryl Issa (R-CA) that China has “weaponized the US legal system”⁵² by financing or encouraging patent suits to extract proprietary data from US firms.⁵³
- A Senate Judiciary Committee hearing in which a former USG official responsible for China issues warned of foreign adversaries using US evidence processes in judicial discovery in a way that “pose[s] a risk of legalized trade secret misappropriation by foreign countries.”⁵⁴
- A Report from the House Select Committee on the Strategic Competition Between the US and the Chinese Communist Party that calls for safeguards to “prevent foreign adversaries from obtaining intellectual property through third party litigation funding.”⁵⁵
- A Letter from Sen. John Kennedy (R.-LA) to Chief Justice John Roberts and the Attorney General, warning that “[m]erely by financing litigation in the United States against ... corporations or highly sensitive sectors, a foreign actor can advance its strategic interests in the shadows.”⁵⁶
- A Justice Department investigation into whether “examining whether foreign entities are investing in US patent litigation to gain proprietary information that would help their own industries.”⁵⁷
- A GAO report reciting industry testimony that, “funding of US patent litigation from foreign entities has become significant in recent years... including [from] China, Saudi Arabia, and France.”⁵⁸
- Many other academic, industry, think tank and other reports raise similar concerns.⁵⁹

C. Why Protective Orders are Insufficient

Patent plaintiffs commonly assure defendants and courts that protective orders (POs) prevent misuse of sensitive information. But POs are limited in several ways:

Problem with Protective Orders	Why It Fails for National Security
Numerous potential points of failure	Protective orders cannot reverse exposure once knowledge has been acquired. They cannot prevent intentional or accidental leaks, cyber breaches of litigation repositories, unwitting disclosures during expert consultation, or foreign intelligence interception of shared litigation files.
Providing access to a trade secret under PO weakens its status as a trade secret	Once foreign engineers, consultants, or experts see sensitive tech, it is no longer “undisclosed,” and the access/knowledge that has been acquired cannot be undone (“unseen” or “unread”).
Penalties are not deterrent.	Fines, evidentiary sanctions, or even disbarment are insignificant when compared with the

	monetary value of exfiltrating a trade secret worth over \$1 billion or a proprietary process or information having national security consequences
Breaches are difficult to identify and trace.	Trade secrets may be exfiltrated from a discovery database by simple means. For example, the Micron v. YMTC discovery dispute revolved around printed paper copies of sensitive source code that could easily be xeroxed or replicated in other ways.
Enforcement is impractical across borders.	A US court cannot readily enforce contempt orders against foreign nationals with no US assets or presence.
POs allow consultants, experts, and funders to access material.	Technical experts may be non-US nationals; third-party financiers or partners are often undisclosed.

As Rep. Darrell Issa (R-CA) stated in 2025 in a House Judiciary Committee Trade Secrets hearing, “A protective order is just a promise. And frankly, it’s a promise that historically has not been kept when billions of dollars or geopolitical advantage are at stake.”⁶⁰

¹ BSA’s members include: Adobe, Alteryx, Asana, Atlassian, Autodesk, Avalara, Bentley Systems, Box, Cisco, Cohere, Cohesity, Dassault Systemes, Databricks, Docusign, Dropbox, Elastic, EY, Graphisoft, HubSpot, IBM, Informatica, Kyndryl, MathWorks, Microsoft, Notion, Okta, OpenAI, Oracle, PagerDuty, Palo Alto Networks, PTC, Rubrik, Salesforce, SAP, ServiceNow, Shopify Inc., Siemens Industry Software Inc., Trend Micro, TriNet, Veeam, Workday, Zendesk, and Zoom Communications Inc.

