STRUCTURING THE DEAL TO AVOID PATENT EXHAUSTION (*POST IMPRESSION PRODUCTS v. LEXMARK*)

Sachin Bhatmuley*

INTRODUCTION

The Supreme Court’s 2017 ruling in *Impression Products v. Lexmark* clearly came as an unwelcome, though not unexpected, shock to patent owners.¹ In it, the Supreme Court ruled on two issues—the ability of a patentee to enforce post-sale restrictions on a patented product and the exhaustion of the patentee’s rights when the patented product was purchased internationally. On both counts, the Court took a position unfavorable to patent owners.²

Part I of this paper introduces patent exhaustion and briefly surveys the jurisprudence in the area of IP exhaustion. It will become apparent that in *Lexmark*, the Supreme Court ruled in line with *Univis Lens* and *Quanta* decisions.³ In the process, the Court also (finally) overruled *Mallinckrodt*.⁴ Interestingly, however, the Court maintained the distinction from *General Talking Pictures* and preserved the patentee’s rights when a licensee makes an unauthorized downstream sale.⁵

Part II of this paper provides the analysis of the *Lexmark* Supreme Court ruling. In *Lexmark*, on the first issue of post-sale restrictions, the Court anchored its analysis and holding in the common law doctrine of rejecting unreasonable “restraints on alienation.”⁶ The Court ruled that the

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*Author is a J.D. 2019 graduate of the University of San Diego School of Law. Author sincerely thanks Professor Ted Sichelman for his valuable guidance and continuous encouragement.


⁶ *Lexmark*, 137 S. Ct. at 1536.
patentee may not enforce any post-sale restrictions on the patented product because that would result in undesired “restraint on alienation.” Instead, the sale (effectively the “first-sale”) would seem to have resulted in patent exhaustion under the “first-sale doctrine.” Interestingly, the Court proceeded instead to suggest that the patentees may pursue post-sale restriction claims under contract law.

A similar reasoning was put forth in the ruling on patent exhaustion upon an international sale. An authorized sale of the product—regardless of the geography—was deemed to have triggered patent exhaustion under the “first-sale doctrine.”

Despite the seemingly unequivocal message of the holding, the Court nevertheless left some wiggle room for the patentees to preserve their rights. Part III of this paper will focus on the issue of exploring a patentee’s options—in light of the *Lexmark* ruling—toward ensuring and preserving its rights to pursue infringement action on downstream players. Part III will also outline a proposal to structure the transaction of the patented product as a “lease” instead of a “sale” in order to avoid exhaustion. Avoiding patent exhaustion by redesigning the transaction will in turn address both areas of the *Lexmark* ruling—the enforcement of post-sale restrictions under patent law and the international exhaustion. Because of the recency of the *Lexmark* decision and the lack of prior work in the area, there has been very little guidance to patentees, notwithstanding some brief suggestions in literature, toward structuring transactions to avoid patent exhaustion. This proposal, therefore, attempts a novel approach to providing meaningful and actionable guidance to the patentee community.

A lease, being a possessory right, will not result in the transfer of the title. Because the title is not transferred, “first-sale” is not triggered, thus preventing patent exhaustion and preserving the patentee’s rights to pursue infringement claims. But, structuring the transaction as a lease must follow specific constraints to satisfy a two-step analysis courts have followed in evaluating such transactions. The first step involves analysis of the transaction under the Uniform Commercial Code (“UCC”) to distinguish a lease from a security interest, followed by the second step of assessing preservation of a meaningful reversionary interest to avoid the risk of the lease transaction being recharacterized as a sale. The UCC and the vast body of case law from bankruptcy courts provide substantial guidance in this area.
Additional refinements are suggested when the patentee licenses the technology to a manufacturer licensee instead of selling the patented product directly to the end-consumer. In such a scenario, the licensing transaction between the patentee and the licensee manufacturer will need to restrict the licensee to “lease” the product to downstream players. The “lease” agreement between a licensee and downstream players may be implemented via a shrink-wrap/click-wrap agreement.

This approach essentially involves a business model innovation on the patentee’s part. Such a fundamental change may be difficult to implement and will require close alignment between all parties involved, including licensee manufacturers and end-consumers. There will be additional execution complexities due to the resource and logistical requirements of the solution. Nevertheless, given the significant benefits patentees will realize by avoiding patent exhaustion, especially in light of the Lexmark ruling, patentees should be highly motivated to explore this option.

I. PATENT EXHAUSTION AND PATENT EXHAUSTION JURISPRUDENCE

A. Patent Exhaustion

A United States patent entitles the patent holder, for a period of 20 years, to “exclude others from making, using, offering for sale, or selling [its] invention throughout the United States or importing the invention into the United States.” Whoever engages in one of these acts “without authority” from the patentee may face liability for patent infringement. However, when a patentee sells one of its products, the patentee can no longer control that item through the patent laws—its patent rights are said to “exhaust.” The purchaser and all subsequent owners are free to use or resell the product, just like any other item of personal property, without fear of an infringement lawsuit. 

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9 Lexmark, 137 S. Ct. at 1533.
10 Id.
B. Patent Exhaustion Jurisprudence

Patent exhaustion jurisprudence dates back to 1873 with the case of *Adams v. Burke*. In *Adams*, the patentee authorized a licensee to make, use and sell patented coffin lids only within a ten-mile radius of Boston. A customer of the licensee purchased the patented coffin lids within the ten-mile radius but later resold them outside of the ten-mile radius. When the patentee sued the customer, the Supreme Court was faced for the first time with the question of whether the first sale of the patent product had exhausted the patent rights. The Supreme Court in *Adams* held that once a patented article was lawfully made and sold, there was no restriction on its use that can be asserted by the patentee, his assignees, or his licensees.

