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## Festo and the Complete Bar: What's Left of the Doctrine of **Equivalents?**

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# FESTO AND THE COMPLETE BAR: WHAT'S LEFT OF THE DOCTRINE OF EQUIVALENTS?

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"Momma's don't let your babies grow up to be cowboys, Make them be doctors and lawyers and such" 1

#### I. INTRODUCTION

It can be said that the Federal Circuit's decision in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*<sup>2</sup> is steeped more in the traits of cowboys than lawyers. That is, the decision makes an impact on the entire range, the range of coverage that is, not the high prairie. The en banc decision has an instant and profound impact on the interpretation of every issued unexpired U.S. patent,<sup>3</sup> those being licensed and every pending patent application. The rule from *Festo* helps determine the scope of an issued patent, but the decision is notable as it creates a complete bar to the application of the doctrine of equivalents to practically every claim that has been amended during the prosecution of the patent application.

Note that the United States Supreme Court has granted certiorari in this case.<sup>4</sup> The briefs seeking and opposing certiorari vigorously debate the policy underpinnings of the decision.<sup>5</sup> The high Court's decision is eagerly awaited

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<sup>1.</sup> WILLIE NELSON, Momma Don't Let Your Babies Grow Up to be Cowboys, on THE BEST OF WILLIE NELSON (Heartland Music 1986).

 <sup>234</sup> F.3d 558 (Fed. Cir. 2000) (en banc), petition for cert. filed, (U.S. Apr. 9, 2001) (No. 01-1543). Among others, amicus briefs have been filed by the Association of Patent Law Firms, Federal Circuit Bar, Federation International des Counseils en Propriete Industrielle and the American Intellectual Property Law Association.

<sup>3.</sup> There are approximately 1.2 million patents now in force prosecuted prior to the *Festo* decision. *See* Reply to Brief in Opposition at 3, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 69 U.S.L.W. 3673 (U.S. June 18, 2001), *available at* http://www.hoffmanbaron.com/news/.

<sup>4. 69</sup> U.S.L.W. 3673 (U.S. June 18, 2001).

<sup>5.</sup> See Reply to Brief in Opposition, supra note 3, at 4 ("The holders of . . . patents [prosecuted prior to the Festo decision] are now rendered defenseless against imitators who have made insignificant changes to amended claim elements."); Lockheed Martin Corp. v. Space

by intellectual property community: attorneys, patentees, licensors and licensees alike. But in the interim, the complete bar rule is the law of the land and may ultimately be the prevailing law. Thus, a through analysis of the decision is warranted.

The practical effect of the complete bar is that the drafter of an application must take added precautions prior to filing the original application. Commentators were quick to point out the myriad of red flags that *Festo* raises.<sup>6</sup> Though the decision certainly gives cause to change the approach taken to drafting the original application,<sup>7</sup> it should be noted that the practitioner sometimes cannot possibly attend to every detail to their liking before filing an application.<sup>8</sup> Indeed, the nature of drafting a patent application does not often lend itself to an ordered and scheduled process as an inventor may disclose material in an erudite and oft in an ill-timed manner. The author's intent is to review the *Festo* decision and apply the practical lessons from the viewpoint of the practitioner.

The *Festo* decision tackles the multi-faceted doctrine of equivalents; beginning with its history via Supreme Court precedent and continuing through Federal Circuit precedent. The majority then proceeds to blaze a well-marked trail, be it for good or bad, along one simple and straight path. As background, note that the doctrine of equivalents prevents an accused infringer from avoiding liability for infringement by changing only minor or insubstantial details of a claimed invention while retaining the invention's essential identity. Infringement will be found under the doctrine of equivalents if the difference between the claimed and accused device or composition are insubstantial. 10

Substantiality is measured objectively from the viewpoint of one skilled in the art and is often measured by the function-way-result test. Infringement exists under this test if the accused product performs substantially the same function in substantially the same way to produce substantially the same result. The doctrine must balance the policy goals of ensuring that the

Sys./Loral, Inc., 249 F.3d 1314, 1320 (Fed. Cir. 2001) (applying complete bar to patent that issued in 1978).

