# Does Innovation Mean Patent Licensing Demands?

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### I. INTRODUCTION

In their recent article, *Do Patent Licensing Demands Mean Innovation?*, Professors Robin Feldman and Mark Lemley take on an important empirical question: Do patent holders function as effective middlemen in facilitating innovation (i.e., the so-called "middleman" hypothesis)?<sup>1</sup> Or in other words, when patent holders initiate patent licensing discussions with others, do the resulting patent licenses translate into new innovation? As Feldman and Lemley point out, defenders of certain patent licensing business models often cite this function of patents as a justification for those business models.<sup>2</sup> Socalled "patent trolls," for instance, though much maligned,<sup>3</sup> may actually benefit society if they facilitate technology transfer through their patent licensing

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<sup>1.</sup> Robin Feldman & Mark A. Lemley, *Do Patent Licensing Demands Mean Innovation?*, 101 Iowa L. Rev. 137 (2015).

<sup>2.</sup> Id. at 138–39.

<sup>3.</sup> See, e.g., Tom Ewing & Robin Feldman, *The Giants Among Us*, 2012 STAN. TECH. L. REV. 1, 27 (concluding that the most recent incarnation of patent trolls, so-called "mass aggregators" of patents, are set to have negative effects on innovation); Robin Feldman & W. Nicholson Price II, *Patent Trolling: Why Bio & Pharmaceuticals Are at Risk*, 17 STAN. TECH. L. REV. 773, 776 (2014) (arguing that, contrary to conventional wisdom, patent trolls also pose problems to the biotechnology and pharmaceutical fields); *see also* Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 COLUM. L. REV. 2117, 2180 (2013) (concluding that patent trolls are a symptom of larger problems with the patent system).

activities. More generally, a growing body of scholars argues that patent rights increase the commercialization of inventions by facilitating beneficial technology transfers between inventors and those in a better position to put the inventions into commercial use.<sup>4</sup> Hence, as Feldman and Lemley explain, both patent law theory and the healthy functioning of the patent system depend, in part, on figuring out whether patents actually serve this "intermediation" purpose.<sup>5</sup>

In order to answer this question, Feldman and Lemley surveyed those in the patent licensing trenches, asking in-house lawyers a number of questions meant to find out whether patent license requests from third parties actually led to new innovation at their companies. The study's results, if representative, overwhelmingly cut against those who argue that patent license requests facilitate technology transfer and innovation.<sup>6</sup> Indeed, the study's results suggest that patent licensing requests fail to promote innovation across the board, regardless of whether a patent troll, competitor, non-competitor, university, or some other entity initiates the licensing request.<sup>7</sup> Instead, such patent licenses ultimately function as a "tax" on innovation that is already occurring.<sup>8</sup>

This brief response to the Feldman and Lemley study comes in two parts. Part II assesses the Feldman and Lemley project's focus on patentee-initiated license requests. It concludes that this focus, while reasonable given the project's objectives, may tend to mask the importance of licensee-initiated licensing activities in some industries. The focus may also fail to capture some patentee-initiated discussions that survey respondents do not characterize as a license request, but which are important for testing the middleman hypothesis. Part III then articulates some concerns with only surveying lawyers, as well as the nature of some of the questions presented to those lawyers. It then provides some possibilities for addressing those concerns.

## II. SOME COMMENTS ON THE PATENT LICENSING UNIVERSE

Notably, the Feldman and Lemley project focuses on patent licensing requests from patent holders.<sup>9</sup> This means that the survey asked respondents to comment on unsolicited patent license requests from third parties, but not about patent licensing activities that the respondents or their companies may have initiated themselves.

This focus is important for several reasons. First, it makes it much more likely that the survey responses will affirm that the patent license requests did

<sup>4.</sup> See, e.g., Feldman & Lemley, supra note 1, at 141.

<sup>5.</sup> *Id.* at 138–41.

<sup>6.</sup> Id. at 171–73.

<sup>7.</sup> Id.

<sup>8.</sup> Id. at 142–44.

<sup>9.</sup> Id. at 149.

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not result in new innovation. In perhaps most cases, after all, Party A seems unlikely to make a licensing request of Party B unless Party B is engaged in innovative activities that at least arguably infringe Party A's patent(s). It is thus not entirely surprising that most survey respondents indicated that such patent license requests did not result in new innovation, since in many if not all cases their own, preexisting innovative activities presumably triggered the patent license request in the first place.