The Court further confirmed this understanding when it ruled in *Keeler v. Standard Folding Bed Co.* that the patentee had exhausted its claims on the patented products post first-sale, and thus could not bring an infringement action for its products re-sold in the reserved territory.

In the 1938 case of *General Talking Pictures v. Western Elec. Co.*, the Supreme Court, in an opinion authored by Justice Brandeis, first upheld the “fields of use” limitation in patent licenses. In *General Talking Pictures*, AT&T owned patents on vacuum tubes (amplifiers) and licensed the patents to American Transformer Company to manufacture tubes for use in non-commercial amplifiers. AT&T provided licenses to other companies (its subsidiaries) in the field of commercial use, or large amplifiers for use in theaters. The vacuum tubes used in the different fields were

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11 *Adams v. Burke*, 84 U.S. 453, 457 (1873) (ruling that exhaustion occurred when the coffin with the patented lid was sold, invalidating post-use restriction).
12 Id. at 456.
13 Id.
14 Id.
15 Id. at 457.
16 *Keeler v. Standard Folding Bed Co.*, 157 U.S. 659, 661 (1895); see also 8 U.S.C.S.A. § 9444 (1916) (summarizing the holding in *Keeler* as “[a] dealer in territory reserved by the patentee may purchase the patented articles from a licensee of other territory, through an agent in such territory, and import and resell them in the reserved territory, without infringing any rights of the patentee”).
17 *See Gen. Talking Pictures*, 305 U.S. at 127 (field-of-use limitations in patent licenses were enforceable in a patent infringement suit in federal court against the licensee and those acting in concert with it).
indistinguishable. American Transformer Company sold its products to General Talking Pictures, which knew of the field-of-use limitation and ignored it. The majority upheld the field-of-use restriction:

As the restriction was legal and the amplifiers were made and sold outside the scope of the license the effect is precisely the same as if no license whatsoever had been granted to Transformer Company. And as Pictures Corporation knew the facts, it is in no better position than if it had manufactured the amplifiers itself without a license. It is liable because it has used the invention without license to do so.

*General Talking Pictures* continues to be good law, albeit as stated in *Lexmark*, for “the modest principle that, if a patentee has not given authority for a licensee to make a sale, that sale cannot exhaust the patentee’s rights.”

In the 1942 case of *U.S. v. Univis Lens Co.*, the Supreme Court extended the scope of the patent exhaustion doctrine to components of an unfinished patented product. This landmark decision found that an authorized and unrestricted sale of a patented article, even when the article was only a component of the patented combination, exhausted the patent rights. The *Univis* opinion stated that whether the licensee sells the patented article in its completed form or before completion, the patented article is effectively “beyond the reach of the monopoly which that patent confers” after the first authorized sale. *Univis* continues to be good law and is universally cited in patent exhaustion cases.

In relatively modern era jurisprudence, the Federal Circuit in *Mallinckrodt, Inc. v. Medipart, Inc.* upheld the post-sale restriction that prohibited the buyer from reusing the device, holding that such a restriction was enforceable under patent law if the manufacturer’s restriction was reasonably within the patent grant. *Mallinckrodt* labeled the devices it sold to hospitals with the notice “For Single Patient Use

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21 *Id.* at 126.
22 *Id.* at 127.
23 *Lexmark*, 137 S. Ct. at 1535.
24 *Univis Lens Co.*, 316 U.S. at 250–51.
25 *Id.*
26 *Id.* at 252.
27 *Mallinckrodt*, 976 F.2d at 708.
Only.”  

Apparently, due to the high price of the device, the hospitals did not follow the “Single Use” restriction and sent the devices to Medipart for reconditioning. Medipart cleaned, reconditioned, and returned the devices to the hospital for reuse at a fraction of the cost of a new device. This was considered infringement. The Federal Circuit held that patent owners could sell patented goods with a restrictive notice and thereby restrict the disposition of the goods by the purchasers, unless there existed price-fixing and tie-in restrictions. This ruling was a departure from earlier Supreme Court jurisprudence on exhaustion. Eventually, the Supreme Court overruled Mallinckrodt in Lexmark.

Another landmark opinion, Quanta Comput., Inc. v. LG Elecs., Inc., established the parameters of patent exhaustion in the context of licensed products. In Quanta, LG Electronics, Inc. (“LGE”) licensed the patents to Intel Corporation (“Intel”) in a licensing agreement that authorized Intel to manufacture and sell microprocessors and chipsets using the LGE patents and also stated that the agreement did not alter patent exhaustion rules. A separate agreement required Intel to give its customers written notice that the license did not extend to a product made by combining an Intel product with a non-Intel product, and it provided that a breach of the agreement would not affect the license agreement. Quanta Computer, Inc. (“Quanta”) purchased microprocessors and chipsets from Intel and manufactured computers using Intel parts in combination with non-Intel parts, but did not modify the Intel components. LGE asserted that this combination infringed the LGE patents. The Court, in its opinion, focused on the license agreement and found that nothing in the license restricted Intel’s right to sell its microprocessors and chipsets to purchasers that intended to combine them with non-Intel parts.