<sup>6.</sup> W.D. Wallace, *Life After Festo: Guarding Against Copyists*, INTELL. PROP. TODAY, January 2001, at 8-11.

<sup>7.</sup> See, e.g., Lockheed Martin, 249 F.3d at 1326.

<sup>8.</sup> Gerry Gressel, Claim Drafting and Claim Amendment to Reduce the Festo Effect, INTELL. PROP. TODAY, April 2001, at 24-25.

<sup>9.</sup> Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608 (1950).

<sup>10.</sup> Hilton Davis Chemical Co. v. Warner-Jenkinson, Co., 62 F.3d 1512, 1517 (Fed. Cir. 1995).

<sup>11.</sup> *Id* 

<sup>12.</sup> Graver Tank, 339 U.S. at 608.

patentee enjoy the full benefit of his patent and ensuring that the claims give "fair notice" of the patent's scope. <sup>13</sup>

To prevent the doctrine of equivalents from consuming the public notice goal, prosecution history estoppel is used by the court.<sup>14</sup> The doctrine operates by preventing a patentee from claiming subject matter relinquished during prosecution of a patent application. Estoppel occurs where the patentee has taken certain actions before the Patent Office, including amendments to the claims.<sup>15</sup> Therefore, "the doctrine of equivalents is subservient to... prosecution history estoppel."<sup>16</sup> The general idea behind prosecution history estoppel is that the patentee, by actions taken during prosecution, puts the public on notice of the rights claimed and the rights surrendered. Actions, such as amendments made to claims, adding more specific elements in order to overcome novelty<sup>17</sup> or obviousness<sup>18</sup> rejections based upon prior art cited by the primary examiner, are the type of action that gives rise to prosecution history estoppel.

The Supreme Court has noted that "the doctrine of equivalents, as it has come to be applied since *Graver Tank*, has taken on a life of its own." To stem this life, the decision in *Warner-Jenkinson* stated that courts will have to "decide whether the proffered reason [for an action made during prosecution] is sufficient to overcome prosecution history estoppel as a bar to application of the doctrine of equivalents to the element added by the amendment." The Court also stated that "where no explanation is established, . . . the court should presume that the patent applicant had a substantial reason related to patentability for including the limiting element added by the amendment." Therefore, "prosecution history estoppel would bar the application of the doctrine of equivalents as to that element."

Despite being urged by the *Warner-Jenkinson* court, the Federal Circuit refused "to require judicial exploration of the equities of a case before allowing application of the doctrine of equivalents," refused to require "proof of intent" on the part of the alleged infringer before the doctrine of equivalents

<sup>13.</sup> London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1538 (Fed. Cir. 1991).

<sup>14.</sup> See, e.g., Charles Greiner & Co. v. Mari-Med Mfg., Inc., 962 F.2d 1031, 1036 (Fed. Cir. 1992).

<sup>15.</sup> See, e.g., Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376-77 (Fed. Cir. 1999).

<sup>16.</sup> Autogiro Co. v. United States, 384 F.2d 391, 400-01 (Ct. Cl. 1967).

<sup>17.</sup> See 35 U.S.C. §102 (1999).

<sup>18.</sup> See 35 U.S.C. § 103 (1999).

<sup>19.</sup> Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 30 (1997).

<sup>20.</sup> Id. at 33.

<sup>21.</sup> *Id*.

<sup>22.</sup> Id.

<sup>23.</sup> Id. at 34.

could be applied,<sup>24</sup> and refused to adopt "independent experimentation" as "an equitable defense to the doctrine of equivalents."<sup>25</sup> The court stated that the "proper time for evaluating equivalency... is at the time of infringement, not at the time the patent was issued."<sup>26</sup> However, even though prosecution history estoppel may apply, the court stated that "if the patent holder demonstrates that an amendment required during prosecution had a purpose unrelated to patentability,<sup>27</sup> a court must consider that purpose in order to decide whether an estoppel is precluded."<sup>28</sup> In the event that "the patent holder is unable to establish such a purpose, a court should presume that the purpose behind the required amendment is such that prosecution history estoppel would apply."<sup>29</sup>

