

Tax Solutions to Patent Damages

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The calculation of patent damages lies at the epicenter of patent policy, yet it remains one of the most contentious issues in all of intellectual property law. The dominant legal framework equates a reasonable royalty, the most prevalent patent damage award, to a hypothetical negotiation between the parties at the time infringement began. Commentators and courts generally agree that existing comparable patent licenses, which represent arm's-length transaction between two unrelated private parties that places a monetary value on the patent, are highly probative in determining a reasonable royalty. The lack of publicly available licensing data, however, limits the ability of courts to identify appropriate comparable licenses. In this paper, we argue that there is a large untapped trove of information

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on existing patent licensing agreements, many of which are likely more probative to reasonable royalty calculation than currently existing licensing data offered by patent damage experts. This novel source of data is tax-related “transfer prices.”

I. Introduction

The calculation of patent damages lies at the epicenter of patent policy, yet it remains one of the most contentious issues in all of intellectual property law.¹ Scholars debate whether the damage rules result in systematic overcompensation of patentees.² The press routinely reports eye-popping, ten-figure damage awards.³ After a decade of trying to pass major patent reform, Congress succeeded only after the divisive patent damages provisions were expunged from the bill.⁴

The Patent Act provides that “[u]pon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty.”⁵ There is general agreement that part of the discontent with patent damages stems from this “reasonable royalty” calculation, which is the most prevalent patent damage award.⁶ The dominant legal framework equates the reasonable royalty to that of a hypothetical negotiation between the parties at the time infringement began, wherein courts are instructed to consider fifteen *Georgia-Pacific* factors in reconstructing this negotiation.⁷ This laundry list of fac-

¹ THE SEDONA CONFERENCE WORKING GRP., COMMENTARY ON PATENT DAMAGES AND REMEDIES 23 (2014), <https://thesedonaconference.org/download-pub/3827>; U.S. FED. TRADE COMM’N, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION (2011); NAT’L RESEARCH COUNCIL, NAT’L ACADS. OF SCI., A PATENT SYSTEM FOR THE 21ST CENTURY (STEPHEN A. MERRILL, RICHARD C. LEVIN & MARK B. MYERS EDS., 2004); U.S. FED. TRADE COMM’N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY (2003).

² See, e.g., Thomas F. Cotter, *Patent Holdup, Patent Remedies, and Antitrust Responses*, 34 J. CORP. L. 1151, 1152–53 (2009); Einer Elhauge, *Do Patent Holdup and Royalty Stacking Lead to Systematically Excessive Royalties?*, 4 J. COMPETITION L. & ECON. 535, 535–36 (2008); John Golden, “Patent Trolls” and Patent Remedies, 85 TEX. L. REV. 2111, 2112 (2007); Mark A. Lemley & Carl Shapiro, *Patent Holdup and Royalty Stacking*, 85 TEX. L. REV. 1991, 1994 (2007).

³ See, e.g., Jonathan D. Rockoff, *Gilead Sciences Ordered to Pay \$2.5 Billion in Damages to Merck & Co.*, WALL ST. J. (Dec. 15, 2016, 6:10 PM), <http://www.wsj.com/articles/gilead-sciences-ordered-to-pay-2-5-billion-in-damages-to-merck-co-1481843183> (reporting the original verdict in *Idenix Pharm. LLC v. Gilead Scis., Inc.*, No. CV 13-1987-LPS, 2016 WL 6802481 (D. Del. 2016)); Sinead Carew, *Microsoft Hit with \$1.52 Billion Patent Damage Verdict*, VC NEWS NETWORK (Feb. 22, 2007, 7:07 PM), <http://www.reuters.com/article/idUSWEN465120070223> (reporting original jury verdict in *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F. Supp. 2d 1016, 1028 (S.D. Cal. 2008), *rev’d* 580 F.3d 1301, 1308 (Fed. Cir. 2009)).

⁴ America Invents Act, Public Law 112-29 (2011).

⁵ 35 U.S.C. § 284 (2015).

⁶ PRICEWATERHOUSECOOPERS, 2014 PATENT LITIGATION STUDY: AS CASE VOLUME LEAPS, DAMAGES CONTINUE GENERAL DECLINE, 9 (2014), available at <https://www.pwc.com/us/en/forensic-services/publications/assets/2014-patent-litigation-study.pdf>.

⁷ *Georgia-Pac. Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 197), *mod. and aff’d*, 446 F.2d 295 (2d Cir. 1971), *cert. denied*, 404 U.S. 870 (1971).

tors has been subject to intense criticism for failing, among other things, to provide the courts with sufficient guidance in determining patent damages.⁸

One way courts have responded to the subjectivity in determining reasonable royalties is to place more weight on the one objective, measurable *Georgia-Pacific* factor—existing comparable patent licenses. An existing patent license represents an arm’s-length transaction between two unrelated private parties that places a monetary value on the patent. The use of existing comparable licenses may enable courts to utilize private valuations to gauge patent damages. For these reasons, comparable licenses might well constitute the best available evidence for reconstructing a hypothetical royalty negotiation. In fact, despite the controversy surrounding patent damages, there is general agreement that existing comparable patent licenses are highly probative in determining a reasonable royalty.⁹

While existing comparable patent licenses are arguably the preferred approach of courts and commentators, the lack of publicly available licensing data limits the ability of courts to identify appropriate comparable licenses. In this paper, we argue that there is a large untapped trove of information on existing patent licensing agreements, many of which are likely more probative to reasonable royalty calculation than currently existing licensing data offered by patent damage experts. This novel source of data is tax-related “transfer prices.”

⁸ See, e.g., Daralyn J. Durie & Mark A. Lemley, *A Structured Approach to Calculating Reasonable Royalties*, 14 LEWIS & CLARK L. REV. 627, 632 (2010) (stating that “[w]ith at least fifteen factors, a complex interaction between them, and little limit on expert testimony on damages, there is likely to be evidence somewhere in the case that could be construed to support virtually any number the jury might settle on”). Relatedly, the nebulous nature of the factors, along with the lack of guidance on how to weigh the factors, limits the ability of a court to review whether a jury’s award is supported by substantial evidence. Christopher B. Seaman, *Reconsidering the Georgia-Pacific Standard for Reasonable Royalty Patent Damages*, 2010 BYU L. REV. 1661, 1688 (2010).

⁹ See, e.g., *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1323–39 (Fed. Cir. 2009); *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 6687122 (N.D. Cal. Nov. 25, 2014) (setting ongoing royalty payments); *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2014 WL 549324 (N.D. Cal. Feb. 7, 2014) (denying Apple’s request for additur following a second trial on damages); *In re Innovatio IP Ventures, LLC Patent Litig.*, No. 11 C 9308, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013); *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901 (N.D. Ill. 2012) (Posner, J.), *aff’d in part, rev’d in part, vacated in part*, 757 F.3d 1286 (Fed. Cir. 2014); Stephen J. Conroy et al., *The Case for Admitting Settlement License Agreements in a Reasonable Royalty Analysis*, 46 LES NOUVELLES 291 (2011); Merritt J. Hasbrouck, *Protecting the Gates of Reasonable Royalty: A Damages Framework for Patent Infringement Cases*, 11 J. MARSHALL REV. INTELL. PROP. L. 192, 215 (2011); John C. Jarosz & Michael J. Chapman, *The Hypothetical Negotiation and Reasonable Royalty Damages: The Tail Wagging the Dog*, 16 STAN. TECH. L. REV. 769 (2013); Layne S. Keele, *Res”Q”ing Patent Infringement Damages After ResQNet: The Dangers of Litigation Licenses as Evidence of a Reasonable Royalty*, 20 TEX. INTELL. PROP. L.J. 181, 205 (2012); David O. Taylor, *Using Reasonable Royalties to Value Patented Technology*, 49 GA. L. REV. 79 (2014); Jaimeson Fedell, Note, *A Step in the Right Direction: Patent Damages and the Elimination of the Entire Market Value Rule*, 98 MINN. L. REV. 1143, 1146–50 (2014). *But see*, William F. Lee & A. Douglas Melamed, *Breaking the Vicious Cycle of Patent Damages*, 101 CORNELL L. REV. 385 (2016); Erik Hovenkamp & Jonathan Masur, *How Patent Damages Skew Licensing Markets*, 36 REV. LITIG. 379 (2017).

As part of their multinational operations, corporations routinely transfer rights to use their patents to their subsidiaries located in different jurisdictions.¹⁰ The amount paid by one related company to another for the economic rights to the patent is the patent's transfer price. Because the sourcing of income and expenses affects the amount of taxable income reportable in a jurisdiction, countries are often at odds regarding the appropriate value to be placed on the use of intellectual property developed in one jurisdiction but used by a business in another. Multinationals that are attempting to minimize their taxes have strong incentives to shift earnings to low-tax jurisdictions. Hence, countries have developed an extensive and detailed set of rules and regulations guiding transfer pricing. Laws require, among other things, that transfer prices reflect an arm's-length transaction between unrelated parties, that multinationals hire appraisers to prepare rigorous documentation justifying their transfer prices, and that multinationals attest to the prices' accuracy under severe penalties.¹¹ Moreover, the Internal Revenue Service ("I.R.S.") has the ability to reject any transfer price that they contend does not fall within an arm's-length transaction between the unrelated parties. Given the similarity between the arm's-length tax standard and the *Georgia-Pacific* factor of existing "comparable patent licenses," we contend that the tax-related transfer prices, at least within certain circumstances, are highly relevant data in determining the reasonable royalty patent damage award.

The relationship between tax-related transfer pricing and patent litigation has largely gone unnoticed, with one notable exception.¹² Andrew Blair-Stanek has previously argued that the tax minimization incentives associated with moving intellectual property from the United States (U.S.) to a "tax-haven" jurisdiction removes almost the entire economic reality of transfer prices.¹³ Hence, by requiring courts to rely on transfer prices in setting damages, he contends that the courts can mitigate multinational corporations' tax avoidance. Our analysis differs from Blair-Stanek in two critical ways. First, while we agree that tax incentives certainly influence transfer prices, we do not believe that tax incentives render transfer prices completely meaningless. That is, we contend that transfer prices reflect the economic value of the patent, at least within some bargaining range. Second, our analysis differs from Blair-Stanek in that we consider transfer pricing on a global scale—i.e., not just moving intellectual property out of the U.S. and into a lower-tax jurisdiction. In doing so, we argue that, depending upon the tax rate of the jurisdiction, royalty payments/license fees within the multinational corporation can be simultaneously upwardly and downwardly influenced by tax incentives. As a result, we contend that

¹⁰ Often, the transfer is effectuated through a licensing agreement.

¹¹ See *infra* Part II.

¹² There is a nascent literature at the intersection of intellectual property law and tax law. See, e.g., Jeffrey A. Maine & Xuan-Thao Nguyen, *The Unequal Tax Treatment of Intellectual Property*, 130 TAX NOTES 931 (2011); Xuan-Thao Nguyen & Jeffrey A. Maine, *Equity and Efficiency in Intellectual Property Taxation*, 76 BROOK. L. REV. 1 (2010).

