Honey, I Shrunk the Patent Rights:

How Implied Licenses and the Exhaustion Doctrine Limit Patent and Licensing Strategies

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Abstract: Implied license laws and the exhaustion doctrine crucially impact the drafting and negotiation of patent licenses. This presentation analyzes the case law that interprets these two doctrines. This presentation also provides frameworks for analyzing implied license and exhaustion issues and then highlights tactics to account for the doctrines when drafting and negotiating licenses. Case law interpreting the Supreme Court's important Quanta Computer, Inc. v. LG Electronics, Inc. decision also is discussed.

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1. Introduction

The patent laws exist in key part to encourage research and development. U.S. Const., Art. I, Section 8, Clause 8. This is a risk and reward system. Innovators invest in research and development and take the risk as to whether the R&D will generate patentable inventions and be commercially successful. If successful, patent owners are rewarded with exclusivity for a lengthy but limited time and the chance to reap patent-powered rewards during the term of exclusivity. It is no secret that commercially important patents can generate substantial revenues for patent owners. In exchange for the potential rewards, patent owners must disclose inventions via the patent literature so that the technology falls into the public domain when the exclusivity ends. Yet, the rewards to be earned by patent owners should be reasonable, not excessive. See Quanta Computer Inc. v. LG Electronics Inc., 553 US 617, 128 S. Ct. 2109, 86 USPQ2d 1673, 1678 (2008) (patent owners not entitled to reap "private fortunes").

Patent owners use many business models to convert the dream of rewards into actual cash flows. Under one common business model, the patent owner sells not only patented products but also unpatented, ancillary products to be used with or alongside the patented products. For example, a patent owner may sell not only manufacturing equipment but also the raw materials used by the equipment. The patent owner also may sell other products that are to be later combined with the output of the equipment. The patent owner also may even contemplate substantial business from selling replacement parts. The contemplated revenue from selling additional patented and unpatented items is a key part of the business model.

Patent owners quite commonly sell both the patented and unpatented products at a price premium. Customers, in contrast, have a strong incentive to find products at the lowest cost. These conflicting interests clash violently in patent battlefields. Gutsy customers might buy some products from the patent owner, but in parallel also seek and buy cheaper ancillary products from third parties. The concerned patent owner swoops in to enforce and protect its patent rights. The patent owner wants the customer to buy all, not some, of the customer's product needs from the patent owner.

Implied license law, the patent exhaustion doctrine, and the repair v. reconstruction doctrine (theoretically a specific aspect of implied license law) are at issue in these situations. These laws allow a gutsy customer to thwart the patent owner. In the right circumstances, any of these laws can push patent scope significantly rearward so that normally infringing activity is now impliedly licensed or exhausted. These laws take a patent owner by surprise and severely disrupt the business model and expected cash flow that the patent owner expected to earn from its patent rights.

2. Implied Licenses

There are a myriad of law and fact circumstances that create implied licenses. Scholars have commented that the law is a morass of doctrines that overlap and/or conflict. See e.g., Nimmer & Dodd, Modern Licensing Law, §§4:2-4:3 (2007). Nonetheless, the present author has found that a substantial majority of the implied license cases fall into one or more of the following categories:

- Fixing an existing contract, such as filling in gaps, correcting mistakes, interpreting ambiguities;
- Conduct/actions, often in combination with words, establish an enforeceable contract (This category is very similar to oral contracts established by words alone. It's not a big leap that words and conduct also can create a contract.);
- Preventing unjust enrichment, such as when a hired manufacturer is allowed to sell patented items to mitigate damages when the patent owner breaches its contract obligations and refuses to buy the manufactured items or such as when patent owners are allowed to earn reasonable rewards but not "private fortunes" or double recoveries; and
- Protecting or implementing important patent policies that impact the public such as overbroad extension of patent rights to unpatented items, extending patent term, price fixing, restricting competitive development, etc.

The implied license cases discussed in this paper fall into mainly the last two of these categories and are strongly powered by equity. There may or may not be patent exhaustion principles (discussed below) at play as well. Often, the cases prevent a patent owner from asserting overbroad patent scope. In others, the cases trim back otherwise legitimate claim scope on principles that the patent owner has already been fairly compensated. Often, there is conduct by the patent owner that induces reliance by the party who at the time or even much later with hindsight asserts implied license. In Bandag, Inc. v. Al Bolser's Tire Stores, 750 F2d 903, 925, 223 USPQ 982, 998 (Fed. Cir. 1984), the young Federal Circuit identified detrimental reliance as a key principle that is at play in many of the implied license cases:

> [A]n implied license cannot arise out of the unilateral expectations or even reasonable hopes of one party. One must have been led to take action by the conduct of the other party.

