

Scaling the Patent System

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Why do firms in some industries ignore patents when developing new products? This paper posits a simple but novel answer to this long-puzzling question: firms ignore patents because they are unable to discover the patents their activities might infringe. The costs of finding relevant patents, which we call discovery costs, are prohibitively high.

Not all industries face high patent discovery costs. Chemical patents are "indexable," meaning that relevant patents can be efficiently retrieved by chemical formula. As a result, discovery costs in the chemical and pharmaceutical industries are low, and inadvertent infringement by firms in these industries is rare. But many other patent categories are not indexable, and in some cases that makes avoiding infringement practically impossible. In software, for example, patent clearance by all firms would require many times more hours of legal research than all patent lawyers in the United States can bill in a year. The result has been an explosion of patent litigation.

This paper attacks two core premises of patent law — that parties are always able to respect each other's patent rights, and that firms should be punished for infringement even if they could not have avoided it. It concludes with several suggestions for how to change the patent system to alleviate the problems created by non-indexable patents.

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