¹³ Andrew Blair-Stanek, *Intellectual Property Law Solutions to Tax Avoidance*, 62 UCLA L. REV. 2 (2015).

tax-related transfer prices may be used to provide both an upper and lower bound to the multinational corporation's valuation of its patents.¹⁴

This Article proceeds in four parts. Part II details patent law damages, highlighting the growing dominance of existing patent licenses in the calculation of patent damages, and noting that the dearth of comparable existing licenses limits the effectiveness of this approach. Part III introduces transfer prices and the host of U.S. regulations that ensure transfer prices reflect an arm's-length value. By taking a global perspective, Part IV examines when transfer prices are likely to represent the upper or lower bounds of a bargaining range based upon tax structures. Finally, Part V explores when transfer prices are the most informative to calculating reasonable royalty damage awards in patent cases and how transfer prices are devoid of some of the distortions that plague existing patent licenses between unrelated parties.

II. Patent Damages

Patents help to nudge society towards the optimal level of innovation by giving inventors a mechanism to recoup their research and development expenses.¹⁵ Patents have value because they enable the owner to recoup these expenses—i.e., increase their profits—either by excluding others from the market in which they sell products or by receiving royalties by licensing the patent.

Once a patent is found to be valid and infringed, its owner is entitled to infringement damages. The governing statute provides for “damages adequate to compensate for the infringement, but in no event less than a reasonable royalty.”¹⁶ Courts have interpreted this language to conclude that patent damages come in two primary measures: lost profits and reasonable royalties. Lost profits provide the patentee with a damage award of the profits the patentee would have made but for the infringing sales.¹⁷ Thus, only patentees that participate in a market in competition with the infringer, such as by selling its own product that practices the patent, will be eligible for lost profits damage awards.¹⁸

¹⁴ *Id.*

¹⁵ See WILLIAM D. NORDHAUS, *INVENTION, GROWTH, AND WELFARE: A THEORETICAL TREATMENT OF TECHNOLOGICAL CHANGE* 76 (1969) (explaining the need for finding the optimal patent length, because the longer a patent lasts, the greater the social cost of that patent due to inefficiencies caused by monopoly of information).

¹⁶ 35 U.S.C. § 284 (2015).

¹⁷ *Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1366 (Fed. Cir. 2008) (“[P]atentees tend to try to fit their damages cases into the ‘lost profits’ framework, or else fall back on the statutory grant of a reasonable royalty.”).

¹⁸ *BIC Leisure Prods., Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 1219 (Fed. Cir. 1993) (reversing the award of lost profits because the patentee and infringer did not compete in the same market). The classic example of lost profits is diverted sales—that is, profits the patentee would have made from sales it lost to the infringing product. See, e.g., *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1124 (Fed. Cir. 2003); *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1578 (Fed. Cir. 1989). Lost profits may also arise from price erosion, where competition from the infringer results in the patentee lowering its prices and hence earning lower profits on the goods it sells. *Lam, Inc. v. Johns-Manville Corp.*, 718 F.2d 1056, 1065 (Fed. Cir. 1983); JOHN M. SKENYON,

Proving lost profits, however, is not an easy endeavor.¹⁹ The prevailing patentee must prove (1) the extent of demand for the patented product, (2) the absence of non-infringing substitutes for that product, (3) the patentee's ability to meet the additional demand by expanding manufacturing capacity, and (4) the extent of profits the patentee would have made.²⁰ Case law also requires an inquiry into how the patentee would divide sales with other companies in the market selling non-infringing or licensed goods.²¹ The difficulties associated with proving lost profits are partly responsible for why lost profits have been declining as a basis for recovery for patent infringement. In recent years, lost profits have constituted less than 37% of all patent damage awards.²²

In contrast, reasonable royalties, which serve as the floor to patent damages, have become the dominant damage award determination. Today, over 80% of all patent damage awards are reasonable royalties.²³ Reasonable royalties are awarded by the courts in two different scenarios. First, when a patentee who manufactured the patent product fails to meet the standards of proof associated with proving lost profits.²⁴ Second, when the patentee does not sell the patented invention herself and may, or may not, license the patent in question to others who sell the patented invention.²⁵ The principal legal framework in patent law for the reasonable royalty damage sets the royalty to the amount that would be agreed upon in a hypothetical negotiation between the parties at the time infringement began.²⁶ This hypothetical

CHRISTOPHER S. MARCHESI & JOHN LAND, PATENT DAMAGES LAW AND PRACTICES § 2.4 (2009).

¹⁹ Historically, patentees have preferred an award of lost profits to a reasonable royalty, as the former better tracks the monopoly value of the patent than the latter. Mark A. Lemley, *Distinguishing Lost Profits from Reasonable Royalties*, 51 WM. & MARY L. REV. 655, 660–61 (2009). However, more recently some patentees are able to pursue greater recovery by seeking reasonable royalty damages instead of lost profits. *See, e.g.*, *Monsanto Co. v. McFarling*, 488 F.3d 973, 978–81 (Fed. Cir. 2007) (affirming a jury award of reasonable royalty damages of \$40 per bag of soybean seed, which was more than six times greater than the plaintiff's lost profits).

²⁰ *See, e.g.*, *Panduit Corp. v. Stahl Bros. Fibre Works*, 575 F.2d 1152, 1156 (6th Cir. 1978). The United States Court of Appeals for the Federal Circuit has adopted this framework as its primary, but not exclusive, method to analyze lost profits. *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549 (Fed. Cir. 1984).

²¹ *See Mor-Flo Indus.*, 83 F.2d at 1578 (applying the market share rule to determine the amount of sales the patentee would have made but for the infringing activity).

²² PRICEWATERHOUSECOOPERS, *supra* note 8, at 9. The rise of non-practicing entities has also likely played an important role in lost profits becoming a declining basis for recovery for patent infringement. *Id.*

²³ Seaman, *supra* note 8, at 1688.

²⁴ 35 U.S.C. § 284 (2015).

²⁵ *Poly-America, L.P. v. GSE Lining Tech., Inc.*, 383 F.3d 1301, 1311 (Fed. Cir. 2004) (holding that reasonable royalties are the only damages for a patent owner that sells a device whose sales are negatively affected by the sale of the infringing product).

²⁶ The Federal Circuit has blessed several other approaches, including an “analytical method” that begins with calculating the defendant's profit from utilizing an infringing product and subtracts “the infringer's usual or acceptable net profit from its anticipated net profit realized from sales of infringing devices.” *Lucent Techs., Inc. v. Gateway, Inc.* 580 F.3d 1301, 1324 (Fed. Cir. 2009) (quoting *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 899 (Fed. Cir. 1986)); *see Taylor, supra* note 11, at 118. Nevertheless, the hypothetical negotiation remains the dominant framework.

negotiation standard assumes both that the parties are willing to negotiate and that it was known to a certainty that the patent was valid and infringed at the time of the negotiation.²⁷

Courts often rely upon a list of fifteen factors, known as the *Georgia-Pacific* factors, to help in determining a reasonable royalty rate.²⁸ These factors pose many

²⁷ *Georgia-Pac. Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116 (S.D.N.Y. 197), *mod. and aff'd*, 446 F.2d 295 (2d Cir. 1971), *cert. denied*, 404 U.S. 870 (1971). As the Federal Circuit has explained: “The hypothetical negotiation tries, as best as possible, to recreate the *ex ante* licensing negotiation scenario and to describe the resulting agreement. In other words, if infringement had not occurred, willing parties would have executed a license agreement specifying a certain royalty payment scheme.” *Lucent Techs., Inc., v. Gateway, Inc.* 580 F.3d 1301, 1324 (Fed. Cir. 2009).

²⁸ The factors are:

1. Royalties patentee receives for licensing the patent in suit, proving or tending to prove an established royalty.
2. The rates paid by the licensee for the use of other patents comparable to the patent in suit.
3. The nature and scope of license, as exclusive or non-exclusive; or as restricted or non-restricted in terms of territory or with respect to whom the manufactured product may be sold.
4. The licensor’s established policy and marketing program to maintain patent monopoly by not licensing others to use the invention or by granting licenses under special conditions designed to preserve that monopoly.
5. The commercial relationship between licensor and licensee, such as, whether they are competitors in the same territory in the same line of business; or whether they are inventor and promoter.
6. The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to the licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.
7. The duration of patent and term of license.
8. The established profitability of the products made under the patent; its commercial success; and its current popularity.
9. The utility and advantages of patent property over the old modes and devices, if any, that had been used for working out similar results.
10. The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefit of those who have used the invention.
11. The extent to which the infringer has made use of the invention and the value of such use.
12. The portion of profit or the selling price that may be customarily in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions.
13. The portion of realizable profit attributable to the invention as distinguished from non-patented elements, significant features / improvements added by the infringer, the manufacturing process or business risks.
14. Opinion testimony of qualified experts.
15. The amount that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon (at the time the infringement began) if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee—who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention—would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license.

Georgia-Pac., 318 F. Supp. at 1119–20; *Unisplay, S.A. v. Am. Elec. Sign Co., Inc.*, 69 F.3d 512, 517 n.7 (Fed. Cir. 1995).

Although the *Georgia-Pacific* factors still dominate the legal landscape, several recent Federal Circuit cases have indicated a decline in the primacy of these factors in calculating reasonable roy-

relevant questions—such as the royalty rates people have been willing to pay for the invention in question or similar inventions in the industry—and, overall, represent a broad spectrum of considerations relating to the patent holder’s and infringer’s potential gains from the patented technology. The use of the *Georgia-Pacific* factors in calculating reasonable royalties, however, has been subject to intense criticism.²⁹

Perhaps the most salient are concerns that *Georgia-Pacific* gives courts and juries no meaningful guidance as to how the fifteen factors should be weighted or compared.³⁰ Observers contend that the long list of *Georgia-Pacific* factors can overload the trier of fact with factors that may be “irrelevant, overlapping, or even contradictory.”³¹ Relatedly, others contend that the long list of *Georgia-Pacific* factors are sufficiently vague as to provide decision-makers almost limitless discretion in making a damage award determination.³² The result has been to leave courts largely at the mercy of the parties’ damages experts, which routinely differ by several orders of magnitude in their valuations. Given the wide disparity in the valuations proffered by the parties, the courts are in desperate need of additional evidence to help narrow the range of a reasonable royalty patent damage award.

From a theoretical perspective, how should the courts attempt to reconstruct the hypothetical negotiation? An application of economic theory suggests that the trier of fact should be determining the lower and upper bounds of the bargaining range.³³ The lower bound of the bargaining range is the minimum amount the licen-

alties. *See, e.g.*, *ResQNet.com, Inc. v. Lansa, Inc.*, 594 F.3d 860, 869 (Fed. Cir. 2010) (reaffirming the hypothetical *ex ante* negotiation as the legal standard for reasonable royalty determination but criticizing *Georgia-Pacific*’s list of evidentiary factors for calculating the royalty as “prioritized and often overlapping”); *Id.* (quoting *Riles v. Shell Expl. & Prod. Co.*, 298 F.3d 1302, 1312 (Fed. Cir. 2002) (reaffirming that the *Georgia-Pacific* approach is not the exclusive means for calculating reasonable royalties)); *Energy Transp. Grp., Inc. v. William Demant Holding A/S*, 697 F.3d 1342, 1357 (Fed. Cir. 2012) (“Once again, this court does not endorse *Georgia-Pacific* as setting forth a test for royalty calculations, but only as a list of admissible factors informing a reliable economic analysis.”).

²⁹ *See, e.g.*, Lee & Melamed, *supra* note 9; Jorge L. Contreras & Richard J. Gilbert, *A Unified Framework for RAND and Other Reasonable Royalties*, 30 BERKELEY L. TECH. 1451, 1479–82 (2015); Taylor, *supra* note 9; Jarosz & Chapman, *supra* note 9, at 823; Seaman, *supra* note 8, at 1704; Durie & Lemley, *supra* note 8, at 628–31; Mark Schankerman & Suzanne Scotchmer, *Damages and Injunctions in Protecting Intellectual Property*, 32 RAND J. ECON. 199 (2001).