Prior to *Festo* the Federal Circuit applied the "flexible bar" approach.<sup>30</sup> The flexible bar stated that prosecution history estoppel "may have a limited effect" on the doctrine of equivalents "within a spectrum ranging from great to small to zero."<sup>31</sup> Under the "flexible bar" the court came down differently, flexing both ways so to say, both in support of an equitable case-by-case approach<sup>32</sup> and in support of a more-complete bar.<sup>33</sup> The divergence in approach certainly caused confusion as to the potential scope of equivalents

- 24. Warner-Jenkinson Co., 520 U.S. at 35-36.
- 25. Id. at 36.
- 26. Id. at 37.
- 27. An amendment to correct a typographical error would clearly fall into this category.
- 28. Warner-Jenkinson Co., 520 U.S. at 40-41.
- 29. Id. at 41.
- 30. Hughes Aircraft Co. v. United States, 717 F.2d 1351 (Fed. Cir. 1983).
- 31. Id. at 1363.
- 32. See, e.g., LaBounty Mfg., Inc. v. United States Int'l Trade Comm'n, 867 F.2d 1572 (Fed. Cir. 1989) (vacating finding of non-infringement based on the holding that once a claim element is amended, no equivalent is available); see also Dixie USA, Inc. v. Infab Corp., 927 F.2d 584, 588 (Fed. Cir. 1991) (noting that prosecution history estoppel should not cause "a total preclusion of equivalence"); Modine Mfg. Co. v. United States Int'l Trade Comm'n, 75 F.3d 1545, 1555-56 (Fed. Cir. 1996) (vacating finding of non-infringement under doctrine of equivalents due to prosecution history estoppel because, although "the available range of equivalency is limited, by estoppel, . . . the prosecution history and the prior art do not eliminate equivalents.").
- 33. See, e.g., Kinzenbaw v. Deere & Co., 741 F.2d 383 (Fed. Cir. 1984). See also 5A DONALD S. CHISUM, CHISUM ON PATENTS § 18.03[b], at 18-492 (1998):

"Beginning shortly after its creation in 1982, the Federal Circuit developed two lines of authority on the scope of an estoppel based on an amendment or argument that distinguished the prior art. One line followed a strict approach, according to which a court refused to speculate whether a narrower amendment would have been allowed. The other line followed a flexible or spectrum approach, which recognized that amendments did not invariably preclude all equivalents . . . . "

available.<sup>34</sup> After the *Warner-Jenkinson* decision, the Federal Circuit revisited the issue, the decisions thereafter reflect the concept that the court still decides what subject matter a patentee has surrendered during prosecution to determine the range of available equivalents.<sup>35</sup>

The Court in *Warner-Jenkinson*, stated that any amendment made for "a substantial reason related to patentability" creates prosecution history estoppel. The decision, albeit far reaching in nature, still left many questions unanswered. Thus, with the *Hughes* "flexible bar" appearing inoperable, or at least irreconcilable with the other Federal Circuit's cases implementing a bar, the Federal Circuit was then poised to resolve the ambiguities left by these cases.

#### II. QUESTIONS PRESENTED FOR EN BANC REVIEW

The *Festo* court requested briefs on five questions for rehearing en banc. These five issues comprise the background on which the court constructs a lengthy opinion, including a number of concurring and dissenting opinions. For brevity's sake, the majority opinion is the focus of this work. The questions presented were:<sup>36</sup>

- 1. For the purposes of determining whether an amendment to a claim creates prosecution history estoppel, is "a substantial reason related to patentability,"<sup>37</sup> limited to those amendments made to overcome prior art under § 102 and § 103, or does "patentability" mean any reason affecting the issuance of a patent?
- 2. Under *Warner-Jenkinson*, should a "voluntary" claim amendment one not required by the examiner or made in response to a rejection by an examiner for a stated reason create prosecution history estoppel?
- 3. If a claim amendment creates prosecution history estoppel, under *Warner-Jenkinson* what range of equivalents, if any, is available under the doctrine of equivalents for the claim so amended?
- 4. When "no explanation for a claim amendment is established,"<sup>38</sup> thus invoking the presumption of prosecution history estoppel under

<sup>34.</sup> See Douglas A. Strawbridge et al., Area Summary, Patent Law Developments in the United States Court of Appeals for the Federal Circuit During 1986, 36 AM. U. L. REV. 861, 887-88 (1987).