One might view this aspect of the study as damning, since it may appear to bias the results in a way unfavorable to those who view patent rights as important to facilitating technology transfer.<sup>10</sup> But it is important to remember that from the outset, the Feldman and Lemley project is concerned with determining whether these types of licensing requests (particularly from patent trolls) actually facilitate post-invention innovation, as many, including some defenders of patent trolls, claim. It is certainly intuitive to believe that most third-party patent license requests do not result in new innovation, because the timing and nature of the requests typically mean that the innovation must already be occurring for the patent license request to even materialize. This intuition becomes even more compelling if, as some evidence shows, most parties independently develop their innovations without recourse to another party's patents.<sup>11</sup> But up until now, this intuition has lacked broad empirical backing,<sup>12</sup> and instead has faced a barrage of scholarly and industry criticism.<sup>13</sup> The Feldman and Lemley project thus provides a first step in empirically backing that intuition.

Furthermore, even if it is intuitive that most patent licensing requests do not lead to *completely* new innovation, it is still possible that such requests result in *some* new innovation. In other words, one might still expect that, even if most patent licensing requests track onto some already occurring innovation, those requests may nonetheless facilitate additional innovation. For instance, it seems logical to believe that Party A will own technology, patents, or expertise related to its to-be-licensed patents that would prove useful to Party B, since the parties are apparently engaged in similar inventive/innovative activities. Hence, one would think that in many circumstances a patent licensing

<sup>10.</sup> For one such viewpoint, see Gene Quinn, *Flawed Survey Erroneously Concludes Patent Licensing Does Not Contribute to Innovation*, IPWATCHDOG (Feb. 22, 2015), http://www.ipwatch dog.com/2015/02/22/flawed-survey-erroneously-concludes-patent-licensing-does-not-contribute-to-innovation.

<sup>11.</sup> *See, e.g.*, Christopher A. Cotropia & Mark A. Lemley, *Copying in Patent Law*, 87 N.C. L. REV. 1421, 1439–57 (2009) (finding that most innovators do not appear to have copied their innovations from patent holders).

<sup>12.</sup> For another of Professor Feldman's recent studies that asks similar empirical questions of the start-up community, see Robin Feldman, *Patent Demands & Startup Companies: The View from the Venture Capital Community*, 16 YALE J.L. & TECH. 236, 268–72 (2014) (finding that patent demands from non-practicing entities have largely negative effects on start-up companies).

<sup>13.</sup> Feldman & Lemley, *supra* note 1, at 138–42.

demand from a third party would ultimately result in technology transfer beyond simply the patent(s) that were the focus of the initial patent licensing request. Yet the Feldman and Lemley survey responses suggest that even this latter type of technology transfer fails to materialize in most cases.<sup>14</sup> Part of this result may be due to the nature of some of the questions, as well as certain workplace dynamics. In Part III below, I address some of these possible issues.

Nonetheless, while the focus on patent licensing requests from third parties is reasonable given the project's purpose of testing the middleman hypothesis, I have two specific concerns relating to this focus and its implementation in the study. First, although the survey instrument is structured broadly in hopes of capturing all patentee-initiated discussions, it may tend to exclude some of the more important patentee-initiated discussions for purposes of testing the middleman hypothesis. For instance, third-party patent holders may regularly approach companies with ideas relating to those companies' innovative products. And these ideas, rather than being something those companies have already implemented, may concern new products or adding new features to existing products. Such discussions, and the patent licenses that follow, are likely important for purposes of testing the middleman hypothesis, simply because they seem, on average, more likely to lead to new innovation than patent-license demands with respect to existing products and product features.

Technically, the survey instrument's first question may capture these types of activities. For instance, Question 1 asks respondents whether they have "received [a] patent licensing or settlement request[]" in the last five years, followed by a parenthetical that provides a list of examples of what patent license or settlement requests include.<sup>15</sup> The first example in that list is "calls or letters suggesting areas of mutual interest or joint ventures," which could be interpreted to cover the types of patentee-initiated interactions that I just described.<sup>16</sup>

Yet many survey respondents may have interpreted the survey in a manner that excludes such activities for at least three reasons. First, survey respondents may have interpreted "calls or letters suggesting areas of mutual interest or joint ventures" as simply instances where a patent holder expresses interest in working together, but which still ultimately boil down to a patent license demand with respect to existing products. A patent license demand, after all, will often include perfunctory introductory comments expressing a desire to work together. But the essence of the call or letter often remains a demand that the recipient take a patent license from the patent holder with respect to already existing products.

<sup>14.</sup> *Id.* at 156–70.

<sup>15.</sup> Id. app. B at 180.