² In 2021, BSA members accounted for nearly 40 percent of all US patents issued to the top 10 grantees, and within that grouping, nearly 85 percent of the US patents issued to American companies. Increasingly, companies that are not BSA members – such as Huawei – have increased their share of US patent grants. IFI Claims Patent Services, 2022 Top 50 US Patent Assignees (“2022 Top 50 US Patent

Assignees”), available at: <https://www.ificlaims.com/rankings-top-50-2022.htm>

³ Business Software Alliance, Software Jobs Report (2021), at <https://software.org/wp-content/uploads/2021SoftwareJobs.pdf>

⁴ See 35 USC § 315(e)(2) (estoppel applies only where an inter partes review “results in a final written decision” and only as to grounds the petitioner “raised or reasonably could have raised”); see also H.R. Rep. No. 112-98, at 48–49 (2011) (explaining that estoppel attaches upon a final written decision and that IPR was designed as an “efficient system for challenging patents” without displacing a defendant’s ability to litigate invalidity in district court where no such decision issues); Cong. Research Serv., R42897, *Inter Partes Review of Patents: Implementation of the Leahy-Smith America Invents Act* 12–13 (2013) (confirming that “if the PTAB declines to institute review, or no final written decision is issued, estoppel does not apply, and the petitioner remains free to pursue invalidity arguments in district court”).

⁵ Sections 315(e)(1) and (2) establish what is commonly referred to as “estoppel” in *inter partes* review. In plain terms, if an IPR results in a final written decision from the PTAB under 35 USC § 318(a), the petitioner – and any real party in interest or privy – cannot challenge the same patent claim again on grounds that were raised or reasonably could have been raised during the IPR proceeding. Section 315(e)(1) bars the petitioner from bringing such

challenges again before the USPTO, and Section 315(e)(2) bars the petitioner from raising those same invalidity arguments later in federal district court or in the ITC.

The critical distinction between the AIA statute and the USPTO's NPRM is this: Under the AIA, estoppel only applies if the PTAB issues a final written decision; if the PTAB declines to institute review or dismisses the proceeding before a final decision, these estoppel provisions do not apply. The NPRM turns this statutory provision on its head, erasing this important distinction.

⁶ This proposal could also create a race to the PTAB and reward hastiness and speed over quality. This would be a costly endeavor for operating businesses just to be the "first in line" at the PTAB early on in district court litigation, often before infringement contentions are due and the plaintiff / patent owner identifies which claims it will be pursuing. Forcing petitioners to file their petitions before patent holder has even identified the claims that it intends to pursue would lead to less well-informed petitions, impeding the PTAB's own ability to assess the pertinence and weight of those petitions, and increasing the risk of misjudgment and miscalculation

⁷ USPTO, A Study of Unpatentability Findings in Inter Partes Review Final Written Decisions (2024), at: <https://www.uspto.gov/sites/default/files/documents/ppac-aia-ipr-study-20241121.pdf>

⁸ Id.

⁹ See US Patent & Trademark Office, Multiple Petitions Study 2021-2022 (2023) (According to USPTO, the "success rate" for serial petitions, i.e., "the number of instituted AIA trials based on serial petitions, also declined from 46 institutions (4% of all challenges to a patent by a petitioner) in fiscal year 2016 to only 3 institutions (0.3% of all challenges to a patent by a petitioner) in fiscal year 2022. Parallel petitions have similarly declined from 20% (FY2019) to 7% (FY2022).")

¹⁰ This proposed universal bar also disregards USPTO's own prior recognition that "that there may be circumstances in which more than one petition may be necessary, including, for example, when the patent owner has asserted a large number of claims in litigation or when there is a dispute about priority date requiring arguments under multiple prior art references."

¹¹ H.R. Rep. No. 112–98, at 39–40 (2011).

¹² 5 USC § 706(2)(A)–(C).

¹³ *Utility Air Regulatory Group v. EPA*, 573 US 302, 328 (2014).

¹⁴ *Cuozzo Speed Techs., LLC v. Lee*, 579 US 261 (2016) ("Congress designed a hybrid proceeding. The purpose of inter partes review is not only to resolve patent-related disputes among parties, but also to protect the public's 'paramount interest in seeing that patent monopolies . . . are kept within their legitimate scope.'" (*citing to Precision Instrument Mfg. Co. v. Automotive Maintenance Machinery Co.*, 324 US 806)).

¹⁵ *Thryv Inc. v. Click-to-Call Techs., LP*, 140 S. Ct. 1367, (2020) ("By providing for inter partes review, Congress, concerned about overpatenting and its diminishment of competition, sought to weed out bad patent claims efficiently.")