Met-Coil Systems Corp. v. Korners Unlimited, Inc., 803 F2d 684, 231 USPQ 474 (Fed. Cir. 1984) and Bandag, are early Federal Circuit cases addressing when authorized sales of patented items trigger implied licenses. These cases were decided in the early 1980's but remain good law. The principles of these two early cases were endorsed and expanded in the Anton/Bauer case seventeen years later in 2003. The Supreme Court's Quanta decision from 2008 endorses the law set forth in these cases, too. Several recent cases apply the law in interesting ways. Met-Coil is an optimum place to begin discussion.

2.1 Met-Coil Systems Corp. v. Korners Unlimited, Inc., 803 F2d 684, 231 USPQ 474 (Fed. Cir. 1984)

Met-Coil and its affiliates (collectively Met-Coil) developed and commercialized a duct fabrication system. The product line includes three main products that Met-Coil intended to sell to its customers

- Metal duct sections:
- Roll forming equipment that shaped the ends of the duct sections, allowing the duct sections to be interconnected with other duct components; and
- "Special" corners that were shaped to connect to the roll formed duct sections.

Met-Coil protected the equipment itself and the method of using the equipment to make ductwork from the equipment, duct sections, and corners. The corners themselves were unpatented. Even though the decision refers to the corners as "special", these were "special" in terms of their shape but not their patented status.

Met-Coil customers bought the equipment from Met-Coil. The equipment sales were unrestricted. There were no sales terms or notices at the time of sale that imposed an obligation on the equipment customers to buy ducts or corners from Met-Coil. Thus, at the time of sale, the equipment customers had no contract obligation or even knowledge that Met-Coil might require the customers to buy ducts and corners from Met-Coil. Met-Coil did issue post-sale notices to this effect.

Importantly, the Met-Coil equipment had only one reasonable and intended use, namely to be used to roll form duct sections in the patented method.

Contrary to Met-Coil's expectations, the customers bought equipment from Met-Coil but not corners. The customers bought corner pieces from the third party Korners Unlimited presumably at lower prices.

Met-Coil believed that only customers who buy all three of the equipment, ducts, and corners from Met-Coil had the authority to practice the patented method. Consequently, Met-Coil alleged that the customers who instead bought corners from the third party Korners directly infringed the Met-Coil method claims. Met-Coil sued Korners for inducing and contributing to the direct infringement. Clearly, Met-Coil was not happy that Korners usurped Met-Coil's expected revenue stream from corner sales.

Korners defended that the equipment customers had an implied license to use the equipment to practice the patented method using the third party corners obtained from Korners. Consequently, there was no direct infringement, and hence no induced or contributory infringement.

The Federal Circuit affirmed summary judgment in favor of Korners on grounds that the equipment customers enjoyed an implied license. As a consequence of the license, equipment customers of Met-Coil could buy unpatented corners from any third party. The decision clearly thwarted the business model and dessicated the revenue stream of the patent owner Met-Coil.

In reaching its decision, the Federal Circuit relied on these factors:

- The equipment sale was unrestricted.
- The equipment had only one use, which is to practice the patented method.
- The facts "plainly indicate" that a license should be implied, because there was no contrary notice or contractual obligation at the time of sale. The post-sale notice issued by Met-Coil was ineffective to impact circumstances of the earlier sale itself.
- The corners were unpatented.

Met-Coil establishes the rule that a patent owner's (or someone authorized by the patent owner as the case law developed) unrestricted sale of patented equipment (or unpatented items as the case law developed) carries an implied license to use the equipment to practice a patented method using unpatented, third party workpieces, when:

- The equipment sale is unrestricted
- The equipment has no non-infringing uses; and
- The facts plainly indicate that a license should be implied

The rule is circular. In essence, the rule states that an implied license exists legally when an implied license exists factually. This is not a lot of guidance. The rule begs the question as to when facts plainly indicate a license.

