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# The Supreme Court's *Festo* Decision:

## IMPLICATIONS FOR PATENT CLAIM SCOPE AND OTHER ISSUES

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“Estoppe’ cometh of the French word estoupe, from whence the English word stopped; and it is called an estoppel or conclusion, because a man’s own act or acceptance stoppeth or closeth up his mouth to allege or plead the truth.” *Coke on Littleton* (circa 1581)

ESTOP: “1531 Dial. on Laws Eng. i. xix. (1638) 34 The law in such cases giveth no remedy to him that is estopped.” *Oxford English Dictionary* (2d edition).

## I. INTRODUCTION

On May 28, 2002, the United States Supreme Court handed down its decision in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 122 S. Ct. 1831, 62 USPQ2d 1705 (2002) which concerns “prosecution history estoppel.” It would be difficult to exaggerate the significance of *Festo* to the United States patent system.

In a concise, unanimous opinion by Justice Kennedy, the Court speaks definitively on the need to maintain a stable and sound set of rules on the scope of patent property rights. The rules must balance the twin needs of providing, first, to patent owners, a fair scope of protection, which, in some instances, extends beyond the literal terms of a patent’s claim, and, second, to competitors and the public, an appropriate level of certainty and clarity. The Court acknowledges the “delicate balance” that “the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which

should be encouraged to pursue innovations, creations, and new ideas beyond the inventor’s exclusive rights.”

In *Festo*, the Court addresses the relationship between the doctrine of equivalents and prosecution history estoppel. The Court reaffirms the doctrine of equivalents as a necessary tool for assuring a fair scope of protection for patent owners, in particular, protection “against efforts of copyists to evade liability for infringement by making only insubstantial changes to a patented invention.” But it also affirms prosecution history estoppel as a tool for reducing the degree of uncertainty created by the doctrine of equivalents: “When the patentee responds to [a] rejection [by the Patent and Trademark Office] by narrowing his claims, this prosecution history estops him from later arguing that the subject matter covered by the original, broader claim was nothing more than an equivalent.”

The Court reviews two rules on prosecution history estoppel that were adopted by the Court of Appeals for the Federal Circuit. The Federal Circuit, for the past twenty years, has had virtually exclusive appellate jurisdiction in patent cases, but its decisions are subject to discretionary review by the Supreme Court.

The Supreme Court affirms the Federal Circuit’s first rule. The rule is that an estoppel arises when a claim limitation is narrowed by amendment for any reason relating to a statutory requirement for obtaining a valid patent. In affirming this rule, the Supreme Court rejects an argument that estoppel should only arise from amendments made to distinguish the prior art and not from amendments to meet the disclosure and clarity requirements of Section 112.

More importantly, the Supreme Court rejects the Federal Circuit’s second rule, the complete bar rule. This rule dictated that a patent owner’s act of amending a claim element during the patent examination process (“prosecution”) creates an estoppel that bars every equivalent to the amended claim element. According to the Supreme Court, the complete bar approach is an impermissible “new rule” that would unfairly diminish the scope and value of existing patents. But, recognizing the uncertainty caused by a “flexible bar” approach to the estopping effect of claim amendments, the Supreme Court holds that a patent owner’s amendment should be presumed to have surrendered all equivalents to an amended claim element. The patent owner may rebut the presumption by showing that “[t]he equivalent [was] unforeseeable at the time of the application,” “the

rationale underlying the amendment [bore] no more than a tangential relation to the equivalent in question,” or “some other reason suggest[ed] that the patentee could not reasonably [have been] expected to have described the insubstantial substitute in question.”

## II. BACKGROUND: AN ILLUSTRATIVE EXAMPLE

A simple hypothetical example illustrates the doctrine of equivalents and prosecution history estoppel.

Assume that an inventor (patent owner) discloses in a patent application an improved shipping container.

As required by the patent law, the inventor must not only provide a “written description” of the invention and of how to make and use the invention and set forth the “best mode” of carrying out the invention, but must also include one or more claims. The claims set forth the elements of the invention. Typically, a claim begins with a preamble (“A shipping container comprising”) and follows with a series of “limitations”. The claim covers only accused products that contain each limitation (the “All Elements Rule”).

Assume that our inventor’s shipping container has a lid. The inventor’s preferred embodiment (example) disclosed in the patent has a *steel* lid. The inventor’s claim is to “An improved shipping container comprising a *metal* lid . . . .” This claim will cover a competitor’s container that uses an *aluminum* lid even though this is different from the example set forth in the patent. It is the claim that governs the scope of a patent.

Assume that an accused infringer produces a shipping container that is exactly like that disclosed and claimed in the patent except that the accused infringer’s container has a lid formed by a special, newly-developed *carbon fiber composite* material, which is not a metal but is as strong as steel. Because the accused container’s lid is not metal, as required by the patent’s claim, there is no “literal infringement.” But, under the doctrine of equivalents, first recognized by the Supreme Court in 1854, the patent owner is permitted to argue that there is infringement because the carbon fiber composite lid is an insubstantial change from the claimed metal lid.

In the 1997 decision, *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997), the Supreme Court rejected an accused infringer’s argument that the doctrine of equivalents was obsolete in the context of modern patent law principles and should be abolished.

But the Supreme Court also recognized the need for certainty, and it imposed limitations on the doctrine of equivalents. One limitation was a requirement that the doctrine be applied on an “element-by-element” basis, that is, there must be an equivalent of every claim element. It does not suffice that the accused device “as a whole” is equivalent to the claimed device as a whole.

In *Festo*, the Supreme Court discussed more fully the policy underpinnings of the doctrine of equivalents and its continuing vitality despite the uncertainty in patent scope that the doctrine creates.

“The patent laws ‘promote the Progress of Science and useful Arts’ by rewarding innovation with a temporary monopoly. U. S. Const., Art. I, ‘8, cl. 8. The monopoly is a property right; and like any property right, its boundaries should be clear. This clarity is essential to promote progress, because it enables efficient investment in innovation. A patent holder should know what he owns, and the public should know what he does not. For this reason, the patent laws require inventors to describe their work in ‘full, clear, concise, and exact terms,’ 35 U. S. C. §112, as part of the delicate balance the law attempts to maintain between inventors, who rely on the promise of the law to bring the invention forth, and the public, which should be encouraged to pursue innovations, creations, and new ideas beyond the inventor’s exclusive rights. *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150 (1989).