¹⁶ *Id.* At 1374-75.

¹⁷ See 5 USC § 706(2)(A), (C).

¹⁸ See e.g., Executive Order 14192, *Unleashing Prosperity Through Deregulation*, Jan. 31 2025, 90 Fed. Reg. 9065, at: <https://www.whitehouse.gov/presidential-actions/2025/01/unleashing-prosperity-through-deregulation/>; Executive Order 14219, *Ensuring Lawful Governance and Implementing the President's "Department of Government Efficiency" Deregulatory Initiative*, Feb. 19 2025, 90 Fed. Reg. 10583, at: <https://www.whitehouse.gov/presidential-actions/2025/02/ensuring-lawful-governance-and-implementing-the-presidents-department-of-government-efficiency-regulatory-initiative/>

¹⁹ See *Motor Vehicle Mfrs. Ass'n v. State Farm*, 463 US 29, 43 (1983) ("the agency must examine the relevant data and articulate a satisfactory explanation for its action").

²⁰ See WSJ, *CBO Cost Estimates for IPR Bill*.

²¹ The NPRM falls short in several respects:

- No empirical showing of a flood of excessive or abuse IPR petitions: Relying on a few cherry-picked statistics, while ignoring many other USPTO and independent studies, the NPRM falls far short of offering a substantial evidentiary showing that the existing institution standard has led to excessive, duplicative, or abusive filings that would warrant the categorical bars and mandatory stipulations proposed in the NPRM.²¹
- No quantified economic analysis: The NPRM omits an assessment of how restricting IPR access will shift costs toward district-court litigation, increase attorney-fee expenditures, and raise consumer prices for technology goods and services.
- No meaningful assessment of alternatives: In their rulemakings, agencies must consider less-restrictive means before adopting categorical rules, such as those proposed here.

- No justification for departing from established policy. Agencies must explain departures from established policy. Yet the NPRM fails to justify abandoning approaches historically applied by the PTAB. By adopting proposals similar to those advanced under the prior Administration – proposals widely criticized and never finalized – the USPTO now risks reinstating a discredited policy framework that undermines AIA objectives and creates legal uncertainty.
- No evaluation of the national and economic security implications of limiting IPR access, including increased exposure of US technology firms to foreign-backed patent litigation.
- No assessment of the costs to small businesses and startups forced to defend against weak patents in district court.
- No consideration of the risks from the transfer of sensitive technical information through court-ordered discovery in judicial litigation—risks the PTAB process was designed to mitigate.

²² US Patent & Trademark Office, Multiple Petitions Study 2021-2022 (2023), at: https://www.uspto.gov/sites/default/files/documents/executive_summary_ptab_multiple_petitions_study_fy2021-2022_update.pdf

²³ United States Patent & Trademark Office, *PTAB Petitions Data* (P-TACTS Case No. 1557991), at: <https://ptacts.uspto.gov/ptacts/public-informations/petitions/1557991/download-documents?artifactId=Ljfq7dREv1Oee-GI8Haf3O-mHfX939Wuyf1eCulsnCwmDBfJY8DX880> (“Out of 3,900,000 live patents in FY 2024, only 1,037 patents were in AIA proceedings, and – of those – 349 patents were partially invalidated and just 141 patents were fully invalidated by the PTAB.”); United States Patent and Trademark Office, *Advancing the AIA’s goal to strengthen the US IP system*, (Nov. 22, 2-24), at: www.uspto.gov/blog/advancing-aias-goal-strengthen-us-ip-system#4

²⁴ *Id.* Other data sources confirm the extremely low IPR challenge rates reflected in USPTO data. For example, fewer than 0.5% of all patents have been challenged via the IPR process. See Engine, *Patent Review is Working for Start-Ups* (2020) at: <https://innovatewithoutfear.engine.is/wp-content/uploads/2020/01/IPR-is-working-one-pager.pdf> (explaining that, “over 10,000 petitions have been filed with the PTAB – which is a very small fraction of the nearly 3 million active US patents. But companies report fewer frivolous patent demands and estimates suggest innovators have saved over \$2 billion since implement of the IPR. ... An exceedingly small portion of patents are challenged before the PTAB.”). Furthermore, approximately 72% of patents asserted in court have never been challenged in IPR proceedings at all, meaning that most litigation proceeds without PTAB involvement. See RPX, *The Overlap Between Patents Asserted in District Court and Challenged at the PTAB* (2023), at: www.rpxcorp.com/data-byte/the-overlap-between-patents-asserted-in-district-court-and-challenged-at-the-ptab/