Not surprisingly, Met-Coil leaves open several questions. As one, the meaning of "plainly indicate" is not set forth. So, the boundaries of when facts are sufficient to plainly indicate something are uncharted territory. Also, what happens if the process in question involves multiple stages so that additional patented equipment is required at those additional stage(s)? Does buying a single piece of equipment from the patent owner authorize the customer to buy additional patented equipment from third parties under the implied license theory? If the special corners had been patented, would the result have been different? Could the customers buy the special corners from Met-Coil but then buy the equipment at much lower pricing from a third party? If in fact Met Coil had given notice to its customers at the time of sale, would that one fact change the outcome? What if the Met-Coil equipment had three uses, but all three were patented by Met-Coil and/or a third party? What if the Met-Coil equipment had two distinct uses, but the two uses are both physically and conceptually easy to separate?

2.2 Anton/Bauer Inc. v. PAG Ltd., 329 F3d 1343, 66 USPQ2d 1675 (Fed. Cir. 2003)

The Federal Circuit decided Met-Coil nearly 30 years ago, back in 1984. More recently in 2003, the Federal Circuit endorsed Met-Coil and extended the reach of implied license law even further in Anton/Bauer Inc. v. PAG Ltd., 329 F3d 1343, 66 USPQ2d 1675 (Fed. Cir. 2003).

Anton/Bauer invented a battery connection system that is a combination of a male plate (M) and a female plate (F). The two plates can be connected mechanically and

electrically. The plates are used to couple battery packs to cameras. The female plate (F) is attached to a camera. The male plate (M) is integrated into battery housings.

Anton/Bauer patented the combination of the M and F plates. Only the combination is protected. The M and F plates individually are unpatented. The F plate sold by Anton/Bauer has one and only one use, namely to be used in combination with an M plate.

Anton/Bauer sells both the F and M plates but only sells them separately. Anton/Bauer never sells the F and M plates together. Clearly, the Anton/Bauer business model contemplates that revenue will be generated from the individual sale of both M and F plates.

PAG disrupts Anton/Bauer's execution of its business model. PAG manufactures and sells M plates specifically designed to be used in combination with the F plates of Anton/Bauer. To the chagrin of Anton/Bauer, customers who bought F plates directly or indirectly from Anton/Bauer bought their M plates from PAG, not Anton/Bauer. PAG customers thus practiced under the Anton/Bauer patent claims protecting the M-F combination even though the customers obtained only F plates from the patent owner. Presumably, PAG sold M plates at better prices. PAG never sold F plates. Thus, any M plate sold by PAG was used only in combination with F plates properly obtained from Anton/Bauer.

PAG thereby usurped M plate sales and the corresponding revenue from patent owner Anton/Bauer. Not happy at all about this, Anton/Bauer believed that only customers who buy both F and M plates from Anton/Bauer have the authority to practice the patented combination. Consequently, Anton/Bauer alleged that the PAG customers directly infringed the Anton/Bauer combination claims when the third party M plates were combined with the Anton/Bauer F plates. Because PAG customers were the alleged direct infringers, Anton/Bauer sued PAG for inducing or contributing to the direct infringement.

PAG defended that the F plate customers had an implied license to use the properly obtained F plates in combination with unpatented M plates to practice the patented combination using the third party M plates obtained from PAG. Consequently, PAG asserted there was no direct infringement, and hence no induced or contributory infringement.

The Federal Circuit agreed with PAG and held that the customers, indeed, were impliedly licensed to make the patented combination of M and F plates with properly obtained F plates, even when using unpatented M plates obtained from any third parties.

In reaching its decision, the Federal Circuit relied on these factors:

- The F plate sales were unrestricted.
- The F plate has only one use, which is to practice the patented combination.
- The facts "plainly indicate" that a license should be implied, because there was no contrary notice or contractual obligation at the time of sale. The M plates are

unpatented. There was no Anton/Bauer conduct at the sale to make a customer think it must buy M plates only from Anton/Bauer.

- The F plate sold by Anton/Bauer is a material, not a minor, component of the patented combination (See footnote 3, 66 USPQ2d at 1680)

Note that the Anton/Bauer decision arguably both narrowed and expanded the Met-Coil rule. In a narrowing sense, the court expressly required the authorized sale item to be a material part of the claimed combination. This materiality requirement may or may not have been integral to the earlier Met-Coil decision, but certainly was not expressly stated there like it is in the Anton/Bauer case. The Anton/Bauer case broadens the Met-Coil rule by extending the rule to patented combinations based on the sale of material, unpatented portions of the combination. Met-Coil, in contrast, involved implied licenses under method claims triggered by equipment sales.