<sup>16.</sup> Id.

Second and related, the parenthetical list also includes references to "threatening litigation" and "infringement lawsuit" twice. Without careful parsing of the language, respondents may have relied on these multiple references to reinforce preexisting understandings that a "patent licensing or settlement" request means, essentially, a patent "shake down."<sup>17</sup> Indeed, of the survey's 39 questions, Question 1 is the only one to mention "calls or letters suggesting areas of mutual interest or joint ventures," whereas many of the remaining 38 questions ask specifically about lawsuits and threats of litigation.<sup>18</sup>

Finally, many respondents may have simply stopped reading before getting to the parenthetical list of examples because they believed they already knew what was meant by a "patent licensing or settlement" request. This tendency may have been particularly likely given the length of the survey (39 total questions) and respondents' limited time to respond.

These three reasons may cumulatively mean that some respondents interpreted the survey to exclude patentee-initiated discussions about developing new products or implementing new features to the company's preexisting products. And if some or all of the survey respondents characterized these types of patentee-initiated interactions as outside the study's scope, the study failed to capture important patentee-initiated discussions that are relevant to testing the middleman hypothesis.

In my own experience, larger companies tend to do all that they can to shield themselves from unsolicited third-party letters or calls recommending new products or features. They do so in hopes of protecting themselves against claims of misappropriation and/or enhanced intellectual property damages for innovative activities in which their many technical teams were already engaged. Nonetheless, my anecdotal experience may not be representative. Hence, the study's results could be bolstered by doing more to ensure that subsequent studies cover these types of patentee-initiated activities as well.

The focus on patent licensing demands from third parties may also tend to obscure certain positive effects of patent licensing activities more generally. Feldman and Lemley excluded licensee-initiated activities from the study because they indicate that such ex ante deals, which may be more promising in terms of technology transfer, often occur before patents even exist.<sup>19</sup> In other words, such ex ante deals center on technology transfer, not patents.<sup>20</sup> Hence, Feldman and Lemley excluded licensee-initiated activities from the study in part because they are focused on the middleman hypothesis, but also because, according to them, those deals often simply do not involve patents.

20. Id.

<sup>17.</sup> Id.

<sup>18.</sup> Id. app. B at 180–89.

<sup>19.</sup> Id. at 139.

But such ex ante deals may involve patents more often than Feldman and Lemley suggest. For instance, the lack of innovation resulting from ex post license deals that the survey highlights may simply mean that many parties are adept at identifying ex ante which patent holders have useful technology and know-how to transfer. That is, parties may frequently seek out certain thirdparty patent holders with patents, technology, and personnel that they believe will expedite their innovative efforts and strike deals accordingly. My own legal practice provides some anecdotal evidence in support of this hypothesis. For instance, I saw preemptive patent licensing activity happen on occasion. In other words, clients at times proactively reached out to third-party patent holders seeking some sort of license deal. The motivation to do so was often, in part, a desire to ensure their freedom to operate. But the third parties also often owned technology and know-how related to the patents that my clients wanted, which ultimately proved useful in facilitating my clients' innovative activities.

Of course, the fact that ex ante deals may include patents more frequently than Feldman and Lemley suggest does not mean that the Feldman and Lemley survey results are irrelevant. But it might mean that the patent licensing story is more nuanced than the survey results—and the inevitable sound bites/ headlines accompanying such a high-profile study—may otherwise suggest.<sup>21</sup> Hence, while the study's focus on the middleman hypothesis may justify excluding licensee-initiated activities (particularly if it is true that third parties rarely if ever initiate discussions with patent trolls), a fuller picture of the innovation effects of patent licensing would require including licensee-initiated activities as well.

But even if my anecdotal experiences regarding licensee-initiated licensing are more generally representative, they may actually strengthen the conclusions of the Feldman and Lemley study regarding ex post licensing demands. In other words, if parties are typically able to identify which patent holders have something useful to them and do, in fact, reach deals accordingly with some frequency ex ante, then the ex post patent demands of those on the outside are even less likely to prove helpful to the innovating party and society in general.

<sup>21.</sup> Indeed, in our sound-bite culture, misinterpretations of research results are frequent, and the Feldman and Lemley project has been no exception so far. For instance, following release of the Feldman and Lemley study, one commentator opined on the basis of its results that the study "dispels what doubt there may have been about the innovation value of patents." Vivek Wadhwa, *Here's Why Patents Are Innovation's Worst Enemy*, WASH. POST (Mar. 11, 2015), https://www.washingtonpost.com/ news/innovations/wp/2015/03/11/heres-why-patents-are-innovations-worst-enemy. To be clear, Feldman and Lemley do not make the same (or anything close to the same) assertion in their study; they are clear about the focus and attendant limitations of their project. But the above-cited commentator nonetheless provides at least one example of how the results might be construed in a way that belies the realities of patent licensing activities in general. For commentary in the opposite direction, see Quinn, *supra* note 10.