28 Id. at 702.
29 Id.
30 Id.
31 Id. at 709–10.
32 Id. at 709.
33 Id. at 706.
34 Lexmark, 137 S. Ct. at 1534–35.
35 Quanta, 553 U.S. at 638
36 Id. at 623.
37 Id. at 623–24.
38 Id. at 624.
39 Id.
40 Id. at 638.
authorized sale to Quanta thus triggered exhaustion, and as a result, LGE could not assert its patent rights against Quanta.\textsuperscript{41}

The \textit{Lexmark} ruling, regarding post-sale restrictions, appears to have generally followed the exhaustion jurisprudence established by \textit{Keeler}, \textit{Uninis Lens}, and \textit{Quanta}. The principal doctrinal underpinning in all three is the common law rejection of “restraint on alienation.” \textit{Mallinckrodt}, which upheld post-sale restrictions, has now been effectively overruled as well. Even though the \textit{Quanta} ruling went counter to \textit{Mallinckrodt}, \textit{Mallinckrodt} was not directly addressed in that opinion. However, in the \textit{Lexmark} opinion, the Federal Circuit’s reliance on \textit{Mallinckrodt} was directly countered and overruled.\textsuperscript{42} \textit{General Talking Pictures} however, with the principle that an unauthorized sale by a licensee will not lead to exhaustion, remains good law.

\section*{II. \textit{Lexmark v. Impression Products} Ruling}

The Supreme Court addressed two key issues in \textit{Lexmark}. First, whether a patentee that sells an item under an express restriction on the purchaser’s right to reuse or resell the product may enforce that restriction through an infringement lawsuit; and second, whether a patentee exhausts its patent rights by selling its product outside the United States where American patent laws do not apply.\textsuperscript{43}

Overruling the Federal Circuit’s prior decision on both counts, the Court held “that a patentee’s decision to sell a product exhausts all of its patent rights in that item, regardless of any restrictions the patentee purports to impose or the location of the sale.”\textsuperscript{44}

In finding patent exhaustion with the first-sale, the Court drew support for its reasoning in the doctrine of “restraint on alienation.” The Court, quoting Lord Coke, stated that “[i]f an owner restricts the resale or use of an item after selling it, that restriction ‘is void, because . . . it is against Trade and Traffique, and bargaining and contracting between man and man.’”\textsuperscript{45} Similar to its holding for copyrighted works in \textit{Kirsaeng v. John Wiley \& Sons, Inc.}, the Court reiterated that the patent exhaustion doctrine “is not a presumption about the authority that comes along with a sale; it

\begin{itemize}
\item \textsuperscript{41} Id.
\item \textsuperscript{42} See \textit{Lexmark}, 137 S. Ct. at 1523.
\item \textsuperscript{43} Id. at 1529.
\item \textsuperscript{44} Id.
\item \textsuperscript{45} Id. (citing J. Gray, \textit{Restraints on the Alienation of Property} §27, at 18 (2d ed. 1895)).
\end{itemize}
is instead a limit on ‘the scope of the patentee’s rights’” and that patent rights yield to this common law principle. Put simply, the Supreme Court considered patent exhaustion automatic and mandatory upon first-sale.

Professor Sichelman and Professor Barnett, in their amicus brief on *Lexmark*, have presented compelling economic arguments against such mandatory exhaustion. They highlight numerous scenarios where it is economically more efficient for a patentee to have more control over downstream players and use cases of its patented technology. Mandatory exhaustion upon first-sale forces the patentee to recover all of its costs and margins from the first-sale and hence introduces inefficiencies. Instead, the approach suggested is that of a “presumptive” exhaustion regime in which the patent owner and a licensee/purchaser can opt out of exhaustion via contract.

Interestingly, the *Lexmark* Court appeared to preserve the distinction between a sale and a licensing transaction and thus left some wiggle room for patentees in avoiding exhaustion. In essence, even though the Court stated that the patent rights are exhausted upon the first-sale by the patentee, it drew a careful distinction when it came to licensing. In so doing, it distinguished *General Talking Pictures* stating that “*General Talking Pictures*, stood for the modest principle that, if a patentee has not given authority for a licensee to make a sale, that sale cannot exhaust the patentee’s rights.” The Court went on to emphasize that the facts in *General Talking Pictures* were different because the “licensee ‘knowingly m[ade] … sales … outside the scope of its license.’”

Nonetheless, the distinction appears somewhat tenuous. The facts in *Lexmark* and *General Talking Pictures* are quite similar and would become almost identical if Lexmark were to license to a third party, which would subsequently sell the cartridges to Impression Products under a single-use

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48 *Id.* at 2.
49 *Id.* at 3–5.
50 *Lexmark*, 137 S. Ct. at 1535 (stating “*General Talking Pictures* involved a fundamentally different situation.”).
51 *Lexmark*, 137 S. Ct. at 1535; see generally *Gen. Talking Pictures Corp.*, 305 U.S. at 127.
52 *Id.*
restraint.53 Because Impression Products would then be aware of the restriction, Lexmark would now be able to pursue infringement claim against Lexmark under General Talking Pictures.54 Nevertheless (and as a result), General Talking Pictures remains good law, confirming the limited principle that “if a patentee has not given authority for a licensee to make a sale, that sale cannot exhaust the patentee’s rights.”

Impact on Patentee’s Rights

By strengthening the patent exhaustion regime, the Court precluded the possibility of infringement claims against post-sale restriction violations. The Court then proceeded to push any post-sale restriction violation claims into the realms of contract law.55 This is clearly not preferable for patentees for two principal reasons. First, injunctive relief available in infringement actions will not be available under contract law under most circumstances, and the only available remedy will be monetary damages. Second, although some third-party actions are possible, most contract law claims will require the parties to be in privity. Both can severely limit the patentee’s ability to control downstream usage, infringing or not.