Additionally, the Anton/Bauer court explained in dicta how the outcome under an implied license theory might have been different if there had been sale restrictions or if the M plate had been patented. This suggests that sale restrictions may appropriately negate an implied license. This also suggests that patenting components of a combination would be sufficient to negate an implied license if a customer were to buy patented components from a third party. In contrast to the appropriateness of post-sale restrictions in an implied license analysis, post-sale restrictions are quite ineffective at negating exhaustion, a separate legal theory.

The Anton/Bauer case sets forth the rule that a patent owner's (or someone authorized by the patent owner) unrestricted sale of an unpatented, material component of a patented combination carries an implied license to use the properly obtained unpatented, material component in combination with unpatented components obtained from any third party to practice a patented combination when:

- The sale of the unpatented, material component by the patent owner is unrestricted;
- The material component has no non-infringing uses; and
- The facts plainly indicate that a license should be implied

The author believes that an implied license would still result if the material component obtained from the patent owner had been patented so long as the third party product is unpatented. This conclusion follows from Met Coil and Anton/Bauer viewed together, because the equipment whose sale triggered an implied license in Met Coil was patented.

2.3 More Recent Developments in implied license law

Implied licenses can be derived from an express license. Zenith Electronics Corp. v. PDI Communications Systems Inc., 522 F3d 1348, 86 USPQ2d 1513 (Fed. Cir. 2008); Jacobs v. Nintendo of America, Inc., 370 F3d 1097, 71 USPQ2d 1055 (Fed. Cir. 2004).

The scope of an implied license derived from an express grant clause cannot be construed to render the express grant meaningless. Jacobs v. Nintendo of America, Inc., 370 F3d 1097, 71 USPQ2d 1055 (Fed. Cir. 2004).

Implied licenses cannot be obtained from a licensee who has no authority to confer a right to use. Monsanto Co. v. Scruggs, 459 F3d 1328, 79 USPQ2d 1813 (Fed. Cir. 2006).

Proof of no noninfringing uses is required when an implied license is derived from an authorized sale but is not required when an implied license is derived from an express license. Zenith Electronics Corp. v. PDI Communications Systems Inc., 522 F3d 1348, 86 USPQ2d 1513 (Fed. Cir. 2008); Jacobs v. Nintendo of America, Inc., 370 F3d 1097, 71 USPQ2d 1055 (Fed. Cir. 2004).

Granting an express license to speakers included an implied license to use the speakers with any compatible televison based on the grant language. Zenith Electronics Corp. v. PDI Communications Systems Inc., 522 F3d 1348, 86 USPQ2d 1513 (Fed. Cir. 2008).

No implied license was found with respect to remote controls based upon speaker sales, because the speakers had noninfringing uses relative to the patented remotes. Zenith Electronics Corp. v. PDI Communications Systems Inc., 522 F3d 1348, 86 USPQ2d 1513 (Fed. Cir. 2008).

Existence of an implied license and its scope are separate issues. Quanta Computer Inc. v. LG Electronics Inc., 553 US 617, 128 S. Ct. 2109, 86 USPQ2d 1673, 1678 (2008); Zenith Electronics Corp. v. PDI Communications Systems Inc., 522 F3d 1348, 86 USPQ2d 1513 (Fed. Cir. 2008).

Intent with respect to downstream customers is relevant to implied license, but not to exhaustion. Transcore LP v. Electronic Transaction Consultants, 563 F3d 1271, 90 USPQ2d 1372 (Fed. Cir. 2009).

A license under a patent as to certain products carries an implied license under narrower or broader continuation patents having the same disclosure absent a clear indication to the contrary in the license. General Protecht Group Inc. v. Leviton Mftg., 651 F3d 1355, 99 USPQ2d 1275 (Fed. Cir. 2011).

Licensed sales are "authorized" for purposes of exhaustion doctrine even if licensee breached its royalty obligations when timely royalty payments is not a condition of the right to sell. Tessera Inc. v. ITC, 646 F3d 1357, 98 USPQ2d 1868 (Fed. Cir. 2011).

3. Patent Exhaustion

The patent statute protects the making, using, selling, offering to sell, and importing of patented subject matter. Patent exhaustion limits the extent to which the protectable patent rights among this litany survive after the authorized sale of a patented item. After an authorized sale, patent exhaustion prevents the patent owner from further controlling the using, selling, offering for sale, or importing of the sold item. The making right generally is not exhausted so that the buyer of the item has no right to manufacture additional patented items. In contrast to implied license law that allows post sale restrictions to restrict implied licenses, post sale restrictions on using, selling, offering to sell, or important generally are improper if exhaustion applies.

