

## *Patent Office Cohorts*

**Michael D. Frakes and Melissa Wasserman<sup>1</sup>**

There is general agreement that the U.S. Patent and Trademark Office (Patent Office or Agency) allows too many low quality patents that unnecessarily drain consumer welfare. Moreover, there is widespread belief that the Agency's patentability decisions are highly inconsistent across examiners. Concerns regarding low quality patents and inconsistent decisions incited Congress to enact the first major patent reform act in over sixty years while likewise spurring the Supreme Court to take a renewed interest in substantive patent law. As little compelling empirical evidence exists as to what features affect the Agency's granting behavior, policymakers have been trying to fix the patent system without understanding the root cause of its dysfunction.

This Article aims to fill at least part of this gap by examining one important feature of the Patent Office that may affect an examiner's grant rate throughout her tenure: the year in which she was hired by the Patent Office. An individual examiner's granting patterns may change year-by-year as the underlying application quality changes or as the granting culture (or top-down directives) within the Agency evolves. However, having perhaps developed her general examination "style" in the critical early stages of her career, an examiner's practices may nonetheless exhibit some degree of stickiness year-by-year. In light of such persistence in behaviors and in light of the variations that likely exist in initial hiring conditions over time—e.g., as a result of changes in training programs—one might predict that examiners of different hiring cohorts will begin to follow distinct, enduring pathways with their examination practices. Consistent with this prediction, we find strong evidence that the year an examiner was hired has a lasting effect on her granting proclivities over the tenure of her career. Moreover, we find that the variation in the particular pathways adopted by different Patent Office cohorts aligns with fluctuations in the initial conditions faced by such cohorts. For this latter purpose, we characterize a cohort's hiring environment by drawing on information pertaining to both new hire training programs and to the Patent Office's quality assurance programs at such times. In documenting the existence of cohort effects and in demonstrating the important of initial environments in explaining certain long-term outcomes, this analysis holds various implications for patent law and administrative law more generally.

---

<sup>1</sup> Frakes: Associate Professor of Law, Northwestern University School of Law; Faculty Research Fellow, National Bureau of Economic Research; Fellow, Northwestern Institute for Policy Research (e-mail: mdf519@northwestern.edu). Wasserman: Associate Professor of Law; Richard and Anne Stockton Faculty Scholar; & Richard W. and Marie L. Corman Scholar, University of Illinois College of Law. The work was funded in part by University of Illinois at Urbana Champaign Research Board, Award 12088 and the Cornell Institute for the Social Sciences Small Grant Award. We are grateful to Matt Berry at the National Center for Supercomputing Applications at the University of Illinois for collecting data from the Patent Office's PAIR database.