

## Note

### ***Quanta* and Patent Exhaustion: The Implications of the Supreme Court's Decision in *Quanta Computer, Inc. v. LG Electronics, Inc.* One Year Later**

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#### I. INTRODUCTION

Patent exhaustion is an historic doctrine stemming from Supreme Court decisions. In essence, patent exhaustion states that the authorized sale of an article that substantially embodies a patent exhausts the patent holder's rights. In other words, once a patent holder sells a patented article, he may not collect royalties from second, third or later owners of the same patented article. This doctrine protects purchasers or licensees of patented items by preventing patent holders from collecting duplicitous royalties. While patent exhaustion has been developed judicially, the last time the Supreme Court addressed it in depth was in 1942. Since then, the landscape of technology has been revolutionized in ways unimagined in 1942, and lower courts have applied the doctrine to the field of computers, electronics, and other areas of advanced technology with varying results.

On June 9, 2008, the United States Supreme Court handed down a new decision on patent exhaustion, part of a series of significant decisions relating to patents.<sup>1</sup> While many of the

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1. See *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2117 (2008) (clarifying that patent exhaustion applies to method claims); see also *Bilski v. Doll*, 129 S. Ct. 2735 (2009) (granting certiorari); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419–20 (2007) (lowering the bar for a finding of unpatentability due to nonobviousness); *MedImmune, Inc. v. Genentech, Inc.*, 549 U.S. 118, 128–132, 137 (2007) (expanding the standing of licensees in challenging patent validity); *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437,

practical implications of *Quanta v. LG Electronics* are yet to be seen, the decision is written narrowly enough that, if applied by lower courts with careful attention to patentable distinction and the intent of the parties in a contract, it will have minimal effects on the status quo in patent law. Additionally, the *TransCore* court's application of *Quanta's* clarification of patent exhaustion to covenants not to sue provides helpful guidance that will allow patent professionals to anticipate the effect that patent exhaustion will have on their work.<sup>2</sup>

This Comment provides a legal overview of the historical doctrine of patent exhaustion and discusses permissible limitations on patent rights. Next, it follows the progression of the *Quanta v. LGE* decision as it made its way from the Northern District of California to the Supreme Court. Finally, it considers the implications that the Supreme Court's decision has had and will continue to have for lower courts and patent professionals, and how these institutions and individuals ought to apply the ruling.

## II. A LOW RESOLUTION SKETCH OF QUANTA AND RELATED PATENT DOCTRINES

### A. PATENT EXHAUSTION: NO AUTOMATED REFRESH

Patent exhaustion, also referred to as the "first sale doctrine," is a judicial doctrine established by the Supreme Court.<sup>3</sup> Patent exhaustion essentially states that the authorized sale of an article that substantially embodies a patent exhausts the patent holder's rights. In *Bloomer v. Millinger*, the Supreme Court first described patent holders' rights and their relationship to patent exhaustion:

Patentees acquire the exclusive right to make and use, and vend to others to be used, their patented inventions for the period of time specified in the patent, but when they have made and vended to others to be used one or more of the things patented, to that extent

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452–54 (2007) (limiting patent holders' ability to recover damages for international infringement).

2. *TransCore, LP v. Elec. Transaction Consultants Corp.*, 563 F.3d 1271, 1274–77 (Fed. Cir. 2009).

3. *See, e.g., Adams v. Burke*, 84 U.S. 453, 456–57 (1873) (holding that when a patentee receives royalties for the full use of his patented article, that article has passed beyond his control); *Bloomer v. Millinger*, 68 U.S. (1 Wall.) 340, 350 (1863) (noting that patent owners are entitled to only one royalty for a patented machine).

they have parted with their exclusive right. They are entitled to but one royalty for a patented machine, and consequently when a patentee has himself constructed the machine and sold it, or authorized another to construct and sell it, or to construct and use and operate it, and the consideration has been paid to him for the right, he has then to that extent parted with his monopoly, and ceased to have any interest whatever in the machine so sold or so authorized to be constructed and operated.<sup>4</sup>

The foundational rule articulated in *Bloomer v. Millinger* has seen little change throughout the development of modern patent law, and has been applied in numerous other cases. For example, *United States v. Univis Lens Co.* is a foundational 20<sup>th</sup> century patent exhaustion case arising out of an antitrust dispute brought by the United States against Univis Lens.<sup>5</sup> Univis owned a number of patents on multifocal lenses used in eyeglasses.<sup>6</sup> Univis licensed its patents to a related organization, in which Univis held a majority of the stock, to manufacture blank lenses and sell them to specified patentees.<sup>7</sup> Univis's framework required licensee wholesalers, finishing retailers and prescription retailers to abide by a price maintenance program governing costs of finished and unfinished lenses.<sup>8</sup> This price maintenance formed the foundation for the government's antitrust complaint.<sup>9</sup> In contrast to the government's argument, the Court noted Univis's interest in controlling the prices of the lenses because finishing the lenses into a usable product required the use of its patented inventions.<sup>10</sup>

The Supreme Court found that Univis's patents were exhausted because, in large part, each lens blank had no practical utility outside of being processed into an eyeglass lens.<sup>11</sup> The Court went on to say:

[W]here one has sold an uncompleted article which, because it embodies essential features of his patented invention, is within the protection of his patent, and has destined the article to be finished by the purchaser in conformity to the patent, he has sold his invention so far as it is or may be embodied in that particular article. . . . In

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4. *Bloomer*, 68 U.S. (1 Wall.) at 350.

5. *United States v. Univis Lens Co.*, 316 U.S. 241, 242–43 (1942).

6. *Id.* at 243.

7. *Id.*

8. *Id.* at 244–45.

9. *Id.* at 248.

10. *See id.* at 248–49.

11. *Id.* at 249–50.

construing and applying the patent law so as to give effect to the public policy which limits the granted monopoly strictly to the terms of the statutory grant, the particular form or method by which the monopoly is sought to be extended is immaterial. The first vending of any article manufactured under a patent puts the article beyond the reach of the monopoly which that patent confers.

