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The George Washington University Law School

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Michaels, Andrew C., Patent Transfer and the Bundle of Sticks (December 1, 2016). GWU Law School Public Law Research Paper No. 2016-57; GWU Legal Studies Research Paper No. 2016-57. Available at SSRN: <https://ssrn.com/abstract=2883829>

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Patent Transfer And The Bundle of Sticks

by Andrew C. Michaels*

Abstract

In the age of the patent troll, patents are often licensed and transferred. A transferred patent may have been subject to multiple complex license agreements. It cannot be that such a transfer wipes the patent clean of all outstanding license agreements; the licensee must keep the license. But at the same time, it cannot be that the patent transferee becomes a party to a complex and sweeping license agreement – the contract – merely by virtue of acquiring one patent. This article attempts to separate the *in personam* aspects of a license agreement from its effects on the underlying *in rem* patent rights, using Hohfeld’s framework of jural relations and the “bundle of sticks” conception of property. A license agreement can diminish (but not add to) the bundle of *in rem* patent rights initially granted by the USPTO, and a new patent owner takes only the diminished bundle of rights upon transfer, given that one cannot transfer more than what one owns. The bundle theory can provide greater clarity regarding the extent to which licenses “run with the patent,” and also has implications for how patent transfer affects other doctrines such as patent exhaustion, FRAND obligations, prior user rights, and laches.

Keywords

license, bundle, Hohfeld, trolls, LOT, exhaustion, laches, in rem, FRAND

* Visiting Associate Professor of Law and Frank H. Marks Intellectual Property Fellow, George Washington University Law School. J.D., New York University School of Law, 2010. The author thanks those who participated in the 2016 Mid-Atlantic Works-in-Progress Colloquium at American University Washington College of Law. Comments welcome at acmichaels@law.gwu.edu.

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Patent Transfer And The Bundle of Sticks

Introduction

No figure in contemporary patent law has drawn more ire than the “patent troll.”¹ The *bête noire* of the patent law community, the so-called troll might be more formerly referred to as a “Non Practicing Entity” (NPE) or “Patent Assertion Entity” (PAE).² The troll lies in wait under technological bridges, until it emerges threatening to cast corporations into a cascade of patent litigation. But the troll can be persuaded to step aside, to grant a license, for a price.

The License on Transfer (“LOT”) Network bills itself as the “permanent solution to the patent troll problem,”³ something like the fabled big billy goat.⁴ The

¹ See, e.g., Kristen Jakobsen Osenga, *Formerly Manufacturing Entities: Piercing the Patent Troll Rhetoric*, 47 CONN. L. REV. 435, 437 (2014) (“Everyone seems to hate ‘patent trolls.’”); but see, Edward Lee, *Patent Trolls: Moral Panics, Motions in Limine, and Patent Reform*, 19 STAN. TECH. L. REV. 101, 101 (2016) (“‘I like patent trolls,’ Judge Richard Posner confessed to a group of patent scholars . . .”).

² Osenga, 47 CONN. L. REV. at 439; see also, Sara Jeruss, Robin Feldman, & Joshua Walker, *The America Invents Act 500: Effects of Patent Monetization Entities on US Litigation*, 11 DUKE LAW & TECH. REV. 357, 358 (2012) (“Any discussion of flaws in the United States patent system inevitably turns to the system’s modern villain: non-practicing entities.”); Lee, 19 STAN. TECH. L. REV. at 103 (“In the extreme, such prejudice leads to a moral panic in which rational policymaking and decision-making give way to hysteria to fight the proverbial ‘folk devil’ (substitute: patent troll).”) (citing STANLEY COHEN, *FOLK DEVILS AND MORAL PANICS* (1972)).

³ See <http://lotnet.com/how-lot-works> (accessed Dec. 2016).

⁴ Cf. JOHN LINDLOW, *TROLLS: AN UNNATURAL HISTORY* 131 (Reaktion Books, 2014) (“Probably the most famous troll is the one under the bridge in *The Three Billy Goats Gruff*.”). In the Norwegian fable, three billy goats cross a bridge in search of food. Under the bridge lives a troll who threatens to eat each billy goat. The first two billy goats each in turn convince the troll to save its appetite for the next, larger, billy goat

idea of the LOT is that a group of companies makes a pact that none of them will transfer any of their patents to a troll. If any company breaks the pact, a license is automatically granted to all of the other companies in the group, which takes effect immediately upon transfer of the patent to the troll. The LOT's plan to "eliminate the patent troll threat,"⁵ is thus premised on the notion that licenses run with patents when transferred. The LOT cannot be bothered to engage with the question of how or to what extent this happens.⁶ But the question remains: is the LOT license a creature of contract or of property?

On the one hand, it cannot be that the mere transfer of a patent wipes the patent clean of all outstanding licenses. But at the same time, the LOT agreement is a complex ten page contract with various provisions relating to bankruptcy, third party beneficiaries, costs, governing law, and other issues.⁷ It cannot be that a patent troll becomes a full party to that contract merely by virtue of acquiring a single patent from a LOT member. So what "runs with the patent" must be something including the bare *license* but something less than the entire contract or *license agreement* creating the license.

Even if the parties to a license agreement attempt to address this issue in the contract, that would not necessarily settle the matter. The parties can agree to make

following behind. But the third billy goat is so large that it defeats the troll, thus permanently solving the troll problem, as the LOT purports to do. *See id.* at 69-70.

⁵ <http://lotnet.com> (accessed Dec. 2016).

⁶ *See* Part II(E), *infra*.

⁷ *See* LOT agreement, v2_0-11_24_15, at § 2.3, 5.3, 5.5, 5.6, 5.11, available at <http://lotnet.com/download-lot-agreement> (accessed Dec. 2016).

a license assignable.⁸ But the question here is different. The question here is when the *licensor* transfers a licensed *patent*, to what extent is the acquirer of the patent automatically bound by the obligations in the license agreement – to which the patent acquirer never agreed.⁹ In other words, to what extent does a license agreement change the underlying *property* rights, and conversely, to what extent does it remain an *in personam* agreement between two contracting parties.¹⁰

How then to separate aspects of the license agreement which remain between the parties to that agreement, from those which “run with the patent?” The caselaw sometimes states that aspects of the license agreement that relate to the “actual use” of the patented invention are “encumbrances” running with the patent. However, this theory is not consistently applied and is not particularly coherent. For example, courts have held that royalty rights do not run with the patent, though

⁸ See *PPG Indus. v. Guardian Indus. Corp.*, 597 F.2d 1090, 1093 (6th Cir. 1979) (“It has long been held by federal courts that agreements granting patent licenses are personal and not assignable unless expressly made so.”); *Troy Iron & Nail v. Corning*, 55 U.S. (14 How.) 193, 14 L. Ed. 383 (1852) (“A mere license to a party, without having his assigns or equivalents words to them, showing that it was meant to be assignable, is only the grant of personal power to the licensees, and is not transferable by him to another.”).

⁹ *Cf. Reuben v. U.S. Air*, No. 11-1235, 2012 U.S. Dist. LEXIS 84038, *19 (W.D. Pa. June 18, 2012) (“It is fundamental contract law that one cannot be liable for a breach of contract unless one is a party to that contract.”); *Electron Energy Corp. v. Short*, 408 Pa. Super. 563, 571 (1991) (“It is fundamental contract law that one cannot be liable for a breach of contract unless one is a party to the contract.”); *Smartran, Inc. v. Alpine Connections, Inc.*, 352 Fed. Appx. 650, 656 (3rd Cir. 2009).

¹⁰ See *McCoy v. Mitsubishi Cutlery, Inc.*, 67 F.3d 917, 920 (Fed. Cir. 1995) (“Whether express or implied, a license is a contract ‘governed by ordinary principles of state contract law.’”) (quoting *Power Lift, Inc. v. Weatherford Nipple-Up Sys.*, 871 F.2d 1082, 1085 (Fed. Cir. 1989); Christopher M. Newman, *A License is not a “Contract not to Sue”*: *Disentangling Property and Contract in the law of Copyright Licenses*, 98 IOWA L. REV. 1101, 1103 (2013) (distinguishing between “license” and “license agreement”).

it is not clear how royalty rights received in exchange for allowing use of a patented invention do not relate to “actual use” of that patented invention. The encumbrance theory is also inconsistent with the principle that there can be no covenants running with personal property, given that patents are by statute to be treated as having the attributes of personal property.¹¹

This article attempts to develop a better framework for analysis of these issues, with the help of Hohfeld’s framework of jural relations and the “bundle of sticks” conception of property. Under this theory, a patentee may give up one stick in the bundle, the right to exclude the licensee, through the license agreement. In Hohfeld’s terminology, the license agreement effects a change in the relation between the patentee and the licensee, from “Right / Duty,” to “No-Right / Privilege.”¹² When the patentee transfers the patent, it transfers only what is left in the bundle of patent rights, though the license agreement or contract remains between the original two parties. This comports with the principle that one cannot transfer what one no longer owns, or, *nemo dat quod non habet*.¹³

Under the bundle theory of this article, the bundle of patent rights granted by the USPTO can be diminished but not enlarged by the actions of a patent owner. For

¹¹ See Part I(A), *infra*; 35 U.S.C. § 261 (“patents shall have the attributes of personal property”).

¹² See Part I(C), *infra*.

¹³ See, e.g., *Commerce Bank, N.A. v. Chrysler Realty Corp.*, 244 F.3d 777, 783 (10th Cir. 2001) (“[The holding that] an assignee can acquire rights no greater than those held by the assignor is consistent with the basic principle of commercial law encapsulated in the Latin phrase *nemo dat qui non habet*. . . . The basic concept behind *nemo dat* is that a transferee’s rights are no better than those held by his transferor.”).

example, though royalty rights might be received by a licensor in exchange for giving up one stick in the patent bundle, such rights would not be considered part of the bundle of patent rights, and so would not automatically transfer with the patent. A patent does not initially include a right to receive royalties, and a license agreement cannot operate add that right to the *in rem* patent bundle.

Part I illustrates the problem, discusses the divide between property and contract, and reviews Hohfeld and the “bundle of sticks” conception of property. Part II compares the bundle theory with the law of covenants and encumbrances that “run with” property interests, and evaluates aspects of license agreements under these two theories, concluding that the bundle theory provides a more coherent explanation. Part III explores some broader implications of the bundle theory for other doctrines of patent law, such as patent exhaustion, FRAND commitments, prior user rights, and laches.

Part I – Bundle Theory and Hohfeld

A. Illustration Of The Problem

Consider companies A and B, which own ten patents each, and enter into a cross-license agreement. Under the agreement, A has a license to all ten of B’s patents, and B has a license to all ten of A’s patents. Then, A transfers one of its ten patents (patent X) to company C. Does company C have a right to sue company B for infringement of patent X? It seems clear that in general the answer is no. B paid for a license to patent X when A owned that patent. B should not, absent contrary

agreement, be deprived of the license bargained for, merely because A later decided to transfer the licensed patent.¹⁴

Courts to have considered the question have generally reached this result.¹⁵ The courts have ruled that even a “bona fide purchaser” of a patent takes the patent subject to “licenses, of which he must inform himself as best he can at his own risk.”¹⁶ The intuition is that the purchaser of a patent should recognize the possibility that licenses on the patent might exist, and should take steps to investigate whether they in fact do exist.¹⁷

¹⁴ Cf. Lawrence Berger, *Policy Analysis of Promises Respecting the Use of Land*, 55 MINN. L. REV. 167, 169 (1970) (“It was early apparent that unless agreements (contained in deeds or leases) respecting the use of land were binding not only upon the promisor (covenantor) who entered into them but also upon purchasers from him, such undertakings would be worthless, since otherwise they could be avoided by a mere transfer to a third party.”); Jay Kesan & Carol M. Hayes, *FRAND’s Forever: Standards, Patent Transfers, and Licensing Commitments*, 89 IND. L. J. 231, 304 (2014) (“if a patentee could extinguish the benefits of a FRAND commitment by transferring the patent to a third party, this would lead to inequitable results”).

¹⁵ See, e.g., *Innovus Prime, LLC v. Panasonic Corp.*, 2013 U.S. Dist. LEXIS 93820, *15 (N.D. Cal. July 2, 2013).