III. PROPOSED SOLUTION

A. Can the Transaction be Structured as a Lease?

This proposal attempts to address the patentee’s interest in maintaining control over the downstream distribution of patented products in addition to (and with the aim of) preserving the rights to pursue patent infringement claims. While the Supreme Court in Lexmark accepted licensing as not triggering exhaustion, it quickly restricted such immunity by deeming exhaustion to have occurred when a licensee in turn

53 See Gen. Talking Pictures Corp., 305 U.S. at 126 (finding that a licensee, which was authorized to manufacture and sell patented vacuum tube amplifiers only for radio amateur, experimental, and broadcast reception, was guilty of infringement when it made and sold amplifiers for use in theaters as part of talking picture equipment).

54 Ryan Swank, Exhausting the Possibilities, L.A. LAW. MAG., Feb. 2018, at 35 (“Had the third-party licensee made a sale outside the scope of the license to a purchaser (Impression Products), and the purchaser was aware of the restrictions, Lexmark’s post-sale restriction should have been upheld under the Supreme Court’s analysis.”).

55 Lexmark, 137 S. Ct. at 1526 (“As a result, even if the restrictions in Lexmark’s contracts with its customers were clear and enforceable under contract law…”).
sold the patented item. In copyright law, the relevant statute specifically excludes the first-sale doctrine’s application when the copyrighted item is transferred through “rental, lease, loan, or otherwise, without acquiring ownership of it.” To a similar effect, there have been brief recommendations in the literature suggesting “licensing” and “leasing” approaches. In this proposed solution, we will take the next step and develop a detailed framework for industry application of structuring patented product transaction as a “lease.”

There are two key propositions fundamental to this proposed framework. First, federal courts have held that UCC § 1-201(37)(b) provides a conclusive test of when a lease is intended as security interest; therefore, a patentee may follow UCC framework to structure the transaction as a true lease. Second, as long as a true lease (and not a

56 Id. at 1534 (“[a] patentee can impose restrictions on licensees because a license does not implicate the same concerns about restraints on alienation as a sale”); Lexmark, 137 S. Ct. at 1534 (“A patentee’s authority to limit licensees does not, as the Federal Circuit thought, mean that patentees can use licenses to impose post-sale restrictions on purchasers that are enforceable through the patent laws. So long as a licensee complies with the license when selling an item, the patentee has, in effect, authorized the sale.”).

57 17 U.S.C. § 109(d) (2020) (“The privileges prescribed by subsections (a) and (c) do not, unless authorized by the copyright owner, extend to any person who has acquired possession of the copy or phonorecord from the copyright owner, by rental, lease, loan, or otherwise, without acquiring ownership of it.”).

58 Matthew K. Blackburn & Joshua D. Curry, Patent Exhaustion Dispute Likely Headed for the Supreme Court, 8 LANDSLIDE 49 (2016) (“Therefore, clearly document the transaction as a license/lease, establish that the patent holder retains title, and take commercially reasonable steps to perfect that title.”); Lisa Larimore Ouellette & Daniel Hemel, Licensing in the Shadow of Impression Products, LEGAL AGGREGATE (May 31, 2017), https://law.stanford.edu/2017/05/31/licensing-in-the-shadow-of-impression-products/ (“Instead of buying your smartphone, you’ll ‘license’ it from Apple or Samsung, which will retain title to the device.”); Aaron Perzanowski, Lexmark and the Future of Sales, THE END OF OWNERSHIP (June 1, 2017), http://www.theendofownership.com/blog/2017/6/1/thoughts-on-impression-products-v-lexmark (“Another potential concern is that companies like Lexmark will stop selling products altogether and move to lease, rental, or subscription models that don’t entail transfers of ownership to consumers.”); DJ Healey, Impression Products v. Lexmark: How can sellers protect themselves after their patent rights are exhausted? Two examples and one warning, LEXOLOGY (Nov. 14, 2017), https://www.lexology.com/library/detail.aspx?g=d1fe37c-f5cf-4df6-be60-e1fefe08da (“There is a body of law that allows some leases to be treated as sales (e.g., for usury when used to finance what amounts to a purchase. Regardless of state laws, the Supreme Court may not find the substance of a lease transaction substantively different enough from a sale to prevent exhaustion.”).

59 In re Marhoefer Packing Co., 674 F.2d 1139 (7th Cir. 1982).
security interest or a disguised sale) results from the transaction, the lease—being only a possessory right—does not transfer the title, and hence does not trigger exhaustion. Therefore, the key is to determine a transaction structure that will qualify as a true lease.

i. Definition of True Lease under the UCC

In an agreement that constitutes a true lease and not a disguised security interest under the UCC, the lessor has title to the goods at all times. The lessee acquires no ownership, title, property, right, equity or interest in the goods other than its leasehold interest. UCC § 1-201 provides the relevant definition of “security interest.” A security interest in the lessee may only be created if an ownership, title, or possessory interest existed in the lessee, and was attached at the time of the transaction. Therefore, a lease that creates a security interest effectively resembles a loan or a conditional sale agreement, and hence may not be termed a “true lease.”

ii. UCC §1-203 Lease Distinguished from Security Interest

The characterization of an agreement as a lease compared to a disguised security interest has been a heavily litigated matter in bankruptcy courts. Distinguishing a lease from a conditional sale or security interest is therefore critical. In litigation, courts have primarily looked at UCC § 1-203 as a significant part of the analysis. However, on occasion, the courts have also looked at additional factors, such as facts and circumstances of the transaction—especially the reversionary interest retained by the lessor at the end of the lease. The Seventh Circuit, in In re Marboefer Packing Co., Inc., held UCC § 1-203 to be a conclusive test in determining if a lease is a true lease or a disguised security interest, and suggested further scrutiny