*Whether the licensee sells the patented article in its completed form or sells it before completion for the purpose of enabling the buyer to finish and sell it, he has equally parted with the article, and made it the vehicle for transferring to the buyer ownership of the invention with respect to that article.*<sup>12</sup>

The phrase “embodies essential features” and the reference to giving effect to “public policy” governing patent law are of particular note. The idea of essentially embodying the invention is an important element of patent exhaustion today, as discussed later, but the point at which an item “essentially embodies” a patented invention is often difficult to discern.<sup>13</sup> Public policy forms a foundation for the doctrine of patent exhaustion, and thus is always a significant consideration in patent litigation.<sup>14</sup> Finally, *Univis* makes it clear that the authorized purchase of an unfinished article carries with it the right to complete the article in those cases where the article has no practical purpose outside of that covered by the patent.<sup>15</sup>

Over time, courts have extended the principle of patent exhaustion beyond a single unfinished authorized article to apply to higher level assembly products where one component is an authorized article.<sup>16</sup> *Cyrrix Corp. v. Intel Corp.*<sup>17</sup> exemplifies this shift in a patent infringement context. In *Cyrrix*, Intel had obtained a patent, the first claim of which

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12. *Id.* at 250–52 (emphasis added) (citations omitted).

13. See *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S.Ct. 2109, 2118–20 (2008) (comparing the lenses in *Univis* which embodied the essential features of the patent to the microprocessors in the present case, which also embodied the essential features of the patent).

14. See Julie E. Cohen & Mark A. Lemley, *Patent Scope and Innovation in the Software Industry*, 89 CAL. L. REV. 1, 31–32 (2001) (comparing the foundations of patent exhaustion with implied license and concluding that they are based on different policies, and can therefore result in different outcomes).

15. *Univis*, 316 U.S. at 250.

16. William P. Skladony, *Commentary on Select Patent Exhaustion Principles in Light of the LG Electronics Cases*, 47 IDEA 235, 238 (2007).

17. 846 F. Supp. 522 (E.D. Tex. 1994), *aff'd*, 42 F.3d 1411 (Fed. Cir. 1994).

covered a microprocessor device.<sup>18</sup> Claims 2 and 6 covered the combination of claim 1 with different types of external memory.<sup>19</sup> Intel brought suit against Cyrix, the customer of one of its licensees, alleging that it infringed claims 2 and 6 for combining the microprocessor device covered by claim 1 with external memory.<sup>20</sup> While Intel's license to the vendor, who sold microprocessors to Cyrix, explicitly covered both these microprocessors and even microprocessors used in combination with Intel products, it did not cover the microprocessors used in combination with non-Intel products.<sup>21</sup> The district court's decision recognized parallels between Intel's microprocessors and the products at issue in *Univis*.<sup>22</sup> The court noted that Cyrix had no practical option for the use of the authorized microprocessors other than to combine them with external memory, thereby infringing claims 2 and 6.<sup>23</sup> The court found that "[t]he sale . . . of a claim 1 microprocessor exhausts Intel's patent rights . . . including without limitation in claims 1, 2 and 6. . . . Intel is barred by the doctrine of patent exhaustion from asserting claims 2 and 6 . . . against Cyrix . . . ." <sup>24</sup>

Neither *Cyrix* nor *Univis* addresses an important concept often discussed in the context of patent exhaustion: patentable distinctiveness. According to the principle of patentable distinctiveness, if in a combination claim or patent, both the authorized component and combination are patentably separate and distinct, that claim or patent is not exhausted by the authorized sale or use of the component alone.<sup>25</sup> This concept was further described by the court in *In re Horneman*:

It is settled law that a party might be entitled to a patent for a combination because of the cooperation of the elements contained therein, and at the same time be entitled to a separate patent for one of the elements of the combination. In such a case, the question to be determined is whether two or more different inventive concepts are involved. If the claims are so related that the separately claimed

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18. *Id.* at 541.

19. *Id.*

20. *Id.* at 528, 531.

21. *Id.* at 534–35.

22. *Id.* at 540.

23. *Id.* at 541.

24. *Id.*

25. See John W. Osborne, *A Coherent View of Patent Exhaustion: A Standard Based on Patentable Distinctiveness*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 643, 674 (2004).

element constitutes the essential distinguishing feature of the combination as claimed, different concepts are not involved, the inventions are not distinct, and double patenting will be found. Conversely, where the element does not constitute the sole distinguishing novelty in the combination the inventions are distinct and double patenting will not be found.<sup>26</sup>

The *Horneman* court also highlighted the implications of claiming combinations where the combination itself does not involve a unique inventive concept. While this practice will generally be compensated for during the patent prosecution process when the claims appear in separate patents, it is likely that claims to a unique inventive concept and claims to the combination of that inventive concept with elements that are well known will appear in the same patent.<sup>27</sup>

#### B. PATENTS AND CONTRACTS: AS INTERCONNECTED AS MICROPROCESSORS AND MEMORY

As demonstrated by *Cyrix* and *Univis*, contractual agreements play significant roles in patent practice and theory. The concept of an “authorized” article in patent exhaustion is dependent upon the contractual relationships between the parties involved. It is well established that patents, like other types of property, can be governed by contracts.<sup>28</sup> A patentee may “withhold rights granted under the patent laws, but may not impose any limitations on the sale of an article which are outside the bounds of the rights granted under the patent laws.”<sup>29</sup> Such a restriction or limitation within the bounds of rights granted by the patent laws is lawful and cannot be negated by the patent exhaustion doctrine.<sup>30</sup> Such restrictions

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26. *In re Horneman*, 92 U.S.P.Q. 316, 319 (C.C.P.A. 1952).

27. If a single party files two patent applications on the same date, where one claims a unique inventive concept and the other claims that same concept in combination with well known elements, the examiner will likely issue an obviousness-type double patenting rejection and require the party to file a terminal disclaimer. The terminal disclaimer will disclaim any patent term for one patent that may extend beyond the life of the first patent to expire and promise not to sell or license the patents separately from each other. If a single patent contains claims directed both to the inventive concept alone and the inventive concept in combination with known elements, both claims will likely be allowed if the examiner finds that the claim directed to the inventive concept alone meets statutory requirements for patentability.