“Unfortunately, the nature of language makes it impossible to capture the essence of a thing in a patent application. The inventor who chooses to patent an invention and disclose it to the public, rather than exploit it in secret, bears the risk that others will devote their efforts toward exploiting the limits of the patent’s language:

‘An invention exists most importantly as a tangible structure or a series of drawings. A verbal portrayal is usually an afterthought written to satisfy the requirements of patent law. This conversion of machine to words allows for unintended idea gaps which cannot be satisfactorily filled. Often the invention is novel and words do not exist to describe it. The dictionary does not

always keep abreast of the inventor. It cannot. Things are not made for the sake of words, but words for things.’ *Autogiro Co. of America v. United States*, 384 F. 2d 391, 397 (Ct. Cl. 1967).

“The language in the patent claims may not capture every nuance of the invention or describe with complete precision the range of its novelty. If patents were always interpreted by their literal terms, their value would be greatly diminished. Unimportant and insubstantial substitutes for certain elements could defeat the patent, and its value to inventors could be destroyed by simple acts of copying. For this reason, the clearest rule of patent interpretation, literalism, may conserve judicial resources but is not necessarily the most efficient rule. The scope of a patent is not limited to its literal terms but instead embraces all equivalents to the claims described. See *Winans v. Denmead*, 15 How. 330, 347 (1854).

“It is true that the doctrine of equivalents renders the scope of patents less certain. It may be difficult to determine what is, or is not, an equivalent to a particular element of an invention. If competitors cannot be certain about a patent’s extent, they may be deterred from engaging in legitimate manufactures outside its limits, or they may invest by mistake in competing products that the patent secures. In addition the uncertainty may lead to wasteful litigation between competitors, suits that a rule of literalism might avoid. These concerns with the doctrine of equivalents, however, are not new.”

The Court emphasized that “[e]ach time the Court has considered the doctrine, it has acknowledged . . . uncertainty as the price of ensuring the appropriate incentives for innovation, and it has affirmed the doctrine over dissents that urged a more certain rule.”

Returning to the hypothetical example, let us assume further that the patent owner originally submitted a claim to “An improved shipping container comprising a lid,” that is, the claim contained no limitation regarding the composition of the lid. The examiner of the Patent and Trademark Office reviewing the patent owner’s application rejects the claim on two grounds. First, he rejects the claim as not novel or obvious

because a prior art reference shows a somewhat similar container with a *glass* lid. Second, he rejects the claim because it is unclear where the lid is located. The patent owner argues that a glass lid, as shown in the reference, is not suitable for the invention because a glass lid is transparent and can break. He further argues that the claim is clear as to the lid’s location. The examiner agrees to allow the claim if the patent owner amends its claim to read “An improved shipping container comprising a *metal* lid, said lid *located substantially on the top* of said container.” The patent owner complies.

Prosecution history estoppel precludes the patent owner from using the doctrine of equivalents to recapture the “territory” surrendered by the amendment. In *Warner-Jenkinson*, the Supreme Court recognized prosecution history estoppel as a limitation on the doctrine of equivalents. In *Festo*, the Supreme Court explains, again in greater detail, the policy underpinnings of prosecution history estoppel.

“Prosecution history estoppel requires that the claims of a patent be interpreted in light of the proceedings in the PTO during the application process. Estoppel is a ‘rule of patent construction’ that ensures that claims are interpreted by reference to those ‘that have been cancelled or rejected.’ *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211, 220-221 (1940). The doctrine of equivalents allows the patentee to claim those insubstantial alterations that were not captured in drafting the original patent claim but which could be created through trivial changes. When, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent. On the contrary, ‘[b]y the amendment [the patentee] recognized and emphasized the difference between the two phrases[,] . . . and [t]he difference which [the patentee] thus disclaimed must be regarded as material.’ *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136-137 (1942).

“A rejection indicates that the patent examiner does not believe the original claim could be

patented. While the patentee has the right to appeal, his decision to forgo an appeal and submit an amended claim is taken as a concession that the invention as patented does not reach as far as the original claim. See *Goodyear Dental Vulcanite Co. v. Davis*, 102 U. S. 222, 228 (1880) (‘In view of [the amendment] there can be no doubt of what [the patentee] understood he had patented, and that both he and the commissioner regarded the patent to be for a manufacture made exclusively of vulcanites by the detailed process’); *Wang Laboratories, Inc. v. Mitsubishi Electronics America, Inc.*, 103 F. 3d 1571, 1577-1578 (CA Fed. 1997) (‘Prosecution history estoppel . . . preclud[es] a patentee from regaining, through litigation, coverage of subject matter relinquished during prosecution of the application for the patent’). Were it otherwise, the inventor might avoid the PTO’s gatekeeping role and seek to recapture in an infringement action the very subject matter surrendered as a condition of receiving the patent.

“Prosecution history estoppel ensures that the doctrine of equivalents remains tied to its underlying purpose. Where the original application once embraced the purported equivalent but the patentee narrowed his claims to obtain the patent or to protect its validity, the patentee cannot assert that he lacked the words to describe the subject matter in question. The doctrine of equivalents is premised on language’s inability to capture the essence of innovation, but a prior application describing the precise element at issue undercuts that premise. In that instance the prosecution history has established that the inventor turned his attention to the subject matter in question, knew the words for both the broader and narrower claim, and affirmatively chose the latter.”

Returning to the example yet again, the amendment adding the “metal” limitation creates an estoppel under settled legal principles. But the example illustrates two issues about estoppel.

The first issue concerns the “position” limitation. The amendment was not made to avoid prior art but rather to “clarify” the claimed invention. Many lower court

decisions before *Festo* stated that amendments for clarification did not create an estoppel. Therefore, if an accused device had a lid partly on the top of a container and partly on its side, and, therefore, did not meet, literally, the “lid-on-the-top” limitation, a patent owner would not be estopped from arguing infringement under the doctrine of equivalents. By entering an amendment to clarify the claimed invention’s scope, and thereby comply with the Section 112’s clear claiming requirement, the patent owner had not surrendered any equivalents.