²⁵ The Perryman Group, *The Potential Economic Costs to the US Government of Discretionary Denial of Inter Partes Review Based on Criteria such as the NHK-Fintiv Rules* (2023), at: www.perrymangroup.com/media/uploads/report/perryman-the-potential-economic-costs-to-the-us-government-of-discretionary-denial-of-inter-partes-review-based-on-criteria-such-as-the-nhkfintiv-rules-08-25-23.pdf

²⁶ Peter Loftus & Liz Essley Whyte, *Drug-Industry Bill Would Raise Medicare Costs*, Wall St. J. (Aug. 31, 2015), <https://www.wsj.com/articles/drug-industry-bill-would-raise-medicare-costs-1441063248> (“WSJ, *CBO Cost Estimates for IPR Bill*”)

²⁷ More specifically, EO 12866 requires agencies to (among other things):

- Examine whether existing regulations have contributed to the problem the rule seeks to address;
- Design regulations in the most cost-effective manner while considering innovation, predictability, and compliance costs;
- Assess both costs and benefits and regulate only when benefits justify costs;
- Avoid duplicative or inconsistent regulation across agencies; and
- Tailor regulation to impose the least burden on society.

EO 13563 requires agencies to (among other things):

- Select among alternative approaches those that maximize net benefits;
- Specify performance objectives rather than prescribing methods;
- Provide meaningful public comment periods (generally at least 60 days); and
- Promote coordination and harmonization among overlapping regulatory regimes.

USPTO’s NPRM falls short of these standards.

²⁸ United States Trade Representative, *The President's 2025 Trade Policy Agenda and 2024 Annual Report of the President of the United States on the Trade Agreements Program* (Feb. 28 2025) (“USTR Trade Policy Agenda”), at: ustr.gov/sites/default/files/files/reports/2025/2025%20Trade%20Policy%20Agenda%20WTO%20at%2030%20and%202024%20Annual%20Report%2002282025%20--%20FINAL.pdf

²⁹ *Id.*

³⁰ Unified Patents, *2022 Patent Dispute Report* (Jan. 5, 2023), at: <https://www.unifiedpatents.com/insights/2023/1/4/2022-patent-dispute-report>

³¹ See Lex Machina, *Patent Litigation Report 2024* (March 2024), available at: https://ptacts.uspto.gov/ptacts/public-informations/petitions/1557430/download-documents?artifactId=jft2Z4NUV3R0EWgHlw6klgf7gQrcezpSuUqHa1G_p4vv09dSpREtmrA See p. 11 *Figure 7 – Most Active Plaintiffs by Cases Filed*. According to Lex Machina, these two entities accounted for 393 out of the 507 cases filed by the top three plaintiffs, which corresponds to 77.51% of the cases filed within this group.

³² HighTech-Solutions, *Patent Sources and Litigation Target Characteristics: NPE Risk for Pre-IPO Companies* (March 2023), at: <https://lotnet.com/wp-content/uploads/2023/03/HTS-NPE-Risk-for-Pre-IPO-Companies.pdf>. After manufacturers, NPEs sued some 1,100 service providers in the US – especially software and other technology leaders – accounting for roughly 23% of the 5,000 companies targeted. Other targets include financial institutions, mining companies, and agricultural producers. In 2023, 3,111 patent cases were filed in US courts. In 2024, the number of filings was 20% higher than 2023. Compare Lex Machina, *Patent Litigation Report 2024* (March 2024), available at: https://ptacts.uspto.gov/ptacts/public-informations/petitions/1557430/download-documents?artifactId=jft2Z4NUV3R0EWgHlw6klgf7gQrcezpSuUqHa1G_p4vv09dSpREtmrA with LexisNexis, *Lex Machina Releases 2025 Patent Litigation Report* (June 2025) (“LexisNexis PR on 2025 Patent Litigation Report”), at www.lexisnexis.com/community/pressroom/b/news/posts/lex-machina-releases-2025-patent-litigation-report

