

4-10-2015

## When Is a Patent Exhausted? Licensing Patents on a Claim-By-Claim Basis

Lucas Dahlin

*IIT Chicago-Kent College of Law*

Follow this and additional works at: <https://scholarship.kentlaw.iit.edu/cklawreview>

 Part of the [Intellectual Property Law Commons](#)

---

### Recommended Citation

Lucas Dahlin, *When Is a Patent Exhausted? Licensing Patents on a Claim-By-Claim Basis*, 90 Chi.-Kent L. Rev. 757 (2015).

Available at: <https://scholarship.kentlaw.iit.edu/cklawreview/vol90/iss2/14>

This Notes is brought to you for free and open access by Scholarly Commons @ IIT Chicago-Kent College of Law. It has been accepted for inclusion in Chicago-Kent Law Review by an authorized editor of Scholarly Commons @ IIT Chicago-Kent College of Law. For more information, please contact [dginsberg@kentlaw.iit.edu](mailto:dginsberg@kentlaw.iit.edu).

## WHEN IS A PATENT EXHAUSTED? LICENSING PATENTS ON A CLAIM-BY-CLAIM BASIS

LUCAS DAHLIN\*

### INTRODUCTION

In a world of increasingly complex technology, patent law is often at the forefront of legal reform. Further, few legal quandaries have received as much attention from courts, legislators, and the media as the problem of “patent trolls,” companies that assert patent rights without actually producing any relevant products.<sup>1</sup> Recently, courts have inexplicably expanded the defense of patent exhaustion to an untenable degree in their inquisition to punish these “trolls.”<sup>2</sup>

To illustrate, imagine that an engineer, whom we shall dub Inventor Joe, has invented and patented a way to modify systems “A” and “B” for more efficient communication with one another. This could involve a computer program to be installed on both systems, physical upgrades for each system, or some combination of both. Further, Inventor Joe’s patent includes some claims relating to the modifications to system A and other claims relating to the modifications to system B. Finally, to complete our hypothetical, imagine systems A and B are owned by different corporations.<sup>3</sup>

In our story, the owner of system A comes to Inventor Joe and asks to license Inventor Joe’s patent; however, the owner of system A only wants to license the claims that apply to system A. He does not want to pay for claims that his system will not embody and could never infringe. This eco-

\* 2015 JD Candidate, Chicago-Kent College of Law. The author wishes to thank Professor David Schwartz, James Konstantopoulos, Heather Collinet, and the various editors from the CHICAGO-KENT LAW REVIEW for their comments and feedback regarding this article.

1. Caroline Coker Coursey, *Battling the Patent Troll: Tips for Defending Patent Infringement Claims by Non-Manufacturing Patentees*, 33:2 AM. J. TRIAL ADVOC. 237, 237–38 (2009).

2. See *Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971 (N.D. Ill. 2013), *order clarified on reconsideration*, No. 10-CV-4387, 2013 WL 6354209, at \*1 (N.D. Ill. Dec. 4, 2013).

3. This hypothetical will be used throughout the paper. It is a simplistic view on patents, and one could argue that it is possible, in this scenario, to split the patent into multiple patents, such as a “method for modifying system A to be able to interact with an external system” and a separate patent for “a method for modifying system B to be able to interact with an external system.” The logistics of independent and distinct inventions being split into separate patents is discussed later in this Article.

conomic rationale makes sense, and Inventor Joe creates a special non-exclusive license agreement that only covers the “system-A claims.”

As a next logical step, Inventor Joe takes his patent to the owner of system B and offers to create a similar license for him that will enable him to practice the “system-B claims” without infringing on Inventor Joe’s patent. However, the owner of system B claims that he can incorporate Inventor Joe’s invention without a license or the fear of litigation because Inventor Joe has already exhausted his patent through licensing “system-A claims” to the owner of system A. System B’s owner argues that, because the two systems must work in collaboration for the overarching invention to be fully realized, and modifications to one system without modifications to the other creates an unfinished product, Inventor Joe can only license the patent to either A or B before exhausting his rights. Nor could Inventor Joe attempt to receive the full value of his patent from Company A and expect them to then bring an infringement suit against Company B because the license to Company A was not exclusive and Company A lacks the standing to sue.<sup>4</sup> Under the expanded doctrine of patent exhaustion, enumerated in *Helperich Patent Licensing v. New York Times*, Inventor Joe would have no recourse and could no longer realize the full value of his invention.<sup>5</sup>

Patent exhaustion is an affirmative defense to a claim of patent infringement.<sup>6</sup> The doctrine of patent exhaustion states that after an authorized sale of a patented product, all patent rights in the product terminate, so long as the product “sufficiently embodies the patent.”<sup>7</sup> Courts have struggled to define this terminology, but have ultimately decided that a product “sufficiently embodies” a patent when it contains the patent’s “essential features” and “its only and intended use is to be finished under the terms of the patent.”<sup>8</sup> This exemplifies two longstanding principles of patent law: (1) that there should be no restriction on the use of a product after an authorized sale, and (2) that the patent holder should not be overcompensated by receiving royalties from every subsequent purchaser of a licensed product.<sup>9</sup>

4. Only an exclusive licensee or assignee has standing to bring an action for infringement. For a more in depth discussion on licensing rights, see *Pope Mfg. v. Gormully & Jeffery Mfg.*, 144 U.S. 248, 251 (1892).

5. See 965 F. Supp. 2d at 980–81.

6. *ExcelStor Tech., Inc. v. Papst Licensing GMBH & Co. KG*, 541 F.3d 1373, 1376 (Fed. Cir. 2008).

7. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 628 (2008).

8. *Id.*

9. See *Adams v. Burke*, 84 U.S. 453, 457 (1873).

However, under the recent ruling in *Helperich*, some patent holders can no longer receive full compensation for their inventions.<sup>10</sup> In *Helperich*, the Northern District of Illinois essentially held that licensing even a single claim from a patent will exhaust that patent, even with respect to third-parties who infringe separate claims within the patent, so long as the third-party product works in conjunction with the licensed product.<sup>11</sup> This is a devastating ruling for companies who wish to license their patents on a claim-by-claim basis for either efficiency or to create field-restricted licenses.<sup>12</sup>

As patents become increasingly complex, it is likely that there will be many more patents that lie at the fault lines between two industries, where multiple distinct parties must receive licenses in order for an invention to come to fruition.<sup>13</sup> The *Helperich* ruling, which essentially barred the licensing of patents on a claim-by-claim basis, will create a number of problems regarding the economics of patent licensing, the efficiency of courts, and the progress of science. Therefore, as a matter of policy, courts should allow patents to be licensed on a claim-by-claim basis by replacing the “sufficiently embodies” test that was first enumerated in *Quanta Computer, Inc. v. LG Electronics, Inc.*,<sup>14</sup> which will be discussed below, with the following two-step inquiry.

First, the court should determine whether there is an economic chain connecting the alleged infringer back to a license. An economic chain would exist if the alleged infringer purchased either a license or a licensed product. If there is not an economic chain linking the infringer to a license, then the defense of patent exhaustion should not be available. If there is an economic chain, then the court should move to the second inquiry: determining whether using or finishing the licensed product as intended would infringe the patent. The patent exhaustion defense should only be available to a party if it has economically contributed to the patent owner, either directly or indirectly, and if it is using its purchase according to the products intended and normal purpose.

