

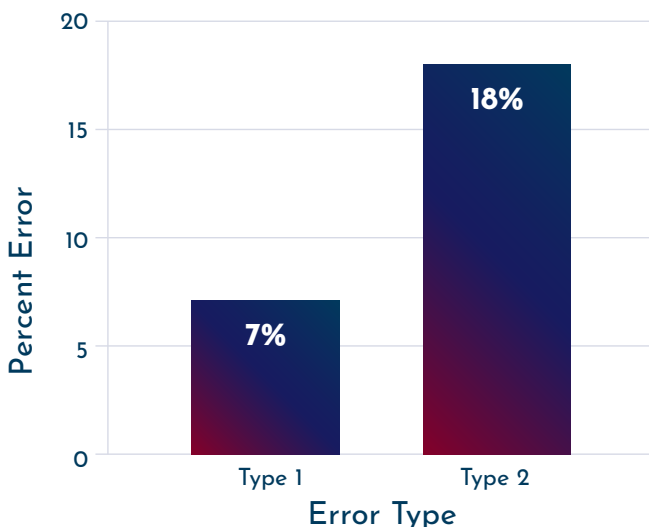
Issue Brief: Patent Quality in the United States

In September 2024, the nonprofit, nonpartisan Sunwater Institute published a [study](#) examining patent quality in the United States. The report found that the overall quality of patents issued by the U.S. Patent and Trademark Office is high and compares favorably to the quality of patents issued by other major patent offices worldwide. It also found that the USPTO rejects valid patents at a significantly higher rate than it grants invalid ones.

C4IP commends the Sunwater Institute for its thorough research and hopes that the key findings of the report, explained below, will shape a new era of honest and informed policy discussion.

1. The USPTO grants invalid patents at a low rate, which compares favorably to other nations' patent offices.

- The study found that the USPTO commits “Type 1” errors — granting a patent claim that is statutorily invalid — approximately 7% of the time.
- The USPTO’s Type 1 error rate compares favorably with other offices around the world, such as the Japan Patent Office, the European Patent Office, and the Korean Intellectual Property Office.
- These findings indicate that, in a global context, the United States is doing well at preventing the issuance of “bad” patents.



“Type 1” error rate is the rate at which the USPTO grants invalid patent claims, while “Type 2” error rate is the rate at which it denies valid claims. Original graph courtesy of the Sunwater Institute.

2. The USPTO rejects valid patents at a significantly higher rate than it grants invalid ones.

- The study determined that the USPTO commits “Type 2” errors — rejecting a patent claim that meets the statutory criteria for patentability — approximately 18% of the time.
- These unwarranted rejections deprive the U.S. economy and consumers of beneficial new technologies and weaken inventors’ trust in the patent system.
- Lowering the rate at which the USPTO rejects valid patents is critical for bolstering U.S. economic competitiveness and national security. These errors limit America’s innovative output, and policymakers should urge the USPTO to grant more valid patents.

3. Invalidation rates in federal court and at the Patent Trial and Appeal Board (PTAB) are unreliable metrics for judging overall patent quality.

- Patents challenged and invalidated in court and at the PTAB have been systematically filtered from the overall pool of patents by the litigation process, making them a biased and unrepresentative sample of the larger pool.
- Invalidation rates of 40-60% are to be expected, as this reflects the uncertainty surrounding the small subset of litigated patents that reach a final judgment.
- Due to the biased selection of challenged and invalidated patents, invalidation rate data is not a reliable metric for judging the quality of the overall pool of patents.