<sup>35.</sup> Litton Systems, Inc. v. Honeywell, Inc., 140 F.3d 1449, 1455-57 (Fed. Cir. 1998). *See also* Hughes Aircraft Co. v. United States, 140 F.3d 1470, 1476-77 (Fed. Cir. 1998) (holding that the court determines the exact subject matter the patentee actually surrendered and if the accused devise does not fall within the range of material surrendered, the doctrine of equivalents is not barred).

<sup>36.</sup> See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 187 F.3d 1381, 1381-82 (Fed. Cir. 1999).

<sup>37.</sup> Warner-Jenkinson Co., 520 U.S. at 33.

<sup>38.</sup> *Id*.

*Warner-Jenkinson*, what range of equivalent, if any, is available under the doctrine of equivalents for the claim element so amended?

5. Would a judgment of infringement in this case violate *Warner-Jenkinson's* requirement that the application of the doctrine of equivalents "is not allowed such broad play as to eliminate an element in its entirety." In other words, would such a judgment of infringement, post *Warner-Jenkinson*, violate the "all element" rule?

#### III. MAJORITY OPINION- THE "COMPLETE BAR"

The court answered the first question by stating that:

[f]or the purposes of determining whether an amendment gives rise to prosecution history estoppel, a 'substantial reason related to patentability' is not limited to overcoming or avoiding prior art, but instead includes any reason which relates to the statutory requirements for a patent. Therefore, a narrowing amendment made for any reason related to the statutory requirements for a patent will give rise to prosecution history estoppel with respect to the amended claim element.<sup>40</sup>

The Court, in *Warner-Jenkinson*, only addressed amendments made to overcome objections based on prior art.<sup>41</sup> The *Festo* court recognized a litany of statutory requirements that must be satisfied before a valid patent can issue and that are thus related to patentability. The list now includes patentability requirements found in 35 U.S.C. §§ 101,<sup>42</sup> 102,<sup>43</sup> 103,<sup>44</sup> and 112.<sup>45</sup> The court stated that they "see no reason why prosecution history estoppel should not also arise from amendments made for other reasons related to patentability . . . ."<sup>46</sup> The response to question one is based on *Warner-Jenkinson's* statement that an amendment "does not necessarily preclude infringement by equivalents of that element."<sup>47</sup> Thus, "if a patent holder can

<sup>39.</sup> Id. at 29.

<sup>40.</sup> Festo, 234 F.3d at 556.

<sup>41.</sup> Warner-Jenkinson, 520 U.S. at 30-34.

<sup>42.</sup> See State St. Bank & Trust Co. v. Signature Fin. Group, Inc., 149 F.3d 1386 (Fed. Cir. 1998) (discussing the patentable subject matter requirement).

<sup>43.</sup> See Atlas Powder Co. v. Ireco, Inc., 190 F.3d 1342 (Fed. Cir. 1999) (holding a patent invalid because the claims were anticipated under 35 U.S.C. § 102).

<sup>44.</sup> See Mitsubishi Elec. Corp. v. Ampex Corp., 190 F.3d 1300 (Fed. Cir. 1999) (holding a patent invalid because the claims were obvious under 35 U.S.C. § 103).

<sup>45.</sup> See Enzo Biochem, Inc. v. Calgene, Inc., 188 F.3d 1362 (Fed. Cir. 1999) (holding a patent invalid because the claims were not enabled, as required by 35 U.S.C.§ 112); Johnson Worldwide Assoc., Inc. v. Zebco Corp., 175 F.3d 985 (Fed. Cir. 1999) (considering whether a patent claim was invalid under the written description requirement of 35 U.S.C. § 112, Paragraph 1.)

<sup>46.</sup> Festo, 234 F.3d at 567.