³⁰ J. Gregory Sidak, *Bargaining Power and Patent Damages*, 19 STAN. TECH L. REV. 1, 3 (2015).

³¹ *See, e.g.*, Durie & Lemley, *supra* note 8, at 631; John W. Schlicher, *Patent Damages, the Patent Reform Act and Better Alternatives for the Courts and Congress*, 91 J. PAT. & TRADEMARK OFF. SOC’Y 19, 22 (2009); Seaman, *supra* note 8, at 1704.

³² *See, e.g.*, Durie & Lemley, *supra* note 8, at 632 (stating that “[w]ith at least fifteen factors, a complex interaction between them, and little limit on expert testimony on damages, there is likely to be evidence somewhere in the case that could be construed to support virtually any number the jury might settle on.”). Relatedly, the nebulous nature of the factors along with the lack of guidance on how to weigh the factors limits the ability of a court to review whether a jury’s award is supported by substantial evidence. Seaman, *supra* note 8, at 1688.

³³ In other words, the hypothetical voluntary transaction necessarily makes both parties better off—a negotiated royalty must fall between the upper and lower bounds of the bargaining range. Importantly, the value of technology covered by the licensor’s patent must be separated from the technology’s other features that the patent in question does not cover. It is possible to deduce the

sor is willing to accept,³⁴ which is a function of its opportunity cost of licensing the patent to the would-be infringer at the time of the hypothetical negotiation.³⁵ The upper bound of the bargaining range is the maximum amount the licensee is willing to pay, which should equal the added incremental benefit the licensee would expect to receive by licensing the patent-in-suit rather than using the next-best non-infringing substitute.³⁶ The ultimate outcome of the hypothetical negotiation—that is, where within the bargaining range the reasonable royalty is for a particular case—should depend in part upon the relative bargaining power of the licensor and licensee in the negotiation.³⁷ From a practical perspective, determining the bargain-

value of the patented feature to a product by observing the profits of the licensee is certain scenarios. For instance, if the would-be licensee sells both the patented technology and next-best non-infringing substitute, then one could calculate the difference in expected profits between the two to determine the incremental value of the patented technology to the infringing product.

The finder of fact must account for the existence of available and acceptable non-infringing substitutes at the time of the hypothetical negotiation. *See, e.g., Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1372–73 (Fed. Cir. 2008). If a non-infringing alternative was not on the market at the time of the hypothetical negotiation, then it is assumed not to have existed. *Siemens Med. Sols. USA, Inc. v. Saint-Gobain Ceramics & Plastics*, 637 F.3d 1269, 1288 (Fed. Cir. 2011); *see also Eschler v. Macke Int'l Trade, Inc.*, 486 F.3d 1286, 1298 (Fed. Cir. 2007); *Micro Chem., Inc. v. Lextron, Inc.*, 318 F.3d 1119, 1122–23 (Fed. Cir. 2003); *Grain Processing Corp. v. Am. Maize-Products Co.*, 185 F.3d 1341, 1351–54 (Fed. Cir. 1999). This assumption can be overcome by the infringer by showing that a non-infringing alternative could have been readily commercialized. In contrast, the mere possibility of design around is not enough to establish availability. *Mars*, 527 F.3d at 1372–73.

³⁴ One piece of empirical evidence that is probative of the costs associated with licensing a patent is comparable licenses that the licensor has executed for the patent in question. Not every comparable license will provide the lower bound of the bargaining range—i.e., illuminate the licensor's minimum willingness to accept. To determine the lower bound of the bargaining range, one must identify a license where the licensor had little to no bargaining power or chose not to exercise her bargaining power.

³⁵ The patent holder is not willing to accept a royalty that is lower than her opportunity cost of licensing the patent. Opportunity costs associated with licensing a patent include profits the patent holder could have earned if she had not issued the license in question. These profits may arise from lost sales—that is, sales the patent holder would have made in the absence of the license. These profits may also arise from alternative licensing schemes that the patent holder forwent because the license in question was issued.

³⁶ In a real-life negotiation, an agreement below the lower bound of the bargaining range will never come to fruition, as the patent holder would have never agreed to license the patent below the minimum value she is willing to accept. Similarly, an agreement above the upper bound of the bargaining range will not materialize because the licensee will not pay a royalty above her maximum willingness to pay. While the stated goal of the reasonable royalty inquiry is to replicate the negotiation that might otherwise have occurred, it is important to recognize that the hypothetical negotiation differs from real-life negotiation in several important ways. Perhaps most significantly is that parties *did not* agree beforehand. The hypothetical negotiation construct presupposes this condition when no such constraint holds in the real world. Thus, one of the inherent difficulties in determining a reasonable royalty is how the trier of fact should proceed when it is clear that the maximum amount the licensee is willing to pay is more than the minimum amount the licensor is willing to accept.

³⁷ The Federal Circuit has acknowledged the import of bargaining power in determining a reasonable royalty. *Deere & Co. v. Int'l Harvester Co.*, 710 F.2d 1551, 1559 (Fed. Cir. 1983) (“[t]aking into account . . . the respective bargaining positions of the parties engaged in the theorized licensing negotiations . . . [is] an eminently reasonable approach to the willing seller-willing buyer analy-

ing range of the hypothetical negotiation and the relative bargaining power of the parties is likely as subjective and indeterminate as the application of the full list of *Georgia-Pacific* factors. Thus, not too surprisingly, courts have shied away from determining the bargaining range of the hypothetical negotiation.

One way courts have responded to the subjectivity in determining reasonable royalties is by placing more weight on the one objective, measureable *Georgia-Pacific* factor—comparable existing license agreements, such as those covering the use of the claimed invention to similar technology.³⁸ An existing comparable license represents an arm's-length transaction between two parties that place a monetary value on the patent. Thus, existing comparable licenses may provide the best, measurable evidence in delineating the hypothetical negotiation. The use of comparable license agreements in determining reasonable royalty rates is a longstanding and well-accepted practice in U.S. patent litigation.³⁹ For instance, the Federal Circuit has stated that comparable licenses “clearly reflect the economic value of the patent technology in the marketplace,”⁴⁰ and it is appropriate to rely upon them when “there [is] a basis in fact to associate the royalty rates used in prior licenses to the . . . negotiation at issue in the case.”⁴¹ Courts, scholars, and commentators all

sis.”); *see also* *Fujifilm Corp. v. Benun*, 605 F.3d 1366, 1372 (Fed. Cir. 2010) (noting that the patent holder “would have enjoyed a strong bargaining position” in the hypothetical negotiation); *Total Containment, Inc. v. Environ Prods., Inc.*, 106 F.3d 427 (1997). The two parties will strike a bargain closer to the lower bound of the bargaining range—the licensor’s minimum willingness to accept—when the licensee has relatively greater bargaining power. In contrast, the two parties will reach an agreement closer to the upper bound of the bargaining range—the licensee’s maximum willingness to pay—when the licensor has relatively greater bargaining power. The relative bargaining power of a party will depend upon the party’s need to reach an agreement—that is, how much each party will gain from a successful agreement. The benefits that accrue to each party in a successful negotiation should be measured with respect to the next-best alternative. The strength of the party’s alternatives will affect the strength of its bargaining power. For instance, a licensor that has received many offers to license the patent in question has strong alternatives to any given license negotiation. Similarly, a licensee that has a non-infringing alternative that is almost as good as the patented technology also has a strong alternative. The stronger the alternative, the stronger the party’s bargaining power. Ultimately determining the bargaining power of parties is a fact-intensive question and will vary from case to case. *But see*, John Golden, “*Patent Trolls*” and *Patent Remedies*, 85 *Tex. L. Rev.* 2111, 2142 (noting that the Federal Circuit has also expressed concern with such an approach and noting that it would be inappropriate to “distinguish the respect due the patent rights of impecunious individual inventors from that due the patent rights of well-funded, well-lawyered, large manufacturing corporations” (citing *Fromson v. W. Litho Plate & Supply Co.*, 853 F.2d 1568 (Fed. Cir. 1988))).

³⁸ Stuart Graham, Peter Menell, Carl Shapiro & Tim Simcoe, *Final Report of the Berkeley Center for Law & Technology Patent Damages Workshop*, 25 *TEX. INTELL. PROP. L.J.* (forthcoming 2017) (“In practice, U.S. courts usually determine reasonable royalties based on ‘comparable’ patent licenses with suitable adjustments made to these comparable licenses to determine reasonable royalties for the patents-in-suit. Indeed, some might say that no other method of determining reasonable royalties has found favor with the Federal Circuit.”).

³⁹ *See* Jonathan S. Masur, *The Use and Misuse of Patent Licenses*, 110 *Nw. L. Rev.* 115, 120 nn.21, 22 (citing cases and literature).

⁴⁰ *LaserDynamics, Inc. v. Quanta Computs., Inc.*, 694 F.3d 51, 79 (Fed. Cir. 2012).

⁴¹ *Uniloc USA, Inc. v. Microsoft Corp.*, 632 F.3d 1292, 1317 (Fed. Cir. 2011).

nearly unanimously bless the use of comparable existing licenses to calculate patent damages.⁴²

The difficulty with this preferred approach lies in finding a comparable existing license. Many patents that are litigated are not licensed, so comparable licenses involving the patent-in-suit do not exist. Moreover, because most licenses are confidential, even licenses involving similar patents or technology are typically not available to the trier of fact.⁴³ This Article contends that there is a large untapped trove of existing patent licensing agreements, many of which are likely more probative to reasonable royalty calculation than currently existing licensing data offered by patent damage experts. This untapped evidence is tax-related patent transfer prices.

III. Transfer Prices and the Tax Regime

This section introduces tax-related transfer prices, describes the various regulations that seek to ensure transfer prices reflect the arm's-length standard, and argues that transfer prices reasonably reflect the value of the patent—at least to the multinational corporation who owns it.

A. What are Tax-Related Transfer Prices?

Today, corporations' operations routinely span geographic borders. As a result, multiple jurisdictions assert a right to tax the income of the multinational business. Transfer-pricing rules guide the allocation of income and costs among the affiliates or "subsidiaries" of the multinational company, and thus the profits reported in each jurisdiction.⁴⁴ More specifically, transfer-pricing regimes provides rules for pricing transactions between enterprises under common ownership or control,⁴⁵ the hallmark of which requires prices to be set at an arm's length standard.

For instance, a multinational corporation (MNC) may transfer economic ownership of a patent to a subsidiary that is located in a jurisdiction different from that

⁴² See, e.g., *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1323–39 (Fed. Cir. 2009); *Apple, Inc. v. Samsung Elecs. Co.*, No. 12-CV-00630-LHK, 2014 WL 6687122 (N.D. Cal. Nov. 25, 2014) (setting ongoing royalty payments); *Apple, Inc. v. Samsung Elecs. Co.*, No. 11-CV-01846-LHK, 2014 WL 549324 (N.D. Cal. Feb. 7, 2014) (denying Apple's request for additur following a second trial on damages); *In re Innovatio IP Ventures, LLC Patent Litig.*, No. 11 C 9308, 2013 WL 5593609 (N.D. Ill. Oct. 3, 2013); *Apple, Inc. v. Motorola, Inc.*, 869 F. Supp. 2d 901 (N.D. Ill. 2012) (Posner, J.), *aff'd in part, rev'd in part, vacated in part*, 757 F.3d 1286 (Fed. Cir. 2014); Conroy et al., *supra* note 9; Hasbrouck, *supra* note 9, at 215; Jarosz & Chapman, *supra* note 9; Keele, *supra* note 11, at 205; Taylor, *supra* note 9; Fedell, *supra* note 9, at 1146–50. *But see*, Masur, *supra* note 39, at 123–145.