In *Warner-Jenkinson*, the Supreme Court distinguished amendments for reasons “related to patentability” and amendments for other reasons. It was unclear whether the Court meant by “patentability” patentability over the prior art, that is, the requirements of novelty (Section 102) and nonobviousness (inventive step) (Section 103), or patentability in a broader sense, including the disclosure and clear claiming requirements of Section 112.

In *Festo*, the Federal Circuit held that “patentability” meant the latter. Of the 12 judges, only one, Judge Newman, dissented.

The second issue the example illustrates concerns the scope or extent of an estoppel. By virtue of the amendment adding *metal* to distinguish the prior art *glass* lids, the patent owner is estopped from arguing that a glass lid is equivalent to the claimed metal lid. But is the patent owner estopped from arguing that some materials, such as the carbon fiber composite, are equivalents because they are much more like the claimed element (metal) than the element in the prior art (glass)?

Most Federal Circuit decisions prior to *Warner-Jenkinson* and *Festo* had adopted a “flexible bar” approach to the scope-of-estoppel issue. Indeed, the Federal Circuit, its first decision on this question in 1983, had rejected a “wooden” approach to estoppel.

“Amendment of claims is a common practice in prosecution of patent applications. No reason or warrant exists for limiting application of the doctrine of equivalents to those comparatively few claims allowed exactly as originally filed and never amended. Amendments may be of different types and may serve different functions. *Depending on the nature and purpose of an amendment, it may have a*

*limiting effect within a spectrum ranging from great to small to zero.*"

*Hughes Aircraft Corp. v. United States*, 717 F.2d 1351, 219 USPQ 473 (Fed. Cir. 1983) (emphasis added). A few Federal Circuit decisions could be interpreted as adopting a contrary approach, a "complete bar" rule. E.g., *Kinzenbaw v. Deere & Co.*, 741 F.2d 383, 222 USPQ 929 (Fed. Cir. 1984). Under the complete bar rule, the court does not delve into the prior art that a claim amendment responded to.

Despite the precedents confirming the flexible bar rule, in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 234 F.3d 558, 56 USPQ 2d 1865 (Fed. Cir. 2000) the Federal Circuit overruled its prior precedents and adopted an absolute or complete bar rule, reasoning that the flexible bar was unworkable and caused too much uncertainty. The Supreme Court describes, correctly, the Federal Circuit's holding on the complete bar issue as "[m]ore controversial" than its holding on the "reasons for patentability" issue.

"[The Court of Appeals held that when] estoppel applies, it stands as a complete bar against any claim of equivalence for the element that was amended. . . . The court acknowledged that its own prior case law did not go so far. Previous decisions had held that prosecution history estoppel constituted a flexible bar, foreclosing some, but not all, claims of equivalence, depending on the purpose of the amendment and the alterations in the text. The court concluded, however, that its precedents applying the flexible-bar rule should be overruled because this case-by-case approach has proved unworkable. In the court's view a complete-bar rule, under which estoppel bars all claims of equivalence to the narrowed element, would promote certainty in the determination of infringement cases."

The Court notes the views of four dissenting Federal Circuit judges, who described how the Federal Circuit's majority disregarded more than 50 Federal Circuit decisions, many written by members of the majority.

"Four judges dissented from the decision to adopt a complete bar. . . . In four separate opinions, the dissenters argued that the majority's decision to overrule precedent was contrary to *Warner-Jenkinson* and would

unsettle the expectations of many existing patentees. Judge Michel, in his dissent, described in detail how the complete bar required the Court of Appeals to disregard 8 older decisions of this Court, as well as more than 50 of its own cases."

### III. FIRST ISSUE: KINDS OF AMENDMENTS GIVING RISE TO ESTOPPEL

Addressing first the issue, "the kinds of amendments that may give rise to estoppel," the Court holds that "a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel."

The Court rejects an argument by the petitioner (patent owner) that "estoppel should arise when amendments are intended to narrow the subject matter of the patented invention, for instance, amendments to avoid prior art, but not when the amendments are made to comply with requirements concerning the form of the patent application."

"In *Warner-Jenkinson* we recognized that prosecution history estoppel does not arise in every instance when a patent application is amended. Our 'prior cases have consistently applied prosecution history estoppel only where claims have been amended for a limited set of reasons,' such as 'to avoid the prior art, or otherwise to address a specific concern — such as obviousness — that arguably would have rendered the claimed subject matter unpatentable.' 520 U. S., at 30-32. While we made clear that estoppel applies to amendments made for a 'substantial reason related to patentability,' *id.*, at 33, we did not purport to define that term or to catalog every reason that might raise an estoppel. Indeed, we stated that even if the amendment's purpose were unrelated to patentability, the court might consider whether it was the kind of reason that nonetheless might require resort to the estoppel doctrine. *Id.*, at 40-41.

"Petitioner is correct that estoppel has been discussed most often in the context of amendments made to avoid the prior art. See *Exhibit Supply Co.*, *supra*, at 137; *Keystone Driller Co. v. Northwest Engineering Corp.*, 294 U.S. 42, 48 (1935). Amendment to accommodate prior art was the emphasis, too,

of our decision in *Warner-Jenkinson, supra*, at 30. It does not follow, however, that amendments for other purposes will not give rise to estoppel. Prosecution history may rebut the inference that a thing not described was indescribable. That rationale does not cease simply because the narrowing amendment, submitted to secure a patent, was for some purpose other than avoiding prior art.

“We agree with the Court of Appeals that a narrowing amendment made to satisfy any requirement of the Patent Act may give rise to an estoppel. As that court explained, a number of statutory requirements must be satisfied before a patent can issue. The claimed subject matter must be useful, novel, and not obvious. 35 U. S. C. §§101-103 (1994 ed. and Supp. V). In addition, the patent application must describe, enable, and set forth the best mode of carrying out the invention. §112 (1994 ed.). These latter requirements must be satisfied before issuance of the patent, for exclusive patent rights are given in exchange for disclosing the invention to the public. See *Bonito Boats*, 489 U.S., at 150-151. What is claimed by the patent application must be the same as what is disclosed in the specification; otherwise the patent should not issue. The patent also should not issue if the other requirements of §112 are not satisfied, and an applicant’s failure to meet these requirements could lead to the issued patent being held invalid in later litigation.”