³³ Cohen, Gurun, and Kominers, *Patent Trolls: Evidence from Targeted Firms*. Harvard Business School Finance Working Paper No. 15-002 (June 8, 2018), at: <https://ssrn.com/abstract=2464303> (“According to RPX Corporation, roughly 69% of NPEs’ patents were acquired externally (purchased) by NPEs and their subsidiaries, whereas 19% were originally assigned to NPEs.” (“HBS Patent Troll Study”).

³⁴ *Id.*

³⁵ Max Baucus, *It's Time for the US to Tackle Patent Trolls*, Harvard Business Review (Sept. 16, 2022), at: <https://hbr.org/2022/09/its-time-for-the-u-s-to-tackle-patent-trolls> (citing James Bessen and Michael Meurer, *Direct Costs from NPE Disputes*, 99 Cornell L. Rev. 387 (2014), at: scholarship.law.cornell.edu/clr/vol99/iss2/3/).

³⁶ LexisNexis PR on 2025 Patent Litigation Report.

³⁷ Reuters, *Intel wins US appeal to overturn \$2.18 billion VLSI patent verdict* (2023), at <https://www.reuters.com/technology/intel-wins-us-appeal-overturn-218-billion-vlsi-patent-verdict-2023-12-04/> (VLSI, the patent assertion entity, is reportedly owned by investment funds managed by Fortress Investment Group, which is itself owned by an Abu Dhabi, UAE sovereign wealth fund).

³⁸ These costs apply to relatively larger NPE cases in which the amount “at risk” is at least \$25 million, but – as noted above – damages claims and awards are often far higher. Many manufacturers are sued multiple times each year by different NPEs, with different NPEs sometimes linked to a related foreign funding entity and sometimes not. See American Intellectual Property Law Association, *Report of the Economic Survey (Relevant Excerpts)*, (August 2021), at: <https://ipwatchdog.com/wp-content/uploads/2021/08/AIPLA-Report-of-the-Economic-Survey-Relevant-Excerpts.pdf>

³⁹ HBS Patent Troll Study, *supra* note 33. Based on a review of 21,300 litigations filed by NPEs prior to 2015, this publication found that NPEs’ purchased 69% of their patents to assert them against their targets in US courts. Indeed, as of 2015, fully 11.25% of all US publicly traded firms had been sued by an NPE - a figure that has risen in the ensuing decade. The Study notes:

[F]irms losing to NPEs (either in court or through settlement) reduce their research and development investment by roughly 20% going forward, relative to ex ante identical firms. Thus, our evidence suggests that NPE litigation may lead to a real decrease in innovation at targeted firms. Of course, when NPEs win lawsuits, some of the losses to the targeted firms—part of the settlement or damage awards, but not the legal costs—should eventually flow back to end inventors. The best available estimates suggest, however, that only a small fraction of the damages won by NPEs are actually paid back to innovators. (based on a finding that “only five cents of every dollar in damages paid by PEs to NPEs makes it back to end innovators.”)

Furthermore, cash-rich manufacturers or other producers in the US are much more likely to be targeted by NPEs. A one-standard-deviation increase in a firm’s cash holdings doubles its probability of being targeted by an NPE, with the probability increasing from ~8.6% to ~16%.

