

PATENT PLEDGES: BETWEEN THE PUBLIC DOMAIN AND MARKET EXCLUSIVITY

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The title of this symposium is “Public Domain(s): Law, Generating Knowledge, and Furthering Innovation in the Information Economy.”¹ In this Article, I address an emerging middle ground between the public domain and the exclusive right to exploit a technology that is otherwise afforded by patent law. I am referring to the emerging phenomenon of “patent pledges.”

Patent pledges are “[public] commitments voluntarily made by patent holders to limit the enforcement or other exploitation of their patents.”² These pledges encompass a wide range of technologies and firms: from promises by multinational corporations like IBM and Google not to assert patents against open-source software users;³ to commitments by developers of industry standards to grant licenses on terms that are fair, reasonable, and non-discriminatory (FRAND);⁴ to the recent announcement by Tesla Motors that it will not enforce its substantial patent portfolio against any company making electric vehicles in “good faith.”⁵

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1. *Public Domain(s): Law, Generating Knowledge, and Furthering Innovation in the Information Economy*, MICH. ST. U.C.L., <http://www.law.msu.edu/ipic/public-domains/index.html> (last visited Feb. 22, 2015).

2. See Jorge L. Contreras, *Patent Pledges*, ARIZ. ST. L.J. (forthcoming 2015) (manuscript at 2-3) (on file with author), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2525947.

3. IBM, IBM STATEMENT OF NON-ASSERTION OF NAMED PATENTS AGAINST OSS (2005), available at <http://www.ibm.com/ibm/licensing/patents/pledgedpatents.pdf>; *Open Patent Non-Assertion Pledge*, GOOGLE, <http://www.google.com/patents/opnpledge/pledge/> (last visited Feb. 22, 2015).

4. See NAT'L RESEARCH COUNCIL, PATENT CHALLENGES FOR STANDARD-SETTING IN THE GLOBAL ECONOMY 17 (Keith Maskus & Stephen A. Merrill eds., 2013), available at <http://www.nap.edu/catalog/18510/patent-challenges-for-standard-setting-in-the-global-economy-lessons>.

5. Elon Musk, *All Our Patent Are Belong to You*, TESLA MOTORS (June 12, 2014), <http://www.teslamotors.com/blog/all-our-patent-are-belong-you>.

Despite this diversity in content and form, patent pledges share a number of unifying features. The public nature of patent pledges distinguishes them from the broad array of formal licenses that patent holders routinely grant in commercial transactions. First, patent pledges are not made to direct contractual counterparties or business partners but *to the public at large*, or at least to large segments of certain markets.⁶ Second are the motivations that lead patent holders to make patent pledges. In general, these motivations fall into two broad categories: (1) inducing other market participants to adopt, and make investments in, a standardized technology or other common technology platform; and (2) “soft” factors, including communitarianism, altruism, and the desire for improved public relations.⁷ Broadly speaking, this Article addresses the first category of pledges, those that are made with an intention to induce movement in the relevant technology market, and which I have termed “actionable” pledges.⁸

To understand the reasons that patent holders make such patent pledges, it is first important to consider the beneficial market-wide effects that patent pledges can have. For example, technical interoperability standards enable devices manufactured by different vendors to interoperate automatically and without significant user intervention. The Wi-Fi wireless networking suite of standards is a good example.⁹ Any computer, tablet, smart phone, or other device that implements the relevant Wi-Fi standard can communicate with any other device that implements the same standard. The manufacturers of those devices need not interact at all during the development and manufacturing of their respective products. So long as two devices comply with the relevant standard, they can communicate with each other.¹⁰

The benefits that can be achieved through widespread product interoperability are known as “network effects” and generally increase as the number of compatible devices grows.¹¹ The

6. Contreras, *supra* note 2, at 3.

7. *See id.* at 4-5.

8. *See id.* at 5.

9. The 802.11 series of Wi-Fi[®] standards was developed at the IEEE Standards Association (IEEE) through collaboration among hundreds of engineers and computer scientists. *See IEEE Get Program*, IEEE STANDARDS ASS'N, <http://standards.ieee.org/about/get/802/802.11.html> (last visited Feb. 22, 2015).

10. *See* Contreras, *supra* note 2, at 31 & n.108.

