Eliciting More Complete Patent Assignment Information Comment of Professor Colleen Chien¹ to the USPTO Docket No. PTO-P-2011-0077

The PTO Has the Right to Ask "Who Owns the Patent?"

In order for the PTO to carry out its responsibility to "disseminat[e] to the public information with respect to patents," (35 U.S.C. § 2(a)(2)) it must take steps to ensure that the information it has is accurate and complete. The transfer of patents happens frequently before and after the main "checkpoint" of patent ownership, patent issuance.² Patent transfers, or reassignments, appear to be growing: in 1980, less than 2,000 U.S. reassignments were reported; by 2003, this number had grown to nearly 90,000.³ The public relies on ownership information to manage patent risk⁴ and facilitate patent transacting.

Asking applicants and patentees "who owns it?" in order to provide this information to the public is well within the scope of the statute and the PTO's reasonable interpretation of it. *See Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-845, 104 S. Ct. 2778, 81 L. Ed. 2d 694 (1984); *Dudas v. Lacavera*, 441 F.3d 1380 at 1383 ("Because the PTO is specifically charged with administering [35 U.S.C. § 2(b)(2)], we analyze a challenge to the statutory authority of its regulations under the *Chevron* framework."). Asking for changes in ownership to be provided in the course of other communication with the patent office (office actions, maintenance fees, etc.) is a sensible and minimally burdensome way of getting it.

¹ Assistant Professor, Santa Clara University School of Law. © 2012. <u>colleenchien@gmail.com</u>. I am thankful to Gazelle Technologies for providing patent data for the analyses reported here, and my research assistant Gerald Wong for his work on the analyses. This comment draws from my experiences in practice as a patent prosecutor, and empirical patent law scholar who has worked with the USPTO's patent assignment and conveyance database, the PTO maintenance database, and other related information about the post-issuance events in a patent's life most recently in developing my 2011 paper, *Predicting Patent Litigation*, 90 Tex. Law Rev. 283 (2011). For that project, I developed a mathematical model for predicting which patents will be litigated based on patent data. According to my analysis, the post-issuance transactions of a patent, including whether and how often it is transferred, reexamined, securitized, and forward cited (together comprising what I call a patent's "acquired characteristics") are statistically correlated to the likelihood of the patent's litigation. This effort, which is now being adapted into commercial environments, represents an example of the multitude ways in which companies may depend on patent data to make decisions about how to run their business. The full paper talks about the difficulties scholars such as myself encounter in working with patent data and the policy implications of these issues and I submit it as an appendix to this comment.

 $^{^{2}}$ For example, when a university transfers its patent applications to a startup, when a company with patents is bought or sold, when a company goes bankrupt and transfers its patents to a new entity, or when a patent portfolio is sold.

³ HENRY CHESBROUGH, EMERGING SECONDARY MARKETS FOR INTELLECTUAL PROPERTY: US AND JAPAN COMPARISONS (2006) at 63. Chesbrough documents a similar rise in patent transfers in Japan, from less than 5,000 in 1997 to more than 35,000 in 2005. *Id.* at 101.

⁴ See Chien, *Predicting Patent Litigation* supra, at Abstract. (Finding that what happens after a patent issues, including whether it changes hands and its owner changes entity size, is correlated with the likelihood of the patent being litigated.)

Patent ownership is a critical component of patent notice. If patents provide the right to exclude, the public is entitled to know who might do the excluding.⁵ As an exhaustive study of patent notice and remedies carried out by the Federal Trade Commission (FTC) found, based on the testimony of hundreds of patent system participants, "PTO records provide poor notice regarding current ownership of patents."⁶ Improving the stock of available ownership information, therefore, is not only statutorily permissible, but also commercially critical.

The remainder of this comment, then, focuses on two questions that the PTO must consider should it implement its proposal: 1) what should be the sanction for failure to provide timely and accurate information, and 2) what form should the requested disclosure take? To address these questions, it is important to appreciate the difference between inadvertent and strategic non-disclosure and to consider the costs of additional disclosure on patent applicants and patentees.