⁴⁰ David Simon, *Why Patent Policy Matters in the China Challenge*, DC Journal – InsideSources (Aug. 15, 2025), at: <https://dcjournal.com/why-patent-policy-matters-in-the-china-challenge/>

⁴¹ Kenneth Huang, et al., *The Impact of Non-Practicing Entity Litigation on Firm Innovation Strategies*, University of Pennsylvania Mack Institute for Innovation Management (January 16, 2022), at:

https://mackinstitute.wharton.upenn.edu/wp-content/uploads/2022/03/Huang-Kenneth-et-al_Escaping-the-Patent-Trolls.pdf

⁴² Catherine Tucker et al., *The Effect of Patent Litigation and Patent Assertion Entities on Entrepreneurial Activity*, 45 IDEAS 218-231 (2016), at: <https://ideas.repec.org/a/eee/respol/v45y2016i1p218-231.html>; see also Ian Appel, et al., *Patent Trolls and Startup Employment*, Harvard Business School Working Paper, No. 17-072 (Feb. 2017), at: <https://www.hbs.edu/faculty/Pages/item.aspx?num=52278>

⁴³ R Street Institute, *Ending the Patent Troll Extortion Racket* (July 22, 2013), at: <https://www.rstreet.org/commentary/ending-the-patent-troll-extortion-racket/>

⁴⁴ Marc Hyden, *Patent Trolls, Legitimate Plaintiffs Expose Flawed Patent Process*, R Street Institute – Commentary (July 24, 2023), at: <https://www.rstreet.org/commentary/patent-trolls-legitimate-plaintiffs-expose-flawed-patent-process/>

⁴⁵ See Congressional Research Service, *The Patent Trial and Appeal Board and Inter Partes Review*, R48016 (May 28, 2024), at www.congress.gov/crs-product/R48016 (“CRS PTAB Report”)

⁴⁶ *Id.* (“Notably, the Federal Circuit reverses district courts on patent validity issues at a higher rate (12.1% reversal rate) than it does PTAB decisions (4.8% reversal rate).”)

⁴⁷ See *id.* See also, Stephen Yelderman, *Prior Art in Inter Partes Review*, 104 IOWA L. REV. 2705, 2706 (2019) (“[T]he cost of litigating an IPR to a final written decision was about \$324,000, which pales in comparison to the \$1–2 million reported cost of litigating a patent in court.”)

⁴⁸ Jennifer Gallagher, *Patent Quality Initiative (PQI) Releases Economic Report Showing the AIA Led to Over 13,000 Jobs and Grew the US Economy by \$3 Billion Since 2014*, Unified Patents (June 24, 2020), <https://www.unifiedpatents.com/insights/2020/6/23/the-perryman-group-releases-economic-report-an-assessment-of-the-impact-of-the-america-invents-act-and-the-patent-trial-and-appeal-board-on-the-us-economy>

⁴⁹ The White House, *America’s AI Action Plan*, p. 12 (July 23, 2025), available at <https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf>; Echoing this viewpoint, Michael Kratsios, Director of the Office of Science and Technology Policy, stated in April 2025: “We face many dangers as a nation, but thanks to decades of feckless American leaders, China in particular has grown into both a geopolitical rival and technological competitor. This threat requires us to protect our science and technology resources with heightened vigilance, and defend the vital work American researchers do in public and corporate contexts alike from misuse, theft, and disruption.” See The White House, *Remarks by Director Kratsios at the Endless Frontiers Retreat* (April 14, 2025), at: <https://www.whitehouse.gov/articles/2025/04/remarks-by-director-kratsios-at-the-endless-frontiers-retreat/> (emphasis added).

⁵⁰ White House Office of Trade and Manufacturing Policy, *How China’s Economic Aggression Threatens the Technologies and Intellectual Property of the United States and the World* (June 19 2018), available at <https://www.whitehouse.gov/wp-content/uploads/2018/06/FINAL-China-Technology-Report-6.18.18-PDF.pdf>

⁵¹ Office of the Director of National Intelligence. *Annual Threat Assessment of the US Intelligence Community* (March 2025), at: <https://www.dni.gov/files/ODNI/documents/assessments/ATA-2025-Unclassified-Report.pdf>. (“China is accelerating its S&T progress through a range of licit and illicit means, to include investments, intellectual property acquisition and theft, cyber operations, talent recruitment, international collaborations, and sanctions evasion.”)