<sup>47.</sup> *Id.* at 567 (quoting Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 33 (1997)).

show from the prosecution history that a claim amendment was not motivated by patentability concerns, the amendment will not give rise to prosecution history estoppel."<sup>48</sup>

The Court answered question two as follows:

Both voluntary amendments and amendments required by the Patent Office signal to the public that subject matter has been surrendered. There is no reason why prosecution history estoppel should arise if the Patent Office rejects a claim because it believes the claim to be unpatentable, but not if the applicant amends a claim because he believes the claim to be unpatentable. 49

The court then cites a number of cases where the applicant clearly surrendered subject matter during prosecution.<sup>50</sup> The court again based their rule on the lack of opposing precedent and stated that "[t]here is no reason why an amendment-based surrender of subject matter should be given less force than an argument-based surrender of subject matter."<sup>51</sup>

The heart of the *Festo* opinion lies in the answer to question three. In response, the court stated:

When a claim amendment creates prosecution history estoppel with regard to a claim element, there is no range of equivalents available for the amended claim element. Application of the doctrine of equivalents to the claim element is completely barred (a "complete bar").<sup>52</sup>

Based on the assumption that the issue of whether a range of equivalents is still available to an amended claim had not been addressed,<sup>53</sup> the court proceeded to independently decide the issue.<sup>54</sup> Based upon their distinguishing directive, that is, Congress specifically created the Federal Circuit to resolve

<sup>48.</sup> Festo, 234 F.3d at 567-68.

<sup>49.</sup> Id. at 568.

<sup>50.</sup> See, e.g., KCJ Corp. v. Kinetic Concepts, Inc., 223 F.3d 1351, 1359-60 (Fed. Cir. 2000) (concluding that "KCJ's statements during prosecution reflect a clear and unmistakable surrender" of subject matter that cannot be reclaimed through the doctrine of equivalents); Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1252-53 (Fed. Cir. 2000) (finding that "through Bayer's statements to the PTO and the declarations if filed, Bayer made statements of clear and unmistakable surrender of subject matter" which it cannot recapture through the doctrine of equivalents); Southwall Techs., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1583, (Fed. Cir. 1995) ("Clear assertions made during prosecution in support of patentability, whether or not actually required to secure allowance of the claim may . . . create an estoppel."); Texas Instruments Inc. v. United States Int'l Trade Comm'n, 988 F.2d 1165, 1174 (Fed. Cir. 1993) (holding that arguments made during prosecution that emphasized one feature of the invention estopped the patent holder from asserting that a device lacking that feature infringed the patent under the doctrine of equivalents).

<sup>51.</sup> Festo, 234 F.3d at 568.

<sup>52.</sup> Id. at 569.

<sup>53.</sup> Id. at 569-71.

<sup>54.</sup> *Id.* at 571.

issues unique to patent law,<sup>55</sup> the court found the issue of prosecution history estoppel, a judicially created doctrine,<sup>56</sup> forthrightly in their jurisdiction.<sup>57</sup>

The court, maintaining the complete bar for policy reasons, extrapolated that if the doctrine of equivalents is applied broadly, the definitional and public-notice functions of the statutory claiming requirement are not met.<sup>58</sup> If, however, a complete bar is in place, the public is on notice as to what scope of protection the claims, narrowed for reasons related to patentability, provide. The patentee and the public can look to the prosecution file history, a public record once a patent issues, to determine if any prosecution history estoppel arises as to any elements of the claims.<sup>59</sup> The complete bar also eliminates the possible guessing that could go on as to the scope of equivalents available after a narrowing amendment related to patentability.<sup>60</sup> In this discussion, the court weighs public notice versus patentee rights; and public notice certainly finds favor with the en banc panel.

The court lamented that the flexible bar lacked a yardstick by which to measure the range of equivalents when prosecution history estoppel applies.<sup>61</sup> The outer limit of such equivalents is clearly marked by the prior art, but the area of design between is a "zone of uncertainty" that can hamper commercial development.<sup>62</sup> The court offers an example of a claim that originally reads "less than twenty" that is amended to read "less than five" in light of a rejection over prior art that recites "less than fifteen." The range between the prior art and the amended claim available for patenting and commercialization is ambiguous.<sup>64</sup> The complete bar allows the public, and the patentee, to know that an amended claim is limited to a literal interpretation of the claim elements. The court then commented that "[a]lthough the flexible bar affords the patentee more protection under the doctrine of equivalents, we do not believe that the benefits outweigh the costs of uncertainty."65 Concluding, the court stated that the "application of a complete bar to the doctrine of equivalents whenever a claim amendment gives rise to prosecution history estoppel similarly reduces the conflict and tension between the patent

<sup>55.</sup> See, e.g., Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996) (citing H.R. Rep. No. 97-312, pp. 20-23 (1981)).