⁴³ Those "comparable" licenses that are disclosed in litigation are typically limited to only those agreements put forth by the litigating parties. Some commentators posit that the parties' may be able to create a special category of "comparables" to use in litigation that provide a skewed valuation of the patent.

⁴⁴ Transfer pricing does not alter the aggregate pre-tax profits of the organization.

⁴⁵ See the JOINT COMMITTEE ON TAXATION, PRESENT LAW AND BACKGROUND RELATED TO POSSIBLE INCOME SHIFTING AND TRANSFER PRICING, JCX-37-10, July 20, 2010.

of the parent corporation. The amount of money a subsidiary pays to the parent corporation for the economic rights to use the patent is its “transfer price.” Because transfer prices are set at an arm’s-length standard, the price the MNC charges its subsidiary for the economic right to use the patent should be set at the amount the MNC would charge a third, unrelated party. Given that sixty percent of world trade occurs inside multinational companies, transfer pricing has become ubiquitous.⁴⁶

Because most foreign jurisdictions have corporate statutory tax rates below the U.S. rate, U.S. MNCs, on average, can increase their reported after-tax profits—i.e., lower their overall tax burden—by shifting more profits into low-tax jurisdictions and more expenses into high-tax jurisdictions.⁴⁷ As a result, U.S. transfer pricing rules are critical in preventing the erosion of the U.S. tax base through the artificial shifting of taxable income out of the U.S. and into foreign jurisdictions through related-party transactions. The statutory authority for these rules in the U.S. is found in § 482 of the Internal Revenue Code (I.R.C.). It states:

In any case of two or more organizations, trades, or businesses . . . owned or controlled directly or indirectly by the same interests, the Secretary may distribute, apportion, or allocate gross income, deductions, credits, or allowances between or among such organizations, trades, or businesses, if he determines that such distribution, apportionment, or allocation is necessary in order to prevent evasion of taxes or clearly to reflect the income of any of such organizations, trades, or businesses. In the case of any transfer (or license) of intangible property . . . , the income with respect to such transfer or license shall be commensurate with the income attributable to the intangible.

As noted above, the baseline by which a “distribution, apportionment, or allocation” is determined to be reasonable is the arm’s-length standard.⁴⁸ Thus, transfer prices should reflect the open market value—that is, the value the corporation would have received if it had transferred the item to an unrelated party.

B. Tax-Related Transfer Prices Reflect the Value of the Patent

In the mid-1990s, the United States began to undertake comprehensive reform of its transfer pricing regulations in response to growing concern that multinational

⁴⁶ Robert Guy Matthews & Jeanne Whalen, *Glaxo to Settle Tax Dispute with IRS Over U.S. Unit for \$3.4 Billion*, WALL ST. J. (Sept. 12, 2006), <https://www.wsj.com/articles/SB115798715531459461>.

⁴⁷ The U.S. taxes its MNCs on a worldwide basis, meaning that it taxes all profits regardless of the jurisdiction in which they are sourced. The U.S. does not double tax MNCs’ foreign source income as it grants a credit against the MNCs’ U.S. tax obligation for any foreign taxes paid in the source country. From a theoretical perspective, a worldwide tax system should make an MNC indifferent to tax rates in foreign jurisdictions. Under the principle of capital export neutrality, if a MNC faces that same tax rate on all of its income regardless of where it is earned, then it will invest in the jurisdictions that offer the highest pre-tax rate of return on investment. If a MNC faces the same tax rate on all of its income regardless of where it is earning, then it should have no tax incentive to use transfer pricing to shift income into low-tax jurisdictions. Unfortunately, the U.S.’s worldwide system is not a “pure” residence-based system as any incremental U.S. tax payment is delayed until the earnings are remitted or repatriated into the U.S. Hence, U.S. MNCs face a strong incentive to reduce their global tax burdens by reporting more income in low-tax countries. See Jennifer Blouin, *Taxation of Multinational Corporations*, 6 FOUND. & TRENDS ACCT. 1 (2011).

⁴⁸ Treas. Reg. 1.482-1(b) (2017).

corporations were abusing transfer-pricing rules to avoid paying U.S. taxes.⁴⁹ Reform efforts to protect the U.S. tax base have continued over the past two decades, with additional expansion or amendment of transfer pricing legislation that seeks to prevent the erosion of the U.S. tax base. The result is that the U.S. now has the most aggressive and detailed transfer pricing regime in the world. This subpart describes the regulations in place to ensure transfer prices reflect an arm's-length value, with a special emphasis on intangible property, such as patents.

1. *Acceptable Methods for Calculating Transfer Prices*

The I.R.S. and Treasury have promulgated numerous regulations that provide substantial guidance on the various acceptable methods for calculating transfer prices, which curb the discretion of taxpayers in determining transfer prices within an arm's-length standard.⁵⁰ These regulations outline three primary methods of assigning values to intellectual property: (1) the Comparable Uncontrolled Transaction (CUT) method, which assigns value based on comparable uncontrolled transactions;⁵¹ (2) the Comparable Profits Method (CPM), which assigns value based on an estimate of the income or cost savings attributable to the specific intangible rights transferred;⁵² and (3) the Residual Profit Split Method (RPSM), which assigns value based upon the residual profit not attributable to other identifiable transactions.⁵³

⁴⁹ PRICEWATERHOUSECOOPERS, INTERNATIONAL TRANSFER PRICING 2015/16, 1056, available at <http://www.pwc.com/gx/en/international-transfer-pricing/assets/itp-2015-2016-final.pdf>.

⁵⁰ In 1988, the IRS and Treasury jointly issued a Notice titled "A Study on Intercompany Pricing Under Section 482 of the Code." I.R.S. Notice 88-123, 1988-2 C.B. 458; see Treas. Reg. 1.482-4(a) (1994).

⁵¹ The CUT method is used to value intangibles when there is a transfer of an "exact" comparable that is transferred in a similar transaction as the uncontrolled comparable. See Treas. Reg. 1.482 (1994). Clearly, this methodology is the most direct and reliable measure of the arm's-length result for a related-party transaction. Prior to the Tax Reform Act of 1986, the taxpayer effectively had a safe-harbor option by relying on a comparable uncontrolled transaction. Post-1986, however, the taxpayer now has to substantiate that even its comparable transactions meet a "commensurate with income standard." See *infra* text accompanying notes 58-60.

⁵² See Treas. Reg. 1.482-5 (1994). The CPM benchmarks to the operating profit of uncontrolled taxpayers involved in similar activities and industries as the taxpayer. For example, where a U.S. parent company licenses an intangible to a foreign manufacturing subsidiary, the royalty payable by the subsidiary to the parent is evaluated under this method by comparing the operating profit of the subsidiary to the operating profits of comparable uncontrolled manufacturers. If the subsidiary's profit level differs meaningfully from the profit levels of the uncontrolled manufacturers, the royalty rate paid by the subsidiary is adjusted as necessary to bring the profit level within an acceptable range of those levels. In effect, this method limits the extent to which income from the intangible can be retained by the licensee to the amount that an uncontrolled licensee would be permitted to retain; the remainder of that income is required to be paid to the licensor through the royalty.

⁵³ Treas. Reg. 1.482-6(c)(2)(ii)(B) also provides for a Comparable Profit Split Method. However, the provisions of this method have a significant overlap with those of the CPM, and CPSM is used in only very limited circumstances. RPSM assigns the intangible value based on the residual profits after taking into consideration some standard rate of return on the business's routine activities. This issue was particularly salient to the Medtronic case. *Medtronic, Inc. v. Comm'n*, T.C. Memo 2016-112 (2016). In *Medtronic*, the taxpayer argued that the IRS's proposed increase to the license payment to be made between the taxpayer's Puerto Rican subsidiary (low-tax) and U.S. parent was too high because it failed to allocate any value to the inherently complex manufacturing intangible

The I.R.S. has also promulgated the Best Method Rule, which directs a taxpayer to use the method that results in the most reliable value.⁵⁴ If a taxpayer relies upon either the CUT or CPM methods, additional regulations strictly outline whether a transaction will be deemed comparable.⁵⁵ The result is that these three methods in-

developed by the Puerto Rican subsidiary. The Court agreed and rejected the IRS's proposed adjustment. This method relies exclusively on external market data to allocate profits. The related-parties then allocate the profits between the U.S. and foreign parties based on the allocation of profits between uncontrolled taxpayers with similar transactions in a similar business.

⁵⁴ Treas. Reg. 1.482-1(c) (1994) (stating that:

[t]he arm's-length result of a controlled transaction must be determined under the method that, under the facts and circumstances, provides the most reliable measure of an arm's-length result. Thus, there is no strict priority of methods, and no method will invariably be considered to be more reliable than others. An arm's-length result may be determined under any method without establishing the inapplicability of another method, but if another method subsequently is shown to produce a more reliable measure of an arm's-length result, such other method must be used. Similarly, if two or more applications of a single method provide inconsistent results, the arm's-length result must be determined under the application that, under the facts and circumstances, provides the most reliable measure of an arm's-length result.

See Treas. Reg. 1.482-8 for examples of how to apply the best method rule.

⁵⁵ Treas. Reg. 1.482-1(d) (1994). The comparability of another transaction is evaluated on the following five factors: 1) functions performed; 2) contractual terms; 3) risks undertaken; 4) economic conditions; and 5) property or services transferred. In addition to the five basic comparability factors, Treas. Reg. 1.482-4(c)(2)(iii)(B)(2) also elaborates on additional factors that would aid in the determination of whether a particular transaction is comparable:

(i) The terms of the transfer, including the exploitation rights granted in the intangible, the exclusive or nonexclusive character of any rights granted, any restrictions on use, or any limitations on the geographic area in which the rights may be exploited, (ii) The stage of development of the intangible (including, where appropriate, necessary governmental approvals, authorizations, or licenses) in the market in which the intangible is to be used; (iii) Rights to receive updates, revisions, or modifications of the intangible; (iv) The uniqueness of the property and the period for which it remains unique, including the degree and duration of protection afforded to the property under the laws of the relevant countries; (v) The duration of the license, contract, or other agreement, and any termination or renegotiation rights; (vi) Any economic and product liability risks to be assumed by the transferee; (vii) The existence and extent of any collateral transactions or ongoing business relationships between the transferee and transferor; and (viii) The functions to be performed by the transferor and transferee, including any ancillary or subsidiary services.

Treasury guidance also provides for two classes of comparable transactions. Treas. Reg. 1.482-1(e)(2)(ii)(A) provides that a comparable meet the following three conditions: 1) the information concerning the controlled transaction and the uncontrolled comparable is sufficiently complete that it is likely that all material differences between the two have been identified; 2) each material difference between the controlled and uncontrolled transaction have a definite and reasonable ascertainable effect on price or profit; and 3) an adjustment is made to the comparable uncontrolled results to eliminate the effect of each material difference. It is rare that a comparable should meet all three conditions. Hence, if there are no uncontrolled comparable transactions under Treas. Reg. 1.482-1(e)(2)(ii)(A), then Treas. Reg. 1.482-1(e)(2)(ii)(B) provides that the arm's-length range should be adjusted to select all uncontrolled comparables that achieve a similar "next best" level of comparability and reliability. Then the taxpayer selects the value from these "Class B" compara-

volve significant investment on behalf of the taxpayer in both the identification of any comparable transactions and the estimation of the future benefit potentially generated by the intangible.