Part I of this Article discusses the history of the defense of patent exhaustion. Part II examines the *Helperich* ruling and analyzes the resulting problems. Part III explains a possible solution to the problem, allowing

10. See *Helperich*, 965 F. Supp. 2d at 980.

11. *Id.* at 980–81.

12. *Claim-by-Claim Patent Licensing: Mind your Ps and Qs*, MCKENNA LONG & ALDRIDGE ADVISORIES LLP (Sept. 10, 2013), <http://www.mckennalong.com/publications-advisories-3389.html>.

13. See *HPL to Appeal Exhaustion Order*, HELFERICH PATENT LICENSING, L.L.C. (Aug. 29, 2013), <http://www.hpl-llc.com/news/13879121/>.

14. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 628 (2008).

claim-by-claim licenses in some cases while still protecting end-users by redefining what it means for a product to “sufficiently embody” a patent. Finally, Part IV will respond to potential weaknesses and criticisms of the proposed solution.

### I. A BRIEF HISTORY OF PATENT EXHAUSTION

The policy behind the patent exhaustion doctrine dates back to common law but was fully enumerated in 1873, when the Supreme Court held in *Adams v. Burke* that a patent could not be used to restrict the uses of an item after an authorized sale.<sup>15</sup> The court reasoned that “when the patentee, or the person having his rights, sells a machine or instrument whose *sole* value is in its use, he receives the consideration for its use and he parts with the right to restrict that use.”<sup>16</sup> Even if an end-user purchases a product through a licensed manufacturer, the original patent holder has received his consideration for the sale through the license he originally negotiated with the manufacturer.<sup>17</sup> Therefore, there is still an economic chain connecting the parties who benefit from the invention, running from the end-user to the licensed manufacturer to a potential assignee of the patent and finally back to the inventor.

However, the Court differentiated between post-sale restrictions, which were held to be illegal, and pre-sale restrictions, which were held to be within the rights of the patent holder.<sup>18</sup> Therefore, a patent holder can craft a license to limit what a manufacturer may create and where he may sell the product, but the patent holder cannot limit the ordinary uses of the product by the end purchaser.<sup>19</sup> After all, a patentee “may grant licenses to make, use or vend, restricted in point of space or time, or with any other restriction upon the exercise of the granted privilege, save only that by attaching a condition to his license he may not enlarge his monopoly and thus acquire some other which the statute and patent together did not give.”<sup>20</sup>

This doctrine is founded in sound logic and public policy. A licensed manufacturer, by virtue of his privity with the patent owner, can negotiate for the rights within the patent that he wishes to exploit and is not required to license the entire breadth of the patent holder’s property rights. The end-

15. *Adams v. Burke*, 84 U.S. 453, 456 (1873).

16. *Id.* (emphasis added).

17. *Id.*

18. *Id.*

19. *Id.* at 456–57.

20. *Ethyl Gasoline Corp. v. United States*, 309 U.S. 436, 456 (1940).

user, on the other hand, has no such negotiating powers and may not even be aware of any restrictions imposed upon the manufacturer.<sup>21</sup> Thus, once the licensed product becomes the personal property of the end-user, or someone who purchases the product from the licensed manufacturer, it would be unfair to limit his use of the product or expect him to research his rights in the product. After all, included in the purchase price is a share of the monopoly granted by the patent.<sup>22</sup>

Another major case that helped carve out the patent exhaustion doctrine was *United States v. Univis Lens Co.*, where the Supreme Court held that a patent was exhausted after the patent owner licensed an unfinished version of a product where its only use would be to eventually become a finished, infringing product.<sup>23</sup> In *Univis*, a patent owner licensed the production of unfinished lenses that could later be ground into specific shapes and sizes.<sup>24</sup> The patent owner then tried to control the finishing of the lenses, claiming that its patent also covered that process.<sup>25</sup> Thus, the patent owner attempted to obtain royalties not only from the lens manufacturers but also from the lens grinders.<sup>26</sup> The Supreme Court rejected this attempt and held that the patent was exhausted after the first sale and that the patent holder could not obtain secondary royalties if the only use of the incomplete products would be to finish them and infringe the patent.<sup>27</sup> As the Court stated:

[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. The reward he has demanded and received is for the article and the invention which it embodies and which his vendee is to practice upon it. He has thus parted with his right to assert the patent monopoly with respect to it and is no longer free to control the price at which it may be sold either in its unfinished or finished form.<sup>28</sup>

The patentee had received consideration for his invention and could no longer restrict the post-sale use of the product. Further, the product's only and intended use would infringe the patent, leaving the purchaser with an essentially worthless item if not for the defense of patent exhaustion.

21. *Bloomer v. McQuewan*, 55 U.S. 539, 549 (1852).

22. *Id.*

23. *United States v. Univis Lens Co.*, 316 U.S. 241, 250–51 (1942).

24. *Id.* at 244–45.

25. *Id.*

26. *Id.*

27. *Id.* at 250–51.

28. *Id.*

Patent exhaustion protected the purchasers of licensed products, here the lens grinders, allowing them to use their legitimate purchase in the intended way without fear of infringement.

*Quanta Computer, Inc. v. LG Electronics, Inc.*<sup>29</sup> is a recent and important case defining the patent exhaustion defense because “[u]ntil *Quanta*, the law permitted patent owners and their customers to control operation of the exhaustion doctrine by the rule that a patent owner could sell and license with express conditions, restrictions or limitations on the patent rights the purchaser received.”<sup>30</sup> In *Quanta*, Intel was creating microprocessors and computer chips under a license from LG Electronics (LGE), which included the condition that the chips and processors were not to be combined with non-Intel products.<sup>31</sup> Intel, within their rights, began to sell the computer chips and microprocessors to Quanta Computer, Inc. (*Quanta*). However, after Quanta began incorporating Intel chips and processors into Quanta machines, LGE sued Quanta, claiming that they had infringed on LGE’s patent.<sup>32</sup> The court found this to be a post-sale restriction on the use of the chips after an authorized sale and held that the patent exhaustion doctrine protected Quanta Computer, and any eventual purchasers of Quanta machines, from claims of infringement.<sup>33</sup>

However, LGE argued that the computer chips alone, without being connected to a computer, could not practice<sup>34</sup> every claim within its patent and therefore not every claim had been exhausted.<sup>35</sup> The court responded to this argument by explaining that the authorized products “embodied” the additional claims, even the computer-implemented method claims, because the chips and processors had no other reasonable use that would result in the end-user not infringing the claims—the computer chips were essentially worthless without a computer. Thus, the authorized sale of the computer chips had exhausted the additional claims, even claims that couldn’t be practiced by the chips without a connected computer.<sup>36</sup>

To determine whether the computer chips “embodied” the additional claims, the court made two inquiries. The first inquiry was determining

29. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617 (2008).

30. John W. Schlicher, *The New Patent Exhaustion Doctrine of Quanta v. LG: What It Means for Patent Owners, Licensees, and Product Customers*, 90 J. PAT. & TRADEMARK OFF. SOC’Y 758, 772 (2008).

31. *Quanta*, 553 U.S. at 623–24.

32. *Id.*

33. *Id.* at 630.

34. A product “practices” a claim if it meets every element of the claim.

35. *Id.* at 628.

