

All Patents Great and Small: A Big Data Network Approach to Valuation

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Andrew W. Torrance, University of Kansas - School of Law

Jevin D. West, University of Washington

Abstract

Measuring patent value is an important goal of scholars in both patent law and patent economics. However, doing so objectively, accurately, and consistently has proved exceedingly difficult. At least part of the reason for this difficulty is that patents themselves are complex documents that are difficult even for patent experts to interpret. In addition, issued patents are the result of an often long and complicated negotiation between applicant and patent office (in the United States, the United States Patent & Trademark Office (USPTO)), resulting in an opaque "prosecution history" upon which the scope of claimed patent rights depends. In this Article, we approach the concept of patent value by using the relative positions of issued United States (U.S.) patents embedded within a comprehensive patent citation network to measure the importance of those patents within the network. Thus, we tend to refer to the "importance" of patents instead of "value," but there is good reason to believe that these two concepts share a very similar meaning.

Keywords: patent, patent value, patent law, patent economics, United States Patent & Trademark Office, USPTO, citation, imprimatur

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