The Patent Record is Incomplete and Inaccurate For Many Reasons

Under the current rules, it is impossible to know who owns a particular patent, or what patents a particular entity owns. This "who owns what" problem, which I also refer to as "patent recordation failure" – frustrates patent decision-making in a number of ways. However, while not required, companies have incentives to record ownership of patents. There are legal benefits to recording.⁷ More to the point, for patents to perform the function that many companies want them to – to serve as a deterrent to suit (defensive patenting), signal a company's value to investors, or provide a measure of the inventive output of an entity – the fact that that company owns the patent needs to be ascertainable from the patent record. As one veteran patent corporate patent attorney put it, "small co's who are VC funded or otherwise subject to due diligence on a fairly regular basis usually keep their PTO assignments current." For that reason, I believe that the inability to tell who owns what patents often, and perhaps usually results from inadvertent, rather than strategic or deliberate acts on the part of the applicant.

Patent recordation failure may be attributable to a wide variety of behaviors: 1) failure to record ownership,⁸ 2) fail to record ownership in a timely manner, 3) assignment to shell or

⁵ As I have previously said, see *Predicting Patent Litigation*, supra at fn 267.

⁶ FED. TRADE COMM'N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION (2011), *available at* <u>http://www.ftc.gov/os/2011/03/110307patentreport.pdf</u>, at fn 268.

⁷ Described in *Predicting Patent Litigation*, supra at p. 311.

⁸ I have previously commented on the number of unrecorded assignments: From *Predicting Patent Litigation*, at p.311:

Prior studies have asserted that the number of unrecorded assignments is likely small. This is because recording patent assignments puts third parties who might otherwise claim ownership on notice and confers legitimacy to patent plaintiffs. A scholar who performed an anecdotal analysis of gaps in the chain of ownership found few unrecorded assignments. Others, however, assert that the number of unrecorded assignments is significant, particularly among small companies who tend to lack formal legal processes and procedures. In a test analysis, I found that, of 100 patents that listed a non-inventor assignee on the front page of the patent, an assignment to that "front-page" assignee was not recorded with respect to thirty of them.⁸ However, this figure may overstate

subsidiary companies that the PTO does not affiliate with the real party in interest, and 4) inconsistent self-identification.

In many cases, this behavior is motivated *not* by a desire to hide a patent's ownership. Rather, patent recordation failure is due to cost (attorney time and fees, for a privately owned start-up small company), poor record-keeping practices once the company has dissolved/gone bankrupt, tax reasons for assigning to one entity rather than another, large companies failing to keep up their assignment records post-issuance, the patent is the subject to a "whole company" transfer and no individual assignment is necessary or where the ownership issues are not straightforward, and that a company does not consistently refer to itself in its interactions before the PTO,⁹ perhaps in part because corporate identity and ownership is itself complicated, particularly for a large and/or multinational corporation. When a patentee has disclosed its ownership on the front-page of the patent, recordation may also seem unnecessary and duplicative of what's already a matter of public record.

However, companies also deliberately withhold patent ownership information in order to gain strategic advantage. Based on a preliminary analysis I did for the purposes of this comment, out of 915 filings of patent litigations of individual patents by patent trolls or "patent assertion entities,"¹⁰ in about a third of the cases, the plaintiff was not the patent owner of record as of the day the litigation was initiated.¹¹ In 10% of all cases, the owner had been assigned rights to the patent but waited until after the patent was initiated to record the assignment.¹² As has been widely reported, companies including Intellectual Ventures, Acacia, and others have assigned their patents to thousands of shell companies and subsidiaries.¹³ An important reason companies

http://acaciatechnologies.com/pr/0423091stqtrfinancials.pdf

the level of overall nonrecording, as a company may feel less need to record an assignment when their ownership is stated clearly on the front page of the patent. (citations omitted, included in source.)

⁹ One commercial service, GazelleTech, has assembled a database that includes 2,317 different spellings of IBM. (paper describing same on file with author) Also see database extract including 200 spellings of IBM (on file with the author).