<sup>56.</sup> Hormone Research Found., Inc. v. Genentech, Inc., 904 F.2d 1558 (Fed. Cir. 1990).

<sup>57.</sup> *Festo*, 234 F.3d at 571-72. Note that the position taken by the Federal Circuit leaves their decision ripe for Supreme Court review.

<sup>58.</sup> Id. at 576.

<sup>59.</sup> Id.

<sup>60.</sup> Id.

<sup>61.</sup> Id. at 577.

<sup>62.</sup> Festo, 234 F.3d at 577.

<sup>63.</sup> *Id*.

<sup>64.</sup> Id.

<sup>65.</sup> *Id*.

protection afforded by the doctrine of equivalents and the public's ability to ascertain the scope of the patent."66

As to question four, the court answered that "[w]hen no explanation for a claim amendment is established, no range of equivalents is available for the claim element so amended." Citing to *Warner-Jenkinson*, the court stated "where no explanation is established, . . . prosecution history estoppel would bar the application of the doctrine of equivalents as to that element." <sup>68</sup>

As to question five, the court found no need to reach a decision on this question based on the application of the complete bar to the patents at issue in the *Festo* case. They did, however, leave this question for another day.<sup>69</sup>

#### IV. DISCUSSION

The answers presented above basically create a two-prong test: (1) does the amendment narrow the claims; and (2) was the amendment related to patentability. This test pertains to the majority of all amendments made during prosecution. The patentee is now faced with two formidable hurdles to overcome to secure a finding of infringement. Most amendments, even if made for clarification, perhaps in response to a § 112 rejection, will be in response to a statutory rejection. The rule, therefore, may be overreaching in nature. Even though a straight-forward, easy-to-apply rule has its obvious advantages, the untoward side of such a doctrine is revealed in its application.

A competitor may easily avoid a patent under the new rules. The competitor simply orders a copy of the prosecution history and reviews the amendments made during prosecution. If the amendments were made for reasons of patentability or the reason cannot be ascertained from the prosecution history, the competitor is free to operate within what could have traditionally been included in the range of equivalents.

The court notes that the field of biotechnology is one critical field that may be harmed by the majority's rule. Completely barring the patent holder from turning to the doctrine of equivalents for amended claim limitations may severely limit the scope of biotechnology patents. For example, a protein molecule can only be claimed as the complete and specific sequence of amino acids comprising the protein. The nature of protein chains are such that the amino acids that comprise the protein are interchangeable without changing the functionality, and therefore typically the commercial limitation, of the protein.

<sup>66.</sup> Id. at 578.

<sup>67.</sup> Festo, 234 F.3d at 578

<sup>68.</sup> Id. (citing Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 33 (1997)).

<sup>69.</sup> *Id*.

<sup>70.</sup> Id. at 616 (J. Michel, concurring in part).

<sup>71.</sup> See 37 C.F.R. § 1.821 (2000)

The impact of this basic rule of biology may seem unassuming. However, as the Federal Circuit has noted, in a single patent claiming the protein erythropoietin, "over 3,600 different protein analogs can be made by substituting interchangeable acids at only a single amino acid position, and over a million different analogs can be made by substituting three amino acids." Because a substituted homology may retain the desired functionality of the claimed sequence, a competitor seeking to make, use or sell a protein that is claimed in an issued patent with an amended claim simply has to design around the patented sequence. Such design around can be accomplished by simply finding unclaimed substitutions producing proteins functionally equivalent to the claimed protein. The patents of the patents of the claimed protein.

When drafting a patent, in particular claims directed towards a protein, it would appear the practitioner would have to meticulously and individually disclose and claim each and every functionally equivalent homolog. Initially drafting clear broad claims will reduce the possibilities of the need for an amendment and, therefore, the impact *Festo* may have on the claim.