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60 Lexmark, 137 S. Ct. at 1535; U.C.C. § 2-103 (AM. LAW INST. & UNIF. LAW COMM’N 2002).
61 U.C.C. § 1-203 (AM. LAW INST. & UNIF. LAW COMM’N 2001).
62 U.C.C. § 1-201(35) (AM. LAW INST. & UNIF. LAW COMM’N 2001).
63 Id.
66 See, e.g., 674 F.2d, supra note 59.
based on the facts of the specific case to ensure proper characterization of the transaction. The Ninth Circuit relied on Marhoefer in The Aerospace Corporation v. Comdisco to determine if the personal property lease between the parties was a true lease. Copyright courts have also engaged in similar analyses, albeit without specifically referring to UCC § 1-203, in trying to determine the “economic realities” of the transaction. In Softman Products Company, LLC v. Adobe Systems, Inc., the court determined that the license was in fact a sale because of the “economic realities”—the amount, nature and duration—of the “licensing” payment. In a tax matter in Swift Dodge v. Commissioner, the Ninth Circuit performed an economic realities analysis that included evaluation of the rights, benefits, and obligations of the parties to determine if the lease was a true lease and not a conditional sale.

Pulling this all together, we begin with UCC § 1-203, often termed as the “Economic Realities Test,” to construct an “economic” framework to assess the transaction. Under UCC § 1-203, a lease creates a security interest if the consideration is fixed and not terminable by the lessee and if:

The original lease term is equal to or greater than the remaining economic life of the equipment.

The lessee is required to renew the lease for the remaining economic life or is required to become the owner of the goods if the original term is less than the remaining economic life of the property.

67 Id. at 1142 (holding that while section 1-201(37)(b) does provide a conclusive test of when a lease is intended as security, that test does not apply in every case in which the disputed lease contains an option to purchase for nominal or no consideration).

68 Aerospace Corp. v. Comdisco, 113 F.3d 1240 (9th Cir. 1997) (holding that the defendant was liable to pay rent to the plaintiff under two personal property leases).

69 SoftMan Prod. Co. v. Adobe Sys., Inc., 171 F. Supp. 2d 1075 (C.D. Cal. 2001) (finding that the circumstances surrounding the transaction strongly suggested that the transaction was in fact a sale rather than a license. For example, the purchaser obtained a single copy of the software, with documentation, for a single price, which the purchaser paid at the time of the transaction, and which constituted the entire payment for the “license.” The license ran for an indefinite term without provisions for renewal).

70 Swift Dodge v. Comm'r, 692 F.2d 651 (9th Cir. 1982) (finding the existence of a conditional sale after a review of the benefits, obligations, and rights of Swift Dodge and the vehicle users).

71 U.C.C. § 1-203 (AM. LAW INST. & UNIF. LAW COMM’N).
The lessee has an option to renew the lease for the remaining economic life for no additional consideration or for nominal additional consideration.

The lessee has an option to purchase the goods for no additional consideration or for nominal consideration.\(^\text{72}\)

In *In re Jeffrey Owen d/b/a C & J Express Co.*, the court primarily focused on the “economic realities” of the transaction—the “bright-line” rule outlined by §1-203.\(^\text{73}\) In that case, the lessee had no option to purchase except by paying fair market value at a sale conducted at the conclusion of the lease term, the term of lease was for less than the economic life of goods, and the present value of lease payments was less than the purchase price of trailers ($82,924 compared to $91,745).\(^\text{74}\) The court held that the transaction was a true lease.\(^\text{75}\)

Federal courts have insisted on scrutinizing the additional facts and circumstances surrounding the transactions. In *In re Marhoefer Packing Company, Inc.*, the Seventh Circuit, while holding the UCC § 1-203 test to be “conclusive,” further reviewed the terms of the lease and held that the lease was a true lease even with a nominal ($1) purchase option price.\(^\text{76}\) The court found the total amount of rent, whether the lessee acquired any equity in the leased property, the useful (remaining) life of the leased goods, and the nature of the lessor's business to be the important factors in determining whether the transaction was a lease.\(^\text{77}\) In *In re Keith Alan Powers*, the court found *Marhoefer* controlling in determining the lease to be a true lease with similar facts.\(^\text{78}\) In *In re Spencer Jerome Tillery*, the termination

\(^{72}\) U.C.C. § 1-203 (AM. LAW INST. & UNIF. LAW COMM’N).

\(^{73}\) *In re Owen*, 221 B.R. 56, 57 (Bankr. N.D.N.Y. 1998).

\(^{74}\) *Id.* at 62.

\(^{75}\) *Id.* at 64.

\(^{76}\) *In re Marhoefer Packing Co.*, 674 F.2d at 1142 (holding that it was a true lease because neither the option to purchase for one dollar at the conclusion of a second four-year term, nor the initial option to purchase it for $9,968 after the first four years, gives rise to a conclusive presumption under clause (b) of section 1-201(37) that the lease is intended as security).

\(^{77}\) *Id.* at 1145.