¹⁶ *Jones v. Berger*, 58 F. 1006, 1007 (C.C.D. Md. 1893); see also, *Innovus Prime*, 2013 U.S. Dist. LEXIS 93820, *16 (“This occurs whether or not an assignee had notice.”); *V-Formation, Inc. v. Benetton Group SpA*, 2006 U.S. Dist. LEXIS 13352 (D. Colo. Mar. 10, 2006) (“The court does not agree that the doctrine of ‘bona fide purchaser’ as urged by V-Formation precludes Benetton from asserting the covenant not to sue as a defense in this case.”). Of course, a true “bona fide purchaser” patent assignee may have some claim against a patent assignor / seller who is less than forthright about the extent to which the patent has been license.

¹⁷ See Menachem Mautner, *The Eternal Triangles of The Law*, 90 MICH. L. REV. 95, 116 (1991) (“Clearly, whenever the purchaser acts with actual knowledge or presumed suspicion of the existence of a prior conflicting claim, the purchaser is the party best located to prevent the conflict by avoiding the transaction.”). In the case of licenses, the purchaser would not necessarily avoid the transaction, but might just pay a lower price for the patent, reflecting the inability to enforce against the licensed parties.

But the more difficult question, on which the courts have been unclear, is: under what *theory* does company B maintain its license to patent X. In this regard, the case law presents at least two different possibilities.

The first possibility is that the license is an “encumbrance” that attaches to the patent and “runs with” the patent when it is transferred.¹⁸ This theory seems to derive from the common law on covenants that “run with the land,”¹⁹ but its application to patent law can be problematic. What exactly runs with the patent? It cannot be the entire license agreement. Considering the hypothetical agreement above, it seems unlikely that given the mere transfer of patent X from A to C, C now inherits A’s license rights to all ten of B’s patents. The contract between A and B remains a contract between A and B, despite the transfer of one patent that was licensed in that contract. So the encumbrance that runs with the patent is something that derives from the license agreement, but something less than the entirety of that agreement. This “encumbrance” theory is also in some tension with the principle that covenants cannot run with personal property, given that by statute, “patents shall have the attributes of personal property.”²⁰

¹⁸ See, e.g., *Innovus Prime*, 2013 U.S. Dist. LEXIS 93820, *15 (“agreements involving the actual use of the patent ‘run with the patent’ and are binding on subsequent owners”) (citing *Datatransury Corp. v. Wells Fargo & Co.*, 522 F.3d 1368, 1372 (Fed. Cir. 2008)).

¹⁹ See CHARLES E. CLARK, REAL COVENANTS AND OTHER INTERESTS WHICH “RUN WITH THE LAND” (2d ed. 1947); Berger, *supra*, 55 MINN. L. REV. at 207.

²⁰ 35 U.S.C. § 261; see also, *Jones v. Cooper Indus., Inc.*, 938 S.W.2d 118, 123 (Tex. App. 14th 1996) (“Since a patent is to be treated as personal property, there can be no covenants that ‘run with’ the patent.”); *In re Particle Drilling Techs.*, 2009 Bankr. LEXIS 2151, *7 (S.D. Tex. 2009) (“Patents are personal property. Real property concepts (such as covenants running with the land) do not apply to personal property.”).

The second possibility is based on the general principle that one cannot transfer what one does not own.²¹ Where a patentee, via a license agreement, has already given up the right to exclude a particular licensee, the patentee cannot then transfer that right. Using the “bundle of sticks” analogy,²² where a patentee has already given up one stick in the bundle, the patentee transfers only what remains. Returning to the hypothetical, A had already given up the right to exclude B from practicing patent X, so A could not transfer that right to C. A transferred to C a diminished bundle of sticks, that is, only those sticks that remained in the bundle.

Sometimes aspects of these two different theories are presented within a single case, or even a single sentence.²³ But these two possibilities (the “encumbrance” theory and the “bundle” theory) have significant differences. To begin with, they are aesthetic opposites; under the encumbrance theory, something

²¹ See, e.g., *Sanofi, S.A. v. Med-Tech Veterinarian Prods.*, 565 F. Supp. 931, 939 (D.N.J. 1983) (explaining that it is a “principle of patent law . . . that the purchaser does not acquire any rights greater than those possessed by the owner of the patent”) (citing *Featherstone v. Ormonde Cycle Co.*, 53 F. 110, 111 (C.C.N.Y. 1892)).

²² See, e.g., *Lexmark Int’l, Inc. v. Impression Prods.*, 816 F.3d 721, 741 (Fed. Cir. 2016) (*en banc*) (“It has long been a familiar feature of our legal landscape that property rights in a particular thing – like the separate interests in making, selling, using, etc., an invention – are viewed as a ‘bundle’ of rights (or sticks) that can generally be transferred separately.”); STEPHEN R. MUNZER, *A THEORY OF PROPERTY* 22-36 (1990); Thomas C. Grey, *The Disintegration of Property*, in *PROPERTY: NOMOS XXII* 69 (J. Roland Pennock & John W. Chapman eds., 1980).

²³ See, e.g., *Datatreasury Corp. v. Wells Fargo & Co.*, 522 F.3d 1368, 1372 (Fed. Cir. 2008) (“[B]ecause the owner of a patent cannot transfer an interest greater than that which it possesses, an assignee takes a patent subject to the legal encumbrances thereon.”); *Innovus Prime*, 2013 U.S. Dist. LEXIS 93820, *15; *Paice LLC v. Hyundai Motor Co.*, 2014 U.S. Dist. LEXIS 95042, *28 (D. Md. July 7, 2014) (“a patent owner cannot transfer an interest greater than that which it possesses, and assignees take patent rights subject to the legal encumbrances thereon”); see also Part II(A), *infra*.

(an encumbrance) is added to the patent, whereas under the bundle theory, something (a stick or a right) is subtracted.

These different cognitive frameworks can also lead to different practical results. If the license agreement is a contract, and if the contract (or part of it) is an encumbrance that travels with the patent, then a new patent owner who fails to abide by the contract terms could potentially be subject to a claim for breach of contract.²⁴ By contrast, under the bundle theory, although a prior licensee would have a license *defense* to an infringement claim by the new patent owner, the prior licensee would not have a breach of contract *claim*, as the contract remains between the original two parties.²⁵

The bounds of the rights of the new patent owner are also potentially different under the two theories. Courts applying the encumbrance theory have generally stated or implied that that the encumbrance includes aspects of the license agreement that relate to the actual use of the patent, or the patented invention.²⁶

²⁴ See, e.g., Kesan & Hayes, 89 IND. L. J. at 286 (“When a patent owner grants a license to another party, the license is often analyzed as a contract.”); ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1450 (7th Cir. 1996) (“[W]e treat the licenses as ordinary contracts”); H. Justin Pace, Note, *Anti-Assignment Provisions, Copyright Licenses, and Intra-Group Mergers: The Effect of Cincom v. Novelis*, 9 NW. J. TECH. & INTELL. PROP. 263, 267 (2010) (“Copyright and patent licenses are contracts and as such are interpreted according to state law.”); Mark R. Patterson, *Must Licenses Be Contracts? Consent and Notice in Intellectual Property*, 40 FLA. ST. U. L. REV. 105, 109 (2012) (“This Article argues that the weight of judicial authority and sound policy support a contractual approach to license formation.”).

²⁵ See, e.g., Ericsson Inc. v. Wi-LAN USA, Inc., No. 14-21854-CV-DMM, D.I. 165, *10 (S.D. Fla., Aug. 14, 2015) (“Ericsson does not have standing to maintain its claim for breach of contract.”).

²⁶ See, e.g., *Innovus Prime*, 2013 U.S. Dist. LEXIS 93820, *15 (“agreements involving the actual use of the patent ‘run with the patent’ and are binding on subsequent owners”)

Royalty rights to a percentage of licensee sales on a patented invention would certainly relate to the use of the patented invention, and possibly use of the patent as well. The encumbrance theory would thus seem to counsel that such royalty rights should run with the patent, just as rent from a tenant would run with the land to a new landlord.²⁷ But where, as in the hypothetical, only a fraction of the licensed patents are transferred, it could be difficult to apportion the extent to which royalty benefits shift to the new owner.

Under the bundle theory, royalty rights would not travel with a patent, absent contrary agreement. This is because the bundle of patent rights granted by the USPTO did not include the right to receive royalties. The royalty rights were extracted by the original patent owner *in exchange for giving up* the right to exclude the licensee, but that does not make the royalty rights part of the patent bundle.²⁸ Under the bundle theory, an *in personam* contract entered into by a patent owner cannot add to the *in rem* bundle of patent rights transferred to a subsequent patent owner. Avoiding the apportionment issue, as well as the issue of what does or does not relate to the “actual use” of the patent or invention, the bundle theory gives a more coherent answer as to whether certain aspects of a license agreement would travel with the patent to a new owner.

(citing *Datatreasury*, 522 F.3d 1372); *Paice*, 2014 U.S. Dist. LEXIS 95042, *32-33 (“licensing terms not tied to the right to use a patented invention do not encumber”).

²⁷ See Berger, 55 MINN. L. REV. at 222 (“the burden of a covenant to pay rent runs with the land to the assignee of the tenant and the benefit runs to the successor in ownership of the landlord’s reversion”).

²⁸ Cf. *In re Particle Drilling Techs.*, 2009 Bankr. LEXIS 2151, *8 (“a royalty interest in a patent cannot be considered a covenant that runs with the land”).

B. Sharpening The Property / Contract Divide In Licenses

The relative clarity of the bundle theory is advantageous as compared with the legal uncertainty of the encumbrance theory.²⁹ In a patent transfer situation, the parties (transferor and transferee) are already dealing and negotiating the transfer of the patent.³⁰ As such, it matters not so much where the entitlement is placed, but it is important to be clear about where the entitlement lies.³¹ If the entitlements are clear, the parties will more easily be able to take them into account in negotiating the price of the patent transfer, or contract around the default rule and transfer additional aspects of any license agreements.³² As explained in *Law and Economics* by Robert Cooter and Thomas Ulen:

[B]argainers are more likely to cooperate when their rights are clear and less likely to agree when their rights are ambiguous. . . . One

²⁹ Cf. Berger, 55 MINN. L. REV. at 234 (“The rules of law about covenants running with the land are so complex that only a very few specialists understand them. Sometimes complexity in the law is necessary. In this particular case, it is not.”).

³⁰ Where royalties are concerned, the relevant analysis is between the patent transferor and transferee, assuming that the licensee will be paying the same amount either way. The question is just, as a default rule, who will the licensee be paying. If the royalties do not run, the transferor continues to get paid. If the royalties do run, the payments go to the patent transferee (the new owner) instead.

³¹ Cf. R.H. Coase, *The Problem of Social Cost*, 3 J. L. ECON. 1, 8 (1960) (“the ultimate result (which maximizes the value of production) is independent of the legal position if the pricing system is assumed to work without cost”); Guido Calabresi & Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1094 (1972) (“Recently it has been argued that on certain assumptions, usually termed the absence of transaction costs, Pareto optimality or economic efficiency will occur regardless of the initial entitlement.”).

³² Kesan & Hayes, 89 IND. L. J. at 289 (“markets require contracting or exchange, and uncertainty threatens exchange”); JULES L. COLEMAN, RISKS AND WRONGS 68 (1992).

implication of this finding is that property law ought to favor criteria for determining ownership that are clear and simple.³³

Uncertainty in where the entitlements lie can only serve to complicate matters, creating costs related to confusion in negotiation, and potentially even future disputes leading to litigation. Clear and simple rights regarding *in rem* rules such as patents rights can help to minimize information costs.³⁴ This supports the idea that under the bundle theory of this article, the patentee can diminish the *in rem* patent bundle of patent rights by entering into a license agreement, but cannot add to that bundle of rights. Allowing a patentee to add to the *in rem* bundle of property rights granted by the USPTO would impose significant information costs on society, as such *in rem* rights are “against the world” and thus impose correlative duties on everyone else, as will be explained further in the next subsection.

This is not entirely just a matter of default rules. The parties to a license agreement could probably successfully agree that a license will *not* run with the licensed patent, as this would not adversely affect a non-party to the agreement such as a bona fide purchaser of the patent. But an agreement that all aspects of a license agreement will necessarily bind a future patent owner could be problematic. How would such an agreement bind a purchaser of the patent who did not sign the

³³ ROBERT COOTER AND THOMAS ULEN, *LAW AND ECONOMICS* 89 (3d. ed. 2000).