After *Festo*, claims need to be drafted in a manner that distinctly delineates the elements contained therein. A patent attorney drafting an application at this time should pay close attention while drafting claims with ranges and excessively long claims.<sup>74</sup> Chemical patents are particularly likely to have a range appear in a claim. A range, however, can show up in patents covering all specimens of subject matter. Claim ranges should be split to include clearly identified limits, as opposed to the traditional "between x and y." To avoid losing any range of equivalents due to an amendment, it would be better to set out the ranges separately. A claim that splits the range into two discrete elements allows for one end of the range to be amended if necessary without potentially ambiguous amendments being made to the entire claim.

Run-on claims are claims consisting of long run-on sentences that describe the composition and perhaps function of a composition. Such claims are best broken down into individual elements as *Festo* impacts claim elements, not the claims in their entirety. Claims broken down into distinct elements can be carefully amended to overcome prior art or any other statutory reason for rejection with less risk of losing the range of equivalents available to the non-amended elements. In either situation, with ranges or lengthy descriptions, the

<sup>72.</sup> Amgen, Inc. v. Chugai Pharm. Co., 927 F.2d 1200, 1213 (Fed. Cir. 1991).

<sup>73.</sup> For a response to this biotechnology hypothetical, see Festo, 234 F.3d at 597-98:

<sup>&</sup>quot;I believe that the concern is largely theoretical. The first inventors to enter a field are only entitled to claim what they can describe and enable, and I am confident that competent patent attorneys can readily craft their claims to cover that subject matter so that estoppel can be avoided. Moreover, subsequent inventors will be better able to find and develop improved products without fear of lawsuits. Predictability will be enhanced."

Id. (Lourie, J., concurring).

<sup>74.</sup> For an excellent discussion on drafting tips, see Gressel, *supra* note 5.

key is set out each and every element of a claim in distinct and recognizable units.

One criticism of the ruling is that the complete bar applies to all unexpired issued patents. Past drafting efforts, made prior to the decision but with painstaking care, may contain many pitfalls that the patent attorney can do little about today. The decision, therefore, necessitates a review of the prosecution history of all commercially important issued and valid patents to determine if an addition filing or reissue is necessary, possible or desired. Although the commercially important elements of a claim may stay intact under a *Festo* review, the scope of available licenses and the value of existing licenses may be severely emoted.

#### V. CONCLUSION

The court did not have to adopt the complete bar, workable alternatives do exist. As Judge Plager said of the majority view, "[i]t is a second-best solution to an unsatisfactory situation."<sup>75</sup> Judge Plager advocates that the doctrine of equivalents, a judge made rule in the first place, ought to be applied in equity, on a case-by-case basis. The equitable application of the doctrine is certainly appealing. For the patentee, this would leave the door open to argue the intended and resultant effect of an amendment does not unnecessarily limit the scope of equivalents to which a claim is privileged. The author suggests a rebuttable presumption rule may operate more equitably. When an amendment with respect to patentability is made, a rebuttable presumption that a complete bar to equivalents would then arise. The patentee could then show that the amendments were not made to overcome prior art but for reasons such as clarity. The common law and district courts can certainly handle such a rule.<sup>76</sup> However, others welcome the rule. The rule facilitates the interpretation of issued patents operating as prior art, thereby facilitating patentability and freedom to operate searches. The rule also allows competitors to design around issued patents once the prosecution history has been reviewed. These points, of course, cut both ways. The rule will operate to severely impair the rights of the patentee and the decision has removed a prodigious degree of equity from patent litigation. So to answer the question presented in the title, what is left of the doctrine of equivalents, is clearly, "not much." In the interim, remember, unless an patentee can squarely demonstrate an amendment (1) does not narrow the scope of the claims and (2) was not made for patentability, there will be a complete bar to the application of the doctrine of equivalents.

<sup>75.</sup> Festo, 234 F.3d 591.

<sup>76.</sup> See Control Resources, Inc. v. Delta Elecs., Inc., 133 F. Supp.2d 121, 123-125 (D. Mass. 2001) (criticizing the Federal Circuit in *Festo* for usurping the common law function of the district courts).

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