28. *See, e.g.*, Osborne, *supra* note 25, at 660.

29. Osborne, *supra* note 25, at 658.

30. *See id.* But this raises a question of what restrictions and limitations are within the bounds of rights granted by the patent laws.

must be clear and explicit: “purchasers of patented goods who lack knowledge of any restrictions should be free to use the goods in an unlimited manner . . . .”<sup>31</sup>

For example, the district court in *Western Electric Co. v. General Talking Pictures Co.* found that sale by license did not deprive the patent owners of the right to exclude the defendant from particular fields of operation and distribution.<sup>32</sup> *General Talking Pictures* was later affirmed by the Supreme Court, which made clear that the doctrine of patent exhaustion only applies to implied, not explicit, restrictions on purchased goods.<sup>33</sup> This limitation parallels the concept of covenants on real property, which are traditionally enforceable only if the purchaser had constructive notice of the restriction.<sup>34</sup> In *Pioneer Hi-Bred International, Inc. v. Ottawa Plant Food, Inc.*, the district court upheld license restrictions on genetically modified seeds where the conditions were explicitly noted on the label of the product.<sup>35</sup> In *Hewlett-Packard v. Repeat-O-Type*, the Federal Circuit emphasized the necessity that a restriction or condition must be explicit: “A noncontractual intention is simply the seller’s hope or wish, rather than an enforceable restriction.”<sup>36</sup> In that case, Hewlett-Packard had included the instructions “discard old print cartridge immediately” in its instruction manual for a printer and contended that this created an enforceable condition preventing reuse of the cartridges.<sup>37</sup> The Federal Circuit held that this did not create a conditional sale; the cartridges were instead sold unconditionally.<sup>38</sup>

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31. *Id.*

32. *W. Elec. Co. v. Gen. Talking Pictures Corp.*, 16 F. Supp. 293, 298 (S.D.N.Y. 1936), *aff’d*, 91 F.2d 922 (C.C.P.A. 1937), *aff’d sub nom.* *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175 (1938), *aff’d on reh’g*, 305 U.S. 124 (1938).

33. *See* *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175 (1938). *But see* Shubha Ghosh, *Carte Blanche, Quanta, and Competition Policy*, 34 J. CORP. L. 1209, 1226 (2009) (arguing that the doctrine of patent exhaustion is mandatory, and thus a contract term that purports to limit the application of patent exhaustion may be preempted).

34. Osborne, *supra* note 25, at 660 n.53.

35. *Pioneer Hi-Bred Int’l, Inc. v. Ottawa Plant Food, Inc.*, 283 F. Supp. 2d 1018, 1048–49 (N.D. Iowa 2003).

36. *Hewlett-Packard Co. v. Repeat-O-Type Stencil Mfg. Corp.*, 123 F.3d 1445, 1453 (Fed. Cir. 1997).

37. *Id.* at 1447, 1453.

38. *Id.* at 1455.

While sales of patented articles can be lawfully restricted, patent exhaustion cannot be disclaimed.<sup>39</sup> In *United States v. Masonite Corp.*, the Court found that a patentee could not assert that exhaustion of a combination claim was disclaimed where the patentee had recovered a full royalty for the combination through the sale of a component of the combination:<sup>40</sup>

[W]hen the patented product 'passes to the hands of the purchaser, it is no longer within the limits of the monopoly. It passes outside of it, and is no longer under the protection of the act of Congress.' . . . In applying that rule this Court has quite consistently refused to allow the form into which the parties chose to cast the transaction to govern. The test has been whether or not there has been such a disposition of the article that it may fairly be said that the patentee has received his reward for the use of the article.<sup>41</sup>

Intent of the parties involved in a patent agreement is critical to construing the extent of the rights involved, because a patent agreement is treated as a traditional contract.<sup>42</sup> The Supreme Court made this clear in *Mallinckrodt, Inc. v. Medipart, Inc.*:

Unless the condition violates some other law or policy . . . private parties retain the freedom to contract concerning conditions of sale . . . . The appropriate criterion is whether Mallinckrodt's restriction is reasonably within the patent grant, or whether the patentee has ventured beyond the patent grant and into behavior having an anticompetitive effect not justifiable under the rule of reason. Thus a lawful express restriction cannot be negated by the doctrine of patent exhaustion. This is true because an unconditional sale, required for patent exhaustion, cannot exist where there is a lawful express restriction.<sup>43</sup>

The principle of respecting parties' intent is long established and is viewed as an important tenant of contract law. One author went so far as to say, "it is beyond question that [a]n agreement respecting patent rights is a contract and must therefore be construed so as to give effect to the intent of the parties."<sup>44</sup>

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39. Osborne, *supra* note 25, at 662.

40. *United States v. Masonite Corp.*, 316 U.S. 265, 277-78 (1942).

41. *Id.* (quoting *Bloomer v. McQewan*, 55 U.S. (14 How.) 539, 549 (1852)) (citations omitted).

42. See Osborne, *supra* note 25, at 660.

43. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700, 708 (Fed. Cir. 1992) (citations omitted).

44. John W. Osborne, *Justice Breyer's Bicycle and the Ignored Elephant of Patent Exhaustion: An Avoidable Collision in Quanta v. LGE*, 7 J. MARSHALL

Intent is also an important consideration when analyzing a quasi-contract corollary to patent exhaustion: implied contract. While patent exhaustion is based in patent policies that somewhat limit the rights of a patent holder, implied contract stems from contract law. Because “implied license is a doctrine of quasi-contract, [it] depends on the beliefs and expectations of the parties to the sales transaction.”<sup>45</sup> The doctrine of implied contract often results in the same end as patent exhaustion: “[B]uying a product carries with it an implied right to use and resell the product.”<sup>46</sup> Because contract theory and patent law have different underlying policies, however, applying patent exhaustion or implied contract doctrine to a particular situation can easily lead to divergent results.<sup>47</sup>

### C. *QUANTA V. LGE*: THE CROSSED WIRES OF PATENT EXHAUSTION AND CONTRACT LAW

*Quanta v. LGE*<sup>48</sup> is located at the frequently traversed intersection of patent law and contract law. Its journey from the Northern District of California to the Supreme Court is described below.