³⁴ Thomas Merrill & Henry Smith, *The Property/Contract Interface*, 101 *COLUM. L. REV.* 773, 795 (2001) (“The disadvantages of the exclusion strategy are largely a function of the limitations on such rights imposed by the need to minimize the unit costs of processing information. In order to keep these costs low, it is simply not possible to make these duties very complex or detailed.”).

contract and may not have even known its terms, some of which may have been confidential? The contract as such could not bind the patent purchaser.

But at the same time, the licensee is not a party to the patent sale transaction, and it is important not to allow that transaction to too severely upset the rights of the licensee, who would expect to maintain the bargained for use privileges. The transfer of the patent cannot erase the effects of the *in personam* license agreement on the underlying *in rem* patent rights. As explained by Thomas Merrill and Henry Smith in their article on “The Property/Contract Interface”:

[W]here we find legal relations that are purely in rem, we also consistently find that the doctrine adopts the form characteristic of property law – immutable bright-line rules. . . . [W]e find a tendency for protective and even notice rules to become more difficult to contract around – more standardized – as duty holders become more numerous and indefinite and so closer to the true in rem situation.³⁵

Thus to use the terminology of Merrill and Smith, license agreements can be thought of as lying along the interface of property and contract.³⁶ In furtherance of clarity regarding the separation of property and contract in license agreements, unpacking the legal rights and duties at play in a patent transfer situation using Hohfeld’s framework jural relations,³⁷ can be helpful.³⁸

³⁵ *Id.* at 850.

³⁶ *See id.* at 849 (“Each of the four institutions we have examined involves some combination of in personam and in rem relations.”).

³⁷ Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L. J. 16 (1913).

³⁸ Pierre Schlag, *How To Do Things With Hohfeld*, 78 LAW & CONTEMP. PROBS. 185, 187 (2015) (“One of the most striking aspects of Hohfeld’s work is how much its architecture and arguments remain relevant – even biting so – today.”). *See generally*, Symposium

C. Hohfeld's Jural Relations

The bundle of rights picture of property has strong roots in Hohfeld's work on fundamental jural relations.³⁹ The lack of precision in court decisions as to what runs with the patent stems in part from failure to distinguish between "license" as pure change in jural relation, and the "license *agreement*" which, *inter alia*, effects that change.⁴⁰ Indeed this is precisely the type of looseness of language that motivated Hohfeld's articulation of the jural relations, and for which they can serve as useful tools for analysis.⁴¹ In short, a patent is often said to provide a "right to

on the Work of Wesley Newcomb Hohfeld, <https://www.law.yale.edu/yls-today/yale-law-school-events/symposium-work-wesley-newcomb-hohfeld> (Oct. 15, 2016).

³⁹ See J.E. Penner, *The "Bundle of Rights" Picture of Property*, 43 UCLA L. REV. 711, 729 (1996) ("Hohfeld's contribution to the bundle of rights picture is quite understandable, since in a significant sense, he devised it, although he did not fully elaborate its contours."); Merrill & Smith, 101 COLUM. L. REV. at 783 (explaining that Hohfeld's work "directly anticipates the adoption of the bundle-of-rights metaphor favored by the Legal Realists").

⁴⁰ Wesley N. Hohfeld, *Faulty Analysis in Easement and License Cases*, 27 YALE L. J. 66, 92 n.49 (1917) (explaining that the "chameleon-hued term, 'license,'" "is rapidly shifted about by lawyers and courts, -- usually even by the more careful writers, -- so as to cover not only more complex groups of operative facts, but also the *jural relations* flowing either from a 'mere permission' or from more complex sets of facts"); see also Hohfeld, 23 YALE L. J. at 24-25 ("Passing to the field of contracts, we soon discover a similar inveterate tendency to confuse and blur legal discussions by failing to discriminate between the mental and physical facts involved in the so-called 'agreements' of the parties, and the legal 'contractual obligation' to which those facts give rise.").

⁴¹ Hohfeld, 23 YALE L. J. at 22 ("At the very outset it seems necessary to emphasize the importance of differentiating purely legal relations from the physical and mental facts that call such relations into being."); see also, Schlag, 78 LAW & CONTEMP. PROBS. at 192 ("Consider the term 'contract.' Sometimes it refers to the mental agreement reached by the parties (e.g., the mental state); at other times to the physical embodiment of that agreement, (e.g., the document); and, at other times, to the various rights, duties, and powers brought into being in virtue of reaching the agreement (e.g., the legal relations).").

exclude,”⁴² and as such, using Hohfeld’s framework, correspondingly provides by definition that others have a “duty” not to infringe.⁴³ So if each right held by the patentee is a stick in the bundle, the license agreement diminishes the size of the patent bundle.

The first thing to grasp about Hohfeld’s jural relations is that are merely a framework for analysis; the jural relations are *sui generis* creations, and Hohfeld explicitly declined to provide formal definitions.⁴⁴ The jural relations are a device for fostering precision in legal analysis. They do not themselves purport to make normative prescriptions about what the law should be.⁴⁵

The motivation for this framework is as Hohfeld puts it, “the ambiguity and looseness of our legal terminology.”⁴⁶ Hohfeld offers the term “property” as a “striking example,” as sometimes it is used to refer to the physical object that is the

⁴² See, e.g., 5 DONALD S. CHISUM, CHISUM ON PATENTS § 16.02[1] (2008) (“a patent grants to the patentee and his assigns the right to exclude others from making, using, and selling the invention”); *Bio-Tech. Gen. Corp. v. Genentech, Inc.*, 80 F.3d 1553, 1559 (Fed. Cir. 1996) (“a patent grants only the right to exclude others and confers no right on its holder to make, use, or sell”); Henry E. Smith, *Intellectual Property as Property: Delineating Entitlements in Information*, 116 YALE L. J. 1742, 1806 (2007) (“Although it is sometimes overlooked, patent law is explicitly based on exclusion rather than on rights to use . . .”).

⁴³ See Hohfeld, 23 YALE L. J. at 33 (“the correlative of X’s right that Y shall not enter on the land is Y’s duty not to enter”).

⁴⁴ Hohfeld, 23 YALE L. J. at 30 (“The strictly fundamental legal relations are, after all, *sui generis*; and thus attempts at formal definition are always unsatisfactory, if not altogether useless.”).

⁴⁵ See Schlag, 78 LAW & CONTEMP. PROBS. at 189 (“Hohfeld’s work might best be read as a contribution about *how* to think, not *what* to think.”).

⁴⁶ Hohfeld, 23 YALE L. J. at 21.

property, but sometimes it is “used to denote the legal interest (or aggregate of legal relations) appertaining to such physical object.”⁴⁷ As Hohfeld explains, confusion can arise because “[f]requently there is a rapid and fallacious shift from the onemeaning to the other,” and at times, the term “is used in such a ‘blended’ sense as to convey no definite meaning whatever.”⁴⁸

The term “license” is a perfect example of the type of ambiguous language that could benefit from Hohfeldian analysis.⁴⁹ “License” might refer to the license *agreement*, the contract, between the licensor and the licensee. Or it might refer to the *legal relations* that arise from the license agreement, such as the privilege to infringe a particular patent.⁵⁰ The distinction matters because while transfer of a patent is generally held not to affect the licensee’s privilege to infringe, that does not mean that the entire license agreement runs with the patent.

Hohfeld was concerned with a similar issue regarding term “contract,” in that “[o]ne moment the word may mean the *agreement* of the parties; and then, with a rapid and unexpected shift, the writer or speaker may use the term to indicate the

⁴⁷ *Id.*

⁴⁸ *Id.* at 21-22.

⁴⁹ See Charles E. Clark, *Licenses in Real Property Law*, 21 COLUM. L. REV. 757, 757 (1921) (“Here courts tend inveterately to confuse acts and the legal relations which result therefrom and the battle begun over words terminates in a result shaped by those words.”).

⁵⁰ Indeed Hohfeld stated that the “chameleon-hued term, ‘license,’” is “rapidly shifted about by lawyers and courts,” and but did not go much further in this regard because “dealing at all adequately with the intricate and confused subject, would, in and of itself, require a long article.” Wesley N. Hohfeld, *Faulty Analysis in Easement and License Cases*, 27 YALE L. J. 66, 92 n.49 (1917).

contractual obligation created by law as a result of the agreement.”⁵¹ Charles Clark also recognized this problem and argued for distinguishing between the “license” as such, and the acts of agreement which create the license.⁵² Similarly, Christopher M. Newman explains that to “discuss clearly the relationship between license and contract, we must also distinguish between acts that signify assent to binding agreements, documents in which those agreements are memorialized, and various legal consequences that follow from them.”⁵³

Hohfeld developed the jural relations as a terminology for the purely legal quantities, so as to avoid confusing them with the physical or mental facts which give rise to those legal relations. It is helpful to break the jural relations into two sets, here is the first set in terms of “correlatives”:

Right <--> Duty

No Right <--> Privilege

And here is the first set again but in terms of “opposites”:

Right X No Right

Privilege X Duty⁵⁴

Rights and Duties are “correlatives,” in that if A has a Right against B, then B owes a corresponding Duty to A.⁵⁵ This is not any type of a normative or

⁵¹ Hohfeld, 23 YALE L. J. at 25; *see also*, Schlag, 78 LAW & CONTEMP. PROBS. at 192.

⁵² Clark, *Licenses in Real Property Law*, 21 COLUM. L. REV. 757, 760-61 (“The use of the one term ‘license’ to describe a privilege accompanied by an immunity from revocation and a privilege not so accompanied creates an illusion of certainty and an erroneous belief in identity.”).

⁵³ Newman, 98 IOWA L. REV. at 1129.

⁵⁴ Hohfeld, 23 YALE L. J. at 30.

prescriptive statement, this is just how Hohfeld’s analytical method works, by definition. So if A has a Right that B stay off of Whiteacre, then B has a Duty to stay of Whiteacre, because that is precisely what it means to say that A has such a Right, under Hohfeld’s framework.⁵⁶ But if B has a Privilege to enter Whiteacre, then A has a No Right that B Stay off Whiteacre, as No Rights are the correlatives of Privileges just as Rights are the correlatives of Duties.⁵⁷ The correlatives are represented by two way arrows above because where one is present (on one side of a relation) the other is present (on the other side).

“Rights” and “No Rights” are “opposites” in that one cannot have both a Right and a No Right to the same thing. The No Right is the negation of a Right. Similarly, Privileges and Duties are opposites. As Hohfeld explains, the “privilege of entering is the negation of a duty to stay off.”⁵⁸ One cannot have both a Privilege to enter and a Duty to stay off. As such, the opposites are represented by X’s above because where one is present on one side of a relation the other is absent on the same side.

The primary difference between calling something a Right and calling it a Privilege, is that a Right forms the predicate basis for an affirmative legal *claim*,

⁵⁵ Hohfeld, 23 YALE L. J. at 32 (“if X has a right against Y that he shall stay off the former’s land, the correlative (and equivalent) is that Y is under a duty toward X to stay off the place”).

⁵⁶ Schlag, 78 L. & CONTEMP. PROBS. at 201 (“It is not so much that rights ‘imply’ or ‘give rise’ to duties. Rather, one’s rights *are* duties in someone else just as one’s duties *are* rights in someone else. As Karl Llewellyn observed, rights and duties are simply different ways of talking about the same legal relation.”).

⁵⁷ Hohfeld, 23 YALE L. J. at 33 (“the correlative of X’s privilege of entering himself is manifestly Y’s ‘no-right’ that X shall not enter”).

⁵⁸ Hohfeld, 23 YALE L. J. at 32.

whereas a Privilege is a *defense* to a legal claim, or the freedom from such a claim. As explained by Hohfeld: “A right is one’s affirmative claim against another, and a privilege is one’s freedom from the right or claim of another.”⁵⁹ Once this is understood, the seemingly odd terminology of a “No Right” begins to make sense. A violation of a Duty opens one up to a legal claim under the correlative Right. By contrast, the exercise of a Privilege does not subject one to a legal claim, as the correlative is a “No Right.” But a Privilege does not imply an affirmative claim against one who interferes with the exercise of the Privilege.⁶⁰

The second set of jural relations functions similarly to the first set, here is the second set in terms of correlatives:

Power <--> Liability

Disability <--> Immunity

Here is the second set again but in terms of opposites:

Power X Disability

Immunity X Liability⁶¹

A Power is similar to a Right, a Liability is similar to a Duty, a Disability (or “No Power”) is similar to a No Right, and an Immunity is similar to a Privilege.⁶² The

⁵⁹ Hohfeld, 23 YALE L. J. at 55.

