Standard-Setting, FRAND, and Opportunism

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Dennis Carlton and Allan Shampine have offered an important contribution to the debate over how to interpret the obligation imposed by standard-setting organizations (SSOs) that holders of standard-essential patents license them on fair, reasonable, and non-discriminatory (FRAND) terms. One of their central contributions is to distinguish between two distinct ways that participants can act strategically in the standard-setting process to generate returns that exceed the benefits associated with their innovation.

First, incorporation of a patented technology into a standard can insulate it from competition from substitute technologies.² In other words, the standard can allow the patent holder to use hold-up to appropriate the quasi-rents that are the product of the standard-setting process itself.³ Second, the patent holder and the firms controlling the decision making of the SSO can collude to disadvantage a particular rival.⁴ Carlton and Shampine view the mandate to impose fair and reasonable royalties as being designed to address the former type of strategic activity and the nondiscrimination mandate as being designed to curb the latter.⁵

While these types of opportunism pose serious problems, they are not the only potential sources of strategic behavior that should be taken into account.⁶ Focusing on the possibility that the patent holder may attempt to hold up those adopting the

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Dennis W. Carlton & Allan L. Shampine, An Economic Interpretation of FRAND, 9 J. COMPETITION L. & ECON. 531 (2013).

² *Id.* at 534, 536–38.

For the seminal article on quasi-rents and hold-up, see Benjamin Klein, Robert G. Crawford & Armen A. Alchian, Vertical Integration, Appropriable Rents, and the Competitive Contracting Process, 21 J.L. & ECON. 297, 298 (1978).

⁴ Carlton & Shampine, *supra* note 1, at 541–43.

⁵ *Id.* at 545–47.

For additional reading on problems associated with FRAND, see Roger D. Blair & Thomas Knight, Problems in Sharing the Surplus, 22 Tex. Intell. Prop. L.J. (forthcoming 2014); Thomas F. Cotter, The Comparative Law and Economics of Standard-Essential Patents and FRAND Royalties, 22 Tex. Intell. Prop. L.J. (forthcoming 2014); Rebecca Haw, Casting a FRAND Shadow: The Importance of Legally Defining "Fair and Reasonable" and How Microsoft v. Motorola Missed the Mark, 22 Tex. Intell. Prop. L.J. (forthcoming 2014); Keith N. Hylton, A Unified Framework for Competition Policy and Innovation Policy, 22 Tex. Intell. Prop. L.J. (forthcoming 2014); William H. Page, Judging Monopolistic Pricing: F/RAND and Antitrust Injury, 22 Tex. Intell. Prop. L.J. (forthcoming 2014); D. Daniel Sokol & Wentong Zheng, FRAND in China, 22 Tex. Intell. Prop. L.J. (forthcoming 2014).

standard makes it easy to overlook that the patent system was itself created to address a different type of hold-up. The research and development costs needed to create the invention are sunk. After the invention has been created, customers can hold out in an attempt to drive the price charged by the patent holder down to marginal cost.

The patent system is designed to give the patent holder the protection it needs to prevent this latter type of hold up from occurring. Imperfections in the patent system can cause slippage that may weaken the incentives for innovation. More importantly, even if patent protection is effective, customers may attempt to use the standard-setting process to circumvent the bargaining power made possible by the patent and use the FRAND process to drive the licensing fee closer to marginal cost, which is of course zero.

Another form of opportunism that does not play a key role in Carlton and Shampine derives from the fact that uncertainty can give rise to a moral hazard. Standard-setting processes can allow other firms to wait and see which inventions prove successful. If patent protection is perfect, inventors can insist on being paid full value for the risks they bore. FRAND licensing can allow other actors to pay below-market rates for successful inventions while avoiding bearing any of the costs of unsuccessful inventions. Any possibility that FRAND licensing may result in below-market prices creates the risk that either or both of these forms of opportunism may lower innovation below efficient levels.⁸

This is not to say that the types of opportunism that Carlton and Shampine have identified are not important. Indeed, they remain serious considerations that must be taken into account. At the same time, the simultaneous potential for opportunistic behavior that both weakens and strengthens patent holders' ability to appropriate the surplus created by their inventions raises important questions as to the proper balance between these offsetting considerations. SSOs and courts implementing FRAND obligations must understand how these countervailing forces play out in a particular context if they are to ensure that the patent system continues to serve as an engine of innovation.

⁷ 1 GREGORY E. UPCHURCH, IP LITIGATION GUIDE: PATENTS & TRADE SECRETS § 1:1 (2013). This point is also applicable to copyright law. Christopher S. Yoo, *Copyright and Product Differentiation*, 79 N.Y.U. L. REV. 212, 215 (2004).

See Daniel F. Spulber & Christopher S. Yoo, Rethinking Broadband Internet Access, 22 HARV. J.L. & TECH. 1, 47 (2008) (contemplating the necessity of rate and access regulation when market entry is "truly feasible").