36. *Id.* at 628–29.

whether the chips' "reasonable and intended use" was to fully practice the patent, including the method claims, while the second inquiry was determining whether the chips "embodie[d] essential features of [the] patented invention."<sup>37</sup>

As to the first inquiry, the court found that the computer chips were reasonably intended to be used in computers, and thus an end-user, reasonably using the product, would infringe upon the additional claims in LGE's patent if they were not exhausted.<sup>38</sup> Indeed, the court found that the computer chips had *no* reasonable uses other than being incorporated into a computer and if the method claims were not held exhausted, an end-user could not possibly use the product without being liable for infringement.<sup>39</sup> In order to protect the end-users from being liable for infringing the claims by simply using the products they had legitimately purchased—one of the historical reasons for implementing the patent exhaustion doctrine in the first place—the court held that the initial sale of computer chips and processors to Quanta had exhausted the additional claims from LGE's patent.<sup>40</sup>

As to the second inquiry, the court held that the chips "substantially embod[ied] the patent because the only step necessary to practice the patent is the application of common processes or the addition of standard parts. *Everything inventive about each patent is embodied in the Intel Products.*"<sup>41</sup> Thus, although the chips and processors alone, without the rest of a computer, could not practice the method claims of the patent, they embodied the entirety of the creative spark of inventiveness found in the patent.

After its success in Quanta, patent exhaustion became an important defense in modern patent litigation. Some experts believe that an increase in complex technology, notably in machines that incorporate many different components, as well as in areas such as biotechnology and plant sciences, will lead to the patent exhaustion defense becoming widespread.<sup>42</sup> Further, as more inventions cover the divide between complex industries, it will become more common for patent applications to describe multiple inventive components within the same patent.

37. *Id.* at 631.

38. *Id.* at 632.

39. *Id.*

40. *Id.*

41. *Id.* at 633 (emphasis added).

42. Harold C. Wegner, *Post-Quanta, Post-Sale Patentee Controls*, 7 J. MARSHALL REV. INTELL. PROP. L. 682, 683 (2008).



## II. THE *HELPERICH* RULING AND RESULTING PROBLEMS

The Northern District of Illinois' recent holding in *Helperich Patent Licensing v. New York Times*, however, has expanded the defense of patent exhaustion to an untenable degree. The Court's ruling essentially bars the licensing of complementary claims within a patent on a claim-by-claim basis, which creates a number of problems. First, there are precedential problems, as the ruling contradicts over a century of legal rationale. Second, there are economic problems, such as over-or-under compensating the patent holder. Finally, there are market problems, such as creating an inefficient and uncertain market and possibly creating hold-ups in the implementation of patented technology. However, before the resulting problems can be fully understood, a more nuanced look at the *Helperich* ruling is required.

### A. *The Helperich Ruling*

The *Helperich* Patent Licensing (*Helperich*) patents dealt with the delivery of content, such as alerts containing hyperlinks, to cell phones.<sup>43</sup> The patents had a number of claims that were directed solely at cell-phone systems and methods (device claims), while other claims were directed at systems and methods for content providers, such as the *New York Times* (content claims).<sup>44</sup>

The *Helperich* patents at issue are similar to the hypothetical presented above regarding a patent on modifications to systems A and B. *Helperich*'s patents deal with the systems and methods of sending alerts containing Internet links to cell phone users over Short Message Service (SMS) or Multimedia Messaging Service (MMS) protocols.<sup>45</sup> A cell phone user can then click on the link sent to the phone to retrieve the content found at a website.<sup>46</sup> In order for the invention to come to fruition, however, required both that the cell phone manufacturers modify the devices they were creating, and that content providers, those who would send the alerts to the users, modify their systems and methods.<sup>47</sup> For example, one of the patents at issue, U.S. Patent No. 7,280,838 ('838 patent)—titled "Content Provision to Subscribers via Wireless Transmission"—includes 96 claims.<sup>48</sup> Some of

43. *Helperich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971, 973 (2013).

44. *Id.* at 977.

45. *See id.* at 973.

46. *Id.*

47. *Id.*

48. U.S. Patent No. 7,280,838 (filed Mar. 18, 2005).

these claims, such as Claim 9 in the '838 patent, pertain only to content provider methods, and therefore should not be exhausted by licensing other claims to cellular device manufacturers.<sup>49</sup>

The court held, however, that after licensing device claims to cell phone manufacturers, Helferich had exhausted its patent and could no longer license its distinct content claims to third-party content providers.<sup>50</sup> Thus, content providers could incorporate the system and methods enumerated in Helferich's patents without contributing any money, either directly or indirectly, to the patent holder.<sup>51</sup>

Returning to our simplistic analogy, the cell phone devices are like system A, and the content providers systems are like system B; the invention deals with the interaction between the two systems and requires that both systems implement the inventive ideas embodied in the Helferich patents in order for the end result, the cell phone alerts, to come to fruition. However, many of the claims are limited to the inventive methods or systems for only cell phone devices or content providers and could not be enforced against the other.<sup>52</sup>

Like in our hypothetical, Helferich attempted to license its claims relating to the devices to the cell phone manufacturers and its claims relating to content provider systems and methods to the content providers.<sup>53</sup> The court held that because Helferich had already licensed its device claims to the cell phone manufacturers, its patents would be exhausted with respect to content providers if the cell phones "substantially embodie[d] [the] patent[s]."<sup>54</sup> In determining whether the devices substantially embodied the

49. *Id.* Claim 9 of the '838 Patent states:

[a] method that communicates data from a content provider through a mobile radiotelephone network to a wireless communication device, utilizing an content notification system having an interface with a home location registry comprising: *the content provider initiating* communication of data intended for the wireless communication device, the data including an information identifier that is associated with information stored by the content provider and identifies the location of the stored information, wherein the information is not included in the data and is not stored in the wireless communication device; *the content provider causing* the content notification system to: process the data into a message suitable for transmission to the wireless communication device, which message includes the information identifier, and transmit the message to the wireless communication device; and *the content provider receiving* a request message that is wirelessly transmitted from the wireless communication device over the mobile radiotelephone network as a reply to the message, the request message including at least a portion of the information identifier" (emphasis added).

The content provider performs every step in this method, and the entire claim is written to only encompass the content provider's actions. Therefore, a manufacturer of a wireless communication device could not infringe this claim and would likely have no interest in licensing it. *Id.*

50. *Helferich*, 965 F. Supp. 2d at 977–78.

51. *See id.*

52. *See, e.g., supra* note 49.

53. *Helferich*, 965 F. Supp. 2d at 977–78.

54. *Id.* at 979 (quoting *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 638 (2008)).

patents, the court looked to the recent Supreme Court ruling in *Quanta*, which was briefly described above.<sup>55</sup>

In *Quanta*, the Court held that a product substantially embodies a patent if “[e]verything inventive about each patent is embodied in the [product].”<sup>56</sup> Further, the Court held that, as a principle, patent exhaustion applies when a product’s only reasonable and intended use would practice the patent, even if the product itself did not completely practice the patent.<sup>57</sup> The court in *Helferich* interpreted this to mean that “that the sale of a device which *partially* practices a patent exhausts that patent in its entirety.”<sup>58</sup> According to the court, licensing even a single claim from a patent will mean that the authorized product will, to some degree, partially practice the patent and thus the patent will be exhausted.<sup>59</sup> Therefore, under the court’s stringent holding on what “substantially embodies” a patent, the licensing of any claim from a patent will exhaust that patent to all third parties.<sup>60</sup>

This holding will only increase uncertainty and inefficiency, and could even disincentivize inventors from conceiving new patentable inventions. Therefore, in situations like *Helferich*, this Note argues that where single patents contain separate claims covering distinct inventive components in two or more industries or classes, the patents must be allowed to be licensed on a claim-by-claim basis so that both industries can license the technology without over- or under-compensating the patent holder.