⁶⁰ Schlag, 78 L. & CONTEMP. PROBS. at 201 (“This gets us to the crux of the matter with regard to the difference between rights and privileges. The former establishes the predicate for a legal remedy, namely a duty in B.”).

⁶¹ Hohfeld, 23 YALE L. J. at 30.

⁶² Hohfeld, 23 YALE L. J. at 55 (“a power bears the same general contrast to an immunity that a right does to a privilege”).

difference is that, unlike a Right which represents the potential for an affirmative claim against another, a “power is one’s affirmative ‘control’ over a given legal relation as against another.”⁶³ For example, if A makes a contractual offer to B, B now has the Power to accept that offer, and A is Liable in the sense that A would be bound if B chooses to accept.⁶⁴ Upon expiration of the offer, B’s Power becomes a Disability, and A’s Liability becomes an Immunity.

The first set of jural relations tracks the patent license situation rather well. A patent holder has the Right to exclude others from practicing the claimed invention; as such, others have a Duty to refrain from infringing the patent. When a patent holder grants a license, the licensee can be said to have been granted a Privilege to infringe the patent.⁶⁵ The patent owner licensor now has a “No Right” in that she has given up the Right to exclude the licensee. She has given up that stick in the bundle of sticks that is the patent. The licensee is thereby freed from his Duty to refrain from infringing.⁶⁶ As the Federal Circuit has explained:

Even if couched in terms of “licensee is given the right to make, use, or sell X,” the [license] agreement cannot convey that absolute right

⁶³ *Id.* at 55.

⁶⁴ *Id.* at 49.

⁶⁵ *Ortho Pharm. Corp. v. Genetics Inst., Inc.*, 52 F.3d 1026, 1031 (Fed. Cir. 1995) (“In its simplest form, a license means only leave to do a thing which the licensor would otherwise have a right to prevent. Such a license grants to the licensee *merely a privilege* that protects him from a claim of infringement by the owner of the patent monopoly.”) (quoting *Western Elec. Co. v. Patent Reproducer Corp.*, 42 F.2d 116, 118 (2d. Cir. 1930)) (emphasis added).

⁶⁶ *See Kesan & Hayes*, 89 *IND. L. J.* at 289 (“If a patent licensee has a privilege to use the licensed patent, this indicates that the licensee has no duty to refrain from using the patent.”).

because not even the patentee of X is given that right. His right is merely one to exclude others from making, using or selling X. . . .⁶⁷

As such, the license agreement, in the form of a contract, can be said to effect the following purely legal change: the relationship between the licensor and the licensee, with respect to the patent, flips from one of Right / Duty, to one of No Right / Privilege. Under the bundle theory, when a patent is transferred, while the license agreement (the contract) will remain between the original two parties, this change in legal relation will travel with the patent, remaining between the patentee and the licensee. The distinction between that which travels with the patent and that which does not thus tracks Hohfeld's distinction between the "purely legal relations" and the "physical and mental facts that call such relations into being."⁶⁸ If the patent is a bundle of Rights to exclude, and the patentee has already given up one of the Rights in the bundle, the patentee may transfer only what is left, under *nemo dat*. In place of the Right to exclude the licensee, the transferred bundle contains a No Right to exclude, and the licensee thus maintains its Privilege to infringe the patent.

D. In Rem (Multital) Versus In Personam (Paucital)

Another important point to understand is that in Hohfeld's scheme, all rights are between human beings, rather than things. As Hohfeld explains, "since the purpose of the law is to regulate the conduct of human beings, all jural relations

⁶⁷ *Spindelfabrik Suessen-Schurr Stahlecker & Grill GmbH v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft*, 829 F.2d 1075, 1081 (Fed. Cir. 1987) (citing 35 U.S.C. § 154).

⁶⁸ Hohfeld, 23 *YALE L. J.* at 20.

must, in order to be clear and direct in their meaning, be predicated of such human beings.”⁶⁹ Similarly, at the dawn of the 20th Century, Oliver Wendell Holmes stated: “All proceedings, like all rights, are really against persons. Whether they are proceedings or rights *in rem* depends on the number of persons affected.”⁷⁰

The notion that all rights are between people, not things, is in tension with the terminology of “*in rem*,” which literally means “against or about a thing.”⁷¹ This bothered Hohfeld. Again in the name of precision and avoidance of confusion, Hohfeld was insistent that a “right in rem is not a right ‘against a thing.’”⁷² Hohfeld was of the view that “because of the unfortunate terminology involved, the expression ‘right in rem’ is all too frequently misconceived, and meanings attributed to it that could not fail to blur and befog legal thought and argument.”⁷³ Thus Hohfeld proposed the alternative terminology (which never really caught on) of “multital” (instead of *in rem*) and “paucital” (instead of *in personam*).⁷⁴

⁶⁹ Wesley Newcomb Hohfeld, *Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 26 YALE L. J. 710, 721 (1917). This second article is somewhat of a continuation of or sequel to Hohfeld’s first (1913) article on the jural relations, which had the same title.

⁷⁰ *Tyler v. Court of Registration*, 175 Mass. 71, 76 (1900).

⁷¹ Merrill & Smith, 101 COLUM. L. REV. at 782 n.28.

⁷² Hohfeld, 26 YALE L. J. at 720. *See also, id.* at 733 (“the attempt to conceive of a right in rem as a right against a thing should be abandoned as intrinsically unsound, as thoroughly discredited according to good usage, and, finally, as all too likely to confuse and mislead”).

⁷³ Hohfeld, 26 YALE L. J. at 720.

⁷⁴ *Id.* at 712.

According to Hohfeld, the real difference between a right *in rem* and a right *in personam* is not that the former is against a thing and the latter is against a person. They are both against people. The difference is one of quantity; the *in rem* right is held against many other people (it is multital), whereas the *in personam* right is held against one person, or a few people (it is paucital). Or as Hohfeld put it, “a right *in personam* is one having few, if any, ‘companions,’; whereas a right *in rem* always has many such ‘companions.’”⁷⁵ Although Hohfeld himself did not use the term “bundle of rights,” once we conceive of an *in rem* right as a multitude of “companion” rights, we are well on our way towards the bundle theory.⁷⁶

There are a couple other general characteristics of *in rem* rights that are worth mentioning. One is that *in rem* rights are generally negative in character in that they require that persons abstain from doing something, (i.e., the duty *not* to infringe a patent).⁷⁷ This makes sense as it would be rather onerous if an *in rem* right required its many subjects to all affirmatively do something. Another is that the class of dutyholders subject to an *in rem* right is not only large, but also indefinite with respect to identity.⁷⁸ For example, a patent owner would not be able to name every person subject to the duty to refrain from infringement.

⁷⁵ *Id.* at 723.

⁷⁶ See Hohfeld, 26 YALE L. J. at 743 (“the supposed single right in rem correlating with ‘a duty’ on ‘all’ persons really involves as many separate and distinct ‘right-duty’ relations as there are persons subject to a duty”).

⁷⁷ Merrill & Smith, 101 COLUM. L. REV. at 788; A.M. Honore, *Rights of Exclusion and Immunities Against Divesting*, 34 TUL. L. REV. 453, 458-59 (1960).

As with his framework of jural relations, Hohfeld's multital / paucital framework maps well onto the patent license situation.⁷⁹ A patent owner has a multital bundle of rights to exclude against other persons. The license agreement is a paucital contract that serves to negate or eliminate one of those rights, that with respect to the licensee.⁸⁰ The patent owner retains the bundle of rights, but there is one less right in the bundle. When the patent owner transfers the bundle, she transfers only what remains in it. The bundle (or patent) does not revert to its original size upon transfer.⁸¹ But the license agreement, the *in personam* contract, nevertheless remains between the patent transferor and the licensee.

Because a patent is not a tangible thing and does not provide a "right to use," it is particularly well suited to the bundle of rights conception. Perhaps the strongest critique of the bundle of rights theory of property is that it fails to sufficiently reflect the fact that ownership often provides the right to use and

⁷⁸ Merrill & Smith, 101 COLUM. L. REV. at 783-84; Albert Kocourek, *Rights in Rem*, 68 U. PA. L. REV. 322, 335 (1920).

⁷⁹ See Hohfeld, 26 YALE L. J. at 719 ("A's right against B is a multital right, or right in rem, for it is simply one of A's class of similar, though separate, rights, actual and potential, against very many persons. The same points apply as regards . . . A's right that B shall not manufacture a certain article as to which A has a so-called patent.").

⁸⁰ J.E. Penner, 43 UCLA L. REV. at 745 ("Licenses do not affect all holders of the general duty to exclude themselves from the property of others; only those party to the license are relieved of the duty.").

⁸¹ *Cf.*, Merrill & Smith, 101 COLUM. L. REV. at 787 ("[I]f A sells Blackacre to B, this does not result in any change in the duties of third parties W, X, Y or Z toward Blackacre. Those duties shift silently from A to B without any requirement that W, X, Y, or Z be aware of the transfer, or even the identities of A or B.").

control a discrete physical thing.⁸² In the case of land for example, it is sometimes much simpler to conceive of ownership as dominion over the tangible parcel of land, rather than as an abstract bundle of legal relations against the world. But this critique has little force as applied to patents. The counterpart of the right to use land might be the patent right to a particular market position – a monopoly on the patented invention – but the monopoly is intangible and is provided by virtue of the bundle of rights to exclude others from infringing.⁸³

Part II – Patent Licenses On Transfer

The bundle of rights is often discussed in the context of whether an exclusive patent licensee has standing to sue. The Federal Circuit has explained that to “have co-plaintiff standing in an infringement suit, a licensee must hold some of the proprietary sticks from the bundle of patent rights.”⁸⁴ These “proprietary rights granted by the patent are the rights to exclude others from making, using or selling

⁸² See J.E. Penner, 43 UCLA L. REV. at 743 (“The right to property is a right of exclusion which is grounded by the interest we have in the use of things.”); Merrill & Smith, 101 COLUM. L. REV. at 787 (“In personam rights attach directly to specific persons, whereas in rem rights attach to persons only because of their relationship to a particular ‘thing.’”); *id.* at 783 (“in rem rights . . . attach to persons through their relationship to particular things”).

⁸³ See J.E. Penner, 43 UCLA L. REV. at 745 (“one is inexorably led into a realm of interminable abstract confusion if one regards the ownership of a patent as really the ownership of an idea, rather than a monopoly on action whose scope is defined by an extremely important expression of what actions are monopolized, i.e., the patent specification and claims”).

⁸⁴ *Ortho Pharm. Corp. v. Genetics Inst., Inc.*, 52 F.3d 1026, 1031 (Fed. Cir. 1995).

the invention in the United States.”⁸⁵ While a non-exclusive, or “bare” license would not transfer any rights to exclude and thus would not transfer standing, an exclusive licensee owns some of the proprietary sticks and may have standing.⁸⁶ As explained by the en banc Federal Circuit:

If the party has not received an express or implied promise of exclusivity under the patent, i.e., the right to exclude others from making, using, or selling the patented invention, the party has a “bare license,” and has received only the patentee’s promise that the party will not be sued for infringement.⁸⁷

Thus a patent can be thought of as a bundle of rights to exclude, for it is the right to exclude that is “at the very heart of patent law.”⁸⁸ Accordingly, royalty rights arising from a license agreement have been held not to confer standing, as they are “merely a means of compensation under the agreement,” rather than a part of the patent right itself.⁸⁹ The Eastern District of Texas has stated: “A patentee’s

⁸⁵ *Id.*

⁸⁶ *Id.* at 1032 (“a licensee with proprietary rights in the patent is generally called an ‘exclusive’ licensee”). *See also*, Christopher M. Newman, *An Exclusive License Is Not an Assignment: Disentangling Divisibility and Transferability of Ownership in Copyright*, 74 LOUISIANA L. REV. 59, 79 (2013) (“A bare license, however, is nothing more than a privilege.”).

⁸⁷ *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1552 (Fed. Cir. 1995) (en banc). *See also*, Newman, 74 LOUISIANA L. REV. at 90 (explaining that an exclusive license, “is still a form of license, however, because the licensor retains a residuum of control over the use rights, consisting of the sole power to permit their transfer from one party to another.”).

⁸⁸ *Penril Datacomm Networks, Inc. v. Rockwell Intern. Corp.*, 934 F. Supp. 708, 712 (D. Md. 1996).