11. *See* CARL SHAPIRO & HAL R. VARIAN, *INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY* 45-46 (1999); Michael L. Katz &

interoperability of different vendors' products opens markets for new products and services, fostering innovation, competition, consumer choice, and economic growth.¹² As observed by the principal U.S. antitrust agencies, standards enabling product interoperability "are widely acknowledged to be one of the engines of the modern economy."¹³ The same holds true for some software platforms, particularly those that are characterized by open application program interfaces (APIs) or are distributed in open-source form.¹⁴ The broad availability of such software platforms can give rise to market-wide cost savings and efficiencies, and can promote consumer choice and competition, as exemplified by the Linux and Android operating systems.¹⁵

Patent pledges create an environment in which multiple firms are more likely to adopt particular standards or open-technology platforms, resulting in greater product interoperability and increased network effects. Why? Because the holder of patents, which might otherwise be used to block a competitor from developing and selling a compatible product, *commits to limit the use of those patents*. This commitment might come close to contributing the patent to the public domain, for example, by pledging not to enforce a software patent against any company with fewer than twenty-five

Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985).

12. See, e.g., *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. LEXIS 60233, at *23 (W.D. Wash. Apr. 25, 2013); Herbert Hovenkamp, *Standards Ownership and Competition Policy*, 48 B.C. L. REV. 87, 90 (2007); FED. TRADE COMM'N, *THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION* 191 (2011), available at <http://www.ftc.gov/sites/default/files/documents/reports/evolving-ip-marketplace-aligning-patent-notice-and-remedies-competition-report-federal-trade/110307patentreport.pdf>.

13. U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, *ANTITRUST ENFORCEMENT AND INTELLECTUAL PROPERTY RIGHTS: PROMOTING INNOVATION AND COMPETITION* 6-7 (2007), available at <http://www.ftc.gov/sites/default/files/documents/reports/antitrust-enforcement-and-intellectual-property-rights-promoting-innovation-and-competition-report.s.department-justice-and-federal-trade-commission/p040101promotinginnovationandcompetitionrpt0704.pdf>.

14. See Contreras, *supra* note 2, at 9.

15. See, e.g., YOCHAI BENKLER, *THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM* 63-64 (2006); David S. Evans, *The Antitrust Analysis of Rules and Standards for Software Platforms* 8 (Coase-Sandor Inst. for Law & Econ., Working Paper No. 708, 2014), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2520860.

employees.¹⁶ At the other end of the spectrum, the pledge might simply be to grant royalty-bearing patent licenses on terms that are “fair, reasonable and non-discriminatory.”¹⁷ In both cases, patent owners limit their statutory right to enforce their patents.¹⁸ By doing so, they seek to induce market participants to adopt *their preferred* standards or technology platforms. In other words, such pledges create a “safe space” in which product development and innovation can flourish with a reduced threat of patent enforcement. Such commitments thus not only benefit the market broadly, but also guide the market toward the patent holder’s own products and technologies, which benefits the patent holder. Patent pledges thus have the potential to produce a number of beneficial market effects, which alone should be sufficient reason to respect and enforce them.

However, there is another reason that patent pledges, as a general rule, should be treated as legally enforceable obligations. This justification is based on the reliance of other market actors on these pledges. Manufacturers who rely on a patent holder’s promise not to block the sale of a product will often make costly investments on that basis.¹⁹ These investments could include product design and development, marketing, materials, capital equipment, information technology, employee training, and supply chain management.²⁰ Once such investments have been made, the manufacturer is said to be “locked-in” and cannot switch to an alternative technology without significant, and potentially prohibitive, cost.²¹ Thus, it is important to enforce the patent holder’s pledge to protect other market actors who have relied on those pledges in making

16. *Non-SDO Patent Statements and Commitments*, PROGRAM ON INFO. JUST. & INTELL. PROP., <http://www.pijip.org/non-sdo-patent-commitments/> (last updated Oct. 15, 2014).

17. *Id.* (internal quotation marks omitted).

18. *See id.*

19. *See* Doug Lichtman, *Understanding the RAND Commitment*, 47 HOUS. L. REV. 1023, 1033 (2010). Interestingly, though the two sets of motivations for making a pledge (inducement to adopt a standard versus charitable purposes) appear quite different from the standpoint of the pledgor, they may not be so different from the standpoint of the pledgee to whom they are directed. That is, both types of pledges are likely to result in the pledgee changing its behavior and making investments on the basis of the pledge.

20. *See* SHAPIRO & VARIAN, *supra* note 11, at 116-30; Joseph Farrell et al., *Standard Setting, Patents, and Hold-Up*, 74 ANTITRUST L.J. 603, 616 (2007); Lichtman, *supra* note 19, at 1033; Joseph Scott Miller, *Standard Setting, Patents, and Access Lock-In: RAND Licensing and the Theory of the Firm*, 40 IND. L. REV. 351, 360 (2007).