Classically, exhaustion applied when complete patent items were sold. This changed in United States v. Univis Lens Co., 316 U.S. 241, 53 USPQ 404 (1942). Univis confirms that exhaustion can apply to patent rights for a finished, patented item when only an unfinished precursor is sold that does not completely practice the patent rights associated with the finished item. Quanta Computer Inc. v. LG Electronics Inc., 553 US 617, 128 S. Ct. 2109 (2008) explores a similar issue with respect to method patent claims. Quanta addresses the issue of whether sale of items used in a portion of a patented method can exhaust rights to the method claims even if extra method steps and extra materials are further needed to fully practice the patented method.

3.1 United States v. Univis Lens Co., 316 U.S. 241, 53 USPQ 404 (1942)

Univis involved an antitrust enforcement action brought by the United States against Univis. The exhaustion doctrine was critical to whether Univis violated the antitrust laws.

Univis developed patented technology for making eyeglass lenses. First, components were fused together to make lens blanks. These were then machined typically via removal of material to convert the blanks into finished bifocal and trifocal lenses. Univis sold the blanks. Entities were licensed to convert the blanks into finished lenses. The finished lenses were patented, but the blanks were unpatented. The lens blanks had one intended use, namely to be converted into finished lenses under the patent.

Univis sold the blanks but then also controlled the pricing at which the licensees could sell the finished lenses. The government alleged that this price fixing violated the antitrust laws. Univis countered that its pricing practice was proper because Univis patent rights that protected the finished lenses. The government countered that Univis exhausted its patent rights when the unpatented lens blanks were sold. Hence, the price restrictions on the sale of finished lenses could not be shielded or justified by the patent rights.

The outcome depended upon whether sale of the incomplete lens blanks triggered exhaustion of the patent rights for the finished lenses. Recognizing that the incomplete lens blanks did not fully practice the patent rights, the Supreme Court nonetheless determined that exhaustion applied to the sale of the blanks based on the following factors:

- The patent owner made an authorized sale (Note that the sales were restricted, but these restrictions were ignored for purposes of an exhaustion analysis.).
- The lenses had only one intended use, namely to be converted into finished lenses. Indeed, the lenses were "without utility until . . . ground and polished as the finished lens of the patent." Univis, 316 US at 249.
- The lens blanks sufficiently embodied essential features of the patent. Note that Univis does not seem to require that the blanks embody all essential features in

contrast to discussion in the later Quanta case that seems to require that all essential patent features be embodied for exhaustion to apply to method claims.

Univis significantly impacts patent rights. A patent owner who sells or authorizes others to sell components, raw materials, or partially finished items (patented or unpatented) of a patented combinations risks exhausting patent rights in the combination in the absence of careful development of both business and patenting strategies. Otherwise, the ability of the patent owner to generate sales or royalty revenues for the combination otherwise can be seriously compromised by exhaustion.

3.2 Quanta Computer Inc. v. LG Electronics Inc., 553 US 617, 128 S. Ct. 2109 (2008)

Quanta shows that method claims are vulnerable to exhaustion risks just the same as any other kind of patent claim. LGE owned and controlled patent rights including method claims relating to computer processing. LGE licensed Intel to sell products that practiced the LGE patent rights. Although the proper construction of the license was in dispute, ultimately the Supreme Court determined that the licensee Intel was authorized to sell Intel products and customers were allowed to use the Intel products in combination with non-Intel products to make computers. Intel sold microprocessors and chipsets and the issue was whether these authorized sales triggered exhaustion of method claims involving use of computers incorporating these Intel products. Notably, the Intel products were only part of the resultant computers.

Intel sold chips and microprocessors to its Customer Quanta. Quanta used these components to manufacture computers that Quanta sold to the marketplace. Quanta procured other computer components such as memory and wiring from third party vendors. Quanta manufactured the Quanta computers using both the Intel microprocessors and chipsets and the third party components in combination. The resultant Quanta computers practiced the LGE method claims.