⁸⁹ *Chan v. Time Warner Entm’t Co.*, 2003 U.S. Dist. LEXIS 16390, *19 (W.D. Tex. Jul. 23, 2003).

right to royalty payments or infringement damages does not limit or detract from the assignment of a patent or substantial rights thereunder.”⁹⁰

Having conceptualized the patent as a bundle of rights to exclude, this article now looks at the effect of patent transfer on various aspects of patent licenses.

A. Arbitration Clauses

The coexistence of the encumbrance theory alongside elements of the bundle theory is well demonstrated in the following paragraph from the Federal Circuit’s decision in *Datatreasury Corp. v. Wells Fargo & Co.*:

Appellants rely on cases standing for the general proposition that because the owner of a patent cannot transfer an interest greater than that which it possesses, an assignee takes a patent subject to the legal encumbrances thereon. . . . However, the legal encumbrances deemed to “run with the patent” in these cases involved the right to use the patented product, not a duty to arbitrate. The cases do not support a conclusion that procedural terms of a licensing agreement unrelated to the actual use of the patent (e.g. an arbitration clause) are binding on a subsequent owner of the patent.⁹¹

The beginning of this paragraph is in some accord with the bundle theory in invoking *nemo dat*, the principle that the owner of a patent cannot transfer an interest greater than that which it possesses. However, the paragraph quickly transitions to the encumbrance theory and the notion that only encumbrances related to the “actual use of the patent” run with the patent.

⁹⁰ *Dexas Int’l, Ltd. v. Tung Yung Int’l (USA) Inc.*, 2009 U.S. Dist. LEXIS 34766, *28 (E.D. Tex. Feb. 25, 2009) (citing *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.P.A.*, 944 F.2d 870, 875 (Fed. Cir. 1991)).

⁹¹ *Datatreasury Corp. v. Wells Fargo & Co.*, 522 F.3d 1368, 1372-73 (Fed. Cir. 2008).

In *Datatreasury*, the agreement at issue was between Wells Fargo Services Corp. (“WFSC”) and WMR e-Pin LLC (“WMR”). The agreement, *inter alia*, provided a license to U.S. Patent No. 5,265,007 (“the 007 Patent”) as well as “all applications and patent disclosures related thereto,” and also included an arbitration clause which provided: “Any dispute or disagreement arising between WMR and Wells Fargo concerning the applicability or interpretation of this License Agreement shall be resolved in accordance with the dispute resolution procedures”⁹² After entering into the agreement with WFSC, WMR assigned the 007 Patent to Datatreasury, along with three other patents. Datatreasury then filed a complaint in the Eastern District of Texas accusing Wells Fargo of infringing the three other patents. There was a dispute as to whether the three patents in suit were “related” to the 007 Patent within the meaning of the WFSC / WMR agreement.⁹³ Wells Fargo argued that this dispute should be submitted to arbitration in accordance with the agreement. But the court held that Datatreasury was not bound by the arbitration clause because it was not a signatory of the contract and did not participate in “negotiating any of its terms,” and that the arbitration clause did not run with the 007 Patent as it was “unrelated to the actual use of the patent.”⁹⁴

Although this result seems correct, the reasoning is suspect. One could question whether the arbitration clause is really unrelated to the use of the patent. If a patent is a right to exclude that is enforced through litigation, then one of the

⁹² *Datatreasury*, 522 F.3d at 1370-71.

⁹³ *See id.* at 1372 n.2.

⁹⁴ *Id.* at 1372-73.

primary uses of a patent might be to bring a suit for infringement. A clause specifying the forum in which such a suit would take place could be said to relate to the use of the patent.

The bundle theory provides more clarity in explaining the result of *Datatreasury*. The arbitration clause provides the Power to move an infringement suit to arbitration. If both parties hold this Power, then both parties are subject to the correlative Liability of having the case moved to arbitration. This Power arose from the WFSC / WMR agreement, which was an *in personam* contract between those two parties, and that contract remained between those two parties when the 007 Patent was transferred. The Power to move the case to arbitration was not granted by the USPTO and was never part of the patent bundle, so the contract did not operate to add that Power to the bundle. Nor was the correlative Liability added to the patent bundle. The arbitration clause remains a feature of the license *agreement*, the contract, and thus remains between the two contracting parties.

The theory that a license is an encumbrance that “runs with” a patent has apparent roots in the law of covenants that run with land. Under the common law deriving from *Spencer’s Case*,⁹⁵ for a covenant to run with land, one requirement has been that the covenant “touch or concern” the land.⁹⁶ This is similar to the Federal Circuit’s ruling that only encumbrances that are not “unrelated to the actual use of

⁹⁵ 5 Co. 16a, 77 Eng. Rep. 72 (Q. B. 1583).

⁹⁶ See CHARLES E. CLARK, REAL COVENANTS AND OTHER INTERESTS WHICH “RUN WITH THE LAND” 96 (2d ed. 1947); Berger, *supra*, 55 MINN. L. REV. at 207 (“*Spencer’s Case* established that the burden of a covenant does not run to an assignee unless it ‘touches and concerns’ the leased property and is not merely ‘collateral.’”).

the patent” will “run with the patent.”⁹⁷ It is also in some accord with the common law’s refusal to allow easements “in gross” – unrelated to a particular parcel of land – to run with the land.⁹⁸

As demonstrated by the arbitration clause at issue in *Datatreasury*, one problem with the encumbrance formulation is that it is rather indeterminate. This has been true even with respect to the common law “touches and concerns” rule for land.⁹⁹ But the problem is even worse for patents, given that patent rights are intangible so there is no physical thing or land to “touch.”¹⁰⁰ What is exactly is “use of the patent,” and how related is related enough? This indeterminacy is exacerbated (or demonstrated) by the fact that in addition to “use of the patent,” the rule has also been alternatively formulated in terms of “use of the patented product,” and “use of the invention.”¹⁰¹

⁹⁷ *Datatreasury*, 522 F.3d at 1372-73.

⁹⁸ Molly Shaffer Van Houweling, *The New Servitudes*, 96 GEO. L. J. 885, 894 (2008) (“The English courts . . . refused to enforce easements ‘in gross,’ which benefit a person or entity without regard to land ownership.”); Newman, 74 LOUISIANA L. REV. at 86 (“One line of doctrine held that easements were permissible only if made appurtenant to an adjacent tenement.”); *Loch Sheldrake Assocs. v. Evans*, 118 N.E.2d 444, 447 (N.Y. 1954) (“If we are to speak with strictest accuracy, there is no such thing as an ‘easement in gross’ . . . since an easement presupposes two distinct tenements, one dominant, the other servient.”).

⁹⁹ CLARK, REAL COVENANTS, *supra*, at 96 (“It has been found impossible to state any absolute tests to determine what covenants touch and concern land and what do not.”).

¹⁰⁰ Cf. Peter S. Menell, *The Property Rights Movement’s Embrace of Intellectual Property: True Love or Doomed Relationship?*, 34 ECOLOGY L.Q. 713, 739 (2007) (“extrapolating from real property law to intellectual property law overlooks important distinctions between the underlying resources at issue”).

¹⁰¹ Compare *Paice*, 2014 U.S. Dist. LEXIS 95042, *32-33 (“licensing terms not tied to the right to use a patented *invention* do not encumber”), with *Datatreasury*, 522 F.2d

B. Royalty Rights

It is not necessary or practical for purposes of this article to go into too much detail regarding the substantial intricacies of the common law on covenants running with land. But one important point is that when a landowner leases land, and then transfers the leased land, the benefit of rent is said to run with the land to the new landowner.¹⁰² The patent law analogue of the rent a landowner receives is the royalties that a patent owner might receive under a license agreement. Applying the encumbrance theory, one would think that just as the rent paid by a tenant runs with the land, royalty rights paid by the licensee should run with the patent, for it would be hard to argue that such royalty rights do not relate to the use of the patent.

But in this regard, the caselaw has reached the opposite conclusion, demonstrating another inadequacy of the encumbrance theory. In *Jones v. Cooper*, the Texas Court of Appeals stated that “‘royalties,’ . . . would not ‘run with’ title to the patents and be binding upon subsequent assignees,” invoking the principle that “[s]ince a patent is [by statute] to be treated as personal property, there can be no covenants that ‘run with’ the patent.”¹⁰³ Similarly, in *In re Particle Drilling Techs.*, the court found that a “royalty interest in a patent cannot be considered a covenant

1368, 1372-73 (“[T]he legal encumbrances deemed to ‘run with the patent’ in these cases involved the right to use the *patented product*, not a duty to arbitrate. The cases do not support a conclusion that procedural terms of a licensing agreement unrelated to the actual use of the *patent* (e.g. an arbitration clause) are binding on subsequent owners of the patent.”) (emphases added).

¹⁰² Berger, 55 MINN. L. REV. at 222.

¹⁰³ See *Jones v. Cooper Indus., Inc.*, 938 S.W.2d 118, 122-23 (Tex. App. 14th 1996); 35 U.S.C. § 261 (“patents shall have the attributes of personal property”); *Pressure Sys. Int’l v. Airgo IP, LLC*, 2010 U.S. Dist. LEXIS 90166, *15 (S.D. Tex. 2010) (“Agreements about patent rights do not run with the patents; they are also personal”).

that runs with the land,” again invoking the principle that patents are personal property and “[r]eal property concepts (such as covenants running with the land) do not apply to personal property.”¹⁰⁴

The notion that royalty rights should not automatically run with a patent seems reasonable, in part because often royalty rights will not correspond directly to the use of a single patent in the way that rent corresponds to the use of single tract of land. The license agreement may cover an entire portfolio of patents relating to the same products or even different types of products. If only one or some of these patents are transferred, it might be difficult to apportion how much of the royalty rights should transfer. Of course, when transferring the patent, the transferor and transferee could contract around the default rule and agree that some royalties will pass to the transferee along with the patent. But keeping the royalties with the transferor seems to provide the clearest and most coherent default rule, thereby lowering transaction costs.¹⁰⁵

Furthermore, some of the consideration for a license agreement may be in the form of a cross-license to the licensee’s patents. Would the cross license also run with the patent in the way an easement to use an adjoining tract of land runs with a parcel of land? This would seem problematic. Returning to the hypothetical

¹⁰⁴ *In re Particle Drilling Techs.*, 2009 Bankr. LEXIS 2151, *7 (S.D. Tex. 2009).

¹⁰⁵ *See* COOTER & ULEN, *LAW AND ECONOMICS* at 89; Part I(B), *supra*; *see also*, Jeremy Kidd, *Kindergarten Coase*, 17 *GREEN BAG 2D.* 141, 155 (2014) (“[E]stablish rules that are clear and predictable, so that the costs of bargaining post-intervention are lower. Bargaining can be difficult enough without having to spend time and money determining where everyone stands.”).

illustration from Part I, the patent transferor (A) and the transferee (C) may not be similarly situated (cross) licensees from the perspective of B. That is, C may be a much larger company and as such B may have been able to gain much more from granting a license to C as compared with A. And with respect to cross-licenses as well, there is again the recurrent problem of apportionment if A transfers only some of the relevant patents to C. These issues stem in part from the fact that patents are rights to intangible property and so cannot adjoin another patent right in the way that one tract of land can clearly adjoin another. These types of difficulties hinder the smooth application to patents of the encumbrance theory apparently derived from real property law.

How to explain then the holdings that royalties do not run with patents? Under the encumbrance theory, the principle invoked by the courts – that patents are personal property with which covenants cannot run – proves too much. This principle would also seem to entirely prevent license rights from running with patents, but it cannot be that the mere transfer of a patent wipes the patent clean of all licenses. And so the courts have held; it “is a longstanding principle that an assignee of a patent takes the patent subject to prior licenses.”¹⁰⁶ Thus courts seem to invoke the notion that covenants cannot run with personal property only selectively and inconsistently, with no acknowledgement of the inconsistency and no real guidance on when the principle should be invoked.