Intangibles, such as patents, are subject to an additional valuation requirement known as the commensurate with income standard. The primary objective of this provision is to ensure that the IRS has the right to audit the reliability of the assumptions used in setting the transfer price for an intangible asset, which can be notoriously difficult to value.⁵⁶ Regulations implementing this standard enable the I.R.S. to adjust retroactively the transfer price of intangibles paid in earlier tax years once the profits generated by the intangibles are observed.⁵⁷ Thus, if the economic rights of a patent are transferred from a parent to a subsidiary for a period of more than one year, the IRS will determine if the transfer price is commensurate with the income attributable to the patent, not only on the day of the transfer, but also five years following the transfer. If, upon examination, the original value of the patent is within 80% to 120% of the redetermined value five years out, the original valuation stands. If, however, the redetermined value does not fall within this range, the taxpayer is liable for the redetermination, interest, and penalties, which accrue if there was substantial understatement or substantial overstatement.⁵⁸

bles using an interquartile range from the 25th to the 75th of the Class B comparables.

⁵⁶ Treas. Reg. 1.482-4(f)(2)(i) (1994).

⁵⁷ Treas. Reg. 1.482-4(f)(2) (1994). If a taxpayer is not required to make a commensurate with income adjustment for five years, then the transfer price is deemed to be arm's-length and the IRS will make no additional adjustments. In other words, the commensurate with income standard provides the IRS with the opportunity to move away from a strict interpretation of the arm's-length standard when there was no comparable good with which to compare the internal transaction. Treasury believes that the commensurate with income provision is consistent with the arm's-length standard. Treasury Notice 88-123, 1988-2 C.B. 458 states that "[l]ooking at the income related to the intangible and splitting it according to relative economic contributions is consistent with what unrelated parties do. The general goal of the commensurate-with-income standard is, therefore, to ensure that each party earns the income or return from the intangible that an unrelated party would earn in an arm's-length transfer of the intangible." Of course, there are those who argue that it is not. See, e.g., Reuven S. Avi-Yonah, *The Rise and Fall of Arm's Length: A Study in the Evolution of U.S. International Taxation*, 15 VA. TAX REV. 89, 131 (1995). However, given the U.S.'s treaty network, it is unlikely that the commensurate with income standard violates the arm's-length standard, as that would be problematic from U.S. trading partners' perspectives.

⁵⁸ See Treas. Reg. 1.482-4(f)(2) (1994).

Susan Morse argues that much of the regulations discussed in this subsection are bypassed by allowing cost sharing agreements. Susan Morse, *Seeking Comparable Transactions in Patent and Tax* 37 REV. LITIG. BRIEF (forthcoming 2017). Cost sharing agreements (CSAs) are means by which related parties within an MNC can share the costs of developing future intangibles. Under a CSA, each party pays the cost of all of an intangible's development in proportion to the reasonability anticipated benefits it would receive from the exploitation of the intangible. However, buy-in payments are required to be made for the transfer of any asset, tangible or intangible, that is reasonably anticipated to contribute to the development of the shared intangibles. Yet importantly, these buy-in payments for existing intangibles are subject to all of the transfer pricing regulations described above.

The benefit of a CSA is that the parties using the newly developed intangibles pay for the intangibles based on their costs of development rather than the value of the developed intangible. In the case of a CSA between a U.S. party and a foreign entity located in a low-tax jurisdiction, so

2. *Other Limitations on Taxpayer Discretion and I.R.S. Enforcement of Transfer Pricing Regulations*

Taxpayers are also subject to a slew of information reporting and record-keeping requirements.⁵⁹ For instance, taxpayers are subject to significant contemporaneous documentation requirements that must provide, among other things, substantiation of the selection of the transfer method chosen and that the value assigned to the transfer price reflects a third party, unrelated transaction. The I.R.S. has the ability to levy hefty penalties—in addition to taxes owed—if taxpayers fail to comply with the rules.⁶⁰ Moreover, the burden of proof lies with the taxpayer, not the I.R.S., to demonstrate that their reported transfer price meets the arm's-length standard.

Finally, the I.R.S. is taking an aggressive, adversarial role in reviewing and adjusting transfer prices. Transfer pricing enforcement falls primarily with the I.R.S.'s Large and Mid-Size Business Division (LMSB), wherein international transfer pricing specialists and a host of economists work to review and adjust transfer prices

long as the cost of developing the intangible is lower than the future profits generated by the intangible, then MNC will reduce its global tax burden. To this extent, we agree with Susan Morse. Yet, there are drawbacks to CSAs. First, the subsidiary and the parent are owners of the developed intangibles. The intangibles no longer belong solely to the U.S. party. Second, the CSA requires continued payments by the foreign affiliate even if the profits of the foreign affiliate are lower than anticipated. Although the IRS has the ability to use the commensurate with income standard to alter transfers, the taxpayer does not have the ability to make retroactive adjustments. Third, the 2011 Treasury Regulations required that, in order for an MNC to garner CSA-related tax benefits, the foreign party to the CSA must have valuable assets to contribute to the CSA. If the foreign party is merely a "cash-box" entity (i.e., an entity that owns mostly cash and investments) then the appropriate buy-in payment should be equivalent to its best realistic alternative to participating in the CSA, which is typically a licensing agreement with its related U.S. party. In this case, there is little economic difference between entering into a CSA and simply arranging a license agreement as the buy-in payment is the net present value of the anticipated royalty payments.

⁵⁹ 26 U.S.C. §§ 482, 6038A, 6038C, and 6503(k) (2017); ERNST & YOUNG, *WORLDWIDE TRANSFER PRICING REFERENCE GUIDE 2015-16*, available at [http://www.ey.com/Publication/vwLUAssets/EY-Worldwide-transfer-pricing-reference-guide-2015-16/\\$FILE/EY_Worldwide_Transfer_Pricing_Reference_Guide_2015-16.pdf](http://www.ey.com/Publication/vwLUAssets/EY-Worldwide-transfer-pricing-reference-guide-2015-16/$FILE/EY_Worldwide_Transfer_Pricing_Reference_Guide_2015-16.pdf).

⁶⁰ 26 U.S.C. § 6662 (2017) and Treas. Reg. § 1.6662-6 (1996) impose the accuracy-related penalty for substantial valuation misstatement to related party transactions that fail the arm's-length standard for pricing property and services. There are two components to the penalty regime—the transactional penalty and the net adjustment penalty. The transactional penalty imposes a 20% substantial valuation misstatement penalty when a reported transfer price is 200% or more (or 50% or less) than the arm's-length price. A 40% gross valuation misstatement penalty is assessed when the reported transfer price is 400% or more (or 25% less) than the arm's-length price. In addition to the transactional penalty, the net adjustment penalty imposes a 20% non-deductible substantial valuation misstatement penalty when the net § 482 adjustment for a tax year exceeds the lesser of \$5 million or 10% of the taxpayer's gross receipts. A 40% gross valuation misstatement penalty applies when the net § 482 adjustment exceeds the lesser of \$20 million or 20% of the taxpayer's gross receipts. Taxpayers can avoid these penalties only if they can show that they had reasonable basis for their transfer prices supported by extensive contemporaneous documentation justifying the computation. *See* Treas. Reg. §§ 1.6662-6, 1.6662-4 (1996). Regulations result in the net adjustment penalty being far more difficult to avoid.

reported by corporations.⁶¹ The I.R.S. has recently poured additional resources into transfer price enforcement by creating a national team of transfer pricing experts, expanding economist staffing in the area, and establishing a transfer pricing council.⁶² The I.R.S.'s commitment to enforcing transfer prices is also apparent by how frequently the IRS reviews and adjusts transfer prices submitted by taxpayers. For instance, in 2015, the I.R.S. audited over 64% of corporations with assets over \$20 billion.⁶³ During these audits, transfer pricing represents 46% of the tax positions (other example of tax positions would be research and experimentation credits, inventory measurement, the domestic manufacturing deduction, etc.) reviewed for these large businesses and 71% of the proposed adjustments.⁶⁴ These audits alone resulted in over \$2.84 billion in adjustments with respect to transfer pricing.⁶⁵

To better understand how transfer-pricing rules operate in practice, consider the dispute between Glaxo Smith Kline and the I.R.S., which resulted in the largest settlement in the history of the I.R.S.⁶⁶ The Glaxo dispute centered on an alleged underpayment of U.S. tax on U.S. sales of the anti-ulcer blockbuster, Zantac. More specifically, the dispute was over the correct transfer price Glaxo U.S. paid to Glaxo U.K. for the use of the U.K. domiciled Zantac patent. Glaxo research and development for Zantac was based in the U.K and resulted in the Zantac patent held in the U.K.⁶⁷ Glaxo maintained that its research and development program—i.e., the U.K. domiciled Zantac patent—was the primary driver of the drug sales in the U.S.⁶⁸

⁶¹ Gregory Ossi & Mike Shepherd, *The IRS's Renewed Emphasis on Transfer Pricing*, 38 J. CORP. TAX'N 3, 3 (2010).

⁶² *Id.* at 4-5; see also Kelly Phillips Erb, *IRS Brings 'A Team' to Crush Transfer Pricing Abuse*, FORBES (Mar. 27, 2012), <https://www.forbes.com/sites/kellyphillipserb/2012/03/27/irs-brings-a-team-to-crush-transfer-pricing-abuse/#1f8799186945>.

⁶³ INTERNAL REVENUE SERV., 2015 DATA BOOK, at 23 (2016).

⁶⁴ TREASURY INSPECTOR GENERAL FOR TAX ADMINISTRATION, REF. NO. 2016-30-090, BARRIERS EXIST TO PROPERLY EVALUATING TRANSFER PRICING ISSUES, at 18 (2016).

⁶⁵ *Id.*

⁶⁶ David S. Hilzenrath, *Glaxo to Pay IRS \$3.4 Billion*, WASH. POST (Sept. 12, 2006), http://www.washingtonpost.com/wp-dyn/content/article/2006/09/11/AR2006091100429_pf.html.

⁶⁷ Jim Ulmer, Jack Ethridge & Treba Marsh, *Transfer Pricing in a Global Economy*, 9 J. OF BUS. CASE STUD. 359, 363 (2013).

⁶⁸ *Id.* Several commentators have argued that the government is not well equipped to challenge taxpayer's transfer prices and that when the government does challenge a taxpayer's position in court, its likelihood of winning the case in court is low. See Susan Morse, *Seeking Comparable Transactions in Patent and Tax*, 37 REV. LITIG. BRIEF (forthcoming 2017). Admittedly, the IRS, like many other administrative agencies, is likely underfunded. Nevertheless, it is important to note that IRS has placed greater emphasis on the enforcement of transfer prices in the past decade. Moreover, we are cautious to draw any conclusions about the universe of tax filings from a select, few cases that are litigated to judgment. Given that the IRS has the ability to levy a 40% fine if successful in litigation, it is not too surprising that the cases that are litigated are much more likely to be cases in which the IRS is taking an untenable position. That is, this asymmetric fine inevitably influences the type of cases taxpayers are willing to litigate.