21. Miller, *supra* note 20, at 383.

investments that, in the end, are likely to have a socially beneficial effect.

Various theories have been advanced regarding the most appropriate legal framework for enforcing patent pledges. These include common law contract,²² antitrust law,²³ patent misuse,²⁴ and other theories based in equity and property law.²⁵ Each of these approaches has theoretical or practical drawbacks that I have previously discussed at length.²⁶ As an alternative, I have proposed a new theory termed “market reliance,” which begins with the equitable doctrine of promissory estoppel and adds to it a rebuttable presumption of reliance adapted from the “fraud-on-the-market” theory under federal securities law.²⁷ The market-reliance approach, which focuses on a patent holder’s behavior-inducing *promise* to the market, may enable patent pledges to be recognized and enforced without the need to prove the elements of contract formation, antitrust injury, or specific reliance.²⁸

But as I have also explained elsewhere, any reliance-based approach requires that the relevant promise have some degree of visibility to the market, even if individual market actors are not aware of specific pledges made with respect to specific patents.²⁹ Thus, pledges that are posted on a web site and taken down the next day, or are substantially changed after they are made, raise questions regarding their later enforcement. If an initial announcement attracted sufficient public attention, such pledges might influence markets significantly. Yet if their appearance and disappearance went unnoticed, then it is likely they would have no impact on the

22. See, e.g., *Microsoft Corp. v. Motorola, Inc.*, No. C10-1823JLR, 2013 U.S. Dist. Lexis 60233 (W.D. Wash. Apr. 25, 2013); Roger G. Brooks & Damien Geradin, *Interpreting and Enforcing the Voluntary FRAND Commitment*, 9 INT’L J. IT STANDARDS & STANDARDIZATION RES. 1, 3 (2011); Kassandra Maldonado, Comment, *Breaching RAND and Reaching for Reasonable: Microsoft v. Motorola and Standard-Essential Patent Litigation*, 29 BERKELEY TECH. L.J. 419, 420 (2014).

23. See, e.g., George S. Cary et al., *The Case for Antitrust Law to Police the Patent Holdup Problem in Standard Setting*, 77 ANTITRUST L.J. 913, 939 (2011); Thomas F. Cotter, *Comparative Law and Economics of Standard-Essential Patents and FRAND Royalties*, 22 TEX. INTEL. PROP. L.J. 311, 313 (2014).

24. Daryl Lim, *Standard Essential Patents, Trolls, and the Smartphone Wars: Triangulating the End Game*, 119 PENN. ST. L. REV. 1, 88-90 (2014).

25. See generally Jorge L. Contreras, *A Market Reliance Theory for FRAND Commitments and Other Patent Pledges*, 2015 UTAH L. REV. 479.

26. See *id.* (manuscript at 14-41).

27. *Id.* (manuscript at 41-56).

28. See *id.*

29. *Id.* (manuscript at 41-45).

market. And, of course, most situations will fall somewhere between these two extremes.³⁰

This situation suggests the need for state involvement in the preservation and dissemination of patent pledges. In order to eliminate factual uncertainty surrounding the sufficiency of notice to the market, I have proposed the creation of a publicly accessible, governmentally operated repository of patent pledges.³¹ Such a repository would provide a trusted source for patent pledges concerning specific technologies (e.g., wireless networking, 4G telecommunications, electric-vehicle power stations, etc.) and would both preserve pledges and track changes subsequently made to them.³²

Patent pledges have already shaped critical technology markets and enabled the interoperability of a vast range of products and services. However, as patent litigation in these markets has increased, the premises and assumptions underlying these pledges have begun to show stress. I have proposed both a theoretical framework (market reliance) and a practical resource (the pledge registry) that, it is hoped, will solidify the legal foundation for this critical middle ground between the public domain and market exclusivity.

30. See Contreras, *supra* note 2, at 54-55 (discussing examples of the Eco-Patent Commons and others in which pledges originally posted online were taken down shortly after being made).

31. See *id.* at 59-60. Currently, the Patent Pledge Database maintained by the author at American University is the only public collection of patent pledges. While it is hoped that this resource is useful to the community, it is entirely dependent on the identification and cataloging of pledges by the operators and thus cannot make any claim to comprehensiveness.

32. *Id.*