\(^{78}\) *In re Powers*, 983 F.2d 88, 90 (7th Cir. 1993) (“This case is controlled by our decision in Matter of Marhoefer Packing Co., Inc.”).
amount or reversionary interest retained by the lessor was held to be indicative that it was not a true lease.\textsuperscript{79}

Similarly, in a copyright infringement action in \textit{Softman Products Co., LLC v. Adobe Sys., Inc.}, the court looked at the price, lack of renewal terms/indefinite term, a single payment, and no product return to determine that the license was in fact a sale, based on the economic realities of the transaction.\textsuperscript{80}

In \textit{Ford v. Lasting Impressions Landscape Contractors, Inc.}, the lease between Ford Motors and Lasting Impressions Landscape Contractors passed the UCC “bright-line” test for a true lease under §1-203.\textsuperscript{81} However, the court engaged in a contextual analysis and looked at the facts and circumstances surrounding the agreement.\textsuperscript{82} The court determined that the central feature of a true lease was the reservation of an economically meaningful interest to the lessor at end of lease term. That is, if there is a meaningful reversionary interest, either an up-side right or a down-side risk, then the parties have signed a lease and not a security agreement.\textsuperscript{83} In this case, the residual value of the vehicles was stated to be 10\% at the end of the lease, and therefore, the court held that the “lessor transferred title to the goods, in substance if not in form,” resulting in a sale rather than a true lease.\textsuperscript{84}

This subsequent “contextual analysis” is performed by the courts as the second step after the UCC §1-203 bright-line rule, principally to determine if the lessor has retained a meaningful reversionary interest in the product at the end of the lease term.\textsuperscript{85} This second step of assessment can be summarized as a six-factor (sometimes seven-factor) analysis evaluating:

\begin{itemize}
\item \textit{Sale} if there is a meaningful reversionary interest, either an up-side right or a down-side risk.
\item \textit{Leasing} if the security interest of Swad in the vehicle was neither perfected under the law of Alabama, nor under the law of Ohio . . . .
\item \textit{Sale} if the rights of the Trustee in said vehicle are superior to those of Swad, and he is entitled to sell the vehicle as an asset of this estate.
\item \textit{Leasing} if the lessor transferred title to the goods, in substance if not in form.
\end{itemize}

\textsuperscript{79} Bill Swad Leasing Co. v. Stikes (\textit{In re Tillery}), 571 F.2d 1361, 1366 (5th Cir. 1978) (“[T]he security interest of Swad in the vehicle was neither perfected under the law of Alabama, nor under the law of Ohio . . . . the rights of the Trustee in said vehicle are superior to those of Swad, and he is entitled to sell the vehicle as an asset of this estate”).

\textsuperscript{80} \textit{SoftMan}, 171 F. Supp. 2d at 1084.


\textsuperscript{82} \textit{Id.}

\textsuperscript{83} \textit{Id.}

\textsuperscript{84} \textit{Id.} at 52.

1) The anticipated useful life of the equipment;
2) The ability of the lessor to market the equipment at the end of the lease term;
3) The amount of the lease payments over the term of the contract in relation to the initial value of the equipment;
4) Whether the equipment is unique because it was designed for installation in the debtor’s (lessee’s) facility;
5) Whether at the time of the agreement the long-term operation of the debtor’s (lessee’s) facility required its continued possession of the equipment; and
6) The economic benefit to the debtor (lessee) in having the transaction structured as a lease rather than a sale.\(^{86}\)

The burden of proof to determine the fair market value of the purchase option under the UCC § 1-203 test, if such an option is part of the transaction, rests upon the party challenging the lease.\(^{87}\) In *GE v. WorldCom, Inc.*, WorldCom wanted to recharacterize the lease of telecommunications equipment as a disguised security agreement.\(^{88}\) The court held that WorldCom did not satisfy its burden of proof in establishing whether the purchase option price at the end of the lease was nominal consideration, and their summary judgment motion was denied.\(^{89}\)

**B. Transaction Structure**

Applying the analysis developed in the preceding section, we will now devise a four-step framework of the deal structure for two distinct transaction scenarios: *sale* to the end-consumer and *license* to a

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\(^{86}\) *In re UNI Imaging Holdings, LLC*, 423 B.R. at 419; *See In re Loop Hosp. P’ship*, 35 B.R. 929, 935–36 (Bankr. N.D. Ill. 1983) (listing seven primary factors and up to fifteen factors to determine if a meaningful reversionary interest is created).


\(^{88}\) *Id.* at 61.

\(^{89}\) *Id.* at 74.
manufacturer/OEM. The first step will identify the players and their transactional relationships. The second step will define the economic realities of the transaction per UCC § 1-203. The third step will address the presence of a meaningful reversionary interest. The fourth and final step will identify industry-specific considerations.

The first transaction scenario entails the transaction taking place directly between the patentee, who is also the manufacturer of the patented product, and the end-consumer (“Patentee-Consumer” scenario). Such a scenario is typically encountered in the printer industry.

In the first step of the analysis, transactional relationships between the parties are identified. In this first transaction scenario, there are two primary players—the patentee and the end-consumer. The agreement will thus be structured as a “lease” of the patented product. The patentee being the “lessor,” and the end-consumer being the “lessee.” The lessee may not be mandated to renew the lease but may choose to do so. This will satisfy UCC § 1-203(b)(2). An option to purchase the product at the end of the lease will not be available. This will satisfy UCC § 1-203(b)(4).

In the second step, the economic realities of the transaction are determined. To this end, the lessor must determine (i) the economic life of the product, (ii) the fair market value of the product, and (iii) the end-of-lease plan for the product.

To ensure a true lease, the lease term shall be less than the estimated economic life determined at the beginning of the lease. Subsequent renewals of the agreement should ensure that the total lease duration does not exceed the overall economic life of the product. The courts have not provided bright-line rules or recommendations in determining the economic life of the product. Industry estimates and prevailing norms may therefore suffice. In the event of dispute, the burden of proof will lie with the party challenging the nature of the transaction.

Secondly, the total of the lease payments may not exceed the fair market value of the product at the time of transaction. However, this factor is not considered dispositive under UCC § 1-203(c)(1). Nevertheless, the fair market value determination will be important in determining the reversionary interest value.