Unlike the encumbrance theory, the bundle theory provides a reconciliation of the apparent realities that a covenant not to sue run with the patent but royalty

¹⁰⁶ *Innovus Prime*, 2013 U.S. Dist. LEXIS 93820, *15 (citing *Keystone Type Foundry v. Fastpress Co.*, 272 F. 242, 245 (2d Cir. 1921)).

rights do not. The royalty right was never a part of the bundle of rights granted by the USPTO. The patent is a bundle of rights to exclude.¹⁰⁷ A patentee that grants a license essentially sells one of the sticks in the bundle, the one that provides the right to exclude the licensee. That stick is no longer in the bundle. Perhaps royalty rights are received in exchange, but that does not make the royalty rights part of the patent bundle. When the patent is transferred, what is transferred is the group of sticks that remain in the bundle. Thus the transferee of the patent takes the patent “diminished by the licensee’s right to use the patented process within the scope of the license,”¹⁰⁸ even though the transferee does not become a party to the license *agreement*. The bundle theory thus accords with the principle that “the owner of a patent cannot transfer an interest greater than that which it possesses.”¹⁰⁹

The discussion of royalty rights highlights an important feature of the bundle approach. Under the bundle approach, only the burdens of a license agreement may run with the patent, the benefits do not run as a default matter, though a patent transferor could agree to transfer them in the sale. The burdens run to the extent that they are conceived of as a *lessening* of the bundle of patent rights. The benefits cannot run, because a license agreement cannot *add* to the bundle of patent rights, cannot make the patent more than the bundle of rights granted by the USPTO.

¹⁰⁷ See n.42, *supra*.

¹⁰⁸ L.L. Brown Paper Co. v. Hydroiloid, Inc., 118 F.2d 674, 677 (2d Cir. 1941).

¹⁰⁹ *Datatreasury*, 522 F.3d at 1372; see also, *Innovus Prime*, 2013 U.S. Dist. LEXIS 93820, *15 (“Patent owners cannot transfer an interest greater than what they possess.”).

C. Confidentiality Provisions

Contractual obligations to keep confidential the terms of a patent license agreement have also been held not to bind subsequent owners of the licensed patent. In *Paice v. Hyundai*, in the District of Maryland, the plaintiff, Paice, LLC, had previously sued Toyota for infringement of certain patents, which litigation had settled. Subsequently, Abell, a non-profit organization, became a co-owner of the patents, which related to hybrid electric technology and fuel efficiency.¹¹⁰ Paice and Abell then sued Hyundai on the same patents, and sought to disclose the Paice-Toyota settlement agreement in the Hyundai litigation as evidence of reasonable royalties for purposes of damages. Toyota intervened to prevent the disclosure of the settlement agreement, invoking a confidentiality provision in the agreement, which stated that the “terms of this Agreement are confidential and shall not be disclosed unless required by law.”¹¹¹ The court granted Toyota’s motion to prevent disclosure of the settlement agreement with respect to Paice, but not with respect to co-plaintiff Abell, because Abell was not a party to the settlement agreement.¹¹²

Applying *Datatransury*, the *Paice* court held that the confidentiality provision did not run with the patents, because it was “clearly a procedural term unrelated to the right to use Paice’s (and now Abell’s) patents.”¹¹³ Toyota argued that “use”

¹¹⁰ *Paice LLC v. Hyundai Motor Co.*, 2014 U.S. Dist. LEXIS 15425, *2-3 (D. Md. Oct. 29, 2014)

¹¹¹ *Id.* at *9.

¹¹² *Id.* at *11.

¹¹³ *Paice*, 2014 U.S. Dist. LEXIS 95042, *33 (magistrate memorandum opinion).

within the meaning of *Datatresury* “contemplates use of the license agreement in a patent infringement trial,” but the court disagreed.¹¹⁴ The court recognized the “potential problem” of “a patent owner, in bad faith, transferring interest in the patent for the sole purpose of circumventing a confidentiality provision,” but noted that this problem did not apply in the present case and that “a future court may create an exception” for such a situation.¹¹⁵

Applying the bundle theory, the confidentiality provision is an *in personam* agreement between the two signatories to the contract. It cannot prevent third parties from attempting to compel disclosure of the agreement. There is no sense in which confidentiality obligations can be thought of as changing the bundle of patent rights. Thus the holding of *Paice* that confidentiality provisions are generally not binding on patent transferees can be explained under either theory.

D. Termination

The power to terminate the license presents some more difficult questions. At common law, if a lease gives a landowner the right to terminate the lease, that benefit would generally run with the land.¹¹⁶ This would seem to be the case under the encumbrance theory as well, as it seems that the right to terminate the license (and thus use the patent unencumbered by the license) relates to the “actual use” of

¹¹⁴ *Id.*

¹¹⁵ 2014 U.S. Dist. LEXIS 154254, at *17-18.

¹¹⁶ Berger, 55 MINN. L. REV. at 233 (“it has been held that the benefit of a covenant allowing the landowner to terminate the lease under certain described conditions runs to the landlord’s successor in interest”).

the patent. But there are good reasons why a termination right should not run. Presumably, the thing stopping the patent owner from exercising the right to terminate is the benefit (e.g., royalty rights or cross-license rights) that the patent owner is receiving under the license agreement, which would cease upon termination. If these benefits do not run with the patent, then there would be nothing stopping a subsequent patent owner from exercising the right to terminate. Thus if termination power runs with the patent, this could effectively eviscerate the general rule that patent assignees must respect pre-existing licenses. Note that this problem does not exist in the land situation because the tenant would be paying rent to the new owner of the land.¹¹⁷

On the other hand, if the power to terminate the license does not run, then transfer of the patent would seem to convert a terminable license to an interminable one. This might initially seem problematic, but it makes sense if the Power to terminate is viewed as a Power to terminate the entire license agreement, rather than only the license to one patent. The licensee thus has a Liability to termination of the entire contract. This explanation comports with the bundle theory; the Power to terminate is a feature of the *contract*, which remains between the original two parties, it does not affect the bundle of patent rights. The Power to terminate arises from the license agreement, as the Power was not part of the bundle granted by the USPTO. Under the bundle theory, the license agreement cannot add the termination power to the patent bundle. Thus termination is another instance where the bundle theory is more coherent than the encumbrance theory.

¹¹⁷ *Id.* at 222.

E. LOT Revisited

This article now returns to the LOT agreement discussed in the introduction. The LOT is an agreement entered into by a group of companies which is supposed to prevent any of them from transferring their patents to a patent troll, or Patent Assertion Entity, by granting a license which becomes effective only upon transfer of the patent to a troll.

Section 1.1 of the LOT agreement – License Grant and Release – provides to every Licensee a “fully vested and irrevocable” “license to make, have made . . . at any time on or after any Transfer of the respective Subject Patent to an Assertion Entity.”¹¹⁸ Section 1.2 states: “With respect to each Subject Patent of the Licensor, the License constitutes a present, fully vested and irrevocable (except as provided in Section 2 below) waiver of the right under the respective Subject Patent for any Assertion Entity to make any Patent Assertion of the respective Subject Patent against any Licensee”¹¹⁹ Thus section 1.2 is structured as a “present” waiver. But what exactly is being presently waived? It is the potential *future* right of an “Assertion Entity” – not a party to the agreement - to enforce the patent.

A paper by one of the LOT founders implies that the LOT is an encumbrance that runs with the patent, though the paper contains no analysis on this point.¹²⁰

¹¹⁸ LOT Agreement v2-0-11_24_15, at § 1.1, available at <http://lotnet.com/download-lot-agreement> (accessed Dec. 2016).

¹¹⁹ *Id.* at § 1.2.

¹²⁰ C. Eric Schulman, *How Scalable Private-Ordering Solutions Improve IP Law: Lessons Learned from my Founding of the License On Transfer (LOT) Network*, available

But it cannot be that the entire LOT agreement is an encumbrance, as it contains many provisions not directly related to the actual use of the patent, including provisions relating to withdrawal, bankruptcy, third party beneficiaries, costs, governing law, and other issues.¹²¹

The LOT agreement also attempts to declare that:

All Licenses granted in this Agreement are intended to and shall run with the Subject Patents to which they pertain for the full duration of such Subject Patents and be binding on subsequent owners and licensees. Any transfer or grant of rights in or to a Licensor's Subject Patent(s), whether by such Licensor or any subsequent transferee, shall be subject to the Licenses and continuing obligations of this Agreement with respect to such Subject Patent(s).¹²²

But the enforceability of this provision is questionable, at least in certain situations. If a PAE ("Patent Assertion Entity") were to purchase one of the patents in question, the PAE would not be a party to the LOT agreement. One cannot be bound by a contract to which one is not a party.¹²³ Significant information costs would be imposed if a patent buyer could be bound (potentially without notice) by the complex provisions of any license agreement entered into by any prior owner.¹²⁴

at <https://ssrn.com/abstract=2827904> (accessed Dec. 2016) ("This structure protects LOT members from being attacked when a PAE acquires a LOT-encumbered patent.").

¹²¹ See LOT Agreement v2-0-11_24_15, at § 2.3, 5.3, 5.5, 5.6, 5.11, available at <http://lotnet.com/download-lot-agreement> (accessed Dec. 2016).

¹²² LOT Agreement at § 1.5.

¹²³ See n.9, *supra*.

¹²⁴ Merrill & Smith, 101 COLUM. L. REV. at 793 ("The unique advantage of in rem rights – the strategy of exclusion – is that they conserve on information costs relative to in personam rights in situations where the number of potential claimants to resources is large, and the resource in question can be defined at relatively low cost.").

Even under the encumbrance theory, problematic situations could arise. The license of Section 1.1 becomes active upon “Transfer” to an “Assertion Entity,” as noted above. Section 6.18 of the agreement defines Transfer to Assertion Entity as:

“(i) the assignment, sale, exclusive license, or transfer, in whole or in part, of such Patent to an Assertion Entity, *whether by Licensor or any subsequent transferee or exclusive licensee of the Subject Patent*, or (ii) acquisition of ownership or control of the Subject Patent by an Assertion Entity (including any circumstance in which Licensor or any subsequent transferee owning or controlling the Subject Patent is or becomes an Assertion Entity . . .), with the earliest date any Entity owning or controlling such Patent is or *becomes an Assertion Entity* or Controlled by an Assertion Entity being deemed to be the effective date of such Transfer.”¹²⁵

Thus even if a patent is initially transferred to a regular operating company that is not a party to the LOT, if that company then transfers the patent to an Assertion Entity (or becomes an Assertion Entity), the LOT license is supposedly activated. Assertion Entity is defined in section 6.2 as “an Entity and each one of its Affiliates if such Entity and all of its Affiliates collectively derived from Patent Assertion more than half of their total consolidated gross revenue measured over the full twelve (12) months preceding a particular date . . .”¹²⁶ As such, in order for the LOT to be fully enforceable, the definitions of Transfer and of Assertion Entity must be part of the “encumbrance” that “runs with the patent.” But it is certainly questionable whether these complex definitions relate to the “actual use of the patent” (or use of the patented product) any more than the arbitration clause that

¹²⁵ LOT Agreement § 6.18 (emphasis added).

¹²⁶ LOT Agreement § 6.2.

the Federal Circuit held not to run with the patent in *Datatresury*, or the royalty rights and confidentiality provisions that have also been held not to run.¹²⁷

Application of the bundle theory to the LOT further highlights the problem. Something like the LOT could potentially be conceptualized under the bundle theory as a license granted immediately prior to transfer. Using the bundle theory, the LOT member could give up the sticks corresponding to the rights to exclude the other LOT members immediately prior to transferring the patent to a PAE, and the PAE would thus receive a diminished bundle of sticks without the rights to exclude the LOT members. This would be in some accord with the LOT's name; a license granted "on" (or immediately prior to) the transfer of a patent from a LOT member.

But the problem for the LOT is that the agreement is not actually structured this way; it purports to also apply even where the patent is not transferred directly from a LOT member to a PAE. For example where the patent is first transferred to a non-LOT operating company, which then transfers it to a PAE, the full bundle must be transferred to the non-LOT operating company, and then the bundle must somehow be diminished upon transfer from the non-LOT operating company to the PAE, even if neither is a party to the LOT.¹²⁸ Similarly, if the patent is transferred to a non-LOT operating company, which then becomes a PAE, the bundle must somehow be diminished at the moment the company turns into a PAE (as defined by the LOT) even though the company is not a party to the LOT.

¹²⁷ See Part II(A), *supra* (discussing *Datatresury*, 522 F.3d 1372); Part II(B)-(C), *supra*.

¹²⁸ See LOT Agreement § 6.18, 6.2.

Furthermore, section 1.2 purports to presently waive the “right under the respective Subject Patent for any Assertion Entity to make any Patent Assertion of the respective Subject Patent against any Licensee. . . .”¹²⁹ But can a patent owner waive the right of someone else to assert the patent? This would conceptually require multiplying the bundle of patent rights to include the inchoate rights of anyone who might potentially later own the patent, which would seem to be a convoluted and problematic notion of property. A patent is more coherently thought of as a bundle of rights to exclude, owned by whoever owns the patent.