LGE believed that Quanta infringed its method claims by using Intel and non-Intel components in combination to make the Quanta computers. According to LGE, Quanta needed to procure all its components from Intel in order to avoid infringement. LGE sued Quanta for infringement. Quanta defended on grounds that Intel's legitimate sale of microprocessors and chipsets to Quanta exhausted the LGE method claims as to computers that incorporated those Intel products.

A threshold issue was whether method claims could even be exhausted. The lower courts dismissed the idea that method claims could be exhausted. Initially, the District Court thought exhaustion could apply to method claims, but later changed its ruling and concluded that exhaustion does not apply to method claims. The Federal Circuit agreed that exhaustion does not apply to method claims. Alternatively, even if exhaustion were in play, the Federal Circuit construed the license in a manner that did not authorize Intel customers to use the Intel chipsets and microprocessors in combination with third party products.

The Supreme Court reversed and held that, indeed, method claims could be exhausted. The Court reasoned that a contrary rule would allow patent holders to avoid exhaustion entirely by inserting patent claims in their specifications. Further, a contrary rule could allow patent holders to control the sale of items multiple times throughout the chain of distribution.

Clearly, the sanctity of the exhaustion doctrine is important to the Court. If the Court finds circumventing claim strategies to be offensive to the exhaustion doctrine, then licensing strategies that unduly limit the doctrine might end up being too offensive as well.

Having determined that method claims could be exhausted in appropriate circumstances, the Court then derived a rule to evaluate exhaustion of method claims. According to the Court, method claims are exhausted when:

- There is an authorized sale of a product or component used in the practice of the method;
- The product that is sold substantially embodies the patented method; and
- The only reasonable use of the product sold is in the patented method.

The Court applied its framework to the facts at hand. First, the Supreme Court disagreed with the Federal Circuit's construction of the license and determined that the license between Intel and LGE authorized Intel to sell microprocessors and chipsets to third parties. Further, the license did not block Intel customers from using the Intel products in combination with third party products. Hence, the sale of the chipsets and microprocessors by Intel to Quanta was authorized, and Quanta's use of both Intel and non-Intel products to make computers was proper.

Interestingly and in contrast to the rights accorded Intel customers, the Court construed the license in a manner so that Intel itself could not sell its products in combination with non-Intel products. It is an unusual license construction, indeed, where a licensee can give customers rights that the licensee itself does not have!

The Court also addressed factors to conclude that the only reasonable and intended use of the chipsets and microprocessors was in the patented method. The Court noted that the Intel products purchases by Quanta had no utility unless used in the patented method. The Intel products have to be integrated into computers to be useful. No alternative use was proposed by LGE, and the Court could not discern one.

Finally, the Court addressed several factors to conclude that the Intel chipsets and microprocessors embodied the patented method claims:

- Even though additional method steps and additional items were needed to fully practice all of the claimed method steps, these were all standard steps and off the shelf items.

- No other patents protected the extra steps or components needed to complete the method combination.
- All novelty resided in the products sold, not in the extra features added by Quanta to complete the combination.
- The LGE patents themselves expressly teach that the extra steps and items are standard, conventional. Little detail is offered for these, further indicating their commonness.
- The extra steps and items are incidental to the invention.
- Quanta needed no independent creativity or innovation to complete the combination. The Court did not address patent details, but this implies that Quanta had no patent protection of its own on point.
- Quanta used the Intel microprocessors and chipsets as is without modification. Quanta also followed Intel specifications.

As a further point of interest, the Court recognized that the Intel license expressly negated implied licenses, but stated that a clause that negates an implied license does not negate exhaustion. Consequently, the Court confirmed that implied license and the exhaustion doctrine are distinct, independent legal theories.

In sum, when the right circumstances are present, Quanta confirms that sale of items used in a portion of a patented method can exhaust rights to the entire method even if extra method steps and extra materials are further needed to fully practice the patented method. After Quanta, the potency of method claims can be watered down considerably if exhaustion is unintentionally triggered by product sales.

3.3 More Recent Developments in the Exhaustion Doctrine

Purchase of seeds from licensee cannot be authorized sale for purposes of exhaustion when sale is contrary to terms of license. Monsanto Co. v. Scruggs, 459 F3d 1328, 79 USPQ2d 1813 (Fed. Cir. 2006).

Second generation seeds grown by buyer from first generation seeds have never been "sold" for purposes of triggering exhaustion. Monsanto Co. v. Bowman, 657 F3d 1341, 100 USPQ2d 1224 (Fed. Cir. 2011); Monsanto Co. v. Scruggs, 459 F3d 1328, 79 USPQ2d 1813 (Fed. Cir. 2006); Monsanto Co. v. McFarling, 302 F.3d 1291, 64 USPQ2d 1161 (Fed. Cir. 2002).