Furthermore, if the Feldman and Lemley project is representative of the role—or lack thereof—that ex post patent licensing demands play in facilitating innovation, it may provide additional grounds for an independent invention/ commercialization defense to patent infringement. For instance, a good amount of evidence indicates that multiple parties frequently come up with the same invention nearly simultaneously.<sup>22</sup> Under current patent law, if one of these parties obtains a valid patent on the common invention, that party can assert the patent against the other inventors; it typically does not matter that the other parties have not copied the invention from the patent holder.<sup>23</sup>

Some have argued that patent law should be reformed to shield independent inventors from patent infringement claims, essentially claiming that the existence of simultaneous, independent invention by multiple parties suggests that the patent incentive was unnecessary to prompt the inventive activity in the first place.24 These earlier proposals thus focus on whether patents were necessary to incentivize the inventive activity. But if the Feldman and Lemley study is representative, it may provide additional grounds for such a defense because patents also seem to be unnecessary-and even detrimental—to the commercialization of inventions. In other words, patents may be justified as a pre-invention incentive to engage in inventive activity and/or as a post-invention incentive to commercialize inventions.<sup>25</sup> But if patents do not appear to be playing either role (i.e., both invention and commercialization are occurring in spite of, rather than because of, patents), then protecting parties that independently invent and commercialize inventions may be even more justified. Naturally, more evidence is needed before making such a significant reform to patent law.<sup>26</sup> But the evidence that Feldman and Lemley provide arguably points in that direction.

# III. SOME ADDITIONAL COMMENTS REGARDING THE SURVEY QUESTIONS AND THOSE SURVEYED

Feldman and Lemley cover the most obvious limitations of their survey methodology in detail, including the study's small sample size (181 total respondents) and low response rate, selection and self-selection bias issues,

24. See, e.g., Vermont, supra note 23, at 478–79.

25. *See generally* Mark A. Lemley, *Ex Ante Versus Ex Post Justifications for Intellectual Property*, 71 U. CHI. L. REV. 129 (2004) (discussing these two different theoretical approaches).

<sup>22.</sup> See generally Mark A. Lemley, The Myth of the Sole Inventor, 110 MICH. L. REV. 709 (2012).

<sup>23.</sup> *See, e.g.,* Samson Vermont, *Independent Invention as a Defense to Patent Infringement,* 105 MICH. L. REV. 475, 478–80 (2006). Patent law does include some exceptions in the form of prior user rights, but such exceptions have a number of constraints that make them quite limited. *See generally* Jacob Neu, *Patent Prior User Rights: What's the Fuss?*, 66 VAND. L. REV. EN BANC 1 (2013) (discussing several limitations of prior user rights under the recently enacted America Invents Act).

<sup>26.</sup> *See, e.g.,* Mark A. Lemley, *Should Patent Infringement Require Proof of Copying*?, 105 MICH. L. REV. 1525, 1527–32 (discussing some possible drawbacks of implementing such a change without first obtaining more conclusive evidence).

and problems with using surveys in general.<sup>27</sup> I will not rehash that discussion here. I will, however, make a few comments on the population that they chose to survey—in-house lawyers—as well as some of the questions their survey asks.

First, Feldman and Lemley indicate that they surveyed in-house attorneys at product companies "because they are best positioned to know whether their company actually implemented new technology as a result of a licensing deal or negotiation."<sup>28</sup> This rationale may justify focusing on these types of lawyers over licensing lawyers who initiate patent demands. But I am not convinced that the sole focus on lawyers in general is justified. For instance, patent license deals often include business and technical personnel as part of the deal team as well, and in many cases these personnel may be in a better position to assess what innovation effects the patent licenses ultimately yield.