Of course, litigators often try to “tell a story” rather than just present the bare bones facts.<sup>61</sup> Thus, it likely did not help *Helferich* that the company is widely considered to be a “patent troll,”<sup>62</sup> and was presented as such to the court.<sup>63</sup> Simply reading the news headlines regarding the *Helferich*

55. *Helferich*, 965 F. Supp. 2d at 979.

56. *Quanta*, 553 U.S. at 633.

57. *Id.* at 630–32.

58. *Helferich*, 965 F. Supp. 2d at 980 (emphasis added).

59. *See id.* (any claim in a patent is going to at least partially practice the patent simply by virtue of being part of the patent).

60. *Id.* at 980 (quoting *Quanta*, 553 U.S. at 638).

61. *See* R. David Donoghue, *Judges Panel*, RETAIL PAT. LITIG. (Aug. 20, 2014), <http://www.retailpatentlitigation.com/2014/08/20/judges-panel/> (recommending that attorneys tell a story in their briefs as “stories . . . help the court follow you ‘deep’ into arguments”).

62. A “patent troll” is “somebody who tries to make a lot of money off a patent that they are not practicing and have no intention of practicing and in most cases never practiced.” Jason Rantanen, *Slaying the Troll: Litigation As an Effective Strategy Against Patent Threats*, 23 SANTA CLARA COMPUTER & HIGH TECH. L.J. 159, 163 (2006).

63. *See* Plaintiff’s Brief in Opposition to Defendant’s Motion to Dismiss or Transfer at n.1, *JetBlue Airways Corp. v. Helferich Patent Licensing, L.L.C.*, 960 F.Supp. 2d (E.D.N.Y. 2013) (No. 12-CV-05847); Jeff Roberts, *New York Times Tangles With Patent Troll*, TIME (Aug. 31, 2012), <http://business.time.com/2012/08/31/new-york-times-tangles-with-patent-trolls/>.

ruling makes clear that this label of “patent troll” influences the way in which intelligent, reasonable people view the company.<sup>64</sup> Some experts have even completely misread the opinion, believing that this case was a battle between “patent trolls” and “end-users,” even though the case did not implicate “end-users,” or their rights, at all.<sup>65</sup>

Helferich appealed the Northern District of Illinois’ decision to the Federal Circuit Court of Appeals, arguing that the decision was an unprecedented expansion of the patent exhaustion doctrine.<sup>66</sup> Unfortunately, some of the patents at issue were found invalid after a review by the PTO and the case has stalled, leaving the Federal Circuit unable to address the district court’s use of the doctrine.<sup>67</sup> Thus, until a similar case arises, it is unclear how other courts, especially the Federal Circuit, will react to the Northern District of Illinois’ decision. For now, and unless the *Helferich* ruling is revisited, this expansion of the patent exhaustion doctrine should be a concern for licensors.<sup>68</sup> As noted above, this holding conflicts with the history of the patent exhaustion doctrine and the history of licensing patents claim-by-claim while also leading to economic problems and market inefficiencies.

### *B. Why the Distinctive Helferich Claims Were Not the Subject of Separate Patents*

Helferich could have saved itself a lot of headaches by simply filing all of its claims as separate patent applications. This of course would be costly and inefficient,<sup>69</sup> but at least the company would not have had to

64. E.g., Adi Kamdar, *Judge Sticks Up for End Users, Rules Against Text Message Troll*, ELECTRONIC FRONTIER FOUND. (Aug. 21, 2013), <https://www.eff.org/deeplinks/2013/08/judge-sticks-end-users-rules-against-text-message-troll/>; Ed Oswald, *Can you Patent a Hyperlink? Patent Trolls Sure Think So*, EXTREME TECH (Aug. 30, 2012, 9:30 AM), <http://www.extremetech.com/computing/135267-can-you-patent-a-hyperlink-patent-trolls-sure-think-so>; Erica Wilson, *Setback for Patent Troll Under “Patent Exhaustion” Doctrine Liberates Mobile Technology*, PAYMENT L. ADVISOR (Aug. 22, 2013), <http://www.paymentlawadvisor.com/2013/08/22/setback-for-patent-troll-under-patent-exhaustion-doctrine-liberates-mobile-technology/>.

65. Kamdar, *supra* note 64.

66. Ryan Davis, *Texting Patents in CBS Case not Exhausted, Fed. Circ. Told*, LAW360 (April 14, 2014), <http://www.law360.com/articles/527903/texting-patents-in-cbs-case-not-exhausted-fed-circ-told>.

67. See, e.g., *CBS Interactive Inc. v. Helferich Patent Licensing, L.L.C.*, No. IPR2013-00033 (B.P.A.I. Mar. 3, 2014) (Paper 122: cancelling claims of patent as obvious). That these specific patents were found to contain obvious claims is immaterial to the question of patent exhaustion.

68. The *Helferich* ruling was accepted for reconsideration by the district court but only because the original opinion failed to mention one of the patents at issue. The reconsideration ruling makes clear that the substance of the original opinion will not be changed. See *Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, No. 10-CV-4387, 2013 WL 6354209, at \*1 (N.D. Ill. Dec. 4, 2013).

69. David Fagundes & Jonathan S. Masur, *Costly Intellectual Property*, 65 VAND. L. REV. 677, 685 (2012) (“[t]he average patent applicant will pay more than \$20,000 to obtain a patent”).

worry about exhausting their content claims simply by licensing their device claims. In the normal course of business, in an effort to minimize costs, patent holders often file as many distinct claims in a single patent as possible, rather than spreading them out over multiple patents.<sup>70</sup> However, putting too many distinct inventions in a single application can be a serious burden on the examiner.<sup>71</sup> Further, many patent examiners need to meet quotas on applications reviewed and thus issuing a restriction requirement, which forces the applicant to split his application into two or more applications, can often help the individual examiners at the expense of patent applicants.<sup>72</sup>

It can often be extremely difficult to determine whether a claimed invention should be split into separate patents.<sup>73</sup> It may be simple to determine the number of inventions when the patent application is for “a computer and a peanut butter and jelly sandwich,” which are clearly separate and unrelated, but it can be difficult to determine when there are a number of closely related, yet distinct ideas,<sup>74</sup> such as in the Helferich patents.<sup>75</sup>

Further, the relevant statute, 35 U.S.C. § 121, gives little guidance. The statute states that “[i]f two or more independent and distinct inventions are claimed in one application, the Director *may* require the application to be restricted to one of the inventions.”<sup>76</sup> It is well accepted that “[m]any patent examiners and patent practitioners are confused by restriction practice and unity of invention practice in the United States Patent and Trademark Office [(PTO)].”<sup>77</sup>

In fact, even the PTO has had trouble with the statute and has concluded that although Congress stated that patent applications must only be split if they are “independent *and* distinct,”<sup>78</sup> what they really meant is that inventions must be split if they are independent *or* distinct.<sup>79</sup> Others have questioned the wisdom of allowing the Manual of Patent Examining Procedure definition to supersede the statute and wondered how *any* possible

70. Robert Platt Bell, *Restriction Requirements*, ROBERT PLATT BELL ARTICLES (Oct. 21, 2007, 10:26 AM), <http://robertplattbell.blogspot.com/2007/10/restriction-requirements.html>.

