DECENTRALIZING PATENT COMMUNICATION: TOWARDS A NETWORK PARADIGM OF THE PATENT SYSTEM

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United States patent law requires the publication of a patent application 18 months after its filing date. Yet in practice, approximately 50% of applicants publish their applications much sooner.¹ Early publication does not expedite the examination process, nor does it grant any special patent rights. Early publication thus seems like an odd phenomenon. Why would patent applicants voluntarily publish information they are not required to disclose? It is counterintuitive to the traditional concept of patent law, which expects applicants to do their best to postpone disclosure of their inventions, not to hasten it. And yet, reality proves otherwise.

The early publication oddity—like another phenomenon I discuss below—suggests a misconception regarding the way the patent system operates. We are accustomed to thinking of the patent system in the following way: An inventor comes up with an invention, and because she wants to protect it, she must submit a patent application that discloses the invention. Then, the patent office examines the application, and after a while, the patent information becomes public. This archetypical routine implies a one-way transfer of information—from an inventor to the public. It also suggests that early disclosure is against the inventor's interests, as it publicizes valuable knowledge before the time is due, seemingly without any benefit. But the frequency with which inventors actually do this casts doubt upon this traditional understanding of how patent law operates.

This gap results from a conceptual misunderstanding of "patent communication," i.e., the flow of messages in the patent space. I argue that the current view of patent communication—which I term the *bulletin-board paradigm*—is oversimplified and may sometimes be misleading. Instead, I propose an updated paradigm—the *network paradigm*—that better reflects the reality of patent communication. The following analysis characterizes both paradigms with respect to the purpose, the players, and the directionality of patent communication. I then demonstrate how the new paradigm provides a fuller and more realistic account of patent communication.

The Purpose—Informing vs. Communicating: When thinking about patents, we tend to focus on the informational value of the patent—namely, the technical and legal content found in patent documents (e.g., respectively, technical knowledge and legal constraints due to patent claims). The

primary focus of both patent caselaw and patent literature is on doctrines and principles anchored in the informational value of patents. But an inventor may wish to communicate other messages through disclosure of her invention. For instance, patent documents can signal innovation to venture capital firms, generate consumer buzz, and threaten competitors with technological dominance. By considering and incorporating these factors, the patent message does more than merely inform others about the technical and legal aspects concerning an invention.

The Players—Patentee-centric vs. Multiplayer: Under the current view, the patentee is the dominant and most active player in patent communication. She is the one who formulates the application and chooses what to disclose and when. The public is merely a passive recipient. However, a closer look at this process reveals a different picture: Additional players, such as licensees, patent attorneys, journalists, and international entities participate in the discourse, and they are not passive at all. Patent attorneys, for example, take on roles beyond their bureaucratic and formalistic stereotypes, frequently implementing marketing and strategic considerations as part of their advocacy, ultimately influencing the patent message.

The Directionality—One-way vs. Multi-directional: The present conception assumes that information flows from the patentee to other players without any feedback. On the predominant "patent bargain" concept, for example, a patentee discloses information about her invention in exchange for exclusive rights to its use. Yet there are other patent communications that diverge from this patentee-to-public flow of information. Take patent reviews as an example: Patent reviews are online articles that resemble consumer reviews.² A journalist updates the public about a patent application and analyzes the invention. Such reviews are open for public discussion and allow others to praise or to criticize the invention. Patent reviews demonstrate an additional, inverse flow of information—from the public to the patentee.

Each of the above dimensions juxtaposes two ways of thinking about patent communications. The first way calls to mind a bulletin board: an informative, one-way channel of communication by which the patentee announces messages to the public, and which offers no opportunity for open or continued discourse. The second way instead resembles a network: it suggests a dynamic process that involves multiple players and a connected system that enables complex interactions and ongoing discourse, with messages coming from various directions and for different purposes. The following

paragraphs focus on two sample cases—the discussed above early publication and the patent pledging practice— to highlight the significance of utilizing the network paradigm.