Thirdly, the end-of-lease plan must also be assessed. To support a true lease, the lessee may either renew the lease for another period, not exceeding the economic life of the product, or may return the product to the lessor. To incentivize continued patronage by the lessee as well as to create a meaningful reversionary interest, the lessor may award a “return
reward” to the lessee in the form of credit toward another lease of the next generation of the product.  

The third step, and a critical feature of the transaction, evaluates the presence of a meaningful reversionary interest—either an upside gain or a down-side risk. A significant upfront deposit, to be refunded at the end of the lease upon return of the product, can reasonably demonstrate the mitigation of the down-side risk. Similarly, an “end of lease” payment—if the product must be retained by the lessee—commensurate with the fair market value of the product at the time of return, or simply accepting the return may be sufficient upside gain. Some courts have held a 10%–25% residual value to be insufficient to create a meaningful reversionary interest. In the event of dispute, courts will rely on available information to make this determination. As such, the lessor may either refund the deposit or waive the “end-of-lease” payment, whichever is applicable, upon successful product return. Should the customer choose not to return the product, the lessor can elect to apply the “end of lease” payment as a “rebate” toward the next lease with the customer. This will avoid the customer actually having to outlay cash and will result in the added benefit of creating customer loyalty and repeat business.

In the final step, additional industry-specific features can be included in the transaction structure. For example, a “refurbish/re-lease” program by the lessor for the returned products can be attractive for price-sensitive markets for products such as printers. Not only will the availability of lower-priced (refurbished) printers enable a different (price-sensitive) market segment, but the existence of such a program will also demonstrate a meaningful reversionary interest in the originally leased product.

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90 See discussion infra pp. 155–160.
91 See Frontier Energy, LLC v. Aurora Energy, Ltd. (In re Aurora Oil & Gas Corp.), 439 B.R. 674, 679 (Bankr. W.D. Mich. 2010) (explaining that a meaningful reversionary interest was found where, at the end of the agreement, the lessor was free to lease the property to another party); Sankey v. ABCO Leasing, Inc. (In re Sankey), 307 B.R. 674, 682 (D. Alaska 2004) (explaining that if the lessor will receive either return of the leased goods or the reasonably predicted fair market value the goods will have at the time the option is to be performed, the lessor has retained a meaningful reversionary interest).
92 See In re Aurora Oil & Gas Corp., 439 B.R. at 680–681.; HMO Sys., Inc. v. Choicecare Health Servs., 665 P.2d 635, 638 (Colo. App. 1983) (finding that if the option to purchase price is variable with the lease payments and less than the fair market value, it is to be considered as showing the intent of the parties to make a lease as security).
93 In re Lasting Impressions Landscape Contractors, Inc., 579 B.R. at 56.
The second transaction scenario involves an intermediate licensee/manufacturer who licenses the technology from the patentee and manufactures the product. The licensee then transacts with the end-consumer (“Patentee-Licensee-Consumer” scenario). This scenario is typical of the personal computer (“PC”) and smartphone industry, and the transaction between the licensee and the end-consumer will now entail leasing of the product instead of a sale.

As in the Patentee-Consumer scenario, the first step of the analysis involves identifying the parties and their transactional relationships. There are at least three primary parties in this transaction scenario: the patentee or licensor, the manufacturer or licensee, and the end-consumer. The agreement between the patentee and the manufacturer will be a “licensing” agreement. This agreement will clearly specify the restriction that the patented product may only be “leased” by the manufacturer to downstream players, including to the end-consumers. The agreement between the manufacturer licensee and subsequent downstream player will be structured as a “lease” of the patented product, with the manufacturer being the “lessor,” and the downstream player being the “lessee.” The lease agreement shall clearly specify the restriction placed by the patentee on the manufacturer. A shrinkwrap agreement may be used to effectuate the lease. The lessee may not be mandated to renew the lease but may choose to do so. This will then satisfy UCC § 1-203(b)(2). An option to purchase the product at the end of the lease is not available. This will satisfy UCC § 1-203(b)(4).

The second step and the third step of the analysis framework are substantially similar to the framework outlined in the previously described Patentee-Consumer scenario. That is, in the second step, the economic realities of the transaction are determined by assessing the (i) the economic life of the product, (ii) the fair market value of the product, and (iii) the end-of-lease plan for the patented product; whereas the third step is focused on determining the presence of a meaningful reversionary interest—either an upside gain or a down-side risk.

94 Gen. Talking Pictures Corp, 304 U.S. at 179 (finding that a license conditioning “field of use” restriction was enforceable and the licensee was guilty of patent infringement when the restriction was not followed).

95 ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1447–48 (7th Cir. 1996) (holding that computer software shrinkwrap licenses are enforceable unless their terms are objectionable on grounds applicable to contracts in general).
In the final step, additional industry-specific features can be included in the transaction structure. For example, a “refurbish/re-lease” program by the lessor for the returned products can be attractive for price-sensitive markets for products such as PCs or smartphones. Not only will the availability of lower-priced (refurbished) items enable a different (price-sensitive) market segment, but the existence of such a program will also demonstrate a meaningful reversionary interest for the lessor in the (originally) leased product.

As illustrated in the PC Supply Chain Example above (see Fig. 1), a PC involves numerous components, many of which are patented and licensed.96 A multi-license product transaction requiring coordination and alignment between multiple licensors may get complicated. The deal may become complex if some licensors require a sale of the product for reasons particular to their businesses, while others may agree to the leasing model. In this event, the agreement will need to reflect the leasing and the subsequent return of only the part that embodies the patented technology. For example, in a smartphone, if the 4G Standard Essential Patent (“SEP”) holder follows the solution proposed here, while the touch-screen patentee requires a sale to realize their revenue, the 4G SEP holder (4G

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patentee) may require the return of only the baseband chip that embodies the 4G technology.