71. MANUAL OF PATENT EXAMINING PROCEDURE § 803(I)(a) (2014).

72. Bell, *supra* note 70.

73. See Jon W. Henry, *Some Comments on “Independent and Distinct” Inventions of 35 USC § 121 and Unity of Invention (Part I)*, 84 J. PAT. & TRADEMARK OFF. SOC’Y 745 (2002).

74. *Id.* at 748.

75. See, e.g., U.S. Patent No. 7,155,241 (filed Feb. 7, 2005).

76. 35 U.S.C. § 121 (2011) (emphasis added).

77. Henry, *supra* note 73, at 748.

78. 35 U.S.C. § 121 (emphasis added).

79. MANUAL OF PATENT EXAMINING PROCEDURE, *supra* note 71, § 802.03(I).

inventions with multiple parts could not be broken into either independent or distinct pieces.<sup>80</sup> Referring to the opening hypothetical<sup>81</sup> it is clear that there are a number of inventions that could be thought of as one invention or as two or more inventions. Sometimes the difference is negligible.

As for the Helferich patents, “the PTO issued at least 17 ‘restriction requirements’ identifying at least 100 ‘independent and distinct’ classes of inventions, and in the process, holding content inventions to be patentably distinct from the handset inventions.”<sup>82</sup> Helferich most likely believed filing so many applications to be unnecessary and economically inefficient, but clearly the Helferich patents had distinct claims: some relating to the devices and some relating to the content providers. Further, these inventions are clearly distinct but related and cannot be said to be independent. Thus, if one adheres to the United States Code,<sup>83</sup> the two classes of claims do not need to be split into separate patents. However, if one defines “independent and distinct” as the PTO does,<sup>84</sup> then the claims should probably be split into separate patents.

However, because the PTO already granted the Helferich patents,<sup>85</sup> it should not have mattered whether the patents should have been split into separate applications during the application phase. The PTO granted these claims and the property rights that accompany them to Helferich, and it should be within Helferich’s power to monetize the entirety of the patent as long as they do not receive double royalties for a single product.

### *C. How the Helferich Ruling Conflicts with the History of the Patent Exhaustion Doctrine and of Licensing Patents Claim-by-Claim*

Expanding the defense of patent exhaustion to protect non-licensing, non-purchasing third parties, such as the *New York Times*, from claims of direct infringement conflicts with the historical reasoning behind the doctrine. Historically, the patent exhaustion doctrine was meant to: (1) protect those who bought products from a licensed manufacturer from unwittingly infringing patents simply by using their purchase, (2) ban post-sale re-

80. Henry, *supra* note 73, at 753.

81. See *supra* note 3.

82. Plaintiff’s Opposition to Defendants’ Joint Motion for Summary Judgment of Patent Exhaustion at 4, *Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 2013 WL 2434922 (N.D. Ill. Apr. 16, 2013).

83. 35 U.S.C. § 121.

84. MANUAL OF PATENT EXAMINING PROCEDURE, *supra* note 71, § 802.01.

85. See, e.g., ‘241 Patent, *supra* note 75.

strictions on licensed items, and (3) make sure that patent owners are not under- or over-compensated.<sup>86</sup>

The reasoning enumerated in the string of cases noted above,<sup>87</sup> however, does not hold when compared to the fact pattern of *Helperich*. In *Helperich*, the accused infringer, the *New York Times*, could not be connected back to the inventor through an economic chain.<sup>88</sup> The *New York Times*, as a content provider, did not purchase any products from the licensed device manufacturers. Nor was it the case that a patent holder was trying to place post-sale restrictions on a product after an authorized sale; in fact, there was nothing that an end-user could do with his purchased cell phone to infringe upon the content claims that *Helperich* was asserting against the *New York Times*.<sup>89</sup> Expanding the defense of patent exhaustion to non-purchasing third parties who are infringing a patent makes little sense; the third party has not, directly or indirectly, compensated the inventor for his creation, nor would a case of infringement against them restrict the uses of a cell phone by the end-user.

#### 1. The Court in *Helperich* Misapplied the Recent Precedent of *Quanta*

To rationalize its decision in *Helperich*, the court looked to the most recent patent exhaustion precedent from the Supreme Court in *Quanta*.<sup>90</sup> As noted above, the court in *Quanta* held the patent exhaustion defense requires the court to make two inquiries. The first inquiry is determining whether the licensed product's "reasonable and intended use" is to fully practice the patent, including any method claims, while the second inquiry is determining whether the products "embod[y] essential features of [the] patented invention."<sup>91</sup>

In *Helperich*, the court applied the test enumerated in *Quanta* and decided that even "partially" practicing a patent, such as by practicing a claim from the patent, was enough for a product to sufficiently embody the patent

86. See, e.g., *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 633 (2008); *United States v. Univis Lens Co.*, 316 U.S. 241, 250–51 (1942); *Adams v. Burke*, 84 U.S. 453, 456–57 (1873).

87. See *supra* Part I.

88. See *Helperich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971, 973 (N.D. Ill. 2013).

89. Unless of course that purchaser was also, through a separate system, providing content to other device owners by utilizing *Helperich*'s patented methods and systems. However, there are no possible infringing acts that a purchaser could perform simply by using their cell phone according to its intended purpose—the claims do not cover end-user actions.

90. *Helperich*, 965 F. Supp. 2d at 980–81.

91. *Quanta*, 553 U.S. at 631.

to the point of exhaustion.<sup>92</sup> The court held that the cell phone devices carried out “all the inventive processes [of the patent] when combined, according to their design, with standard components.”<sup>93</sup> This is a surprising holding, given that a number of claims in the Helferich patents discussed the inventive processes required by content providers, such as the *New York Times*, that were not embodied within the cell phone devices and are not “standard components.”<sup>94</sup> That the content claims were found patentable in the first place is evidence that the PTO did not find them to describe merely “standard components,” but rather found they described an inventive design worthy of protection. Allowing *de minimis* practicing of a patent in an authorized device to “sufficiently embody” the patent means that licensing even a single claim from a patent will exhaust the entire patent.

Further, in contrast to *Quanta*, where the end-users would be implicated for infringement simply by virtue of their reasonable use of the purchased computer chips and processors (in computers), the end-users in *Helferich* would not infringe on the content claims of the Helferich patents by the reasonable use of their purchased cell phones.<sup>95</sup> Thus *Quanta* is not the exact analogy to *Helferich* that the court made it out to be.<sup>96</sup>

As justification for this expansion of the exhaustion doctrine, the *Helferich* court reasoned that:

[a] claim in a patent can only be carved out if it becomes the subject of a separate, distinct patent, relying on the Supreme Court’s holding that the elements of a patent claim cannot be parceled out—’[f]or if anything is settled in the patent law, it is that the combination patent covers only the

92. *Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, No. 10-CV-4387, 2013 WL 4401378 at \*6 (N.D. Ill. Aug. 14, 2013), *order clarified on reconsideration*, No. 10-CV-4387, 2013 WL 6354209 (N.D. Ill. Dec. 4, 2013).

93. *Id.* at 979 (quoting *Quanta*, 553 U.S. at 634).

