

## *Are Litigated Patents More Important?*

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Various correlates of patent value, influence, and importance have been proposed. Among the more prominent of these are payment of maintenance fees, size of patent family, number of claims, and how frequently a patent has been litigated. We test the hypotheses that (1) litigated patents tend to be more important than average and (2) patent importance rises with the level of court (that is, district court, Court of Appeals for the Federal Circuit (“CAFC”), and United States Supreme Court) patent litigation reaches. Citations are widely regarded to be useful indicators of the technological importance of inventions disclosed in a patent, as well as of the economic value of that patent. Using a hierarchical method of analysis, we constructed a graph of the complete 130 million citation network of all United States patents issued from 1976 to 2014, and assigned every node (that is, an individual patent) an objective importance score. The mean importance score for all patents was set to 1.0, with importance scores scaling directly with numerical value. For example, an importance score of 10 indicates a patent ten times as important as average, while an importance score of 0.1 indicates a patent only one tenth as important as average. Using a dataset of patents litigated to a decision at a district court, the CAFC, and the Supreme Court from 2000-2014, and patent importance scores assigned to each litigated patent, we tested hypotheses (1) and (2). Our results indicate that patents litigated in district court have a mean importance score of about 4.5, those litigated in the CAFC have a mean importance score of about 6.5, and patents litigated in the Supreme Court have a mean importance score of about 8.3. We discuss the implications of these results, which suggest that (1) litigated patents do appear be considerably more important than average and (2) patent importance rises markedly from district court to CAFC to Supreme Court.