A separate agreement or additional terms related to execution of the end-of-lease or Take-Back plan (see Fig. 1) will be required between the patentee and the manufacturer in order to ensure proper accounting of “end of lease” or “rebate” payments and to incentivize the manufacturer’s ongoing participation.

C. Risks/Weaknesses of Proposed Solution

i. UCC § 1-203 Analysis Applied to Patent Transactions

The characterization of leases and sales/security interests has been a heavily litigated area in commercial transactions as well as (and especially in) bankruptcy courts. However, there is very little case law or evidence of its application in consumer goods transactions. Further, the primary applicability of UCC § 1-203 appears to be in equipment leases in a business-to-business (B-2-B) setting. While federal and patent courts have cited UCC authority in certain areas, such as interpreting contract terms under UCC § 2-207 and § 2-209, the application and applicability of UCC § 1-203 in a patented goods transaction has not been tested in either a business environment or in case law.

ii. Untested Business Models and Financials

The proposed solution involves innovation in the business models of patentees as well as downstream players. The new business models involve a shift from “selling” to “leasing” of products. While licensing of patented products is a mature business model that has been widely adopted by patentees, licensing followed by leasing is fundamentally different from licensing followed by selling. As such, it may involve non-trivial

97 See cases supra notes 65–89.
98 Mallinckrodt, Inc., 976 F.2d at 708 n.7 (“In accordance with the Uniform Commercial Code a license notice may become a term of sale, even if not part of the original transaction, if not objected to within a reasonable time. U.C.C. § 2–207(2)(c).”); Wing Shing Prods. (BVI), Ltd. v. Simatelex Manufactory Co., 479 F. Supp. 2d 388, 405 (S.D.N.Y. 2007) (“Under the Delaware U.C.C., ‘a signed agreement which excludes modification or rescission except by a signed writing cannot be otherwise modified or rescinded.’ Del.Code Ann. tit. 6 § 2–209(2).”).
modifications to existing businesses and could present significant business
and financial risks.

iii. Practical Challenges

Even after the business model changes are adopted by the parties, the
proposed solution requires strong alignment between all of them for
successful execution. Because each party is required to enter into a binding
agreement, such alignment may be difficult to achieve. For example, there
could be accounting and financial reasons why a manufacturer licensee
may not want to enter in a leasing transaction with its customers. Similarly,
there could be logistical and resource constraints in managing product
returns and accounting of end-of-lease deposit or rebate payments. As the
complexity of the product and supply chain grows, the number of
licensors and downstream players will also increase. This can introduce
significant complexities in creating and reaching agreements between all
relevant parties. Finally, there could be disagreements regarding even basic
terms due to unknown ex-ante risk-reward distribution between the
parties. Put differently, the manufacturer licensee may not foresee the
benefits of this solutions as clearly as the patentee licensor.

Nevertheless, because the proposed solution promises to alleviate a
significant concern—that of avoiding patent exhaustion—and preserves
patent infringement claims, we believe that the patentees will be highly
motivated to explore such agreements. Future agreements will also benefit
from transaction and business data as well as litigation outcomes, if any,
of earlier agreements.

D. Additional Issues to be Considered

i. Patent Misuse and Antitrust Issues

Patent misuse may be invoked as a defense when a patentee is deemed
to engage in otherwise acceptable activities in conjunction with the
transaction relating to the patented goods.\textsuperscript{99} Tying or combining, and
requiring the consumer to participate in, such other business activities as
a condition to the patent transaction may give rise to patent misuse. Patent
misuse is typically implicated when the patentee is deemed to have market
power.\textsuperscript{100} Patent misuse is not implicated when the patentee does not have

\textsuperscript{99} 14A Chisum on Patents 5640 (2020).
market power. An infringer may raise patent misuse defense contending the proposed lease transaction structure to be an abuse of market power leading to patent misuse. This risk may be especially significant when the patentee indeed has a dominant market position.

Antitrust laws attempt to level the playing field by curbing anti-competitive behavior of market participants. In so doing, the antitrust laws work to increase competition, thereby allowing free market economics to thrive. The proposed transaction structure could be construed by regulators to constrain market participants of such economic freedom, especially if the patentee enjoys a significant competitive advantage in the given market.

ii. International Exhausation

Exhaustion triggered by an international sale may also be addressed with the proposed leasing approach. The same framework may be applied to avoid international exhaustion. However, because the transaction is occurring overseas, the assessment of whether a transaction is a “true lease” may be subject to international law. Should disputes arise, the weight international courts would afford federal common law vis-à-vis international law remains unclear.

IV. CONCLUSION

The Lexmark decision was an unwelcome ruling for the patentee community. Patentees effectively lost control over downstream uses and transactions. Further, the patentees are now being forced to recover all costs/margins in the first sale, reducing the opportunity for market segmentation or price-discrimination. The ruling on international exhaustion also opened the door for gray market imports and the resulting price arbitrage.

This proposal provides an alternative to the patentee community in structuring their patented product transaction as a lease instead of a sale, thereby avoiding exhaustion. A framework for the deal structure was developed to ensure that the lease transaction satisfies the “true lease”

101 Id. at 46.
103 Id.
criterion and withstands the test of “economic realities,” which the courts often inquire into. There is little prior work or guidance in this area, and this proposal presents a novel, though untested approach. It involves business model innovation on the patentee’s part. Such fundamental change is often difficult to implement and requires close alignment and agreement between all parties, including licensee manufacturers and end-consumers. Nevertheless, given the significant benefit patentees will realize by avoiding patent exhaustion, patentees should be highly motivated to explore this solution.

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