94. *See, e.g.*, ‘838 Patent, *supra* note 48 (“A method that communicates data from a content provider through a mobile radiotelephone network to a wireless communication device, utilizing an content notification system having an interface with a home location registry comprising: the content provider initiating communication of data intended for the wireless communication device, the data including an information identifier that is associated with information stored by the content provider and identifies the location of the stored information, wherein the information is not included in the data and is not stored in the wireless communication device; the content provider causing the content notification system to: process the data into a message suitable for transmission to the wireless communication device, which message includes the information identifier, and transmit the message to the wireless communication device; and the content provider receiving a request message that is wirelessly transmitted from the wireless communication device over the mobile radiotelephone network as a reply to the message, the request message including at least a portion of the information identifier.”).

95. *Compare Helferich*, 965 F. Supp. 2d at 973, with *Quanta*, 553 U.S. at 617.

96. *See Helferich*, 965 F. Supp. 2d at 980–81.



totality of the elements in the claim and that no element, separately viewed, is within the grant.<sup>97</sup>

This analogy is, forgive the pun, patently invalid, and it is puzzling why the court conflated elements within a claim to claims within a patent.

## 2. The Court Ignored Precedent That Allows Licensing of Patents on a Claim-by-Claim Basis

While single elements within a claim are clearly not protected by patent law, a single claim within a patent is expressly protected.<sup>98</sup> In fact, the Supreme Court has realized “it is sometimes said that each claim of a patent is a separate patent.”<sup>99</sup> Regardless of whether there has been an authorized sale of a licensed product, elements within a claim are virtually never within the scope of a patent, while claims within a patent “define the [very] scope of a patent grant” and are expressly protected.<sup>100</sup> Therefore, while *Helferich* could not license an individual element from one of their claims, as it does not possess a monopoly over the individual elements, *Helferich* should be able to license specific claims from its patents as it *does* control a monopoly over products that fall within its patented claims. The claim/element dichotomy is an essential aspect of patent law, where, respectively, the first is protected while the latter is not.

In several circumstances, the courts have made clear that each claim of a patent should be treated separately. For instance, in considering the issue of licensing only specific claims within a patent, the Supreme Court, in *Pope Manufacturing v. Gormully & Jeffery Manufacturing*, held that a patent could not be assigned on a claim-by-claim basis, but rather *could* be licensed on a claim-by-claim basis.<sup>101</sup> The Court said that while a patent assignee could sue on his own behalf, or pass along his rights to another, a licensee could not.<sup>102</sup> Thus, applied to *Helferich*, the cellular phone device manufacturers would be unable to sue content providers, such as the *New York Times*, while *Helferich* itself could still sue, as it did.<sup>103</sup>

97. *Id.* at 977 (quoting *Aro Mfg. v. Convertible Top Replacement Co.*, 365 U.S. 336, 344 (1961)).

98. Compare *Aro*, 365 U.S. at 344 (rights of a patent cover “only the totality of the elements in the claim” and “no element, separately viewed, is within the grant”), with *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996) (“[a] claim covers and secures a process, a machine, a manufacture, a composition of matter, or a design . . . . A claim define[s] the scope of a patent grant”).

99. *Pope Mfg. v. Gormully & Jeffery Mfg.*, 144 U.S. 248, 252 (1892).

100. See *supra* note 98.

101. See *Pope*, 144 U.S. at 252.

102. *Id.*

103. See *Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971, 973–74 (N.D. Ill. 2013).

This reasoning has been applied in recent cases as well, such as *Lucent Technologies, Inc. v. Gateway, Inc.*, where the court held that:

the right of the patentee to assign his monopoly was limited to: (1) the whole patent, comprising the exclusive right to make, use, and vend the invention throughout the United States; (2) an undivided part or share of that exclusive right; or (3) the exclusive right under the patent within and throughout a specified territory.<sup>104</sup>

Anything less, the court reasoned, such as transferring rights to a single claim, “did not convey title in the patent and the right to sue; instead, it conveyed merely a license.”<sup>105</sup>

Of course, neither the *Lucent* nor the *Pope* courts were forced to consider the patent exhaustion doctrine, as it was not relevant to those fact patterns, but there would be no purpose in allowing a claim-by-claim licensing of patents if such a practice would exhaust the entire patent. If licensing a single claim exhausted the patent, then it would be tantamount to licensing the entire patent, including every single claim, as either way the patent would be exhausted. Such a result is illogical and does not comport with what the Supreme Court enumerated in *Pope*.<sup>106</sup>

However, a more recent line of cases, starting with *Cyrix Corp. v. Intel Corp.*<sup>107</sup> and eventually leading to *Quanta*, have shown that the doctrine of patent exhaustion, as a defense to claim-by-claim licenses, is on the rise, and will likely be litigated often in the near future. *Cyrix*, like *Quanta*, dealt with the patent holder licensing computer components without licensing them in combination with other standard computer components, effectively leaving the licensed components as worthless parts that could never be used without causing patent infringement.<sup>108</sup> The *Cyrix* court “echoed *Univis Lens* when it held that “[t]he patent exhaustion doctrine is so strong that it applies even to an incomplete product that has no substantial use other than to be further manufactured into a completed patented and allegedly infringing article.”<sup>109</sup> But of course, as discussed above, the cell phones of the *Helferich* case do not meet this definition.

Therefore, the ruling in *Helferich*, that licensing a single claim within a patent will exhaust that patent with regards to non-purchasing third par-

104. *Lucent Techs., Inc. v. Gateway, Inc.*, 543 F.3d 710, 720 (Fed. Cir. 2008).

105. *Id.* at 721 (citing *Pope*, 144 U.S. at 252).

106. *See Pope*, 144 U.S. at 252.

107. *Cyrix Corp. v. Intel Corp.*, 846 F. Supp. 522, 524 (E.D. Tex. 1994), *aff'd*, 42 F.3d 1411 (Fed. Cir. 1994).

108. *Id.*

109. John W. Osborne, *A Coherent View of Patent Exhaustion: A Standard Based on Patentable Distinctiveness*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 643, 651 (2004) (citing *Cyrix Corp.*, 846 F. Supp. at 540).

ties, directly contradicts the historical grounds of protecting end-users from post-sale restrictions. Further, the ruling also conflicts with recent precedent, which states that a patent is only exhausted if the authorized product essentially embodies all of the inventive parts of the patent.<sup>110</sup>

#### *D. How the Helferich Ruling Creates Problems*

On top of the *Helferich* ruling diverging from historical reasoning and precedent, it also creates a number of practical issues, which will become increasingly problematic as the use of the patent exhaustion defense becomes widespread. The *Helferich* ruling will create economic inefficiencies and possibly even market hold-ups.

##### 1. Possible Economic Inefficiencies Created by the *Helferich* Ruling

As a matter of policy, the patent exhaustion doctrine should have three economic goals in mind: first, to promote the advancement of science by providing an economic incentive for inventors to invent; second, to make sure that the patent holder is not over- or under-compensated for his patent through licenses; and finally, to make sure that a licensee is not paying for more or less intellectual property rights than his product will utilize. It has been said that the “exhaustion and implied license doctrines should operate to facilitate sales and licensing transactions between patent owners and their customers and not to dictate the terms of those transactions.”<sup>111</sup>

Initially, the patent exhaustion doctrine must not conflict with the constitutional reasoning behind the totality of patent law—to “promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”<sup>112</sup> Thus, inventors whose designs lay between two industries, such as in the *Helferich* patents, need to be assured that they will receive full and fair economic value for their designs and will not be limited to licensing to a single company before exhausting their patent. If such inventors cannot be assured that their inventions will have the same rights and economic value as those inventions that exist solely within the purview of a single industry, there will be a loss of incentive to invent, which will hinder the progress of science.

110. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 635 (2008); *Adams v. Burke*, 84 U.S. 453, 456–57 (1873).

111. Schlicher, *supra* note 30.

112. U.S. CONST. art. I, § 8, cl. 8.

However, under the *Helferich* ruling, licensing a patent that sits between two industries will involve either under compensating the patent-holder or forcing the licensee to over pay. If the inventor is only allowed to license his patents to a single industry, he will have to choose whom to license to and may be uncertain as to the value of his intellectual property.<sup>113</sup> To assist with a demonstration, we will once again return to the fictional scenario of companies A and B and a patent with “system-A claims” and separate “system-B claims.”<sup>114</sup>

As a first option, the inventor can attempt to license the patent, in full, to one of the two companies; presumably the more lucrative of the two. Under this scenario, there would likely be some impedance to a licensing agreement as the patent holder would want to receive the full value of the patent in the license but the licensee would only want to pay for the relevant bits, or claims, of the patent that his product would embody. Company A would clearly have no interest in paying a licensing fee for “system-B claims.” Further, as a mere non-exclusive licensee, Company A would be unable to enforce the “system-B claims” against company B even if they did license those claims, as only an assignee has standing to sue. Therefore, Company A could not recover the loss of paying for “system-B claims” if Company B refused a sub-license.<sup>115</sup> And in a scenario like in *Helferich*, where *Helferich* was licensing its patents to multiple cellular device manufacturers (Company A in the hypothetical), an assignment instead of a license would be impractical.<sup>116</sup> Thus, the result is either: (1) the patent holder is under-compensated, as Company A will only pay for the claims it will utilize and the patent is then exhausted, or (2) the licensee overpays for the intellectual property it needs as it will be paying for claims that neither it nor its end-users could ever possibly infringe.

As a second option, the inventor may, as *Helferich* did, try to license the relevant claims from its patent to each relevant industry, respectively.<sup>117</sup> If allowed, this would lead to the patent holder being compensated once for every utilized claim, as Company A and Company B essentially split the cost of a full license. However, after the *Helferich* ruling, the inventor will find the second industry unwilling to pay for the claims relevant to them, as

113. It would be unclear, from an economic standpoint, whether the patent has the value of the relevant claims to the industry or whether the value is of the entirety of the claims.

114. See *supra* note 3.

115. *Lucent Techs., Inc. v. Gateway, Inc.*, 543 F.3d 710, 720–21 (Fed. Cir. 2008) (only assignees or exclusive licensees may sublicense).

116. See *Helferich Patent Licensing*, *L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971, 973 (N.D. Ill. 2013).

117. *Id.* at 973–74.

they will claim the patent in exhausted. Thus, in this case, the inventor will be undercompensated as he is getting paid only for some of the claims and invention.<sup>118</sup>

As an unlikely third option, the patent holder could attempt to license the entirety of both industries at once, in a single license. This could lead to a similar cost-sharing option across companies that use either “system-A claims” or “system-B claims.” However, companies would have incentives to simply wait out the process and newly created companies would be free to enter the market since there would only be exhausted patents; thus, a market hold-up will be created, as is explained below.

Accordingly, the expanded patent exhaustion doctrine will have real negative economic effects, on both the patent holder and any potential licensees. However, worst of all is the effect on society, as the above-mentioned scenario could cause a market hold-up that would keep inventions off the market.

## 2. How the *Helperich* Ruling Could Lead to a Market Hold-Up

Beyond the purely economic concerns resulting from being unable to license a patent claim-by-claim, there is a concern that there will be a race between different companies to license the patent where the prize of a free license goes to the loser. This will create a market hold-up where the patented technology is not being licensed because companies will wait for others to license a technology before taking advantage of an exhausted patent. But who will pay for a license if it frees others to practice the patent freely? And when nobody is licensing patents, there is less of an economic incentive to invent and humanity suffers the loss of useful inventions.

To illustrate, let us return to the opening hypothetical of a patent covering modifications to systems A and B, owned by companies A and B respectively.<sup>119</sup> If licensing “system-A claims” to Company A will exhaust the patent, Company B will not buy a license until Company A has exhausted the patent by licensing “system-A claims.” However, if “system-B claims” were first licensed to Company B, Company A would be able to produce their part of the patented technology without having to purchase a license. Thus, both companies would have an incentive to not license the technology first, and the invention would languish in conception. This would obviously harm the public, who does not have the advantage of the

118. *Id.* at 980–81.

119. *See supra* note 3.

invention, as well as the patent holder, who cannot monetize his intellectual property.

Overall, implementing the expanded patent exhaustion doctrine to prohibit individual licensing of claims without exhausting the patent will cause a number of problems. First, it would conflict with the historical reasoning behind the patent exhaustion doctrine. Second, it would create economic uncertainty and inefficiencies. Third, it would create a market hold-up scenario that would disincentivize inventors from creating and patenting inventions in fields that border multiple industries. Finally, it would disincentivize existing companies from licensing relevant claims from such a patent and inventions would languish in conception.

### III. REDEFINING THE PATENT EXHAUSTION DOCTRINE TO TEST FOR INDIRECT ECONOMIC CONTRIBUTION AND FAIR RESTITUTION

Although the *Helferich* ruling created a number of problems in the patent exhaustion doctrine, there are no doubt many possible solutions. The solution below, however, is simple and would not likely require any legislation be passed. It would enable some patents to be licensed on a claim-by-claim basis as long as: the claims in question are distinct from one another and practicing one claim would not necessarily implicate another.

Under this proposal, patent exhaustion would be considered under a two-part test. The first part of the test would ask whether there is any economic chain that can link an accused infringer to a licensing agreement or authorized sale. Only if there is an economic chain linking the accused infringer to the patent should the defense of patent exhaustion be available. If there is a sufficient economic connection, then the court will move on to the second inquiry and determine whether the licensed product sufficiently embodies the non-licensed claims in such a way that those claims are exhausted. This second part of the test is essentially the same as the test used in *Quanta*, asking whether the normal or expected use of the product by the authorized purchaser would result in infringement.<sup>120</sup> It is not the same, however, as the test used in *Helferich*, that simply required that the product “partially” practice the patent rather than “substantially” practice the patent.<sup>121</sup>

The first part of the proposed test would be governed under the simple rule that patent exhaustion does not apply to non-purchasing third parties.

120. *Quanta Computer, Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 623–24 (2008).

121. *Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971, 979 (N.D. Ill. 2013) (quoting *Quanta*, 553 U.S. at 635–38).

This would solve most of the above-mentioned problems with the patent exhaustion doctrine as it currently stands. This solution is appealing in that it would not require any substantive change in the patent exhaustion doctrine. In fact, such a reading of the patent exhaustion doctrine would better comport with the historical reasoning of the law as well as recent precedent.

As noted above, the historical purpose of patent exhaustion doctrine was to protect end-users from post-sale restrictions on products that had been manufactured with authority under a license.<sup>122</sup> To simply exempt this defense from non-purchasing parties, i.e., manufacturers who cannot be connected to the licensed product through a chain of commerce, would fulfill the historical function of the patent exhaustion doctrine while promoting the progress of the sciences by permitting inventors to realize the full economic value of their patents.