The Court rejects the petitioner’s specific contention that “amendments made to comply with §112 concern the form of the application and not the subject matter of the invention.”

“The PTO might require the applicant to clarify an ambiguous term, to improve the translation of a foreign word, or to rewrite a dependent claim as an independent one. In these cases, petitioner argues, the applicant has no intention of surrendering subject matter and should not be estopped from challenging equivalent devices. While this may be true in some cases, petitioner’s argument conflates the patentee’s reason for making the amendment with the impact the amendment has on the subject matter.

“Estoppel arises when an amendment is made to secure the patent and the amendment narrows the patent’s scope. If a §112 amendment is truly cosmetic, then it would not narrow the patent’s scope or raise an estoppel. On the other hand, if a §112 amendment is necessary and narrows the patent’s scope—even if only for the purpose of better description—estoppel may apply. A patentee who narrows a claim as a condition for obtaining a patent disavows his claim to the broader subject matter, whether the amendment was made to avoid the prior art or to comply with §112. We must regard the patentee as having conceded an inability to claim the broader subject matter or at least as having abandoned his right to appeal a rejection. In either case estoppel may apply.”

The Court holds that “[e]stoppel arises when an amendment is made to secure the patent and the amendment narrows the patent’s scope.” It notes that “[i]f a §112 amendment is truly cosmetic, then it would not narrow the patent’s scope or raise an estoppel.” But, “if a §112 amendment is necessary and narrows the patent’s scope—even if only for the purpose of better description—estoppel may apply.”

“A patentee who narrows a claim as a condition for obtaining a patent disavows his claim to the broader subject matter, whether the amendment was made to avoid the prior art or to comply with §112. We must regard the patentee as having conceded an inability to claim the broader subject matter or at least as having abandoned his right to appeal a rejection. In either case estoppel may apply.”

Turning to the facts of the case before it, the Court notes that the patent owner conceded that the disputed claim limitations not literally present in an accused device “were made for reasons related to §112, if not also to avoid the prior art.” Therefore, an estoppel was created. But did the estoppel completely bar any reliance on equivalence?

Returning to the example, the question would be: did the patent owner’s amending of its claim from “lid” to “metal lid” to distinguish a reference showing, inter alia, a glass lid, preclude, without further inquiry, the patent



owner's assertion that the accused carbon composite fiber composite lid is equivalent to the claimed metal lid?

#### IV. SECOND ISSUE: EFFECT OF ESTOPPEL — COMPLETE OR FLEXIBLE BAR?

The Court addresses “the second question presented: Does the estoppel bar the inventor from asserting infringement against any equivalent to the narrowed element or might some equivalents still infringe?”

##### A. REJECTING THE “COMPLETE BAR” RULE

The Federal Circuit adopted a “complete bar,” under which a “narrowed element must be limited to its strict literal terms.” “Based upon its experience,” the Federal Circuit found “the flexible-bar rule . . . unworkable because it leads to excessive uncertainty and burdens legitimate innovation.”

The Supreme Court disagrees for three reasons.

##### 1. INCONSISTENCY WITH ESTOPPEL'S PURPOSE

First, the complete bar rule is inconsistent with the purpose of applying estoppel, that is, to hold an inventor “to the representations made during the application process and to the inferences that may reasonably be drawn from the amendment.”

“Though prosecution history estoppel can bar challenges to a wide range of equivalents, its reach requires an examination of the subject matter surrendered by the narrowing amendment. The complete bar avoids this inquiry by establishing a *per se* rule; but that approach is inconsistent with the purpose of applying the estoppel in the first place — to hold the inventor to the representations made during the application process and to the inferences that may reasonably be drawn from the amendment. By amending the application, the inventor is deemed to concede that the patent does not extend as far as the original claim. It does not follow, however, that the amended claim becomes so perfect in its description that no one could devise an equivalent. After amendment, as before, language remains an imperfect fit for invention. The narrowing amendment may demonstrate what the claim is not; but it may still fail to

capture precisely what the claim is. There is no reason why a narrowing amendment should be deemed to relinquish equivalents unforeseeable at the time of the amendment and beyond a fair interpretation of what was surrendered. Nor is there any call to foreclose claims of equivalence for aspects of the invention that have only a peripheral relation to the reason the amendment was submitted. The amendment does not show that the inventor suddenly had more foresight in the drafting of claims than an inventor whose application was granted without amendments having been submitted. It shows only that he was familiar with the broader text and with the difference between the two. As a result, there is no more reason for holding the patentee to the literal terms of an amended claim than there is for abolishing the doctrine of equivalents altogether and holding every patentee to the literal terms of the patent.”

##### 2. SUPREME COURT PRECEDENT

Second, the Court deems a flexible bar rule to be “consistent with our precedent.”

“While this Court has not weighed the merits of the complete bar against the flexible bar in its prior cases, we have consistently applied the doctrine in a flexible way, not a rigid one. We have considered what equivalents were surrendered during the prosecution of the patent, rather than imposing a complete bar that resorts to the very literalism the equivalents rule is designed to overcome. *E.g.*, *Goodyear Dental Vulcanite Co.*, 102 U. S., at 230; *Hurlbut v. Schillinger*, 130 U. S. 456, 465 (1889).”

##### 3. “REAL PRACTICE BEFORE THE PTO”; RELIANCE ON PRIOR DOCTRINE

Third, the flexible bar rule is “respectful of the real practice before the PTO.” As held in *Warner-Jenkinson*, “[t]here is no justification for applying a new and more robust estoppel to those who relied on prior doctrine.”