#### 1. District Court

*Quanta* began as two cases in the Northern District of California, decided in 2002 and 2003: *LG Electronics, Inc. v. Advance Creative Computer Corp.*<sup>49</sup> and *LG Electronics, Inc. v. Asustek Computer, Inc.*,<sup>50</sup> respectively. Both cases centered around a set of six computer related patents owned by LG Electronics (LGE),<sup>51</sup> though only three were at issue in the

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REV. INTELL. PROP. L. 245, 259 (2008).

45. Cohen & Lemley, *supra* note 14, at 31–32.

46. *Id.* at 31.

47. One author describes patent exhaustion as a mandatory rule of patent licensing and implied licenses as a default rule of patent licensing. If there are no restrictions, then a downstream user has the right to use the patented invention under the doctrine of implied license. But if there are restrictions that extend beyond the scope of the patent holder’s rights, then patent exhaustion applies as a mandatory rule, allowing a downstream user to practice the patented invention. *See Ghosh, supra* note 33, at 1229.

48. 128 S. Ct. 2109 (2008).

49. 212 F. Supp. 2d 1171 (N.D. Cal. 2002).

50. 248 F. Supp. 2d 912 (N.D. Cal. 2003).

51. *Asustek Computer*, 248 F. Supp. 2d at 914; *Advance Creative*, 212 F. Supp. 2d at 1173–74.

consolidated Supreme Court case: U.S. Patent Nos. 4,939,641 ('641); 5,379,379 ('379); and 5,077,733 ('733).<sup>52</sup> The '641 patent disclosed a system for ensuring that the most current data in a computer system are retrieved from memory by monitoring requests and updating main memory from the cache when the data requested are more current in the cache than in the main memory.<sup>53</sup> The '379 patent relates to coordinating read and write requests to the main memory.<sup>54</sup> The '733 patent describes methods for managing data traffic on a bus connecting two computer components.<sup>55</sup>

LGE had licensed a patent portfolio, including the three patents described above, to Intel Corporation (Intel) in an agreement that permitted Intel to manufacture and sell microprocessors and chipsets that use the LGE patents.<sup>56</sup> The agreement explicitly authorized Intel to "make, use, sell (directly or indirectly), offer to sell, import or otherwise dispose of" its products practicing the LGE patents.<sup>57</sup> However, the license did stipulate that no license

is granted by either party hereto . . . to any third party for the combination by a third party of Licensed Products of either party with items, components, or the like acquired . . . from sources other than a party hereto, or for the use, import, offer for sale or sale of such combination.<sup>58</sup>

Additionally, the license claimed not to limit or alter the effect of patent exhaustion that would otherwise apply.<sup>59</sup> In a separate written agreement (Master Agreement), Intel agreed to give notice to any of its own customers that the license with LGE "does not extend, expressly or by implication, to any product that you make by combining an Intel product with any non-Intel product."<sup>60</sup>

The two original district court cases involved customers of Intel who had combined products licensed by the LGE patents with non-Intel products. In the case involving Advance Creative, LGE alleged that the defendant along with another

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52. *See Quanta*, 128 S. Ct. at 2113.

53. *Id.*

54. *Id.*

55. *Id.* at 2113–14.

56. *Id.* at 2114.

57. *Id.*

58. *Id.*

59. *Id.*

60. *Id.*

computer parts manufacturer had infringed all six of its patents relating to microprocessors and chipsets.<sup>61</sup> Both defendants eventually stopped participating in the case, and the court entered default judgments against them.<sup>62</sup> While the court found that the defendants infringed the patents, and granted LGE's motion for injunctive relief, it found that the evidence did not support an award of damages.<sup>63</sup>

In *Asustek*, LGE sued ten computer manufacturers for patent infringement of article and method claims. All of the companies had purchased microprocessors or chipsets from Intel and had installed them into computers that they manufactured.<sup>64</sup> The court granted summary judgment for the defendants on the article claims.<sup>65</sup> It rested its holding on *Univis Lens*, in which the Supreme Court said:

[W]here one has sold an uncompleted article which, because it embodies essential features of his patented invention, is within the protection of his patent, and has destined the article to be finished by the purchaser in conformity to the patent, he has sold his invention so far as it is or may be embodied in that particular article.<sup>66</sup>

The court found specifically that the defendants' purchase of the patented products was unconditional in that it was not conditioned on their agreement not to combine the products with non-Intel parts.<sup>67</sup> The court did note, however, that the notice provided to the defendants was sufficient to negate a claim of implied license to practice the LGE patent in combination with non-Intel components.<sup>68</sup> Finally, the court granted summary judgment for LGE on its motion that neither patent exhaustion nor implied license provided the computer manufacturers with a defense to LGE's claim that they infringed the LGE patents.<sup>69</sup>

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61. LG Elecs., Inc. v. Advance Creative Computer Corp., 212 F. Supp. 2d 1171, 1173–74 (N.D. Cal. 2002).

62. *Id.* at 1174–75, 1179.

63. *Id.* at 1176–79.

64. LG Elecs., Inc. v. Asustek Computer, Inc., 248 F. Supp. 2d 912, 914 (N.D. Cal. 2003).

65. *Id.* at 918.

66. *Id.* at 915 (quoting *United States v. Univis Lens Co.*, 316 U.S. 241, 250–51 (1942)).

67. *Id.* at 916–17.

68. *Id.* at 917.

69. *Id.* at 918.

