Does Agency Funding Affect Decisionmaking?: An Empirical Assessment of the PTO's Granting Patterns

Michael Frakes

Assistant Professor, Cornell Law School mdf96@cornell.edu | Bio I SSRN

Melissa Wasserman

Assistant Professor, Illinois College of Law mfwasser@illinois.edu | Bio I SSRN

This Article undertakes the first empirical study of the influence of the PTO's funding on the agency's decision-making. More specifically, this Article studies the influence of the PTO's budgetary structure on the most important decision made by the agency: whether or not to grant a patent. It begins by setting forth a theoretical model predicting that certain elements of the PTO's fee schedule, such as issuance and maintenance fees, which are only collected in the event that patents issue, create incentives for the PTO to grant additional patents. Using a rich database of previously-unavailable patent grant rates, we then empirically test the predictions of the theoretical model by comparing the agency's granting patterns before and after 1991, the period at which the agency became almost exclusively funded by user fees.

Our findings suggest that the agency's fee structure biases the PTO towards granting patents. Moreover, we find the distortion in PTO decision-making has a differential impact across technology and entity size. For instance, with respect to those types of patents for which the PTO is likely to profit the most from granting patents, we estimate a relatively stronger sensitivity to the PTO's funding structure. Furthermore, we also find that these distortions are more likely to occur when markers indicative of an underfunded PTO are present. As such, our results are relevant to the ongoing debate regarding the nature of bureaucrats or government employees. Our findings contradict the idea that bureaucrats seek to maximize their budgets while lending support to the notion that when agencies seek enlarged budgets they do so as a result of being mission minded but financially constrained.

From a social welfare perspective, our results are discouraging, as they suggest that the PTO's financial incentives, and not solely the merits of the invention, may be, in part, driving patentability decisions. While patents attempt to push society towards a socially optimal level of innovation by providing inventors with a mechanism to recoup their research and development expenses, they do so only at a cost—consumers pay higher prices and have less access to the patented invention. A PTO that is applying the patentability standards in a patent-protective manner is likely to be routinely granting patents on inventions that were either already known or represent only a trivial advancement over the existing scientific knowledge. As a result, a grant-biased PTO is likely to systematically issue patents that end up imposing significant costs on society without bestowing the commensurate benefits of innovation.