SCREENING PROPERTY RIGHTS FOR INNOVATION (joint with William Matcham)

Abstract

We develop a dynamic structural model of patent screening incorporating incentives, intrinsic motivation, and multi-round negotiation. We use natural language processing to create a new measure of patent distance, which, together with detailed data on examiner decisions, enables us to estimate the model and thereby study strategic decisions by applicants and examiners. Our results show that patent screening is moderately effective, given the existing standards for patentability. Examiners exhibit substantial intrinsic motivation that significantly improves screening quality. We quantify the annual social costs of patent screening at \$24.7bn, equivalent to 6.3% of U.S. private sector R&D. Reforms that limit negotiation rounds significantly reduce social costs.