“The Court of Appeals ignored the guidance of *Warner-Jenkinson*, which instructed that courts must be cautious before adopting

changes that disrupt the settled expectations of the inventing community. See 520 U. S., at 28. In that case we made it clear that the doctrine of equivalents and the rule of prosecution history estoppel are settled law. The responsibility for changing them rests with Congress. *Ibid.* Fundamental alterations in these rules risk destroying the legitimate expectations of inventors in their property. The petitioner in *Warner-Jenkinson* requested another bright-line rule that would have provided more certainty in determining when estoppel applies but at the cost of disrupting the expectations of countless existing patent holders. We rejected that approach: ‘To change so substantially the rules of the game now could very well subvert the various balances the PTO sought to strike when issuing the numerous patents which have not yet expired and which would be affected by our decision.’ *Id.*, at 32, n. 6; see also *id.*, at 41 (GINSBURG, J., concurring) (‘The new presumption, if applied woodenly, might in some instances unfairly discount the expectations of a patentee who had no notice at the time of patent prosecution that such a presumption would apply’). As *Warner-Jenkinson* recognized, patent prosecution occurs in the light of our case law. Inventors who amended their claims under the previous regime had no reason to believe they were conceding all equivalents. If they had known, they might have appealed the rejection instead.

#### **B. PRESUMPTION; BURDEN OF SHOWING NO SURRENDER OF PARTICULAR EQUIVALENT**

In *Festo*, the Court notes that *Warner-Jenkinson* had placed a burden on a patent owner to show that an amendment was not made for a reason related to patentability. It dictated that all equivalents are precluded when a court cannot determine the amendment’s purpose.

“In *Warner-Jenkinson* we struck the appropriate balance by placing the burden on the patentee to show that an amendment was not for purposes of patentability:

‘Where no explanation is established, however, the court should presume that

the patent application had a substantial reason related to patentability for including the limiting element added by amendment. In those circumstances, prosecution history estoppel would bar the application of the doctrine of equivalents as to that element.’ *Id.*, at 33.

“When the patentee is unable to explain the reason for amendment, estoppel not only applies but also ‘bar[s] the application of the doctrine of equivalents as to that element.’ *Ibid.* These words do not mandate a complete bar; they are limited to the circumstance where ‘no explanation is established.’ They do provide, however, that when the court is unable to determine the purpose underlying a narrowing amendment — and hence a rationale for limiting the estoppel to the surrender of particular equivalents — the court should presume that the patentee surrendered all subject matter between the broader and the narrower language.”

In *Festo*, the Court places a similar burden of the patent owner to show that an amendment “does not surrender” an alleged equivalent.

“Just as *Warner-Jenkinson* held that the patentee bears the burden of proving that an amendment was not made for a reason that would give rise to estoppel, we hold here that the patentee should bear the burden of showing that the amendment does not surrender the particular equivalent in question. This is the approach advocated by the United States, see Brief for United States as Amicus Curiae 22-28, and we regard it to be sound. The patentee, as the author of the claim language, may be expected to draft claims encompassing readily known equivalents. A patentee’s decision to narrow his claims through amendment may be presumed to be a general disclaimer of the territory between the original claim and the amended claim. Exhibit Supply, 315 U.S., at 136-137 (‘By the amendment [the patentee] recognized and emphasized the difference between the two phrases and proclaimed his abandonment of all that is embraced in that difference’).”

In the most critical language in the *Festo* opinion, the Court discusses the standards and circumstances for a patent owner showing the rebuttal of a presumption of a “general disclaimer between the original claim and the amended claim.”

“There are some cases . . . where the amendment cannot reasonably be viewed as surrendering a particular equivalent. The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question. In those cases the patentee can overcome the presumption that prosecution history estoppel bars a finding of equivalence.

“This presumption is not, then, just the complete bar by another name. Rather, it reflects the fact that the interpretation of the patent must begin with its literal claims, and the prosecution history is relevant to construing those claims. When the patentee has chosen to narrow a claim, courts may presume the amended text was composed with awareness of this rule and that the territory surrendered is not an equivalent of the territory claimed. In those instances, however, the patentee still might rebut the presumption that estoppel bars a claim of equivalence. The patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.”

#### **V. STANDARD FOR REBUTTING PRESUMPTION OF COMPLETE SURRENDER**

In *Festo*, the Supreme Court emphasizes that the presumption that a narrowing amendment surrenders any equivalents to a claim limitation can be rebutted by a patent owner: “This presumption is not . . . just the complete bar by another name.”

The critical questions are: what standards govern the patent owner’s burden of proof? What showing establishes that an alleged equivalent was not

surrendered by an amendment?

#### **A. THE COURT’S DESCRIPTION OF REBUTTING CIRCUMSTANCES**

It is important to consider the Court’s precise language. The following are all the passages in the Court’s opinion that bear on the critical question of what can constitute a rebuttal.

1. AFFIRMATIVE CHOICE. “The doctrine of equivalents is premised on language’s inability to capture the essence of innovation, but a prior application describing the precise element at issue undercuts that premise. In that instance the prosecution history has established that the inventor turned his attention to the subject matter in question, knew the words for both the broader and narrower claim, and affirmatively chose the latter.”

2. SUBJECT MATTER SURRENDERED. “Though prosecution history estoppel can bar challenges to a wide range of equivalents, its reach requires an examination of the subject matter surrendered by the narrowing amendment.”

3. WHAT CLAIM IS NOT, BUT NOT WHAT CLAIM IS. “The narrowing amendment may demonstrate what the claim is not; but it may still fail to capture precisely what the claim is.”

4. UNFORESEEABLE EQUIVALENTS; FAIR INTERPRETATION OF WHAT WAS SURRENDERED. “There is no reason why a narrowing amendment should be deemed to relinquish equivalents unforeseeable at the time of the amendment and beyond a fair interpretation of what was surrendered.”

5. PERIPHERAL RELATION TO REASON AMENDMENT WAS SUBMITTED. “Nor is there any call to foreclose claims of equivalence for aspects of the invention that have only a peripheral relation to the reason the amendment was submitted. The amendment does not show that the inventor suddenly had more foresight in the drafting of claims than an inventor whose application was granted without amendments having been submitted. It shows only that he was familiar with the broader text and with the difference between the two.”

6. WHAT EQUIVALENTS WERE SURRENDERED.

“We have considered what equivalents were surrendered during the prosecution of the patent, rather than imposing a complete bar that resorts to the very literalism the equivalents rule is designed to overcome.”