Moreover, when the IRS loses in transfer pricing litigation, it's often because the Court determined that it failed to uphold the arm's-length standard. For example, consider several recent cases that focus on the role of equity compensation in establishing intangible development costs under a cost sharing arrangement. In both *Altera* and *Xilinx*, the IRS lost because the Court determined that the IRS's proposed adjustments would never have been considered when establishing an arm's-

Glaxo also argued that its U.S. domiciled Tagamet patent was a CUT—comparable uncontrolled transaction—for its U.K. domiciled Zantac patent. Tagamet, like Zantac, is a selective inhibitor of gastric acid secretion, although Zantac is more efficacious and had fewer side effects.⁶⁹ As a result, Glaxo U.S. paid high licensing fees for use of the Zantac patent to Glaxo U.K. The high licensing fees had the effect of shifting income out of the U.S. and into the U.K., reducing U.S. taxes.⁷⁰ The I.R.S. disagreed with Glaxo and argued that Tagamet had heavily benefited from being the first drug of its class to market, a characteristic that Zantac did not share with Tagamet. As a result, the I.R.S. concluded that it was Glaxo’s aggressive marketing in the U.S.—not the U.K. domiciled Zantac patent—which had generated the sales and value of Zantac.⁷¹ In other words, the I.R.S.’s position was that Glaxo’s outbound royalty payment for the Zantac patent failed to be commensurate with income. Ultimately, the I.R.S. prevailed and recovered \$3.4 billion in back taxes from Glaxo.⁷²

IV. Taking a Global Perspective on Transfer Pricing

The above discussion focuses solely on the U.S.’s transfer pricing regime. Given that the majority of countries have statutory tax rates below the U.S.’s, U.S. tax law focuses on stemming the stripping of earnings from the U.S. by setting arti-

length royalty negotiation. See *Altera v. Comm’n*, 145 T.C. 91, 123 (2015); *Xilinx, Inc. v. Comm’n*, 125 T.C. 37, 54 (2005). *Veritas* and *Amazon* were also lost by the IRS because the IRS proposed “arbitrary and capricious” adjustments that violated § 482’s arm’s-length standard. In both of these cases, the IRS attempted to assert that the value of the intangibles party to buy-in payments had an unlimited life rather than a finite period as typically is the case in certain technologies. See *Veritas Software Corp.*, 133 T.C. 297, 327 (2009); *Amazon.com, Inc. v. Comm’n*, 148 T.C. No. 8 (2017). These cases are all based on pre-2011 Treasury Regulations. In the 2011 Regulations, the IRS now stipulates that the value of intellectual property transferred related to a CSA will include the life of any intellectual property to which the transferred intellectual property contributed. Said another way, the buy-in payment will have to include the value created by the newly developed intellectual property. Finally, in *Medtronic*, the taxpayer prevailed because it was able to show that the value of the patent-related intangibles should not include the value of the manufacturing intangibles. Each of these cases highlights the adversarial role between the taxpayer and the tax authority. See *Medtronic Inc. v. Comm’n*, TC. Memo No. 2016-112, 143 (2016). Given the difficulty in valuing unique intangibles, the fact that the taxpayer often prevails seems to highlight the notion that company-generated, internally-documented transfer prices are capturing arm’s-length economic values of intellectual property as required by tax law.

⁶⁹ Mahendra R. Gujarathi, *GlaxoSmithKlin PLC.: International Transfer Pricing and Taxation*, 22 ISSUES IN ACCOUNTING EDUCATION 749, 750 (2007). However, when Zantac launched, few market analysts thought that Zantac’s sales would ever overtake those of Tagamet, which historically had been the leading treatment of choice for ulcers and heartburn.

⁷⁰ Jim Ulmer, Jack Ethridge & Treba Marsh, *Transfer Pricing in a Global Economy*, 9 J. OF BUS. CASE STUD. 359, 363 (2013).

⁷¹ *Id.*

⁷² *Id.* at 359. There are a couple aspects of this settlement that are noticeable. First, the IRS’s understanding of the pharmaceutical industry was nuanced enough to realize that the first drug of its class to market enjoys an exclusivity that later comers do not. Second, the IRS recognized that much of the U.S. sales revenue stemmed from the U.S. marketing endeavor—not the U.K.-based science. This led to the creation of marketing intangibles owned by the U.S. business, exploited in the U.S. and, therefore, subject to taxation in the U.S. Overall, this case illustrated that the IRS was willing to invest in understanding the commercial and financial relations between the different arms of the Glaxo business.

ficially low transfer prices of outbound transfers of intangibles. However, multinational corporations almost always include foreign subsidiaries. Foreign countries are also concerned about the erosion of their tax base. This section outlines the Organization for Economic Co-operation and Development (OECD) countries' transfer pricing regulations, which largely mimic those of the U.S. In particular, it argues that the competing adversarial roles between the taxpayer and multiple tax authorities in establishing transfer prices can set both lower and upper bounds in reasonable royalty calculations for patent damages.

A. The OECD Countries' Transfer Pricing Regulations

The OECD provides "best practices" for tax administrations of its member nations through the *OECD Model Tax Convention on Income and on Capital* (OECD Model Tax Convention), which forms the basis for the network of bilateral income tax treaties between OECD and non-OECD countries.⁷³

The OECD Model Tax Convention delves extensively into transfer pricing. Like the U.S., the basic premise of the OECD's guidance is that transfers between related parties should be measured at an arm's-length standard. Article 9 of the OECD Model Tax Convention states:

[Where] conditions are made or imposed between the two [associated] enterprises in their commercial or financial relations which differ from those which would be made between independent enterprises, then any profits which would, but for those conditions, have accrued to one of the enterprises, but, by reason of those conditions, have not so accrued, may be included in the profits of that enterprise and taxed accordingly.⁷⁴

Similar to U.S. regulations, the OECD includes guidance regarding the identification of comparable transactions (e.g., the U.S. has the Best Method Rule and the OECD has the "most appropriate method" standard). In terms of specific measurement methodologies, the OECD also mimics the U.S. For example, CUT is analogous to the OECD's comparable uncontrolled price method, CPM is similar to the OECD's transactional net margin method, and RPSM is similar to the OECD's profit split method.⁷⁵

⁷³ The OECD Model Tax Convention includes principles incorporated in the Model United Nations Double Taxation Convention. See OECD, *MODEL TAX CONVENTION ON INCOME AND ON CAPITAL* (2014). Since multiple countries may assert a right to tax the income of one multinational corporation, the OECD guidelines also help reduce conflicts among jurisdictions that could result in the double-taxation of income.

⁷⁴ *Id.* at art. 9.

⁷⁵ What the OECD guidelines lack is a commensurate with income standard that allows for periodic adjustments to transfer prices based on profits. This leads to potential conflicts between jurisdictions (U.S. and non-U.S.) if both agreed with the *ex ante* transfer prices but then the U.S. disputes that agreed upon transfer pricing *ex post*. Hence, the use of periodic adjustments could clearly be deemed inconsistent with OECD guidelines. Yet, the OECD is clear that it grants tax authorities the right to audit the accuracy of the assumptions on which transfer prices are based, and to make adjustments if the assumptions underlying the transfer prices are inappropriate.

It appears that the OECD is considering formalizing a commensurate with income standard in its transfer pricing guidelines. The OECD Base Erosion Profit Shifting Action Item 8 "Hard to Value Intangibles" implies that *ex post* outcomes should be compared to *ex ante* profit projections

B. Tax Incentives and Transfer Prices as Lower and Upper Bounds of the Reasonable Royalty Calculation

How do tax incentives affect transfer prices? Under the assumption that a MNC is seeking to minimize its tax burden, a MNC has the incentive to maximize the profits reported in a low-tax jurisdiction and minimize the profits reported in a high-tax jurisdiction. If the MNC's subsidiary that owns the patent is in a high-tax jurisdiction and the MNC's subsidiary that licenses the patent is in a low-tax jurisdiction, the result will be a transfer of money from a low-tax to a high-tax jurisdiction. In this scenario, the MNC seeking to minimize its tax burden has the incentive to set the licensing value on the lower bound of the bargaining range. By valuing the royalty at the lowest amount the corporation can justify—and that the tax authority will accept as within the arm's-length range—the multinational corporation will maximize its profits in a low-tax jurisdiction and minimize the global taxes it must pay. Because all of the U.S.'s major trading partners have statutory corporate tax rates below that of the U.S., almost every transfer of economic ownership of a patent from the MNC's U.S. operations to a foreign subsidiary will likely be downwardly biased or represent this lower range of arm's-length transactions.

In contrast, if the MNC's subsidiary that owns the patent is in a low-tax jurisdiction and the MNC's subsidiary that licenses the patent is in a high-tax jurisdiction, the license payment will result in profits moving into the low-tax jurisdiction and out of the high-tax jurisdiction. In this scenario, the MNC seeking to minimize its tax burden has the incentive to set the licensing value that is at the upper bound of the arm's-length transaction range. By valuing the royalty at the highest amount the corporation can justify—and that the jurisdiction's tax authority will accept as within the arm's-length range—the MNC will select the largest reasonable transfer price payment from a high-tax to a low-tax jurisdiction and hence minimize its tax burden.

Thus, depending upon the underlying tax incentives, the transfer prices reported to and accepted by the tax authorities may help to delineate the upper or lower boundary of the reasonable royalty patent damage award. Notably, because statutory tax rates are widely known, the tax incentives should always be apparent. Moreover, because many patents will likely have transfer pricing that represent a license from a high-tax to a low-tax jurisdiction and vice versa, it is likely that the court may be able to use different transfer prices associated with one patent to delineate both the upper and lower boundaries of the reasonable royalty.

The remainder of this subpart discusses two examples drawn from the Joint Committee on Taxation's Report on "Present Law and Background Related to Possible Income Shifting and Transfer Pricing" to illustrate patent-related income flows

to evaluate the reasonableness of the transfer prices suggesting that making periodic adjustments to transfer prices by tax authorities is an acceptable practice.

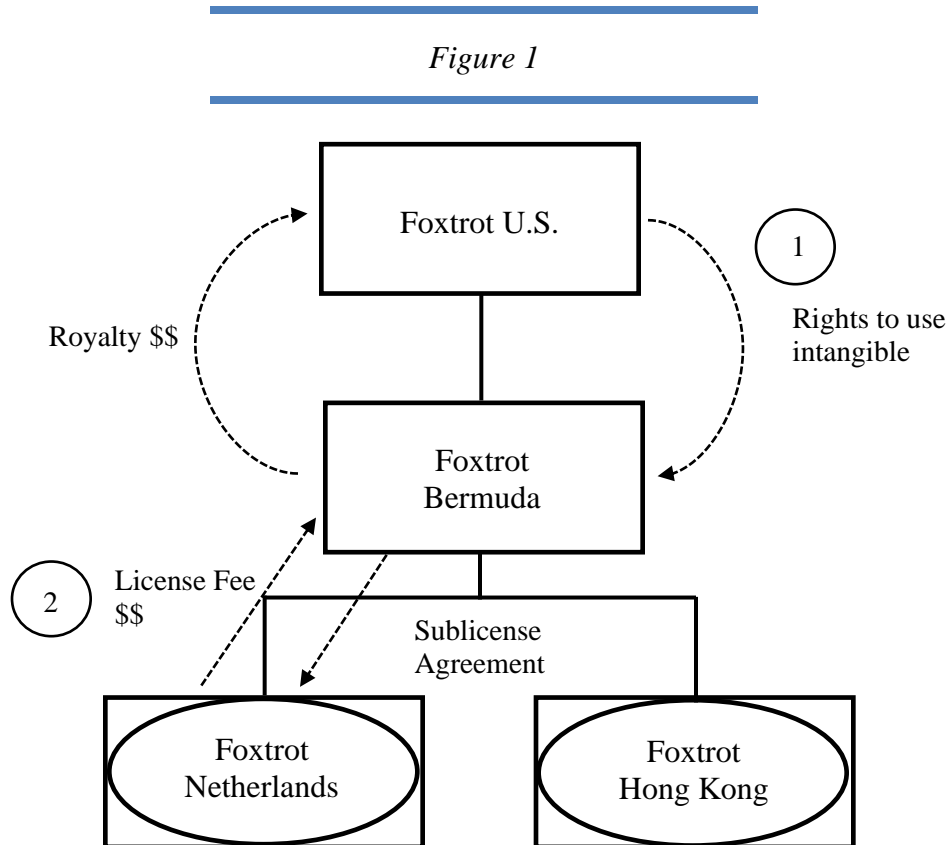
and demonstrate, in a more concrete manner, when transfer prices may represent the upper or lower bounds of the value of the patent.⁷⁶