## 2. Court of Appeals for the Federal Circuit

In *LG Electronics, Inc. v. Bizcom Electronics, Inc.*,<sup>70</sup> the appeal from *Asustek*, the Federal Circuit Court of Appeals pursued every possible option simultaneously: the case was “affirmed-in-part, reversed-in-part, vacated-in-part, and remanded.”<sup>71</sup> The court began by reviewing the implied license findings, noting that to prevail, defendants must establish that the products have no non-infringing use, and that the circumstances of the sale “plainly indicate that the grant of a license should be inferred.”<sup>72</sup> The appellate court agreed with the district court and found that no license could be implied.<sup>73</sup>

In discussing patent exhaustion, the appellate court confirmed that it is only triggered by an unconditional sale; however, this court said the sale was conditional because the “LGE-Intel license expressly disclaim[ed] granting a license allowing computer system manufacturers to combine Intel’s licensed parts with other non-Intel components.”<sup>74</sup> The license additionally required notice for the licensees.<sup>75</sup> The appellate court reversed the district court’s decision on this issue and found that the article claims were not exhausted.<sup>76</sup> It agreed with the district court, however, that the method claims were not exhausted.<sup>77</sup> The court vacated and remanded several ancillary issues regarding the individual patents.<sup>78</sup>

## 3. Supreme Court

When the Supreme Court heard *Quanta*, the Court focused on the issue of patent exhaustion, but did not address the question of implied license.<sup>79</sup> In discussing patent exhaustion, the Court relied heavily on *Univis Lens*.<sup>80</sup> Most notably, the

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70. 453 F.3d 1364 (Fed. Cir. 2006).

71. *Id.* at 1381.

72. *Id.* at 1369 (quoting *Met-Coil Sys. Corp. v. Korners Unlimited, Inc.*, 803 F.2d 684, 686 (Fed. Cir. 1986)).

73. *Id.*

74. *Id.* at 1370.

75. *Id.*

76. *Id.*

77. *Id.*

78. *Id.* at 1371.

79. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2121–22 (2008).

80. *Id.* at 2116.

Court clearly answered the question of whether method claims are susceptible to patent exhaustion: they are.<sup>81</sup> The Court looked to the practical consequences of this decision, noting that if method claims could not be exhausted, they would become an end-run around patent exhaustion, which a patent drafter could use to shield almost any item from patent exhaustion.<sup>82</sup>

Next, the Court discussed what was required to trigger patent exhaustion. First, it noted that an article must embody essential features of the patented invention.<sup>83</sup> Second, the article must be capable of use only in practicing the patent.<sup>84</sup> Finally, the sale must be authorized.<sup>85</sup> In finding that the sale of the LGE microprocessors met each of these criteria, the Court drew analogies between the case at hand and *Univis Lens*.<sup>86</sup>

Particularly when analyzing the question of an authorized sale, the Court looked to the structure of the license agreement between LGE and Intel.<sup>87</sup> It noted that while Intel was required to give customers notice that the combination of the parts with non-Intel parts was not covered by the license, nothing prevented Intel from selling those parts to the customers even if it intended to use them in combination with non-Intel components.<sup>88</sup> Additionally, because the notice requirement appeared in the Master Agreement, but not in the License Agreement, the parties did not even suggest that a breach of the Master Agreement would result in a breach of the License Agreement.<sup>89</sup>

The Supreme Court's decision in *Quanta* was predictable on many levels. Nevertheless, it offers significant guidance for lower courts in applying the doctrine of patent exhaustion to a world of technology where combination claims are abundant.

#### 4. *Quanta* Applied: *TransCore v. Electronic Transaction*

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81. *Id.* at 2117.

82. *Id.* at 2118.

83. *Id.* at 2119.

84. *Id.*

85. *Id.*

86. *Id.* at 2118–20.

87. *Id.* at 2121–22.

88. *Id.*

89. *Id.*

*Consultants Corp.*

One of the first notable applications of the patent exhaustion doctrine—as clarified by *Quanta*—occurred in *TransCore, LP v. Electronic Transaction Consultants Corp.*<sup>90</sup> TransCore is a manufacturer of automated toll collection systems and the assignee of several patents related to that technology.<sup>91</sup> In 2000, TransCore sued a competitor, Mark IV, for infringement of several patents.<sup>92</sup> The suit was settled; Mark IV paid TransCore \$4.5 million in exchange for an unconditional covenant not to sue.<sup>93</sup> The covenant not to sue listed the patents covered and expressly stated that it “shall not apply to any other patents issued as of the effective date of this Agreement or to be issued in the future.”<sup>94</sup>

Several years later, the defendant in the present case, ETC, won a bid to install and test open road tolling for the Illinois State Toll Highway Authority.<sup>95</sup> ETC purchased and installed toll collection systems manufactured by Mark IV.<sup>96</sup> TransCore sued ETC for infringement of three patents that had been listed in the agreement with Mark IV along with a fourth, related patent (the ‘946 patent) that had been pending at the time of the agreement and had since issued.<sup>97</sup> The district court ruled on summary judgment that TransCore’s patent rights were exhausted.<sup>98</sup> TransCore appealed on the question of whether an unconditional covenant not to sue authorizes sales by the covenantee for purposes of patent exhaustion.<sup>99</sup>

The Federal Circuit’s opinion relied heavily on *Quanta*’s statement of patent exhaustion that “the initial authorized sale of a patented item terminates all patent rights to that item.”<sup>100</sup> The court began with the premise that a patent does not provide a patentee with an affirmative right to practice an

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90. 563 F.3d 1271 (Fed. Cir. 2009).

91. *Id.* at 1273.

92. *Id.*

93. *Id.*

94. *Id.*

95. *Id.*

96. *Id.*

97. *Id.* at 1273–74

98. *Id.* at 1274.

99. *Id.*

100. *Id.* (quoting *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2115 (2008)).

invention, but rather the right to exclude.<sup>101</sup> Since a patent holder cannot convey rights he does not own, any patent license, in a fundamental sense, is a waiver of the right to exclude (sue).<sup>102</sup> In that way, the court reasoned, a non-exclusive patent license is equivalent to a covenant not to sue and both can properly be viewed as allowing authorized sales by the licensee.<sup>103</sup> Because the covenant generally stated that TransCore would not bring any claims for “future infringement” generally, TransCore failed to limit the covenant to actions such as “making,” “using,” or “selling.”<sup>104</sup> The court found that all of the above actions were authorized for the purposes of patent exhaustion.<sup>105</sup>

Further, the court found that the ‘946 patent, though expressly excluded by terms of the covenant, was also exhausted under an implied license to practice under the doctrine of equitable estoppel.<sup>106</sup> This doctrine essentially estops a licensor from assigning a definable property right, and later trying to detract from that right by use of another patent necessary to the practice of the assigned or licensed patent.<sup>107</sup> Because the later issued ‘946 patent was necessary to practice at least one of the patents included in the covenant not to sue, the court found that Mark IV was an implied licensee of the ‘946 patents.<sup>108</sup> Mark IV’s rights extended to ETC.<sup>109</sup>

### III. INTELLECTUAL PROPERTY AND PRACTICE IMPLICATIONS OF *QUANTA*

*Quanta*, and *TransCore*’s application of *Quanta*, provide valuable guidance for practitioners drafting patent applications and licensing agreements in a post-*Quanta* world.