Indeed, contrary to what Feldman and Lemley suggest, lawyers may have significant reasons to understate the effects of patent license demands.<sup>29</sup> For instance, their involvement with the patent license deals may often mostly consist of long, drawn-out, and tough negotiations with the other side. In many cases, that bitter experience may constitute the primary basis for their survey responses, rather than actual follow-up with the technical and business teams regarding how the license deal affected the team's innovative efforts. Indeed, if my time as in-house licensing counsel is any indication, keeping up with the teams one supports is often an uphill battle, particularly when in-house counsel are often responsible for multiple deals simultaneously, change supporting roles frequently, and even change companies with some regularity. In fact, these factors may provide independent grounds for doubting the accuracy of many survey responses, since the multiple and ever-changing responsibilities of many in-house counsel make relying on their memories of day-to-day events concerning highly technical topics somewhat dubious.

This is not to say that in-house lawyers are irrelevant survey respondents. But it is to suggest that targeting broader deal teams is more likely to yield accurate results. Indeed, conducting a comparative study of different in-house personnel may be one promising way to better decipher the innovation effects of patent license requests.

The wording of some of the survey questions exacerbates some of these concerns. For instance, a respondent might read some of the questions to impose a temporal limitation on the patent license request that unfairly excludes innovation that resulted from the license. Take the following question, a variation of which appeared for each type of party:

<sup>27.</sup> Feldman & Lemley, *supra* note 1, at 144–49.

<sup>28.</sup> Id. at 144.

<sup>29.</sup> Id. at 145.

Q6 When competitor requests led to a patent license, how often did you create new products or features with the technology you licensed (e.g., as opposed to merely taking the license to cover existing products or features)?<sup>30</sup>

If a respondent responded to this question with "0–10%" of the time, the respondent might simply mean that the license did not result in new innovation at the time of the license. Less clear, however, is that such a response means that the licensee did not continue to innovate with respect to the technology, and that the patent license did not facilitate that innovation. Indeed, it seems more likely that in many cases the licensee did, in fact, continue to innovate with respect to the licensed technology. And it seems at least possible that the licensee was aided in pursuing such improvements to the product or service based on whatever patent license it obtained.

Of course, the fact that the survey responses indicate that in most cases third-party licensors did not transfer technology or personnel along with the patent license may make this less likely.<sup>31</sup> But it remains possible that the licensees gleaned from the patents themselves ideas as to how to further innovate upon their preexisting technology. While there is evidence suggesting that parties rarely resort to patents for technical knowledge,<sup>32</sup> there is other evidence suggesting the contrary.<sup>33</sup> Furthermore, licensed patents become a more likely source of technical aid to licensees than patents in general simply because licensees have greater incentives and opportunity to study them.

Relatedly, some of the same factors discussed above relating to workplace dynamics may impose additional unwarranted temporal limitations on the respondents' responses. In other words, in-house counsel may often view deals relating to patents and technology discretely given in-house counsels' multiple and shifting responsibilities. Indeed, an initial patent license may often be followed with amendments, technology transfer, or additional related agreements between the parties. But the survey respondent, while involved with the initial deal, may not be part of these later developments. Hence, the survey responses may not capture such activities and their innovation outcomes, which are arguably relevant to testing the middleman hypothesis. And this failure to capture such activities may be so because (1) respondents understand the questions to include temporal limitations, and (2) the realities

<sup>30.</sup> Id. app. B at 181.

<sup>31.</sup> Id. at 156–70.

<sup>32.</sup> *See, e.g.*, Alan Devlin, *The Misunderstood Function of Disclosure in Patent Law*, 23 HARV. J.L. & TECH. 401, 402–03 (2010) (concluding that patents are ineffective at conveying useful information to the public); Jeanne C. Fromer, *Patent Disclosure*, 94 IOWA L. REV. 539, 560 (2009) (indicating that much evidence suggests that researchers find patents unhelpful in terms of discovering useful technical information).

<sup>33.</sup> *See, e.g.*, Lisa Larrimore Ouellette, *Do Patents Disclose Useful Information?*, 25 HARV. J.L. & TECH. 545, 572–76 (2012) (presenting the results of a survey of nanotechnology researchers that show that many such researchers rely on patents for technical information).

of the workplace mean that many respondents simply are not in a position to comment on all relevant history relating to the patent license and the implicated technologies.

#### **IV.** CONCLUSION

The Feldman and Lemley study tackles an important empirical question in light of today's heated debates about patent trolls and their effects on innovation. More generally, it provides an important contribution for assessing the merits of "commercialization" and related patent law theories.

This response highlights some areas worth further study. First, it is worth considering in greater detail how this study relates to the broader universe of patent licensing activities, whether additional studies should expand to capture more of that universe, and what the results of such studies may mean for patent law's liability doctrines. Second, I recommend that additional studies of these topics include non-lawyers and lawyers alike and better take into account the often-dynamic nature of the workplace.