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Applicant and Examiner Citations in U.S. Patents: An Overview and Analysis

by [Juan Alcacer](#), Michelle Gittelman and Bhaven Sampat

Abstract

Researchers studying innovation increasingly use indicators based on patent citations. However, it is well known that not all citations originate from applicants—patent examiners contribute to citations listed in issued patents—and that this could complicate interpretation of findings in this literature. In 2001 the US Patent and Trademark Office (USPTO) began reporting examiner and applicant citations separately. In this paper, we analyze the prior art citations of all patents granted by the USPTO in 2001-2003. We show that examiner citations account for 63 per cent of all citations on the average patent, and that 40 per cent of patents have all citations added by examiners. We use multivariate regression and analysis of variance to identify the determinants of examiner shares. Examiner shares are highest for non-US applicants and in electronics, communications, and computer-related fields. However, most of the variation is explained by firm-specific variables, with the largest patent applicants having high examiner shares. Moreover, a large number of firms are granted patents that contain no applicant prior art. Taken together, our findings suggest that heterogeneity in firm-level patenting practices, in particular by high-volume applicants, has a strong influence on the data. This suggests that analysis of firm-level differences in patenting strategies is an important topic for future research.

Keywords: [Citations](#); [Innovation and Invention](#); [Patents](#); [Research](#); [United States](#);Language: English Format: Print 43 pages [Read Now](#)

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About the Author

[Juan Alcacer](#)James J. Hill Professor of Business Administration
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