¹⁰ Cases initiated from 2000-2008. If a litigation involved the assertion of five patents, for example, it counted as five litigation filing events. The methodology used to develop this database is described in my paper, *Of Trolls, Davids, Goliaths, and Kings: Narratives and Evidence in the Litigation of High-Tech Patents*, 87 N.C. L. REV. 1571 in which I detail the process of selecting cases and the definition of a patent "troll" applied. The coding was conservative, erring on the side of finding the plaintiff to be the patent owner of record, e.g. I conservatively coded subsidiaries and parents, and owners/owner-companies as the same entity, for example Firepond and Orion, because Firepond Inc is Erich Spangenberg's wife's company, and Orion IP is one of Spangenberg's shell companies.

¹¹ "Owner of record" refers to the entity to whom the patent was assigned based on recorded assignments, as of the time of the litigation. In 4.6% of the cases, an assignment to the plaintiff was recorded, but after the lawsuit was initiated.

¹² Analysis on file with author.

¹³ See *From Arms Race to Marketplace*, supra, at fn142 "*See, e.g.*, Press Release, Acacia Research Corp., Acacia Research Reports First Quarter 2009 Financial Results (Apr. 23, 2009),

⁽describing Acacia's more than 100 patent portfolios, held collectively by its many subsidiaries);

Avancept, Avancept, A Study of: The Intellectual Ventures Portfolio in the United States: Patents &

purchase patents on the secondary market is for litigation. Indeed, the FTC has defined a patent assertion entity as a company focused on "*purchasing* and asserting patents."¹⁴

Patent assertion entities are not the only ones to "play games with the assignments."¹⁵ Prior to issuance, some companies deliberately withhold their identities (by for example, keeping blank the Application Data Sheet) until the patent has issued. The private patent sales market is much larger than the public one, in part because of the privacy and control practicing companies can exercise over transaction information.¹⁶ According to one account, "CFOs [] nervously roll IP licensing expenses into the costs of goods produced to avoid any public slip. Miniature versions of actual sales documents are publicly recorded to thwart greater disclosure. Creating a limited liability company to hold IP assets provides still greater uncertainty."¹⁷

The Impact of Patent Recordation Failure Depends on The Patent

Regardless of the motive for non-disclosure, lack of accurate ownership information can create different issues depending on what happens to the patent. For patents that have limited commercial value and are never licensed, litigated or asserted, the error seems likely to result largely in harmless error to the public, though the owner company itself may incur transactions costs when it seeks to transfer or transact with the patent.

For patents that have commercial value, but which the owner is not strategically hiding its identity, the problem of locating the owner of a patent to which a license is sought, although certainly potentially more costly than if the record is accurate, appears manageable. This conclusion is based on anecdotal accounts which may or may not prove to be representative of what is typical.¹⁸ However, since patent owners like to be paid, it seems likely that their agents or

Applications 6 (2d ed. 2010) (on file with the author)supra note 87, at 18 (estimating that IV has up to 1100 shell companies); see also Joe Mullin, *Patent Enforcement Companies Speak at SF Conference*, The Prior Art (May 28, 2010, 12:16 PM),

http://thepriorart.typepad.com/the_prior_art/2010/05/patent-enforcement-companies-speak-at-sfconference. Html ("[Erich Spangenberg has a] very large network of patent-holding companies, several

of which are named after Greek gods.")"

¹⁴ FED. TRADE COMM'N, *supra*, at n5.

 $^{^{15}}$ Id. at n331.

¹⁶ From Arms Race to Marketplace, supra at fn 110.

¹⁷ Tom Ewing, *Inside the World of Public Auctions*, Intell. Asset Mgmt., July/Aug. 2010, at 63, 69

¹⁸ For example, as a veteran attorney and general counsel in a company in the medical device space, put it to me, " [Patent clearance] has never been [insurmountable] for me. In my experience it can play out in number of ways. Usually you can find someone who will represent that they own and, assuming you are comfortable with that representation and/or any actual evidence they can provide, you can do a deal with them and rely on their reps and warranties. Other times you can simply wait for a maintenance payment to come due and, if no one pays, you are out of the woods (works best when you are in development mode). If someone does pay you have a good idea of ownership. Other times an acquiring company will take on the risk and/or task of finding owner and licensing (may be a predicate to deal closing).

attorneys or record would be happy to pass on an interest in taking a license to their patent to them.