1. Joint Committee Taxation Report Examples

Figure 1 is a simplified pictorial representation of Case Study Foxtrot, drawn from the Joint Committee on Taxation's Report. Foxtrot is a U.S. MNC that manufactures goods overseas using a contract manufacturer, Foxtrot Hong Kong. Foxtrot Netherlands licenses the U.S. patent from Foxtrot U.S. and then Foxtrot Hong Kong makes goods to Foxtrot Netherlands' specifications.⁷⁷ Foxtrot Netherlands sells finished goods either directly to non-U.S. customers or to Foxtrot U.S. (who then sells to U.S.-based customers). The number 1 shows the payment that Foxtrot Bermuda makes to the U.S. parent for the use of the U.S.-based patent. The U.S. has a higher corporate statutory tax rate than Bermuda. As a result, it behooves Foxtrot U.S. to value the patent at the lower bound of the arm's length transaction—i.e., minimize the license fee—when it licenses the patent to Foxtrot Bermuda as the license fee creates U.S.-sourced taxable income.

⁷⁶ In Section III of the JCT's report, there are six case studies based on the tax structures of six large, multinational manufacturers. JOINT COMMITTEE ON TAXATION, JCX-37-10, PRESENT LAW AND BACKGROUND RELATED TO POSSIBLE INCOME SHIFTING AND TRANSFER PRICING, at 51 (2010).

⁷⁷ Both Foxtrot Netherlands and Foxtrot Hong Kong are disregarded entities for purposes of any U.S. tax filings. This means that Foxtrot Netherlands' and Foxtrot Hong Kong's economic activity are combined with Foxtrot Bermuda before reporting to the IRS. These disregarded entities facilitate the reduction of Foxtrot's Subpart F income. A U.S. MNC's Subpart F income is immediately taxable in the U.S.—i.e., it does not qualify for the deferral of any potential repatriation taxes. Subpart F income is a component of the U.S.'s controlled-foreign-corporation or CFC anti-abuse regime.



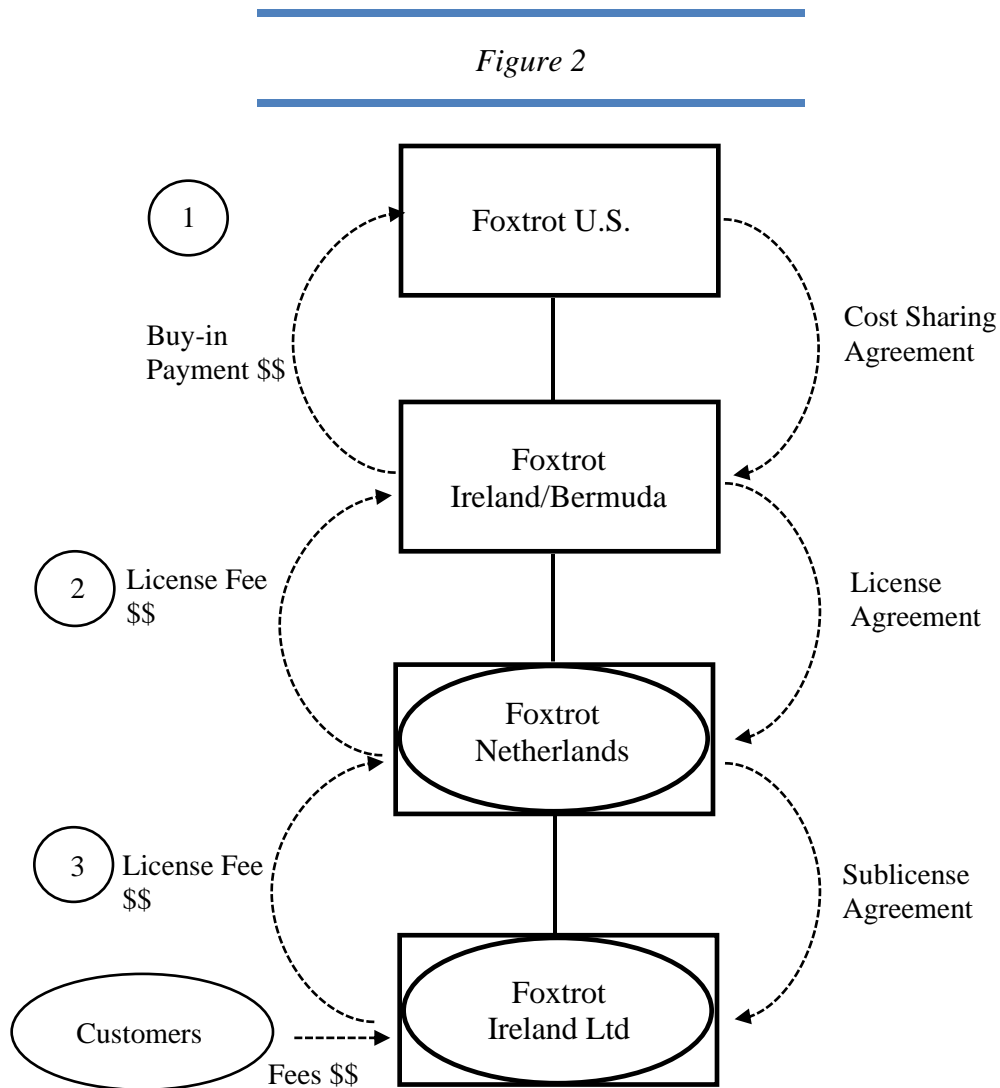
Number 2, however, shows that Foxtrot Netherlands has a sublicense agreement with Foxtrot Bermuda so that it may use the patent in the manufacturing process. The Dutch have a higher corporate statutory tax rate than Bermuda. As a result, it benefits Foxtrot Netherlands to value the patent at the upper bound of the arm's-length transaction range—i.e., maximize its license fee—to Foxtrot Bermuda as doing so will reduce Foxtrot's current Dutch tax obligation.⁷⁸ That is, each dollar of royalty paid by Foxtrot Netherlands to Foxtrot Bermuda reduces Foxtrot's current tax obligation by the applicable Dutch statutory tax rate. Furthermore, the transfer price set between the Netherlands and Bermuda will have been evaluated by the Dutch tax authorities under applicable Dutch transfer pricing guidelines.⁷⁹ So, the payment made by Foxtrot Bermuda to the U.S. parent should represent the lower bound of the value of the patent, and the payment made between Foxtrot Netherlands and Foxtrot Bermuda should represent an upper bound.⁸⁰

⁷⁸ Foxtrot Netherlands has a sizeable income as it is reporting the majority of Foxtrot's foreign sales.

⁷⁹ PRICEWATERHOUSECOOPERS, INTERNATIONAL TRANSFER PRICING 2015/16, 620, available at <http://www.pwc.com/gx/en/international-transfer-pricing/assets/itp-2015-2016-final.pdf>.

⁸⁰ Importantly, cost-sharing agreements do not render transfer pricing ineffective. As this example illustrates, even in the presence of a cost-sharing agreement between the U.S. operations and the

In Figure 2, we assumed that, instead of being primarily a manufacturer, Foxtrot is a patent-intensive firm. The structure below represents the Double-Irish transaction commonly used by U. S. MNCs to reduce their foreign tax obligations.⁸¹ Similar to the structure in Figure 1, the U.S. parent transfers the patent offshore. In this case, Foxtrot U.S. establishes a cost-sharing agreement with Foxtrot Ireland/Bermuda (a quasi-Irish corporation) whereby Foxtrot Ireland/Bermuda makes pay-



foreign entity, there will likely still be intra-firm license agreements between the MNC's foreign entities that provide for upper and lower bounds of the value of the intangibles.

⁸¹ This example is based on Google's structure.

ments to purchase an outright interest in the U.S. patent, which will then be jointly developed by the U.S. parent and the foreign subsidiary (see Number 1).⁸²

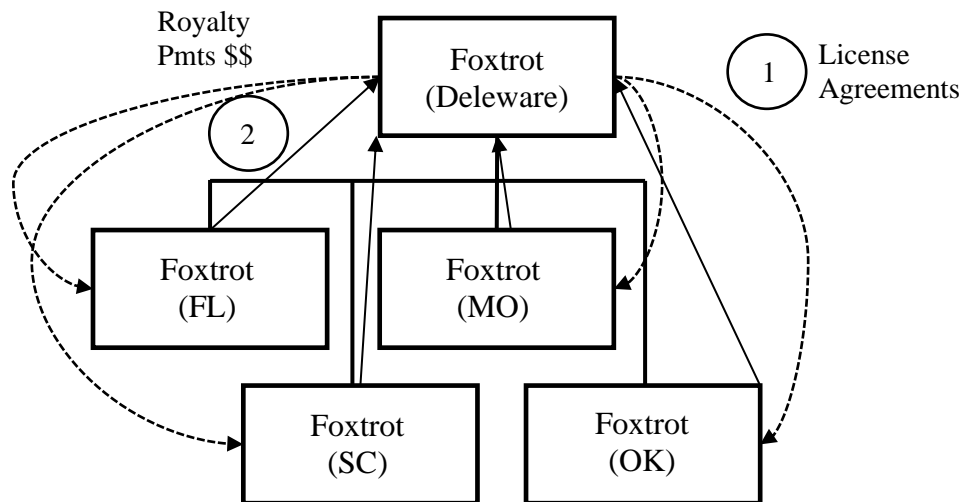
Foxtrot Ireland/Bermuda then provides a sublicense of the intangible to a Dutch holding company (Number 2). The Dutch holding company, Foxtrot Netherlands, then sublicenses the patent to Foxtrot Ireland Ltd. (Number 3). Foxtrot Ireland Ltd. has significant employees and operations in Ireland. This entity collects all non-U.S.-based Foxtrot revenue from customers. Foxtrot Ireland Limited then negotiates a transfer price for the use of the sublicense with the Irish tax authorities. This royalty payment serves to reduce the Ireland Limited's taxable income. Foxtrot Netherlands receives a sizable royalty payment from Foxtrot Ireland Limited. The Dutch entity then makes a sizeable license payment to Foxtrot Ireland/Bermuda. The net effect is that Foxtrot Netherlands has little current corporate tax. This royalty payment does not create any significant tax, as Bermuda does not tax royalty income. As with Figure 1, Number 1 (the transfer from Foxtrot Ireland to Foxtrot U.S.) represents a lower bound on the value of the intangible. On the other hand, the payments between Foxtrot Ireland/Bermuda, Foxtrot Netherlands, and Foxtrot Ireland Ltd. are all likely to be biased upwards therefore representing estimates of the upper bound.