⁵² US House of Representatives, Committee on the Judiciary, Subcommittee on Courts, Intellectual Property, Artificial Intelligence, and the Internet, “*Protecting Our Edge: Trade Secrets and the Global AI Arms Race*,” *Hearing*, 119th Cong., 1st Sess., (May 7, 2025), at: <https://www.congress.gov/event/119th-congress/house-event/118204/text>; See also, US House of Representatives, Committee on the Judiciary, Subcommittee on Courts, Intellectual Property, Artificial Intelligence & the Internet, “*Foreign Abuse of US Courts*” 119th Cong., event 118511, (July 22, 2025) opening remarks of Rep. Daryl Issa (R-CA), at: <https://www.congress.gov/event/119th-congress/house-event/118511> In this hearing, Chairman Issa stated, “we see and have documented instances of foreign funding from China, Russia, and other sources who use shell companies to hide where they come from.”

⁵³ US House of Representatives, Committee on the Judiciary, Subcommittee on Courts, Intellectual Property, and the Internet, “*The US Intellectual Property System and the Impact of Litigation Financed by Third-Party Investors and Foreign Entities*” 118th Cong., Serial No. HHRG-118-JU03 (June 12, 2024). Available at <https://www.govinfo.gov/content/pkg/CHRG-118hrrg56096/pdf/CHRG-118hrrg56096.pdf>. One witness connected trade secret theft to judicial discovery processes as follows: “The third-party litigation funding is used as a vehicle for investment, or as a means of achieving other strategic goals of the funder, including harming strategic or geopolitical competitors or using the courts and the litigation discovery process as a conduit to gain access to sensitive trade secrets and confidential.”

⁵⁴ Mark A. Cohen, Statement before the Senate Committee on the Judiciary, Subcommittee on Intellectual Property, *Foreign Competitive Threats to American Innovation and Economic Leadership* (Apr. 18, 2023), available at <https://www.judiciary.senate.gov/imo/media/doc/2023-04-18%20PM%20-%20Cohen%20-%20Testimony.pdf>

⁵⁵ US House of Representatives, Select Committee on the Strategic Competition Between the United States and the Chinese Communist Party, *Reset, Prevent, Build: A Strategy to Win America’s Economic Competition with the Chinese*

Communist Party (Dec. 12, 2023), available at <https://selectcommitteeontheccp.house.gov/sites/evo-subsites/selectcommitteeontheccp.house.gov/files/evo-media-document/reset-prevent-build-scc-report.pdf>

⁵⁶ US Senator John Kennedy, *Kennedy urges Roberts, Garland to take action to protect national security from foreign actors meddling in US courts* (Jan. 9 2023), at: <https://www.kennedy.senate.gov/public/press-releases?ID=1FBC312C-94B8-409B-B0A3-859A9F35B9F5>

⁵⁷ Karen Freifeld, *US Justice Dept examining if foreign adversaries fund US patent lawsuits to steal trade secrets*, Reuters, (Dec. 6, 2024), at <https://www.reuters.com/legal/government/us-justice-department-examining-foreign-funding-patent-lawsuits-2024-12-06/>; US GAO TPLF Report; US Dep't of Justice, *Preventing Access to US Sensitive Personal Data and Government-Related Data by Countries of Concern*, 28 C.F.R. pt. 202 (Jan. 8 2025), 90 Fed. Reg. 1637 (Jan. 8 2025) (final rule). Available at <https://www.federalregister.gov/documents/2025/01/08/2024-31486/preventing-access-to-us-sensitive-personal-data-and-government-related-data-by-countries-of-concern> (NSD warning that foreign adversaries access sensitive data about Americans not only through cyberattacks or theft, but through lawful processes, which include court-ordered discovery).

⁵⁸ See GAO TPLF Report. The GAO TPLF report also contains testimony: (1) that "foreign entities could be funding lawsuits against US companies as a strategy to divert their financial resources and distract from their primary business operations;" (2) on "concerns about foreign entities gaining access to sensitive company information during the discovery process—a process in which companies typically share detailed information on how their technology works—and using it to undermine US industry;" (3) that "in the semiconductor industry, knowledge about manufacturing processes is particularly sensitive. Therefore, if a foreign competitor were to learn of a US company's manufacturing process through discovery during litigation, it might be able to implement that process in its factories abroad without the US company's knowledge"; and (4) that 30-70% of patent cases may be subject to third party litigation funding, whereas only 4-6% of such cases are brought by individual inventors.