When non-disclosure of ownership is strategic, it is likely because the patent owner wants to gain some advantage through the non-disclosure, to the potential detriment to an assertion target or other member of the public. A company may not want its competitors to know what it's doing. A patent troll may not want others to know what patents it hold, preserving for its assertion campaigns the element of surprise, or insulating its patents from a reexamination challenge. This makes it harder and more expensive for a company to clear its rights prior to product launch, or use patent information to drive decision-making. However, in areas such as tech, clearance is frustrated by many other drivers, making a change in ownership rules, by itself, unlikely to completely solve the problem.

<u>Suggestions for the PTO – What It Could Ask to be Disclosed and What Penalties It Could</u> <u>Consider for Failure to Do So</u>

Inadvertent Disclosure

To address the problem of inadvertent disclosure, the PTO's proposals are useful and unlikely to be too controversial. To address the problems of misspellings and inconsistent selfidentification, the PTO could provide clear guidelines regarding who is the owner, ask the owner to identify themselves with reference to an already-existing patent asset (e.g. this application is owned by the owner of record of patent X,XXX,XXX), or use other ways to reduce errors.

Providing a financial incentive for reporting changes in ownership (rather than just mere verification) seems like a reasonable way to compensate for the potential costs generated by ownership recordation. Instituting a penalty for non-disclosure of ownership would require much greater consideration. As it is for a number of the PTO's ministerial requirements (small entity status, missing inventor declaration), any penalty would likely be tiered based the reason for non-disclosure. However, introducing a penalty that could cloud the validity or enforceability of a patent, even just in a scarce number of cases, could introduce considerable costs in patent transacting (due diligence) and litigation contexts , and lead to abuse by the party contesting the motivation for non-recordation.

Strategic Non-Disclosure

To address the problem of strategic disclosure, the PTO's proposals may only be partially effective. Some companies withhold ownership information because they can and have no reason not to do so – in these cases, a nudge in favor of disclosure may make a difference. However, for those for whom secrecy is crucial to their business model (particularly patent assertion entities), the rules could potentially be skirted , for example, by assigning to a shell company or exclusively licensing, rather than buying the patent.

One way to guard against strategic practices, however, would be to require the patentee to disclose not only the patent owner but also the real party in interest.¹⁹ However, this could represent a significant change to practice, and the pros and cons, as well as the differential impact of such a requirement on both inadvertent and strategic non-disclosure, and large and small entities, would need to be carefully considered.

Other Points

In addition to seeking more information from applicants, the PTO could do much more with the information it already has.²⁰ "Although the only patents that could be asserted are patents that have not lapsed, it is impossible to search only among in-force patents at the PTO website, and even finding out whether a particular patent is still in force is a laborious process [on the PTO website]."²¹ The subsidiary-matching problem is a vexatious one that could be potentially be addressed, at least in part, through the disclosure of customer ID/payor information.

One of the most pressing problems in the patent system is the inability of companies to anticipate and efficiently manage the risks that existing patents pose to the work they are doing. In addition to the current proposal, I commend the Kappos administration's notable and productive efforts to improve the flow of patent information to the public in support of corporate decision-making.²² I also commend and encourage the PTO's in its continuing efforts to address other parts of the risk-management problem including by working with the EPO in developing a state of the art classification system.²³

¹⁹ FED. R. CIV. P. 17 ("An action must be prosecuted in the name of the real party in interest.").

²⁰ I am working on a paper that explores in depth that what it might could do tentatively entitled, "Rethinking Patent Disclosure" (draft in progress).

²¹ Predicting Patent Litigation, supra, at 311.

²² Through, e.g., the conference "Patent Statistics for Decision Makers 2011" <u>http://conferences.thehillgroup.com/USPTO/PatentStatistics2011/index.html</u>, and the release of patent data through

the Google Patent Store. Jon Orwant, *Free Download: 10 Terabytes of Patents and Trademarks*, GOOGLE PUB. POL'Y BLOG (June 2, 2010, 2:40 PM), http://googlepublicpolicy.blogspot.com/2010/06/free-download-10-terabytes-of-patents.html (noting that another patent-database project had previously spent "hundreds of thousands of dollars" on acquiring data from the PTO).

²³ <u>http://www.uspto.gov/news/pr/2010/10_51.jsp</u>