In the bulletin board paradigm, disclosure of patent information is a burden, as the applicant reveals information that gives her a competitive advantage. This paradigm makes no sense of the early publication phenomenon. The network paradigm, on the other hand, understands that the patentee may have other purposes in mind. With respect to early publication, acquiring patent rights is only one of several interests involved in the act of patent disclosure. Indeed, although applicants neither obtain patent rights faster nor increase the scope of their patent rights as a result of early publication, they may achieve other goals such as misleading competitors, creating a buzz in the capital market, and gathering consumer feedback. Under the network paradigm, however, we can see that disclosure is sometimes a burden, sometimes a prize, and frequently a mix of both.

Another common practice that is perplexing when viewed through the lens of the bulletin board paradigm, yet sensible under the network paradigm, is *patent pledging*. Patent pledging means waiving patent rights fully or partially.³ In the past decade, patent pledges have become increasingly popular, especially among mega-corporations such as Google, IBM, Moderna, and Tesla. Patent pledging—like early publication of patent information—seems irrational: Why would patentees give up their valuable IP rights? According to the traditional view, the whole idea of the patent system is to acquire patent rights, not to waive them. But the network paradigm offers a more nuanced understanding of the interests at stake. Indeed, while patentees may lose something of value as a result of their pledge, they stand to gain something of even greater value: By voluntarily relinquishing their enforcement rights, patentees can signal a willingness to cooperate, rebut accusations of overenforcement, or avoid the specter of compulsory licensing. As a part of an ongoing course of communication, patent pledging may assist the pledgor in accomplishing its broader goals, which may include forging partnerships or improving its public image. Such considerations are particularly important when solidarity and collaboration are required, which explains the popular trend of patent pledging throughout the Covid-19 crisis.⁴

In short, patent communication is more complex and connected than what the prevailing bulletin-board paradigm allows. The latter fails to recognize that multiple parties may have various motives for communicating through the patent system. The network paradigm offers a more complete view of the interests involved. Viewing the practices of early patent publication and patent

pledging through the lens of each paradigm allows us to appreciate the multifaceted nature of patent communication. The Article elaborates further instances, including patent continuations, patent reviews, and the first-to-file rule.

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To read the full paper, see: Or Cohen-Sasson, *The Patent Medium: Toward a Network Paradigm of the Patent Medium*, 32 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 857 (2022) (link). For a video abstract, see: https://youtu.be/mVRwCX2gYnY

¹ Stephen Glaeser & Wayne R. Landsman, Deterrent Disclosure, 96 ACCT. REV. 291 (2021).

² GIZMOCHINA, *Patents*, https://www.gizmochina.com/?s=patents (last visited Apr. 11, 2022); PATENTLY APPLE, https://www.patentlyapple.com/ [https://perma.cc/Z2GQ-B2P2]; PATENTLY MOBILE, https://www.patentlymobile.com/ [https://perma.cc/55J6-K975].

³ E.g., see: Google, *Open Patent Non-Assertion Pledge*, available here: https://www.google.com/patents/opnpledge/pledge; IBM, *Free Access to Patent Portfolio to Combat COVID-19*, available here: https://www.ibm.com/blogs/research/2020/04/ibm-patent-portfolio-access-combat-covid-19; Moderna, *Moderna's Updated Patent Pledge*, available here: https://investors.modernatx.com/Statements--Perspectives/Statements--Perspectives-Details/2022/Modernas-Updated-Patent-Pledge/default.aspx; Tesla, *All Our Patent Are Belong To You*, available here: https://www.tesla.com/blog/all-our-patent-are-belong-you.

⁴ See Statement by Moderna on Intellectual Property Matters During the COVID-19 Pandemic, MODERNA, https://investors.modernatx.com/news-releases/news-release-details/statement-moderna-intellectual-property-matters-during-covid-19; The Pledgors, OPEN COVID PLEDGE, https://opencovidpledge.org/partners/. For a comprehensive review of this phenomenon during the COVID-19 pandemic, see Jorge L. Contreras, The Open COVID Pledge: Design, Implementation and Preliminary Assessment of an Intellectual Property Commons, 2021 UTAH L. REV. 833 (2021).