2. *State and Local Taxation Transfer Pricing Regulations*

Finally, even within the domestic-only organizations/supply chains, there are many opportunities to observe tax-related transfer prices, particularly if a corporation has an incentive to source income (expenses) in low (high) tax states. Figure 3 illustrates the use of a Delaware intangible holding company structure. In this setting, the domestic parent, Foxtrot U.S., places its intangibles in a Delaware holding company, then its subsidiaries in other states make payments to the Delaware entity for the use of its intangibles. As Delaware does not tax income from intangibles, payments made by an affiliate in another state to the Delaware parent company saves the corporation the states' taxes on the royalty payment.

⁸² Foxtrot Ireland/Bermuda is a quasi-Irish entity meaning that it is a registered Irish company. But since the company has all of its assets and business in Bermuda, Ireland does not assert its right to tax the income.

Figure 3



The above discussion illustrates that the tax authorities and taxpayers often have an adversarial relationship in the establishment of transfer pricing. The majority of the discussion focuses on the I.R.S.'s combatting artificially low outbound transfer prices (i.e., the transfers or license of U.S. based/created intangibles into foreign jurisdiction). However, taxpayers may also have an incentive to value the patent at the upper bounds of arm's-length transactions (e.g., the Glaxo case). Because the U.S. is considered a high-tax jurisdiction, it is natural to presume that values found on U.S. tax returns have a tendency to be too low. While this is true, one can argue that there is a significant amount of time and effort required by a U.S. MNC to support the appropriateness of its transfer pricing. Furthermore, U.S. MNCs have transfers of intangibles between non-U.S. jurisdictions. These transfers may be biased upward to take advantage of low-tax incentives. Many of these royalty payments/license fees are subject to scrutiny under OECD transfer pricing guidelines suggesting that they face a level of scrutiny similar to U.S.-based transfer prices. Given the commensurate with income standard and existing penalties regimes, transfer pricing should certainly provide some guidance as to the appropriate bounds (or relative range) to the value of firms' intangibles. Nevertheless, given the staggering sums of money at issue, it is inevitable that corporations will seek to set their transfer prices within their discretion to minimize their tax liability. Although our current system is far from perfect, we reject the notion that the tax incentives effectively strip away all value and render transfer prices meaningless. Given that dueling patent experts often diverge by several orders of magnitude on a reasonable royalty damage award, transfer pricing could provide valuable evidence to help the trier of fact narrow the range of a reasonable royalty patent damage determination.

V. The Situations in which Tax-Related Transfer Prices are the Most Informative to Patent Damages

Although the underlying legal standards for defining the reasonable royalty in the tax and patent context are nearly identical—that is, both require a hypothetical arm’s-length negotiation between willing, uncontrolled parties—a number of factors may render transfer prices more or less informative to the reasonable royalty calculation in patent damages. This section commences by delineating circumstances that alter the saliency of transfer prices in determining patent damage awards and concludes by arguing that transfer prices are devoid of some of the distortions that plague prior pre-existing patent licenses between unrelated parties.

To begin, the patent’s transfer price will be most informative to the calculation of a reasonable royalty damage award when the timeframes for the hypothetical negotiations overlap.⁸³ Under patent law, the hypothetical negotiation occurs at the time the defendant started infringing the patent. The initial transfer of patent offshore typically occurs early in the technology’s existence.⁸⁴ Thus, the patent will likely be subject to an intra-corporation transfer before patent infringement begins. There is a concern, however, that the patent will be transferred so early in the technology’s lifespan that the royalty calculated for the tax purposes will drastically undervalue the patent. If the patent is transferred to a subsidiary immediately upon its issuance it is possible that the incremental value the patent provides to the underlying technology will be uncertain, as the value of the technology itself will largely be unknown. Importantly, our proposal does not advocate utilizing the initial transfer price of the patent. Instead, we posit utilizing the royalty the licensee subsidiary pays the licensor subsidiary. Unlike the initial transfer price, tax law requires the royalty rate to be updated to reflect changes in the value of the underlying technology, and hence the patent in question.⁸⁵ Thus, even if the initial transfer price is arbitrarily low, the updating of the licensing stream provides some confidence that increases in the valuation of the technology will be reflected over time.

Second, the tax-related transfer price might need to be adjusted to reflect the nature of the parties in the patent infringement litigation. For instance, patent law typically assumes the royalty rate is higher when it involves licensing a patent to a direct competitor rather than to another unrelated party, because the opportunity

⁸³ *Integra Lifesciences I, Ltd. v. Merck KGaA*, 331 F.3d 860, 870–72 (Fed. Cir. 2003) (holding that a prior license consummated at a significantly different time “may have no bearing on the value of the hypothetical . . . license”).

⁸⁴ Lee A. Sheppard, *Reflections on the Death of Transfer Pricing*, 120 TAX NOTES 1112, 1112 (2008) (“Good ideas are identified early and transferred early.”).

⁸⁵ Under the commensurate with income standard, transfer prices must be within 80% and 120% of an *ex post* valuation of the intangible. Furthermore, if the intangible is “exploited” using a cost-sharing arrangement, regulations required that the taxpayer rely on an “investor model,” effectively placing a cap on the profit that the arrangement can generate for the licensee. To the extent that the licensee earns more than 1.5 times its investment, an adjustment is made to allocate more income back to the licensor (typically a U.S.-based entity). *See* Treas. Reg. 1.482-7(i)(6) (2001).

costs to the patentee are likely larger with the former than the latter.⁸⁶ U.S. tax law defines the “arm’s-length” price as the price that the corporation would have charged if it had instead been dealing with an unrelated party (rather than its own subsidiary) under the same circumstances.⁸⁷ The arm’s-length pricing in tax context captures the appropriate market premium associated with the value of the patent, regardless of the specific nature of the relationship between the hypothetical licensee and licensor. To the extent transfer prices do not explicitly account for the opportunity costs associated with licensing technology to a direct competitor, existing patent law doctrine suggests an upward adjustment may be necessary.

Third, the more similar the technology associated with the intra-corporation patent transfer and the patent litigation in question, the more informative the transfer price will be to the calculation of the patent damage award. That is, the transfer price represents an arm’s-length transaction wherein the parent company licenses the patent to a subsidiary for use in making some product. If a patented technology’s value varies upon the product in which it is incorporated, the licensor may price discriminate—i.e., charge greater licensing rates when the patent provides more value to the product.⁸⁸ Take for example, a patent on technology that meaningfully elongates the battery charge for computer devices.⁸⁹ The value of the patent technology will likely be larger for a laptop computer than a desktop computer.⁹⁰ As a result, a manufacturer of the former may be willing to pay more to license the technology than a manufacturer of the latter. To the extent that the value of a patented technology varies upon its use, it may be necessary to adjust the transfer price if the products subject to the intra-corporation transfer are significantly different than the one at issue in the patent litigation.

Finally, we note that tax-related transfer prices are devoid of some of the distortions that plague prior patent licensing prices between unrelated parties. Commentators have long noted the possibility of a feedback loop existing between prior patent licenses and patent litigation damage awards.⁹¹ Because many patent licenses

⁸⁶ See *Minks v. Polaris Indus., Inc.*, 546 F.3d 1364, 1373 (2008) (holding that the reasonable royalty determined by the district court may need to be adjusted upwards to account for the parties being competitors); *Mars, Inc. v. Coin Acceptors, Inc.*, 527 F.3d 1359, 1373–74 (Fed. Cir. 2008) (noting that the reasonable royalty for licensing to a competitor is larger than the standard arm’s-length rate).

⁸⁷ 26 C.F.R. § 1.482-1(b)(1).

⁸⁸ Anne Layne-Farrar, *The Patent Damages Gap: An Economist’s Review of U.S. Statutory Patent Damages Apportionment Rules*, 26 *TEX. INTELL. PROP. L.J.* (forthcoming 2017) (manuscript at 13) (*available at* <https://ssrn.com/abstract=2911289>) (noting that technology that elongates battery life would provide more value to a laptop than a desktop computer).

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ Roger D. Blair & Thomas F. Cotter, *INTELLECTUAL PROPERTY: ECONOMIC AND LEGAL DIMENSIONS OF RIGHTS AND REMEDIES* 230 (2005); Lemley & Shapiro, *supra* note 2, at 2021–22; Taylor, *supra* note 9, at 106–07; Lee & Melamed, *supra* note 9, at 418; Masur, *supra* note 39, at 133–38; Hovenkamp & Masur, *supra* note 9. *But see*, Oskar Liivak, *Beyond Circularity: Licensing for Innovation*, 26 *TEX. INTELL. PROP. L.J.* (forthcoming 2017) (arguing that not all patent licenses are subject to this feedback loop and that these licenses “produce market-based evidence that can be

are negotiated in the shadow of existing or threatened patent litigation, there is a concern that distortions associated with the prior existing patent licenses may be introduced to the reasonable damages calculation. For instance, while the hypothetical negotiation for calculating a reasonable royalty for patent damages assumes the patent is valid and infringed, real-life licensing rates are invariably negotiated in the presence of uncertainty about patent validity and infringement.⁹² As a result, commentators often suggest that actual royalty rates found in “comparable” prior licenses between unrelated parties should be adjusted upwards to counteract this uncertainty when being utilized as benchmarks for patent damages.⁹³ The same adjustment would not be necessary for tax-related transfer prices, as tax law assumes the patent is valid and must be licensed—i.e., infringed.⁹⁴ That is, because tax-related transfer prices are not negotiated in the shadow of litigation, there is no danger that any uncertainty associated with success at trial would downward bias their values.

Enforceability concerns, however, are not the only confounding feedback factor that is present in prior patent licenses but absent in tax-related transfer prices. Scholars have also noted that real-life negotiations of licenses often occur after the licensee has already begun practicing the licensed patent.⁹⁵ To the extent the infringer is locked into the patented technology, it is likely to agree to a rate much higher than if it were free to change technology.⁹⁶ Thus, a prior patent license may not accurately track the incremental value of the patent to the product but instead be inflated upwards.⁹⁷ The concern that prior existing license agreements may reflect lock-in costs is also absent in tax-related transfer prices. The transfer of patents by related entities simply does not involve the dynamic associated with hold-up costs.

VI. Conclusion

This Article argues that tax-related transfer prices could be useful evidence in calculating reasonable royalty patent damages. Although transfer prices are undoubtedly influenced by the tax system, given that corporate statutory tax rates are widely known, the tax incentives should always be apparent. Knowing whether a reported transfer price should represent a lower or upper bound of a reasonable royalty calculation will enable the trier of fact to utilize transfer prices to help narrow the range of an acceptable reasonable royalty patent damage award. Importantly, our proposal will not solve every reasonable royalty calculation. That is, only a patentee that manufactures products and has transferred the economic right of the patent to a subsidiary will have reported tax-related transfer prices. Nevertheless, giv-

used rather directly to compute patent damages”).

⁹² Durie & Lemley, *supra* note 8, at 641–43.

⁹³ *Id.*

⁹⁴ That is, appraisers hired by multinational corporations to calculate the royalty rate associated with the transfer of patents to a subsidiary do not discount the licensing price to affect uncertainty in patent validity and infringement.

⁹⁵ Lee & Melamed, *supra* note 9, at 418; Lemley & Shapiro, *supra* note 2, at 2016.

⁹⁶ Lee & Melamed, *supra* note 9.

⁹⁷ Lemley & Shapiro, *supra* note 2.

en the ubiquity of intra-company trading, it is likely that a significant number of litigated patents will meet this criterion.