

## Research Brief for the Lay Person: Intellectual Property Policy

### Context

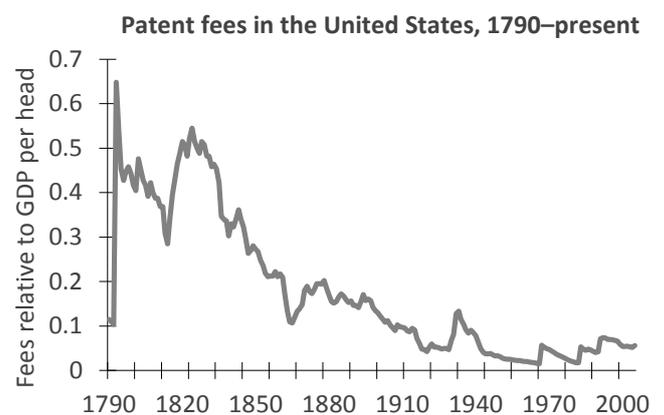
It is easy for the owner of a car to prevent others from using it. He or she merely has to keep the doors locked and hide the keys. Much the same can be said for all other tangible assets, that is, anything that can be physically touched. It is, however, more difficult to exclude others from co-opting and using intangible assets, such as ideas – these can indeed be stolen, often without the owners even noticing. Intellectual property (IP) rights can be seen as padlocks for intangible assets. Patents are one of the most common types of IP rights which enable owners to exclude others from using and copying their inventions.

An important benefit of the patent system is that it can increase investment in research and development. Pharmaceutical companies would be reluctant to invest millions of dollars in the development of a new drug if competitors were allowed to copy it. Yet, there are also costs associated with the patent system, and many observers report that it is not working smoothly.

### My contribution

My research aims at finding ways to improve the patent system. One major issue facing patent offices is the soaring demand for patents. This so-called ‘global patent warming’ makes it difficult for patent offices to examine patent applications in a reasonable amount of time and with a high enough degree of accuracy. The delay in approving patents has become excessive and patents of dubious quality are being issued. Long pendency and low-quality patents are detrimental to technological and economic progress.

In theory one could raise patent fees in order to ‘cool’ the patent system, and indeed patent fees are cheap from an historical point of view (see figure). Until recently little was known about how patent rates respond to fee changes. I have shown that patenting has similar price sensitivity (‘elasticity’ in economists’ jargon) to oil and cigarettes. A 10-per cent increase in fees leads to a 3 to 5 per cent reduction in the number of patent applications. (Together with [Bruno van Pottelsberghe](#)).



### Impact

Estimating the price elasticity of demand for patents matters for policy makers. A large number of citations to my work come from policy-directed reports, which is testament to the importance of this research in developing better policy. My work has been cited by organizations such as the European Commission, the European Patent Office, the UK IP Office, the World Intellectual Property Organization and the US Patent and Trademark Office, to name but a few.

### Ongoing research

My next step is to study whether patent fees can be used to filter out low-quality patents. We now know that fees affect the number of patent applications, but we do not know whether they affect the quality of patent applications. The theory suggests that they should, but we lack empirical evidence on this question. Resolving this will provide a better understanding about the use of fees as a policy tool, especially in the current context of significantly poor quality patents entering the system. (Together with [Adam Jaffe](#)).

G. de Rassenfosse and B. van Pottelsberghe. 2007. Per un pugno di dollari: A first look at the price elasticity of patents. *Oxford Review of Economic Policy*, 23(4):588–604

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