Under this proposal, the first relevant inquiry for a court would be whether the accused infringer ever economically contributed, either directly or indirectly, to the patent holder. Thus, in a case like *Quanta*, where the accused infringer had purchased LGE-licensed computer chips from Intel,<sup>123</sup> the patent exhaustion doctrine would still apply. *Quanta*, by paying Intel for its computer chips, indirectly contributed to LGE, the patent owner, because Intel had negotiated a license with LGE.<sup>124</sup> Thus it could be said that some of *Quanta*'s money ended up in the pocket of the patent owner.<sup>125</sup>

Similarly, in *Univis*, the accused infringers, who took unfinished lenses and ground and polished them into finished products,<sup>126</sup> would still be protected by the patent exhaustion doctrine because they can be economically connected to the patent holder through the lenses' chain of commerce.

In fact, the only case that would come out differently would be *Helferich*, where there is no chain of commerce argument to be made that the *New York Times* ever directly or indirectly compensated Helferich for utilizing its patented content inventions.<sup>127</sup> Thus, the *New York Times* should have no more of a defense under the patent exhaustion doctrine than another phone manufacturer who utilized the device claims in its phones without first licensing them.

122. *Adams v. Burke*, 84 U.S. 453, 456 (1873).

123. *Quanta*, 553 U.S. at 623–24.

124. *Id.*

125. *See id.*

126. *United States v. Univis Lens Co.*, 316 U.S. 241, 247 (1942).

127. *See Helferich Patent Licensing, L.L.C. v. N.Y. Times Co.*, 965 F. Supp. 2d 971, 980–81 (N.D. Ill. 2013).

Should a defendant meet the requirements of the first test, that there was an authorized purchase of a licensed product, the court will move on to the second part of the test: whether the licensed product essentially embodies the litigated non-licensed claims. This part of the test ensures that the economic contribution found in the first inquiry was related to the correct claims. Going back to our hypothetical, this ensures that Company A could not license “system-A claims” from the patent owner and then argue that, because there is an economic link between them and the patent holder, that “system-B claims” have been exhausted with respect to Company A.

Part two of the test ensures that a licensee only gets what it paid for, unless it cannot utilize what it paid for without infringing on other claims. This ensures that companies can license only those claims they need, while allowing the patent holder to receive fair compensation by licensing all of his claims, individually, to relevant companies.

#### IV. CRITICISMS AND RESPONSES TO THE TWO-STEP ECONOMIC-CONTRIBUTION/EMBODYING-THE-CLAIM TEST

Many of the possible criticisms to the proposed two-part test can be found in the conclusion of the *Helferich* ruling.<sup>128</sup> It is worth noting that many of the potential problems of allowing claim-by-claim licensing are minor when compared to the problems caused by the expansion of the patent exhaustion doctrine.

First, there is a concern that allowing licenses on a claim-by-claim basis will confuse licensees.<sup>129</sup> The court in *Helferich* argued that a “licensee would be uncertain as to what parts of a patent it has use rights and what is not licensed.”<sup>130</sup> However, this uncertainty cannot be a major problem; the current rule is no clearer. Further, any licensee would know what claims it has licensed and would presumably have time during licensing discussions to clarify its rights. A patent holder and licensee can directly determine what rights the licensee has; thus, there should be little confusion.

If a third party is unsure as to whether a claim or patent has been exhausted, it can simply analyze the relevant facts in light of the two-step test detailed above. If it purchased the product through an authorized sale and only intends to use the product according to its normal and intended use, there would be no doubt that it is protected by the defense of patent exhaus-

128. *Id.*

129. *Id.* at 980.

130. *Id.*



tion. Although the test is not simple, it is no more difficult than the current test and is quite a bit simpler than many tests in patent law.<sup>131</sup>

Another criticism is that if a patent holder “were able to carve out individual claims from a single patent, it could potentially claim a multitude of separately licensable rights from one invention and thereby, in effect, create hundreds of patents out of a single patent.”<sup>132</sup> This criticism lacks merit as well. Patent owners already have separate rights to exclude based upon each of the claims within their granted patents. These rights already exist, and regardless of whether patents can be licensed on a claim-by-claim basis, patent owners can litigate whenever a single claim is infringed.<sup>133</sup> Further, regardless of whether a licensor were to separately license 100 claims or simply license an entire patent of 100 claims as a complete package, they would receive the same compensation as the licensee would be negotiating for the same rights in both scenarios.

Claims already define the boundaries of patent rights; it only makes sense that each claim, with its own exclusive rights to exclude, should be able to be licensed separately from other claims. The Supreme Court has long recognized that “it is sometimes said that each claim of a patent is a separate patent.”<sup>134</sup> Therefore, it seems as if the court’s fear—that hundreds of patents will be created out of a single patent—has long already been true. And regardless of any change to the patent exhaustion doctrine, it will continue to be true.

Finally, there is a concern that following the two-step test, detailed above, will lead to patent owners being compensated twice for the same invention, resulting in a double recovery.<sup>135</sup> However, in the economic analysis provided in this article, it was discussed how patent owners will be either under-compensated or over-compensated as a result of the *Helferich* ruling.<sup>136</sup> Conversely, a system that allows patents to be licensed on a claim-by-claim basis, so long as the claims are distinct, will lead to the patent owner being justly compensated for his patent, where each licensor is paying only a fraction of the patent’s full licensing value.

Simply put, there may be problems with the proposed two-step test, such as some uncertainty. However, the current ruling creates far greater

131. Compare the difficulty in determining whether there is an economic chain between a purchaser and patent holder, which is relatively simple, with determining whether an invention is non-obvious in light of hundreds of pieces of prior art.

132. *Helferich*, 965 F. Supp. 2d at 980.

133. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 373 (1996).

134. *Pope Mfg. v. Gormully & Jeffery Mfg.*, 144 U.S. 248, 251 (1892).

135. *Helferich*, 965 F. Supp. 2d at 980.

136. See *HPL to Appeal Exhaustion Order*, *supra* note 13.

problems, including even greater uncertainty, economic inefficiencies, and possibly a market hold-up.

#### CONCLUSION

The patent exhaustion doctrine has been recognized for over 150 years and is an important defense for the purchasers of licensed products. Historically, it protected purchasing parties from post-sale restrictions on licensed products and ensured that patent owners were not overcompensated.<sup>137</sup> However, if the doctrine is allowed to be permanently expanded to include non-purchasing parties and to exclude the possibility of claim-by-claim licenses, as in *Helferich*, then it creates more problems than it solves.

The simple solution is to add a first inquiry to the patent exhaustion test. Rather than just asking whether the product in question substantially practices the relevant litigated claims, courts should first look to see whether the accused infringer ever, directly or indirectly, economically contributed to the patent owner through the chain of commerce.

This solution will solve the economic hurdles and market hold-up potential created by the *Helferich* ruling without adding much complexity to the inquiry. Further, since this interpretation is more attuned to the historical purposes and use of the patent exhaustion doctrine, legislation would not likely need to be passed. The Federal Circuit, upon ruling on *Helferich's* appeal or on a similar case, could simply enumerate the need for an economic connection between the accused infringer and the asserting patent owner for the patent exhaustion doctrine to apply. A few simple sentences in an appellate opinion can fix the problems caused by the *Helferich* ruling.

137. *Adams v. Burke*, 84 U.S. 453, 456 (1873).