The enforceability of the LOT is thus questionable, and could impose significant information costs on downstream acquirers of the patent, particularly where the patent is not transferred directly from a LOT member to a PAE. One of the LOT founders apparently likens the LOT to an Open Source copyright license.¹³⁰ In the case of an Open Source license, users are granted a license free of charge provided they agree to the terms of the license.¹³¹ But this does not involve a transfer of the copyright or terms of the license agreement running with such a transfer. The LOT presents the different question of attempting to bind future patent acquirers to the complex terms of a contract to which they have not agreed.

¹²⁹ LOT Agreement § 1.2.

¹³⁰ Schulman, *supra* at *1 (“Open Source is one example of a POS in the copyright context. This paper uses the License On Transfer (LOT) Network (the largest networked patent cross license by number of patents) as a case study of a POS.”).

¹³¹ *See, e.g., Jacobsen v. Katzer*, 535 F.3d 1373, 1379 (Fed. Cir. 2008) (“By requiring that users copy and restate the license and attribution information, a copyright holder can ensure that recipients of the redistributed computer code know the identity of the owner as well as the scope of the license granted by the original owner.”).

To be sure, the terms of the original license agreement are generally important to the new patent owner to the extent that they altered the rights in the patent bundle. For example, a patentee, through a license agreement, might agree not only to refrain from suing the licensee, but also to refrain from suing the licensee's customers.¹³² In such a case, the bundle is diminished by not only the stick corresponding to right to exclude the licensee, but also by the sticks corresponding to the rights to exclude the licensee's customers. Thus under the bundle metaphor, the patent transferee would not have a right to exclude the licensee's customers, as the patent transferor gave up those rights and so could not have transferred them. But it is important to remember that the subsequent patent owner still is not a party to the contracts agreed to by prior owners of the patent. It is one thing to diminish the patent bundle by giving up the rights to exclude certain other entities. It is another thing for a patent owner to purport to give up the rights of others who might potentially own the patent in the future, while keeping those rights for itself in the present.

Part III – Broader Implications

The bundle theory and the encumbrance theory are different ways of thinking about the effect of patent transfer on aspects of license agreements. Sometimes these different theories lead to significantly different results. Having determined that the bundle theory more elegantly and coherently explains the

¹³² See, e.g., *Ericsson Inc. v. Wi-LAN USA, Inc.*, No. 14-21854-CV-DMM, D.I. 165, *3 (S.D. Fla., Aug. 14, 2015) (“Ericsson maintains that pursuant to the Siemens License, LME and Siemens provided each other, their related companies, and their customers with protection from the other’s patents.”).

license on transfer situation, this article now explores the application of the bundle theory to other areas of patent law.

Various doctrines in patent law deal with the alteration of patent rights due to actions by the patentee or others interacting with the patent.¹³³ As it is with patent licenses, the bundle theory can be useful in conceptualizing the extent to which such alterations travel with the patent upon its transfer. First discussed will be patent exhaustion, then FRAND obligations, prior user rights, and finally laches.

A. Patent Exhaustion

The Federal Circuit *en banc* majority opinion in *Lexmark Int'l v. Impression Products*, included an application of the bundle of sticks conception in the area of patent exhaustion.¹³⁴ The plaintiff, Lexmark, made and sold printers as well as toner cartridges, and owned a number of patents covering the cartridges and their use. The relevant cartridges were sold domestically and at a discount but subject to an express single-use/no-resale restriction. The defendant, Impression, later acquired the cartridges, not directly from Lexmark, but rather after a third party had physically modified them so as to enable re-use, in violation of the restriction. Impression then resold the cartridges, and Lexmark sued for patent infringement. Impression attempted to defend under the doctrine of patent exhaustion, arguing that by selling the cartridges, Lexmark had

¹³³ Cf. Jason Rantanen, *The Malleability of Patent Rights*, 2015 MICH. ST. L. REV. 895, 919 (2016) (“[W]hen I say that patent rights are malleable, I mean that their scope and strength can be altered by actors interacting with those rights even after the government has issued that right.”).

¹³⁴ *Lexmark Int'l, Inc. v. Impression Prods.*, 816 F.3d 721 (Fed. Cir. 2016) (*en banc*), *certiorari granted* (Dec. 2, 2016).

exhausted its patent rights in those cartridges and could no longer sue for infringement. The en banc majority however found no exhaustion, and in so holding, noted that it “has long been a familiar feature of our legal landscape that property rights in a particular thing – like the separate interests in making, selling, using, etc., an invention – are viewed as a ‘bundle’ of rights (or sticks) that can generally be transferred separately.”¹³⁵

The *Lexmark* dissent, however, was of the view that an authorized sale of a patented article exhausts the patentee’s property rights in that article, regardless of any contractual conditions placed on the sale.¹³⁶ The Supreme Court recently granted certiorari in the case, so it is possible that the dissent’s view might ultimately prevail. In urging the Supreme Court to grant the petition for certiorari, the U.S. Solicitor General argued in part that the Federal Circuit majority had been guilty of a “failure to distinguish between the rights which are given to the inventor by the patent law and which he may assert against the world through an infringement proceeding and rights which he may create for himself by private contract.”¹³⁷

The distinction drawn by the government is not unlike the distinction between the license agreement and its effect on the underlying patent rights, precisely the sort of the distinction that Hohfeld’s framework can help to flesh out.¹³⁸ Normally, a patentee

¹³⁵ *Lexmark*, 816 F.3d at 741.

¹³⁶ *Lexmark*, 816 F.3d at 781 (Dyk J., dissenting) (“The right to exclude expires (or is ‘exhausted’) by an authorized sale.”).

¹³⁷ *Impression Prods., Inc., v. Lexmark Int’l, Inc.*, No. 15-1189, *Brief For The United States As Amicus Curiae*, at *8 (Oct. 2016) (quoting *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U.S. 502, 514 (1917)).

¹³⁸ *See* Part I(C), *supra*.

making an unrestricted sale of a patented article would be giving up the Right to exclude with respect to that article. Whoever owns that article has a Privilege (or “authority”) to infringe the patent with that article.¹³⁹ This Privilege would be unaffected by any subsequent transfer of the patent, because the patent owner would transfer the bundle of patent rights appropriately diminished, including the “No Rights” correlative to the Privileges of those who had purchased patented articles from the previous patentee. But according to the Federal Circuit majority in *Lexmark*, when a patentee explicitly places conditions on the sale (e.g., single use, no resale), the patentee is only giving up the Right to exclude provided that the article is used in accordance with those conditions. Thus the patent bundle is diminished to a lesser extent than it would be in the case of an unrestricted sale of a patented article.

The question then is whether restrictions placed on an authorized sale should be allowed to lessen the extent to which a patentee parts with its *in rem* patent rights in the article sold, or whether such restrictions are mere *in personam* agreements between the buyer and the seller. One advantage of the bright line rule urged by the Solicitor General and by the dissent would be lower information costs on downstream purchasers of patented articles.¹⁴⁰

¹³⁹ *Id.* at 734 (“some sales confer authority on the purchaser to take certain actions – such as selling or using the purchased article in the United States or importing it into the United States – that would otherwise be infringing acts”).

¹⁴⁰ See Part I(B), *supra*. See also, *Lexmark*, 816 F.3d at 781 (Dyk J., dissenting) (“Post-sale restraints would ‘cast a cloud of uncertainty over every sale.’”) (quoting *Tessera, Inc. v. Int’l Trade Comm’n*, 646 F.3d 1357, 1370 (Fed. Cir. 2011)); *Brief For The United States, supra*, at *14 (“This Court long ago recognized that ‘[t]he inconvenience and annoyance to the public’ if patent rights are not exhausted by the first authorized sale are

On the other hand, the *Lexmark* case also seems to raise what J.E. Penner called “the question of individuation,” that is, can property be divided any which way (like slicing a cake) or is it comprised of certain indivisible base units (like a club is comprised of individual people).¹⁴¹ Penner seemed to think that property should be viewed as more like the cake.¹⁴² The *Lexmark* majority would allow patentees to control the extent to which they part with their patent rights upon sale, whereas the dissent takes more of an individuated, all or nothing approach to sales of patented articles.

B. FRAND Commitments

Technology companies sometimes seek to have their patented inventions incorporated into the guidelines promulgated by standard setting organizations (SSOs). In doing so, such companies promise that if their invention is adopted into the standard, they will license the patent rights on fair, reasonable, and non-discriminatory (FRAND) terms to anyone who infringes due to compliance with the standard. But what happens if the company that made the FRAND commitment then transfers the patent? Is the subsequent patent owner bound by the FRAND commitment? For much the same reasons that subsequent patent owners are generally held to be bound by bare license commitments, it seems that the answer should be yes. As Jay Kesan and Carol Hayes explain, “if a patentee could extinguish

‘too obvious to require illustration.’”) (quoting *Keeler v. Standard Folding Bed Co.*, 157 U.S. 659, 667 (1895)).

¹⁴¹ J.E. Penner, 43 UCLA L. REV. at 754.

¹⁴² *Id.* (“If we are to take the bundle of rights analysis of property seriously we have to believe that the individual rights are like members of a club However, as the analysis will show, they are merely like slices of a cake, no more than momentary functional descriptions made with a particular legal concern in mind.”).

the benefits of a FRAND commitment by transferring the patent to a third party, this would lead to inequitable results.”¹⁴³

That is, if an SSO were induced by a FRAND commitment to adopt a particular invention into the standard, it would be inequitable if the FRAND commitment could then be shirked through a transfer of the patent. But as with patent licenses, there is some uncertainty as to the theory or mechanism by which a subsequent patent owner would be bound by a previous owner’s FRAND commitment. Kesan and Hayes primarily adopt the encumbrance theory, arguing in favor of “conceptualiz[ing] the FRAND commitment as an encumbrance that runs with the patent, similar to a servitude under real property law.”¹⁴⁴ They explain that it is “fairly uncontroversial to conclude that a FRAND commitment relates to the use of the patent,” and moreover, that subsequent owners should be considered to be on notice because the standards documents are publicly available, and “many SSOs also make FRAND commitments publicly available.”¹⁴⁵ They note that the “primary hurdle to analogizing to servitudes is that patents are treated as having the attributes of personal property, and servitudes on personal property are generally disfavored in the law,” but sidestep this hurdle by pointing out that the “law of servitudes has become more liberalized over the years.”¹⁴⁶

¹⁴³ Jay Kesan & Carol M. Hayes, *FRAND’s Forever: Standards, Patent Transfers, and Licensing Commitments*, 89 IND. L. J. 231, 304 (2014).

¹⁴⁴ Kesan & Hayes, 89 IND. L. J. at 313.

¹⁴⁵ *Id.* at 295.

¹⁴⁶ *Id.*

The encumbrance theory is better suited for FRAND commitments than it is for patent licenses. The reason is that practically the entire FRAND commitment relates to the patent, so it is relatively unproblematic to think of the entire FRAND commitment as running with the patent. By contrast, as discussed earlier, license privileges often arise from broad license agreements with many different types of *in personam* commitments. There may be many different patents involved in a license agreement and many different types of commitments, not all of which will be directly related to any one patent. Accordingly, it would not make sense to have the entire license agreement shift to a new party with the transfer of one patent.

But the FRAND commitment could also be conceptualized using the bundle approach. The patent owner trades certain aspects of the bundle of rights in exchange for adoption of the invention into the standard. The FRAND commitment can be said to qualify the right to exclude with respect to those who use the standard, in that “the patent owner cannot play the patent holdout game,”¹⁴⁷ that is, a patent owner seeking to enforce must be willing to negotiate a FRAND license with the potential infringer. And the bundle theory does still accord better with the treatment of patents as personal property and the law’s disfavoring of servitudes on personal property. Thus although the encumbrance theory is relatively unproblematic for FRAND commitments, the bundle theory more coherently conceptualizes such constraints.

Indeed, Kesan and Hayes also attempt to apply Hohfeld to the FRAND scenario, albeit in a different manner, stating that the “FRAND commitment may be

¹⁴⁷ *Id.* at 297.

understood as imposing on the patent owner a duty to negotiate in good faith, and through a Hohfeldian analysis, this means that there is a correlative right to good faith negotiation that is held by the potential licensee.”¹⁴⁸ If such a duty travels with the patent, this would mean that all potential infringers would have an affirmative claim (e.g., breach of contract) against a subsequent patentee who did not comply with the duty to negotiate in good faith. This seems questionable. For support, Kesan and Hayes cite *Apple v. Samsung*, where the court stated that under French law, “Samsung’s contractual obligations arising from its FRAND declarations to ETSI at the very least created a duty to negotiate in good faith with Apple regarding FRAND terms.”¹⁴⁹ But that case did not involve a patent transfer, Samsung was the plaintiff and the party that made the commitment to the SSO (ETSI). Samsung thus had a duty to comply with its own contractual obligations, but that does not mean that such contractual obligations necessarily entirely travel with the patent.