#### A. *QUANTA*, *TRANSCORE*, AND PROPERTY RIGHTS: A BUNDLE OF WIRES

While there is no doubt that the Supreme Court has

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101. *Id.* at 1275.

102. *Id.*

103. *Id.* at 1275–76.

104. *Id.*

105. *Id.*

106. *Id.* at 1279.

107. *See id.*

108. *Id.*

109. *Id.*

historically recognized the ability of patent owners to deal with patent rights like a bundle of wires that can be separated—a play on the Court’s venerable analogy of a bundle of sticks—the Court’s decision in *Quanta* and its application in *TransCore* may call that into question. The license in *Quanta* only covered Intel’s sale of the parts, but not the microprocessors used in the context of computers. This set of agreements was negotiated by two sophisticated parties who presumably sign similar contracts on a regular basis. But the Supreme Court did not recognize the intended limits of preventing third parties from combining patented microprocessors with non-Intel parts carved out by the Master Agreement. Instead of viewing the Supreme Court as refusing to recognize the limits of the Master Agreement, an alternate interpretation is available. That is, the Court merely interpreted the agreement differently from the Federal Circuit and found that the agreement was not conditional and did not limit the intellectual property licensed in the agreement. If the latter interpretation is true, it is possible that LGE and Intel were experiencing the consequences of sloppy contract drafting.<sup>110</sup> Additionally, the holding in *Quanta* was quite fact specific, which supports the latter interpretation.<sup>111</sup> If the reason for the finding of patent exhaustion in *Quanta* was the form and language involved in the agreements at issue, the Court left unanswered the question of whether it is possible to contract around patent exhaustion.<sup>112</sup>

On the other hand, if lower courts interpret the holding in *Quanta* to mean that patent owners and licensees cannot contract around patent exhaustion, *Quanta* could have more

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110. See F. Scott Kieff & Troy A. Paredes, *The Basics Matter: At the Periphery of Intellectual Property*, 73 GEO. WASH. L. REV. 174, 189 (2004).

111. See Richard P. Gilly & Mark S. Walker, *Supreme Court’s Quanta Decision Clarifies the Reach of Patent Exhaustion*, INTELL. PROP. & TECH. L.J., Sept. 2008, at 1, 1.

112. See *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2122 n.7 (2008) (“We note that the authorized nature of the sale to Quanta does not necessarily limit LGE’s other contract rights. LGE’s complaint does not include a breach-of-contract claim, and we express no opinion on whether contract damages might be available even though exhaustion operates to eliminate patent damages.”). Regardless of whether parties can contract around patent exhaustion, they may be able to pursue breach of contract claims more successfully.

serious implications.<sup>113</sup> *Quanta* could potentially be used to limit patent holders' abilities to deal with their "bundle of sticks" as they see fit and may restrict their ability to divide their patent rights.<sup>114</sup> *UMG Recordings v. Augusto*, a copyright infringement case focusing on the first sale doctrine that came out the day after *Quanta*, may be a first step in interpreting *Quanta* in this manner.<sup>115</sup> *TransCore* also seems to support an interpretation that parties cannot contract around patent exhaustion. Although *TransCore* argued that it intended to limit the covenant not to sue to Mark IV, the court found evidence of intent irrelevant, and went one step further to find that Mark IV had an implied license for the '946 patent.<sup>116</sup>

Additionally, the *Quanta* holding can be viewed as extremely limiting to patent holders' rights when compared with the general property law policy disfavoring restraints on alienation.<sup>117</sup>

In contrast, because different fields of technology tend to have different patenting styles and density, such a limitation could have positive effects on technologies such as computer hardware and software where a well-acknowledged "patent thicket" can make producing incremental technology complicated and expensive because of the high number of patents and licenses involved. This type of rationale could lead lower courts to limit application of *Quanta* specifically to computer hardware related fields.<sup>118</sup> Such an application would

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113. Such a limitation on ability to contract would be interesting in light of *MedImmune*, where the Supreme Court did not explicitly deny patent holders the ability to contract to restrict their licensees' ability to challenge the validity of a licensed patent. See Rachel Krevans & Daniel P. Muino, *Restoring the Balance: The Supreme Court Joins the Patent Reform Movement*, 9 SEDONA CONF. J. 15, 28 (2008).

114. See F. Scott Kieff, *Quanta v. LG Electronics: Frustrating Patent Deals by Taking Contracting Options Off the Table?*, 2008 CATO SUP. CT. REV., 315, 325–26.

115. See *UMG Recordings v. Augusto*, 558 F.Supp.2d 1055, 1064 (C.D. Cal. 2008). In *UMG Recordings*, a copyright owner sent promotional CD's bearing labels noting that the CD's were licensed to a music industry insider, but that the copyright owner retained the title. The court found that the label did not create a license and that music industry insider was authorized to resell the CD's under the first sale doctrine. *Id.* at 1058, 1064.