⁵⁹ See also Wall Street Journal, *Patent Lawsuits Are a National-Security Threat* (2024), https://www.wsj.com/opinion/patent-lawsuits-are-a-national-security-threat-secretly-funded-litigation-f3cd5bd4?mod=opinion_feat2_commentary_pos1 (It is "reasonably likely that foreign powers are funding the VLSI [v. Intel case, given that] ... foreign adversaries are already engaged in widespread industrial espionage and technology expropriation against US companies."); Peter Choharis, *National Security Implications of Foreign Third-Party Litigation Financing* (May 2025) (Perspective, American Security Project) (on file at <https://www.americansecurityproject.org/wp-content/uploads/2025/05/Ref-0302-Natsec-Implications-of-Foreign-Third-Party-Litigation-Financing.pdf>) ("An American Security Project analysis stating that, "outside funding of patent litigation enables companies owned or controlled by US adversaries to gain access to valuable IP that is sensitive to US national security interests [including] ... artificial intelligence, supercomputing, pharmaceuticals, computer chip manufacturing, and aeronautics, among others. These national security risks are especially acute for manufacturing processes, which enable rivals to create the stolen product more quickly, cheaply, and accurately."); Center for Strategic and International Studies (CSIS), *Is Third-Party Litigation Financing a National Security Problem?* (Feb. 23 2024), at: <https://www.csis.org/analysis/third-party-litigation-financing-national-security-problem> (stating that, Third Party Litigation Funding "introduces into the US legal system ... a potential backdoor for foreign powers to access sensitive information that arises from a lawsuit."); Institute for Legal Reform, *ILR Briefly – A New Threat: The National Security Risk of Third Party Litigation Funding* (2022), at: <https://instituteforlegalreform.com/research/ilr-briefly-a-new-threat-the-national-security-risk-of-third-party-litigation-funding/> (describing "foreign adversaries of the United States ... undermin[ing] US national economic and security interests through the infiltration of the American litigation system."); Institute for Legal Reform, *Tackling Foreign Manipulation – The Urgent Need for Reform in Third Party Litigation Funding* (2024), at: <https://instituteforlegalreform.com/blog/tackling-foreign-manipulation-the-urgent-need-for-reform-in-third-party-litigation-funding/>; Bloomberg Law, *China Firm Funds US Suits Amid Push to Disclose Foreign Ties* (2023), at news.bloomberglaw.com/business-and-practice/china-firm-funds-us-lawsuits-amid-push-to-disclose-foreign-ties (reporting that PurpleVine IP, a Shenzhen, China-based third-party litigation investment firm, is financing many patent lawsuits in US courts against non-Chinese electronics and semiconductor companies); Maya Steinitz, *Whose Claim is This Anyway? Third-Party Litigation Funding*, 95 Minn. L. Rev. 1268, 1270 (2011) (warning about "China Investment Corporation (CIC)... fund[ing] a suit against an American company in a sensitive industry such as military technology" and "obtaining highly confidential documents containing proprietary information regarding sensitive technologies from the American defendant corporation.")

⁶⁰ See e.g., Adam M. Josephs, *The Availability of Discovery Sanctions for Violations of Protective Orders*, 80 U. Chi. L. Rev. 1027, 1030–31 (2013) (noting that protective orders are only as valuable as they are enforceable particularly if a party cannot fully trust that its information will be adequately protected); Ramona L. Lampley, *False Security: How Courts Have Improperly Rendered the Protections of the Protective Order Illusory*, 89 Denv. U. L. Rev. Online 55, 56–57 (2011) (cautioning that practitioners and their clients should be wary of relying too much on the perceived protections of a blanket protective order.); observing that courts have allowed protective orders to become so routine and so broad that their protections are largely illusory); Fed. Judicial Ctr., *Confidential Discovery: A Pocket Guide on Protective Orders* 12–14 (2012) (emphasizing that protective orders do not guarantee absolute confidentiality, and cautioning that overreliance carries inherent risk of later disclosure or judicial modification).