Inapplicability of exhaustion to second generation seeds does not eviscerate exhaustion doctrine as to self-replicating products, because applying exhaustion would eviscerate the patent rights for self-replicating products. Also, the new seeds have never been sold. The patent owner also was compensated only for the first generation seeds, so the patent owner is not unjustly enriched by the holding. Monsanto Co. v. Bowman, 657 F3d 1341, 100 USPQ2d 1224 (Fed. Cir. 2011).

The Federal Circuit indicates that sales of first generation of self-replicating product could exhaust patent rights as to second and subsequent generations if the only use of the product was to replicate itself. Monsanto Co. v. Bowman, 657 F3d 1341, 100 USPQ2d 1224 (Fed. Cir. 2011).

Without an actual sale, there can be no exhaustion. In contrast to the first generation seeds, the second generation seeds were never sold by the patent owner. Monsanto Co. v. Scruggs, 459 F3d 1328, 79 USPQ2d 1813 (Fed. Cir. 2006).

The fact that a patented technology replicates itself does not exhaust patent rights to the replicated copies as this eviscerates the rights of the patent holder. Monsanto Co. v. Scruggs, 459 F3d 1328, 79 USPQ2d 1813 (Fed. Cir. 2006).

Based on language used, a covenant not to sue authorized sales for purposes of the exhaustion doctrine. Transcore LP v. Electronic Transaction Consultants, 563 F3d 1271, 90 USPQ2d 1372 (Fed. Cir. 2009).

Sales authorized by earlier covenant not to sue exhausted rights in a future patent. Transcore LP v. Electronic Transaction Consultants, 563 F3d 1271, 90 USPQ2d 1372 (Fed. Cir. 2009).

Intent with respect to downstream customers is relevant to implied license, but not to exhaustion. Transcore LP v. Electronic Transaction Consultants, 563 F3d 1271, 90 USPQ2d 1372 (Fed. Cir. 2009).

To invoke protection of exhaustion doctrine, the authorized sale must have occurred under the U.S. Patent at issue. Hence, sale in foreign territory does not trigger exhaustion. Ninestar Technology Co. v. ITC, 667 F3d 1373, 101 USPQ2d (Fed. Cir. 2012); Jazz Photo Corp. v. ITC, 264 F3d 1094, 59 USPQ2d 1907 (Fed. Cir. 2001).

The Quanta decision decided in 2008 did not eliminate the territory requirement that a sale must occur under a U.S. Patent to trigger exhaustion. Ninestar Technology Co. v. ITC, 667 F3d 1373, 101 USPQ2d (Fed. Cir. 2012).

4. Repair v. Reconstruction Doctrine

4.1 Overview

The repair v. reconstruction doctrine (RRD) is another doctrine that limits patent scope. You are significantly impacted by the RRD if you sell patented items, such as capital equipment, for which there is a sizeable used equipment market. You also are significantly impacted by the RRD if you generate a substantial portion of your revenues from replacement parts or service for the patented items you sold. One consequence is that your patent rights might protect you very well in the new sales market, but not at all or poorly in the used market. Your replacement parts business might be vulnerable, too, unless key features of key replacement parts are themselves protected by patents.

The RRD divides refurbishment activity into two main categories: repair and reconstruction. A refurbisher is permitted to "repair" a patented item but is not permitted to "reconstruct" a patented item. Repair means that anyone who buys a patented item, or licenses it without applicable license restrictions, has an implied right to repair that item and keep it in proper working order. Thus, repair activities are impliedly licensed, but not reconstruction activities. A refurbisher can repair patented items without violating patent rights that protect the patented item.

In contrast to "repair" rights, a refurbisher has no rights under the RRD to "reconstruct" a patented item. Generally, reconstruction, not repair, occurs if the refurbisher reconstructs a totally worn or spent product to make it operable again (but see Jazz Photo Corp. v. ITC, 264 F3d 1094, 59 USPQ2d 1907 (Fed. Cir. 2001), which uses the RRD to authorize extensive refurbishment of totally spent, single use cameras) or reconstructs the item so extensively that it is transformed into a new article.