The FRAND commitment can be better conceptualized as the patentee giving up or qualifying its Rights to exclude, instead of as creating affirmative Rights in each of the SSO members. Thus the SSO members have a *Privilege* to a negotiated license on FRAND terms, rather than a Right to negotiation. The important thing to the SSO members is not negotiation for its own sake, rather it is freedom from holdout pressure. The Privilege is not an affirmative claim, but if a subsequent patent owner attempts to “play the holdout game” or sue an SSO member without

¹⁴⁸ *Id.* at 290.

¹⁴⁹ *Apple, Inc. v. Samsung Electronics Co.*, No. 11-CV-01846, 2012 U.S. Dist. LEXIS 67201, *43-44 (N.D. Cal. May 14, 2012).

negotiating, the SSO member may invoke the Privilege as a defense, thereby relieving the SSO member of holdout pressure. As such, the FRAND obligations on patent owners are better thought of as No Rights instead of Duties, as the patent owner has no right to play the holdout game. The bundle of patent rights is thus diminished, and only the diminished bundle would transfer to a subsequent owner.

C. Prior User Rights

Although it is generally accepted that a patent provides only a right to exclude and not a right to use,¹⁵⁰ some use rights may arise irrespective of the patent by virtue of invention or prior use. The Supreme Court has stated that the right of an inventor to use its own creation “existed before and without the passage of law and was always the right of an inventor.”¹⁵¹ As explained in the classic text book by Albert H. Walker:

A patentee has two kinds of rights in his invention. He has a right to make, use, and sell specimens of the invented thing; and he has a right to prevent all other persons from doing either of those acts. The first of these rights is wholly independent of the patent laws; while the second exists by virtue of those laws alone.¹⁵²

¹⁵⁰ See, e.g., 5 DONALD S. CHISUM, *supra*, § 16.02[1]; *Bio-Tech. Gen. Corp.*, 80 F.3d at 1559. *But see*, Adam Mossoff, *Exclusion and Exclusive Use in Patent Law*, 22 HARV. J. L. & TECH. 321 (2009).

¹⁵¹ *Bauer & Cie v. O'Donnell*, 229 U.S. 1, 10 (1913); *see also Pennock v. Dialogue*, 27 U.S. 1, 23 (1829) (explaining that the Patent Act of 1800 “may well be deemed merely affirmative of what would be the result from general principles of law,” in that it “gives the right to the first and true inventor and to him only”).

¹⁵² ALBERT H. WALKER, *TEXT BOOK OF THE LAW OF PATENTS FOR INVENTIONS*, § 155, pg. 193 (5th ed. 1917) (citing *Bloomer v. McQuewan*, 14 How. 539 (1852); *United States v. Bell Telephone Co.*, 197 U.S. 238 (1897); *Jewett v. Atwood Suspender Co.*, 100 F.R. 647 (1900); *Victor Talking Mach. Co. v. The Fair*, 123 F.R. 426 (1903)).

Similarly, William C. Robinson stated:

The right conferred by the grant of letters-patents is the right to the exclusive use of the invention during a specific period of time. This right differs, in some respects, from the right to the invention itself. The right to the invention vests in an the inventor by virtue of his own creative act, and under existing laws includes the right not only to use it without a patent, but to obtain a patent for it The right created by the letters-patent is collateral to the right to the invention¹⁵³

Given that subsequent independent creation is not a modern day defense to a claim of patent infringement, it seems that the inventor’s independent use right is no longer in full effect.¹⁵⁴ But the notion of use rights for inventors carries forward to present day patent law to some extent in the form of prior user rights. The America Invents Act provides a defense to infringement “based on prior commercial use.”¹⁵⁵ Prior to the AIA, a “prior user who did not abandon, suppress, or conceal the invention,” could rely on Section 102(g)(2) to “invalidate the later patent of another and thereby escape liability for infringement.”¹⁵⁶ But with the AIA’s switch to a first-to-file patent system, it was necessary to enact the full prior commercial

¹⁵³ WILLIAM C. ROBINSON, 2 THE LAW OF PATENTS 6-7, § 420 (1890).

¹⁵⁴ See, e.g., Smith, 116 YALE L. J. at 1810 (“Patent law, but not copyright law, gives a right against independent invention or creation . . .”).

¹⁵⁵ 35 U.S.C. § 273 (2013).

¹⁵⁶ See U.S. PAT. & TRADEMARK OFF., REPORT ON THE PRIOR USER RIGHTS DEFENSE 48 (2012); 35 U.S.C. § 102(g)(2), amended by Leahy-Smith American Invents Act of 2011, Pub. L. No. 112-29, 125 Stat. 284.

use defense in order to ensure that prior users could not be forced to pay for the continued use of their own prior work.¹⁵⁷

If use rights inhere by virtue of invention and are separate from the patent, they should not travel with the patent. Practicing one patent (A) might require the practice of another blocking patent (B). The inventor of patent A might have a prior user right to practice patent B. But the prior user right is not granted by the USPTO, it is separate from the patent. That is, the inventor of patent A would have had the prior user right with respect to patent B even if she had never applied for patent A. Prior user rights are personal to the prior user, they are *in personam*. Thus the prior user rights are not part of the bundle of patent rights, and would not travel to a new patent owner upon transfer of the patent.

D. Laches

Laches is an equitable defense with a long common law pedigree, wherein courts of equity “refused its aid to stale demands, where the party has slept upon his right and acquiesced for a great length of time.”¹⁵⁸ To invoke the defense of laches in a patent case, the defendant must prove: (1) an unreasonable delay in filing suit by the patentee, and (2) that the delay operated to prejudice the accused

¹⁵⁷ U.S. PAT. & TRADEMARK OFF., at 48 (“The switch from first-to-invent to first-inventor-to-file is cited in the legislative history of the AIA as the main impetus behind the changes to section 273. (footnote omitted) One of the direct results of adopting a first-inventor-to-file regime is the elimination of section 102(g)(2) of the current law.”).

¹⁵⁸ See, e.g., *Smith v. Clay*, 3 Brown Ch. 638, 29 Eng. Reg. 743 (1767).

infringer.¹⁵⁹ An example of prejudice would be where if the defendant had notice, it could have switched to a non-infringing product.¹⁶⁰ While laches bars retrospective relief, it as a general matter does not bar prospective relief.¹⁶¹

Part of the purpose of the laches doctrine is to prevent trolls from lurking under bridges until the most opportune time to emerge. A hiding troll might induce a billy goat to invest in walking towards a certain bridge.¹⁶² If the troll had been standing on top of the bridge, the billy goat might have found a different way up the hillside. A patent troll might similarly lie in wait, deliberately allowing a technology company to accrue infringement damages, whereas if the troll had made its patent known, the company might have switched to a non-infringing alternative. The Supreme Court is currently considering whether laches remains a defense in patent

¹⁵⁹ See, e.g., *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*, 960 F.2d 1020, 1032 (Fed. Cir. 1992) (*en banc*).

¹⁶⁰ See *Auckerman*, 960 F.2d at 1033; *Meyers*, 912 F.2d at 1463 (reversing summary judgment of laches because the evidence indicated that the accused infringer would have continued its development and sales activities regardless of what the patentee did).

¹⁶¹ *Auckerman*, 960 F.2d at 1040, 1043. See also, 6A-19 CHISUM ON PATENTS § 19.05 [3][a] (“In terms of the effect on the patent owner’s rights, laches precludes the recovery of damages for infringements occurring prior to the filing of suit but not an injunction or damages as to post-filing infringements; estoppel bars prospective as well as retrospective relief.”); *SCA Hygiene Prods. v. First Quality Baby Prods.*, 807 F.3d 1311, 1333 (Fed. Cir. 2015) (*en banc*) (“[A] patentee guilty of laches typically does not surrender its right to an ongoing royalty.”), *certiorari granted*, 136 S. Ct. 1824 (2016).

¹⁶² See n.4, *supra*.

litigation.¹⁶³ If laches is done away with, patent trolls will be free to hide under technological bridges with impunity.¹⁶⁴

When a patent is transferred, the prior owner’s knowledge of infringing activities is constructively imputed to the new owner.¹⁶⁵ As the Federal Circuit has explained, a “patentee cannot avoid the consequences of his laches by transferring the patent.”¹⁶⁶ Thus to the extent that potential infringers have a viable laches defense to a particular patent, that defense would remain if the patent were transferred. As such, the laches defense should be thought of as altering the *in rem* patent rights rather than as an *in personam* defense against a particular patentee.¹⁶⁷

Applying Hohfeld, the laches defense is a Privilege to infringe without paying retrospective damages.¹⁶⁸ The patentee thus has a No Right to retrospective

¹⁶³ *SCA Hygiene*, 136 S. Ct. 1824 (argued Nov. 1, 2016) (considering whether laches should be available to bar claims for legal damages from patent infringement that are brought within the six-year limitations period codified at 35 U.S.C. § 286).

¹⁶⁴ *See, e.g., SCA Hygiene Prods. v. First Quality Baby Prods.*, No. 15-927, *Amicus Brief Of Dell*, 5 (Sept. 19, 2016) (“NPEs tend to wait to sue, allowing others to build up businesses and then claiming a share of the profits (or a payment to go away).”).

¹⁶⁵ *See CHISUM*, at [2][a][ii] (“It is well-settled that in determining the length of delay, a transferee of the patent must accept the consequences of the dilatory conduct of immediate and remote transferors. This includes any charges of infringement or threats of suit made by a predecessor.”).

¹⁶⁶ *Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1559 (Fed. Cir. 1997). *See also, Barnes & Noble, Inc. v. LSI Corp.*, 849 F. Supp. 2d 925, 931 (N.D. Cal. 2012) (“Lucent’s conduct may be imputed to Defendants for at least some theories of unenforceability of patent rights, including laches, estoppel, and inequitable conduct.”).

¹⁶⁷ *See Rantanen, supra*, 2015 MICH. ST. L. REV. at 919.

¹⁶⁸ *Cf., SCA Hygiene*, 807 F.3d at 1332 (“Equitable estoppel, on the other hand, is different – the patentee has granted a license to use the invention that extends throughout the life of the patent.”).

damages (or only a prospective Right to exclude) against any defendant with a bona fide laches defense. Conduct giving rise to a laches defense, then, diminishes the bundle of patent rights. When the patent is transferred, under the theory of this article, the transferor takes only the diminished bundle of rights.

Conclusion

Devices or conceptualizations can provide a way of understanding the law in a more coherent way, thereby reducing uncertainty in the law and improving the ability to accurately predict how the law will or should treat situations that might arise in the future. One example of a conceptualization in patent law is the classic “Winslow tableau” device for thinking about obviousness, which is to “picture the inventor as working in his shop with the prior art references—which he is presumed to know—hanging on the walls around him.”¹⁶⁹ This device may not work perfectly in every case, but it can be a useful way of thinking about most cases. The power of Newtonian Physics to predict reality is known to break down at the quantum and relativistic levels, but nevertheless it provides a useful model for most standard earthly activities.

The bundle theory provides a useful framework for thinking about a variety of doctrines in patent law. Under this theory, the patent is a bundle of rights (or sticks) granted by the USPTO. Actions by the owner of a patent, such as entering into a license agreement, selling a patented article, or making FRAND commitments, can diminish this bundle of rights, but cannot add to it. The owner of a patent can

¹⁶⁹ *In re Winslow*, 53 C.C.P.A. 1574, 1577 (C.C.P.A. 1966) (Rich, J.).

exchange sticks in the bundle for other forms of value. When a patent is transferred, what is transferred is whatever remains in the bundle. That is, the transferred patent is the original bundle of sticks granted by the USPTO, but appropriately diminished by the actions of the previous patent owners.

Regarding the effect of patent transfer on patent licenses, the bundle theory provides a framework that is more consistent and helpful than the prevalent encumbrance theory. And although it does not purport to be the unifying theory of patent law, the bundle theory can provide a useful way of thinking about some other doctrines in patent law as well. Courts and litigators then, should consider making use of the bundle framework, especially when faced with issues arising from or related to the transfer of patents.