

Patent Law and the Two Cultures

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A half century ago, physicist and author C.P. Snow warned of a “gulf of mutual incomprehension” between the liberal arts and sciences. Snow’s “Two Cultures” thesis, though subject to various critiques, has particular relevance to patent law, a realm where law and science intersect. Drawing on Snow’s framework, this Article addresses fundamental challenges arising from a system where lay judges must engage, understand, and ultimately pass judgment on complex technologies. It argues that patent doctrine can play a substantial and underappreciated role in mediating technical anxiety throughout the patent system, thus leading to more consistent and predictable decisions. While this Article focuses on patent law, its implications extend to ever-expanding areas where law and science intersect, such as environmental law, toxic torts, and scientific evidence.

The Article first draws from the philosophy and psychology of science to argue that scientific subject matter can impose significant cognitive burdens on lay persons. The Article then offers a descriptive theory of a substantial portion of Federal Circuit jurisprudence, which employs formalism and doctrines of institutional deference to reduce those cognitive burdens on district court judges. The Article then identifies a countervailing trend in recent Supreme Court patent decisions, which tend to increase the degree to which district court judges must engage and understand complex patented technologies. The Article concludes with prescriptions for mediating technical anxiety in the patent system. Applying concepts from patent law itself, it proposes an “enablement” standard for patent opinions that provides guidance to adjudicators without resorting to strict formalism.