

Reforming the Patent System

A Hamilton Project proposal by Lisa Larrimore Ouellette and Heidi Williams of Stanford University offers several reforms to the U.S. patent system to make it work more effectively and facilitate technological innovation. Specifically, Ouellette and Williams' proposal would:

- Require U.S. patent applications to distinguish hypothetical experimental results (i.e., prophetic examples) from real data.
- Mandate more transparent and standardized disclosure of patent ownership.
- Increase uniformity in patent terms across inventions.

Issue Overview

- **Technological innovation helps drive long-run economic and productivity growth.** While governments also rely on research and development tax credits and publicly funded research subsidies, the patent system is the most prominent policy lever available to spur innovation.
- **The U.S. patent system falls short in several clear ways:**
 - ♦ Patent applications tend to include poorly labeled “prophetic” examples that can mislead researchers and innovators;
 - ♦ Current patent ownership is often unclear because owners are not mandated to disclose ownership in transparent and standardized ways; and,
 - ♦ Effective patent terms—depending on the product and duration of testing—are uneven, which poses a disadvantage to the commercial viability of inventions requiring longer trials.

The Challenge

Achieving robust productivity growth is a prerequisite for raising living standards. Unfortunately, productivity growth has slowed since the early 2000s. While the exact causes of this slowdown in productivity are uncertain, it is important for policymakers to improve the incentive structures for technological innovation via reforms to the U.S. patent system to increase and sustain economic growth.

Despite a lack of research consensus regarding the effects of patents on innovations, Ouellette and Williams identify three opportunities to improve the patent system that are well-rooted in available evidence: requiring U.S. patent applications to distinguish hypothetical, experimental results from real data; mandating patent owners provide more transparent and standardized disclosure of patent ownership; and, increasing uniformity in patent terms across inventions.

The Path Forward

Ouellette and Williams propose the following reforms to improve the patent system:

- 1. Require U.S. patent applications to distinguish hypothetical, experimental results from real data.** Inventors often obtain patents based on prophetic examples, which predict the outcomes of various experiments, procedures, and protocols without having actually implemented the research. More-clearly identifying prophetic examples would avoid confusing key audiences (e.g., scientists, investors, foreign patent examiners) while still maintaining patentees' legal rights.
- 2. Mandate patent owners provide more transparent and standardized disclosure of patent ownership.** After a patent is filed, patent owners can voluntarily report subsequent changes in ownership—but there is no legal requirement for them to do so. Increased transparency in patent ownership could help reduce transaction costs in technology markets by identifying patent owners, allowing market participants to determine whether their planned activities require licensing.
- 3. Increase uniformity in patent terms across inventions.** In the pharmaceutical industry, for example, a drug that requires a longer clinical trial—and thus, is slower to arrive on the market—often has a shorter patent life because they are filed before clinical trials begin. Yet the reduced effective periods of market exclusivity can impact the commercial viability of firms making investments in developing much needed, potentially life-saving new products. Amending the 1984 Hatch-Waxman Act to start the effective market exclusivity period for new drugs at the time of approval for sale, rather than at the time of patent filing, would help to equalize effective patent life across more inventions. Combined with reductions in effective pharmaceutical patent terms achieved through crackdowns on strategic behavior such as pay-for-delay, this reform would help to create more uniformity in effective patent life.

Ouellette and Williams argue that improving the efficiency of the patent system is a worthwhile effort, despite the uncertainties that exist surrounding the overall impact of patents on innovation and productivity. The current patent system offers several opportunities to enhance efficiency and transparency, thereby contributing to faster long-run economic growth.

About the Authors

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