116. See *TransCore, LP v. Elec. Transaction Consultants Corp.*, 563 F.3d 1271, 1279 (Fed. Cir. 2009).

117. See Kieff, *supra* note 114, at 325.

118. *But see TransCore*, 563 F.3d at 1273–74 (patents were not limited to the realm of computer hardware).

parallel the application of *KSR*'s obviousness holdings to the "predictable arts."<sup>119</sup>

Finally, another route lower courts could take would be to focus on alternative doctrines. For instance, the Supreme Court in *Quanta* never discussed the issue of implied license, though it was an issue raised earlier in the suit.<sup>120</sup> The out-workings of such a suggestion would obviously depend upon the arguments raised by each plaintiff and defendant; however, if lower courts interpret *Quanta* as a result of poorly drafted contracts, perhaps third parties like *Quanta* could be protected in the future through doctrines such as implied license.<sup>121</sup> Additionally, lower courts ought to take into account the intent of parties involved in contracts. Intent is an important element of contract law, and courts' consideration of intent would also comport well with the application of the doctrine of implied license.<sup>122</sup>

## B. QUANTA IN PRACTICE

Regardless of the route that district courts and the Court of Appeals for the Federal Circuit take in interpreting *Quanta*, practitioners can proactively learn valuable lessons from and avoid consequences similar to those resulting from the Supreme Court's interpretation of patents and contracts in *Quanta*.

### 1. Patent Prosecution

Patent prosecutors have extremely difficult jobs. They are often called upon to foresee the future. They are expected to know what possible variations of an invention might want to be incorporated into claims in the future. They are expected to claim specific embodiments and portions of an invention that competitors are likely to make and sell. They must also know

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119. See *Ortho-McNeil Pharm., Inc. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1364–65 (Fed. Cir. 2008).

120. See generally *Kieff*, *supra* note 114, at 327–29 (discussing the doctrine of implied license).

121. *Id.* But see *Ghosh*, *supra* note 33, at 1226 (arguing that the doctrine of patent exhaustion is mandatory, and thus a contract term that purports to limit the application of patent exhaustion may be preempted).

122. See *Hewlett-Packard Co. v. Repeat-O-Type Stencil Mfg. Corp.*, 123 F.3d 1445, 1453 (Fed. Cir. 1997) (discussing the relevance of "noncontractual intention").

precisely what characterizes the inventive aspect of the product they are attempting to methodize. The *Quanta* Court reinforced this demand on patent prosecutors when it said of the *Univis* lens blanks, “exhaustion was triggered by the sale of the lens blanks because their only reasonable and intended use was to practice the patent and because they ‘embodie[d] essential features of [the] patented invention.’”<sup>123</sup>

First, understanding the idea and implications of “essential features” is vital when drafting and prosecuting a patent application. Unfortunately for the patent community, the concept of an essential feature is full of ambiguity. As one author suggests, an essential feature is perhaps that which is used to distinguish an invention over prior art.<sup>124</sup> However, the application of this principle to a variety of articles, methods, patents, and industries is unlikely to be straightforward.<sup>125</sup> It is unclear where the line will be drawn between the addition of parts that clearly require creative decisions and standard components that are routinely used.<sup>126</sup> To add to the ambiguity, courts in the early twentieth century used a similar concept for purposes of determining contributory infringement.<sup>127</sup> The courts focused on which element of a patent claim was “key” or at the “heart of the invention.”<sup>128</sup> Because this determination was so inherently subjective, courts used it as they wished, routinely ruling for patentees at the beginning of the period, and then ruling against patentees in the later part of the period.<sup>129</sup>

Keeping in mind that the outcome of *Quanta* may have had more to do with licensing practice than patent exhaustion, and that the key concepts within *Quanta* are highly ambiguous, there are general precautionary principles practitioners can glean from the decision.

A patent covering a single “essential feature” or a fundamental component with an “essential feature” which is

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123. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2119 (2008) (citing *United States v. Univis Lens Co.*, 316 U.S. 241, 249 (1942)) (alterations in original).

124. See Osborne, *supra* note 25, at 673–674.

125. See Gilly & Walker, *supra* note 111, at 4.

126. See *id.*

127. See Kieff, *supra* note 114, at 321.

128. *Id.*

129. *Id.*

later incorporated into a larger product may be at greater risk of being exhausted. If the “essential feature” of the invention is embodied in a low-level component with a single practical use, later dependent claims covering the combination of that component with standard components in the art may become worthless. Under the assumption that an essential feature is one used to distinguish over prior art, practitioners should attempt to distinguish their case over the prior art on a variety of levels, creating multiple layers of “essential features.”<sup>130</sup> Practitioners can do this throughout the specification and claims of a patent application. The specification can highlight creative elements on both component and larger article levels.<sup>131</sup> Dependent claims can be drafted to also incorporate levels of innovation, in contrast to using them to add standard parts to a single innovative element. While these ideas are undoubtedly difficult to implement, they are valuable considerations nonetheless.

## 2. Contracts and Licensing

Attorneys and businesses can also proactively draft contracts using lessons learned from *Quanta*. While contracts drafted prior to *Quanta* and interpreted in light of *Quanta* may be shorted, practitioners can be proactive in drafting contracts in light of what they glean from *Quanta* and cases interpreting it. Smart contracting should center on the concept of an “authorized sale,” one of the essential requirements articulated by the Court for patent exhaustion.<sup>132</sup> It is crucial to note that the *Quanta* Court found that the sale of the microprocessors at issue was not conditional.<sup>133</sup> The *Quanta* court said, “Nothing in the License Agreement restricts Intel’s right to sell its microprocessors and chipsets to purchasers who intend to combine them with non-Intel parts.”<sup>134</sup> At the same time, the

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130. See Osborne, *supra* note 25, at 673–674.

131. Additionally, practitioners can consider using a background section in the patent application to note potential non-infringing uses of elements of the patented article to avoid a finding, like that in both *Univis* and *Quanta*, that the article had no use outside of embodying the entire patented invention.

132. See *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2115 (2008).

133. *Id.* at 2122 (“Intel’s authority to sell its products embodying the LGE Patents was not conditioned on the notice or on Quanta’s decision to abide by LGE’s directions in that notice.”).

134. *Id.* at 2121.

Master Agreement did require notice that third parties were not licensed to combine the microprocessors with non-Intel parts.<sup>135</sup> This seems to indicate that a requirement of notice in a separate agreement without tangible conditions in the license agreement is insufficient to avoid patent exhaustion.