7. PURPOSE UNDERLYING NARROWING AMENDMENT; SURRENDER OF PARTICULAR EQUIVALENTS. “[W]hen the court is unable to determine the purpose underlying a narrowing amendment — and hence a rationale for limiting the estoppel to the surrender of particular equivalents — the court should presume that the patentee surrendered all subject matter between the broader and the narrower language.”

8. SOME CASES: PARTICULAR EQUIVALENT NOT SURRENDERED. “There are some cases . . . where the amendment cannot reasonably be viewed as surrendering a particular equivalent.”

a. UNFORESEEABLE EQUIVALENTS. “The equivalent may have been unforeseeable at the time of the application . . . .”

b. AMENDMENT RATIONALE BEARING ONLY “TANGENTIAL RELATION” TO THE EQUIVALENT. “[T]he rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question . . . .”

c. OTHER REASON; NO REASONABLE EXPECTATION TO HAVE DESCRIBED INSUBSTANTIAL SUBSTITUTE. “[T]here may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question.”

9. REASONABLY EXPECTED TO HAVE DRAFTED A CLAIM. “[T]he patentee [may] rebut the presumption that estoppel bars a claim of equivalence. The patentee must show that at the time of the amendment one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.”

## **B. APPLICATION TO FACTS IN *FESTO*? THE “RECORD”**

The patents at issue in *Festo* (the Carroll patent and the Stoll patent) concern “an improved magnetic rodless cylinder.” During prosecution and reexamination, the claims of both patents were amended to add “a new limitation—that the inventions contain *a pair of sealing rings, each having a lip on one side*, which would prevent impurities from getting on the piston assembly.” (Emphasis added.) The Stoll patent’s claims were also amended to require that “the outer shell of the device, the *sleeve*, be made of a *magnetizable* material.” (Emphasis added.)

The accused infringer’s cylinder avoids literal infringement in two ways. First, “rather than using two one-way sealing rings, [the cylinder] employs a single sealing ring with a two-way lip.” Second, the accused infringer’s “sleeve is made of a nonmagnetizable alloy.”

The Court does not finally resolve the question whether the patent owner had — have rebutted — rebut the presumption that the “equivalents at issue have been surrendered.”

“On the record before us, we cannot say petitioner has rebutted the presumptions that estoppel applies and that the equivalents at issue have been surrendered. Petitioner concedes that the limitations at issue — the sealing rings and the composition of the sleeve — were made in response to a rejection for reasons under § 112, if not also because of the prior art references. As the amendments were made for a reason relating to patentability, the question is not whether estoppel applies but what territory the amendments surrendered. While estoppel does not effect a complete bar, the question remains whether petitioner can demonstrate that the narrowing amendments did not surrender the particular equivalents at issue. On these questions, respondents may well prevail, for the sealing rings and the composition of the sleeve both were noted expressly in the prosecution history. These matters, however, should be determined in the first instance by further proceedings in the Court of Appeals or the District Court.”

The Court’s disposition is a bit curious for at least two reasons.

First, the Court does not indicate what “record” the determination of rebuttal should be made on. As noted

below, the Federal Circuit held in its *Festo* decision that any rebuttal must be based solely on the “intrinsic evidence,” that is, the patent’s written description and the prosecution history record. Testimony and other evidence were not admissible.

Second, the Court hints that the accused infringer will likely prevail because “the sealing rings and the composition of the sleeve both were noted expressly in the prosecution history.” But, one may ask, why should express notation of the narrowing claim limitations carry such weight? Should not the question be whether the accused equivalents, a two-lip, single sealing ring, and an operable sleeve structure using a non-magnetizable sleeve, were “noted expressly” or, possibly, were foreseeable alternatives to a person skilled in the art and, therefore, should reasonably have been literally claimed?

### C. ANALYSIS

It can be expected that the district courts and the Federal Circuit, in coming years, will be asked, repeatedly, to interpret and apply the *Festo* Court’s language on rebuttal of a presumption of complete surrender of equivalents by amendment.

#### 1. UNFORESEEABLE EQUIVALENTS: TIME OF APPLICATION OR OF AMENDMENT? AFTER-ARISING TECHNOLOGY

The Court in *Festo* several times mentions “unforeseeability” as a basis for rebutting the estopping effect of a narrowing amendment. The Court notes that a patent owner will likely be deemed not to surrender “equivalents unforeseeable at the time of the amendment and beyond a fair interpretation of what was surrendered.” Then, the Court notes that “[t]he equivalent may have been unforeseeable at the time of the application . . . .”

In the “shipping container” example above, the patent owner may be able to establish that the carbon fiber composite lid was not a foreseeable equivalent to a metal lid because the composite had not yet been invented at the time the patent owner filed its application.

An immediately apparent ambiguity in the Court’s language concerns *timing*. It mentions both “time of the amendment” and “time of the application.” Later, it returns to “time of the amendment,” commenting that a “patentee must show that *at the time of the*

*amendment* one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.” (Emphasis added.)

There could well be a major difference between what was “foreseeable” on the application date and on the amendment date. An application may have been filed, for example, on July 1, 1999, and the amendment entered years later, for example, on July 1, 2002. Often, more will be “foreseeable” at the later date because of progress in the technology and the marketplace.

A “time of application” rule, that is, the effective filing date, would be consistent with basic patent law principles. Generally, a patent application “speaks” as of its filing date. A patent applicant cannot add “new matter” by amendment. New matter may be added by the filing of a continuation-in-part application, but any claims dependent on the new matter will not be entitled to the benefit of the original filing date. Federal Circuit case law indicates that the date for construing claim language is presumed to be the filing date. E.g., *Schering Corp. v. Amgen Inc.*, 222 F.3d 1347, 55 USPQ2d 1650 (Fed. Cir. 2000).

One reason that an alleged equivalent may have been “unforeseeable” is that it did not yet exist.

A preliminary note: one might ask how an accused element can be deemed to be an equivalent when it was not foreseeable and did not exist as of the time the patent owner filed his application or amended his claim? The answer is that the Supreme Court ruled in *Warner-Jenkinson* that equivalency is determined as of the date of an alleged infringement. It follows that an accused element may be an equivalent of a claimed element in a patent even though the patent does not disclose or enable the accused element. (Enablement is determined as of patent application’s filing date.)