A patent owner may have patent rights that cover replacement parts and/or refurbishment methods. Under current case law, the RRD does not authorize a refurbisher to undertake refurbishment activities that involve such patented replacement parts or refurbishment methods. In RRD parlance, such refurbishment constitutes impermissible reconstruction, not repair. This means that a patent owner can obligate you to buy patented replacement parts and patented services only from authorized sources. Interestingly, this also highlights important differences between patents that protect entire products and patents that only protect components. Patents that protect key components and repair methods are very important to protect against refurbishment activity in the used equipment market and might also help protect new sales. Alas, patents more broadly protecting entire systems are mainly useful for new sales and are much less potent in the used market.

Overzealous patent owners may try to tie sales of patented items with the sale of unpatented items or services. For example, that new, patented car you just bought from Acme Motors might need an oil change in a few months. Can Acme obligate you to buy unpatented oil change services from them as a condition of their selling the car to you? Apart from the antitrust implications of this tie, the RRD would not permit the tie either. Under the RRD, you have a right to repair your car using unpatented parts and services.

The patent owner cannot leverage patent rights to force you to buy its other unpatented items or services, but force is key. The patent owner can still offer to such unpatented items and services to you if undue patent leverage is absent.

The RRD attempts to balance competing interests between the patent owner and the public. On the one hand, the public should respect patent rights. On the other hand, the public should be protected from overzealous patent owners who try to extend patent rights to encompass unpatented items.

To evaluate whether refurbishment activities are proper or not, understanding the definitions of "repair" and "reconstruction" is crucial. You may think that it is relatively easy to categorize competitive activities as either repair or reconstruction. In some circumstances, it arguably is easy. But in many commercially important scenarios, it is difficult to determine if conduct is repair or reconstruction. The distinction between

repair and reconstruction is grey in many fact patterns. Patent owners and refurbishers fight over the RRD with some frequency. Laws continue to evolve.

Trying to predict an outcome can be a minefield for both parties. A patent owner risks violating the antitrust laws via conduct that unduly attempts to restrict repair activities or otherwise overextend its patent rights. There are criminal and civil ramifications. The Univis case discussed above is a good example of this, as that case involved an enforcement action by the United States against an allegedly overzealous patent owner who overextended patent rights to fix prices. An aggressive refurbisher who falls on the reconstruction side of the fence risks exposure to damages for patent, trademark, trade secret, copyright, contract, or other rights.

In most instances, patented items are sold or licensed. Restrictions on sold goods are more likely to implicate anticompetitive laws and/or be unenforceable. A patent owner can use more restrictions in a license, but even these can be troublesome. Outright restrictions on repair likely would be disfavored as would be provisions that fix prices, mandate that repairs can be performed only by authorized sources, set up boycotts, tie in, tie out, mandate overly broad grant backs of rights, restrict competitive development, etc.

Currently, courts have a strong bias favoring repair over reconstruction. A substantial majority of published decisions reach holdings of repair, not reconstruction. This does not mean that reconstruction is a dead letter, though. The most egregious, clear cut cases might never make it to trial or be appealed. It is fair to presume that the reported trial and appellate decisions tend to involve close cases. Consequently, the bias for repair in the case law means that repair tends to be favored in close cases, not all cases.

Certain fact patterns are common. Common fact patterns and the outcomes are listed in the following table shown on the next page.

4.2 Table of Common Fact Patterns

Common Fact Patterns	Repair or Reconstruction?
Take out, clean, and replace a part.	Almost always repair:
Replace a patented part with another patented part	Almost always reconstruction.
Replace a patented part with an unpatented part with same or different functionality	Likely repair, but could be reconstruction depending upon claim scope
Replace a missing part.	Some cases say this is reconstruction.
Early replacement of a part	Repair, unless another category is applicable
Replace an unpatented part with an unpatented part	Almost always repair
Both new machine and old machine exist	Almost always reconstruction.
Old machine discarded after new machine put together.	Almost always reconstruction.
Old machine has worn out completely and new machine put together in framework of old machine	Likely to be reconstruction. *But see Jazz Photo Corp. v. ITC*, 264 F3d 1094, 59 USPQ2d 1907 (Fed. Cir. 2001)
New functionality is incorporated into old machine by replacing some components with new ones	Can be repair or reconstruction, but trend seems to favor repair
Disassemble a machine, clean and service the parts, and reassemble the machine	Almost always repair:
Disassemble several machines, and then rebuild the best parts into fewer machines	Likely to be repair.