

The Case for Tailoring Ex-Post Patent Strength to Innovation Diffusion

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The patent system is often justified on the basis of two theories. The first, incentive theory, views patents as incentives to invest in innovation. The second, disclosure theory, views patents as incentives to disclose information about an invention. Both justifications are tied to ex ante behavior: incentives to invent foster innovation up to the time of patent filing, and disclosure is achieved once the patent document is made public. The doctrines that determine patent strength are similarly tied to patentees' behavior prior to the patent grant: for example, patent scope is determined by the words of the claims as written at the time of filing. Patentees' behavior following a patent grant, by and large, does not affect the strength of patent rights. This Article argues that this ex ante view of patentees' behavior is incomplete both as a matter of theory and as a matter of actual doctrinal practice. It makes the theoretical case that ex post patent strength should be tied to efforts by the patentee to diffuse his or her innovation. And it shows how understanding patent rights as tools to facilitate the diffusion of technological knowledge helps explain otherwise puzzling doctrinal decisions.

This Article identifies three distinct diffusion channels: (1) codified knowledge (through text); (2) tacit knowledge (transmitted through experiential learning); and (3) knowledge embedded in commercial products. Following a patent grant, patentees can choose to use a single diffusion channel, such as relying on the patent document, or multiple channels, such as making information about the invention available through scientific publications, trade shows, and marketed products. A diffusion view of patent law turns this variety of patentee behavior into a policy lever to reward robust diffusers and limit the rights of weak diffusers.

Understanding these three diffusion channels helps explain and justify otherwise puzzling court decisions in the area of remedies, where courts routinely grant injunctions to academic inventors but deny them to other non-practicing entities. Under diffusion theory, courts are justified in granting universities strong patents through injunctive relief because universities often engage in robust diffusion even when they do not in fact commercialize their innovations. Non-practicing entities, in contrast, do the bare minimum amount of diffusion required by the patent act: filing a patent specification. A diffusion framework also allows us to move beyond categories to focus on relevant behavior: efforts to make knowledge about the invention effectively available to the public.

Applying a diffusion lens also provides a justification and framework to tie patent strength to efforts by patentees to diffuse their innovation following the patent grant. Under this framework, this Article argues, weak knowledge diffusers should receive weak ex post patent rights through injunction denials, a robust experimental use defense for putative infringers, and the unavailability of the doctrine of equivalents to expand the literal scope of patent claims during litigation.