Recent opinions by Federal Circuit judges suggest that the doctrine of equivalents should play a special role in extending a patent claim’s literal scope to “after-arising” technology for the reason alluded to by the Supreme Court in *Festo*: that is, with such technology, a patent claim draftsman cannot reasonably be expected to have drafted a claim literally covering the equivalent.

In particular, Judge Rader of the Federal Circuit has endorsed the after-arising technology and “foreseeability” concepts. In *Festo*, he wrote a dissenting opinion to

make this point about prosecution history estoppel.

In the recent in banc decision, discussed below, *Johnson & Johnston Associates Inc. v. R.E. Service Co., Inc.*, 285 F.3d 1046, 62 USPQ2d 1046 (Fed. Cir. 2002) (in banc), Judge Rader again wrote a concurring opinion arguing that the “the doctrine of equivalents does not capture subject matter that the patent drafter reasonably could have foreseen during the application process and included in the claims.” Under this view, a patent owner would be restricted to unforeseeable equivalents even if there has been no claim amendment and hence no estoppel.

In *Johnson*, the Federal Circuit’s Judge Lourie, wrote a separate opinion highlighting problems with a “foreseeability” standard. For example, is foreseeability the same as the patent law standard of obviousness (inventive step)? If so, he noted the ironic effect:

“It seems counterintuitive for a patentee to have to assert that an accused device was nonobvious or for the accused to have to assert that it was obvious. A patentee seeking to establish equivalence wants to show that the accused is merely making a minor variation of his invention, an obvious one, not a nonobvious improvement. One accused of infringement wants to show that he has made an important advance, not that he is a copier, and that his device was obvious over the patented invention, or foreseeable.”

“What about the case of a separately patented accused device, which is thus presumptively nonobvious? For such a device to be eligible for equivalence, the improvement therein would have to be found to be not foreseeable, which would seem to run counter to the frequent rubric that equivalence requires substantially the same function, way, and result, a test that is closer to obviousness, not nonobviousness. Should a manufacturer planning to market a product that is close to the claims of an issued patent have to forego a patent in order to be able to assert that its device would have been obvious, hence foreseeable, and thus not covered by equivalence? That is contrary to the patent policy that encourages an innovator to file for a patent and disclose his invention. Thus, foreseeability creates conflicts with conventional patent law ideas.”

On the other hand, Judge Lourie notes that if foreseeability and obviousness are different concepts, a foreseeability standard would be a “new complexity into what is already an amorphous and vague area of the law.”

The Supreme Court’s adoption of “foreseeability” as a standard for prosecution history estoppel means the problems Judge Lourie identified may well arise.

## 2. PERIPHERAL OR TANGENTIAL RELATION BETWEEN AMENDMENT’S RATIONALE AND THE ALLEGED EQUIVALENT

The Supreme Court notes that there is no “call to foreclose claims of equivalence for aspects of the invention that have only a peripheral relation to the reason the amendment was submitted” and that an amendment “cannot reasonably be viewed as surrendering a particular equivalent” when “the rationale underlying the amendment [bore] no more than a tangential relation to the equivalent in question.”

Undoubtedly, this language will be the subject of much debate.

In the “shipping container” example, the patent owner might seek to rely on this language. He would argue that the “rationale” for the amendment adding “metal” to the lid limitation was to confirm that the lid was not transparent and breakable as was the glass lid in the prior art reference cited by the examiner. That rationale bears “no more than a tangential relation to the equivalent in question,” the carbon fiber composite lid, which, like metal, is neither transparent nor breakable.

What must a patent owner show to escape an estoppel on this ground? Given the presumption the Court recognizes, the patent owner’s first and critical burden is to establish what was “the rationale underlying the amendment.” Given the Federal Circuit’s prior decisions emphasizing the importance of “intrinsic” evidence, the Federal Circuit will likely require that the “rationale” be apparent from the prosecution record itself. “Extrinsic evidence,” such as testimony by the inventor or the inventor’s patent attorney, will likely not be allowed to supplement or alter the prosecution record. Cf. *Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 238 F.3d 1341, 57 USPQ2d 1553 (Fed. Cir. 2001).

Also, the Federal Circuit will likely focus on the substance of the amendment and its relationship to an

examiner's rejection or objection. It will give little weight to general and self-serving statements by an applicant about an amendment's rationale. See, e.g., *Bai v. L & L Wings, Inc.*, 160 F.3d 1350, 48 USPQ2d 1674 (Fed. Cir. 1998) (a patentee's "boilerplate remark to the examiner that he amended his claims to 'specifically and expressly recite the structural details' of his invention does not affect our conclusion" that prosecution history estoppel applies).

Of critical importance is how to apply the Supreme Court's "tangential relation to rationale" language to the most common scenario in which estoppel arises: amendments made to distinguish prior art.

It seems likely that the Federal Circuit will link this language to pre-*Festo* Federal Circuit cases applying the "flexible bar" approach. These cases compared the prior art reference distinguished by the amendment, the claim as amended, and the accused equivalent. If there was a "marked difference" between the reference on the one hand and the claimed and accused product or process on the other hand, there is no surrender of the accused equivalent. See, e.g., *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448, 46 USPQ2d 1169 (Fed. Cir. 1998) (in banc) (no estoppel by argument); *Institutform Technologies, Inc. v. Cat Contracting, Inc.*, 161 F.3d 688, 48 USPQ2d 1610 (Fed. Cir. 1998). In other words, there must be clear "difference in kind" between the claimed and accused elements and the prior art that was distinguished by an amendment.

In the context of amendments to overcome Section 112 enablement and written description problems, a parallel analysis may apply. Is an accused equivalent distinctly closer to the narrowed, described, and enabled subject matter than to the broader subject matter that the examiner deemed to have been not enabled or described?