In contrast, the Court does refer to the license in *General Talking Pictures* as different from that in *Quanta*.<sup>136</sup> In *General Talking Pictures*, the license agreement was contained in a single document and had more direct and affirmative language than that in *Quanta*.<sup>137</sup> Both parties knew that the manufacturer was not authorized to commercially sell the amplifiers in question.<sup>138</sup>

It is unclear how cases like *Mallinckrodt v. Medipart*<sup>139</sup> will be viewed in light of the Court's decision. In *Mallinckrodt*, the Federal Circuit upheld a single-use restriction in a label license as long as the terms were not objectionable under general contracts law and policy.<sup>140</sup> In light of *Quanta*, a similar fact pattern today might produce a different outcome based on the rationale used by the Supreme Court.<sup>141</sup> *B. Braun Medical, Inc. v. Abbott Laboratories* explained *Mallinckrodt* further by saying that the exhaustion doctrine

does not apply to an expressly conditional sale or license. In such a transaction, it is more reasonable to infer that the parties negotiated a price that reflects only the value of the "use" rights conferred by the patentee. As a result, express conditions accompanying the sale or license of a patented product are generally upheld.<sup>142</sup>

Because the Court did not explicitly address situations

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135. *Id.*

136. *Id.* (citing *Gen. Talking Pictures Corp. v. W. Elec. Co.*, 304 U.S. 175 (1938)).

137. *Id.*

138. *Gen. Talking Pictures*, 304 U.S. at 180.

139. *Mallinckrodt, Inc. v. Medipart, Inc.*, 976 F.2d 700 (Fed. Cir. 1992).

140. Kieff, *supra* note 114, at 323; *see also* Cohen & Lemley, *supra* note 14, at 33–34 (suggesting that *Mallinckrodt* may be an especially important case for software patent owners because they depend upon the ability to restrict usage of software through licensing that occurs in a variety of forms, including labels).

141. *See, e.g.*, *UMG Recordings v. Augusto*, 558 F. Supp. 2d 1055, 1064 (C.D. Cal. 2008) (finding that a label on promotional CD's retaining ownership for the copyright owners was preempted by the first sale doctrine.). This case specifically dealt with the first sale doctrine within copyright, however, not in the context of patents.

142. *B. Braun Med., Inc. v. Abbot Labs.* 124 F.3d 1419, 1426 (Fed. Cir. 1997) (citations omitted).

similar to *Braun*, it is probably still good law, and the use of express conditions should still be upheld.

Based on the rationale of cases like *General Talking Pictures*, *Mallinckrodt*, and *Braun*, it appears that it would have been possible for LGE to contract around patent exhaustion by incorporating the agreement into a single agreement, instead of using a Master Agreement and a License Agreement. Additionally, language contained in the agreement could have explicitly made the sale of the microprocessors conditional upon Intel agreeing not to sell the parts to third parties who would later combine them with non-Intel parts.

These variations on the LGE and Intel agreement can give parties tangible guidance for avoiding patent exhaustion. If patent owners desire to avoid patent exhaustion, the first step is to make any licensed use of their patented invention clearly conditional or limited. It is still unclear, however, what precisely will suffice to make a license clearly conditional. Practitioners looking to avoid patent exhaustion should follow the example of the parties in *General Talking Pictures* and should “condition or otherwise restrict the licensee’s rights (including reselling rights) with direct, affirmative language in the license from licensor to licensee.”<sup>143</sup> Additionally, such language should be incorporated into a single agreement, to make it clear that the sale or use of the patented article is conditional upon limitations on the use of the patented article by the licensee. A licensor interested in seeking additional licenses on a particular patent may consider including language disclaiming the application of patent exhaustion to particular patents.<sup>144</sup>

Finally, the *Quanta* court did note that they were not addressing the issue of contractual damages in their decision:

We note that the authorized nature of the sale to Quanta does not necessarily limit LGE’s other contract rights. LGE’s complaint does not include a breach-of-contract claim, and we express no opinion on whether contract damages might be available even though exhaustion operates to eliminate patent damages.<sup>145</sup>

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143. Gilly & Walker, *supra* note 111, at 4.

144. Several of the briefs filed in *Quanta* urged the Court to “hold that patent exhaustion is a non-waivable tenet grounded in public policy and thus not capable of being contracted away or otherwise disclaimed.” *Id.* at 5. The Court appeared not to reach this issue and therefore it is unclear whether expressly disclaiming patent exhaustion would be effective. *Id.*

145. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 128 S. Ct. 2109, 2122 n.7

While contract damages and related rights were not discussed in the *Quanta* decision, contractual damages could prove to be a creative alternative to recovering damages if patent damages become more difficult to enforce due to the increasing application of patent exhaustion.

#### IV. CONCLUSION

While in many ways the Supreme Court's decision in *Quanta v. LGE* was unremarkable, though helpful in clarifying that patent exhaustion extends to method claims, the consequences of the decision have only begun to be seen. While the Court's application of patent exhaustion in *Quanta* was clearly motivated, at least in part, by the ambiguous nature of the agreements at issue, the question of parties' abilities to contract around patent exhaustion still remains.

In applying *Quanta*, lower courts should be mindful of precedent by considering traditional property law and policies. Courts should also consider the intent of parties participating in the contract, particularly in the context of contracts drafted prior to the *Quanta* decision. Finally, lower courts should be aware of the body of technology to which they are applying the *Quanta* decision, recognizing the divergent natures of technology bases ranging from chemical compositions to computer software.

Attorneys and businesses can apply lessons learned from *Quanta* in their practice. When drafting patent applications attorneys and agents should incorporate multiple levels of creative elements, distinguishing the present application over prior art when possible. They ought also to seek ways to incorporate additional creative combinations into dependent claims. When parties are drafting contracts and licensing agreements, they too can apply lessons learned from *Quanta*. Parties should to use clear, direct and affirmative language to create a conditional sale or use of the patented article or method. Additionally, any such conditions should be incorporated into the same document or agreement granting the license to the licensee. Finally, attorneys should remember the *TransCore* court's application of patent exhaustion to a covenant not to sue, and always articulate whether a licensee is entitled to make, use, or sell a patented invention.