Of considerable interest is how the tangential-relation-to-amendment rationale concept can be applied in the context of inventions pertaining to biotechnology. An instructive case is *Mycogen Plant Science, Inc. v. Monsanto Co.*, 252 F.3d 1306, 58 USPQ2d 1891 (Fed. Cir. 2001), *on denial of rehearing*, 261 F.3d 1345, 59 USPQ2d 1852 (Fed. Cir. 2001). The patent concerned the modification of a *Bacillus thuringiensis* (Bt) gene so that, when inserted into a plant, the gene would cause the plant to express more highly Bt pesticidal toxin. It was known that a Bt gene could be inserted into a plant to enable the plant to itself express the Bt

pesticidal toxin. However, when modified with the "native" Bt gene, plants achieved only a low level of expression. The inventors developed a strategy for modifying the native Bt gene to make it more "plant friendly." The modification entailed substituting redundant codons (multiple three nucleic acid DNA sequences that encode for one of the 20 amino acids that are the building blocks for proteins such as the toxin). In other words, codons encoding for a given amino acid from the native version would be changed to a "redundant" codon that encodes for the same amino acid but that the plant statistically prefers.

The patent owner disclosed in its specification a figure setting forth the precise DNA sequence of its synthetic gene, but it originally asserted broad claims stated in functional terms. For example, original claim 1 was to: "1. A synthetic gene designed to be highly expressed in plants comprising a DNA sequence encoding an insecticidal protein which is functionally equivalent to a native insecticidal protein of Bt." The examiner rejected this and similar claims as not sufficiently enabled, given the unpredictable nature of the subject matter. The examiner similarly rejected narrower claims, such as to "A synthetic gene designed to be highly expressed in plants comprising a DNA sequence encoding a Bt insecticidal protein, said synthetic gene having modified codons in a Bt coding region." Eventually, the patent owner cancelled the broad claims in favor of two very specific claims that were limited to the precise sequences set forth in the figure, for example, "A synthetic gene comprising the DNA sequence presented in Fig. 1, spanning nucleotides 1 through 1793."

In an infringement suit, the patent owner asserted infringement under the doctrine of equivalents. The Federal Circuit applied the "complete bar" rule to bar any equivalent to the precise sequence set forth in the figure.

How would a case similar to *Mycogen* — that is, when a very broad claim recited in terms of biological function is narrowed to a very narrow claim recited in terms of structure — be resolved under the Supreme Court's test in *Festo*? Suppose the accused equivalent synthetic gene varied by changing only one codon. If the evidence showed that one skilled in the art would have known that changing one or a few codons would have no effect on the function of the claimed synthetic gene (i.e., higher expression of encoded protein), a strong argument can be made that there should be no preclusion of equivalency. The rationale of the amendment was to overcome the

examiner's view that the broader functional claims covered substantially different sequences that had not been enabled or described.

What about amendments that are obvious mistakes in that an amendment was more restrictive than its apparent rationale would have dictated? An example is *Pioneer Magnetics, Inc. v. Micro Linear Corp.*, 238 F.3d 1341, 57 USPQ2d 1553 (Fed. Cir. 2001). A patent concerned a power supply circuit. During prosecution, an examiner rejected an original application claim 1 based on a prior art reference. The patent owner amended the claim to add a first limitation, which required that a modulator be a "pulse width" modulator, and a second limitation, which required that a multiplier circuit be a "switching analog" multiplier circuit. The prior art reference disclosed neither a switching multiplier circuit nor a pulse-width modulator. In remarks accompanying the amendment, the patent owner explained that claim 1 had been amended to conform to original dependent claim 6, which the examiner had not rejected in view of the reference. Original dependent claim 6 had contained only the "pulse width" limitation, not the "switching" limitation, which was in original dependent claim 7. The patent owner, through his attorney, had mistakenly made the claim conform to the narrower claim 7, not the broader allowed claim 6 as stated in the "remarks" accompanying the amendment.

In an infringement suit, the patent owner asserted that an accused device met the "switching" limitation by equivalence. The amendment adding the switching limitation created an estoppel, which, under *Festo*, absolutely barred the patent owner from showing that the limitation was met by equivalency.

The patent owner argued that the "switching" limitation was added by "sheer inadvertence" and was an obvious error. It (1) submitted a declaration by its patent attorney stating that the amendment was through inadvertence, (2) noted the remarks accompanying the amendment, which stated that the intent was to incorporate only dependent claim 6, and (3) asserted that reading claim 1 to include the "switching" limitation made it redundant with claim 2. The Federal Circuit rejected the arguments.

Applying the Supreme Court's test, one could argue that the "rationale" of the amendment was to add the "pulse width" limitation, which the examiner had indicated would be sufficient to distinguish the prior art. The

alleged equivalent to the "switching" limitation in the accused device, arguably, bore no more than a tangential relation to the amendment's rationale, which was to distinguish a device with neither the switching nor the pulse width features. Despite the plausibility of this argument, one suspects that the Federal Circuit will not likely apply the tangential relation concept merely to rescue patent owners from claim drafting mistakes. A patent owner can be "reasonably expected" not to make such mistakes.

### 3. OTHER REASONS

In addition to unforeseeable equivalents and equivalents only tangentially related to an amendment's rationale, the Supreme Court includes a "catch-all" category of rebuttal, noting that "[t]here may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question."

What such an "other reason" might be, the Court gives us not a hint!

One possibility is that an "insubstantial substitute" may be of a nature such that there could be a vast number of potential substitutes for a particular invention and that it would be unreasonable to expect the inventor tediously to describe and independently claim each potential insubstantial substitution. This may be a way to address cases such as *Mycogen* involving claims to specific DNA sequences and other inventions pertaining to biotechnology.

The Supreme Court uses the words "expected to have described the insubstantial substitute in question," but presumably it means expected to "have claimed" the substitute. This leads to a question: can this category extend to situations in which a patent owner does not literally claim the insubstantial substitute because the specification has no description support for such a claim?

To explain this question, let us return to the "shipping container" example. Assume that after filing his application, the patent owner's competitor begins selling containers with carbon fiber composite lids. The patent owner submits a new claim to "An improved shipping container comprising a *carbon fiber composite* lid . . ." Probably, the PTO examiner will reject this claim because nowhere in the patent owner's specification is there any description of carbon fiber



composite lids. The claim would violate the “written description” requirement of Section 112. The patent owner might try other language, such as “a non-transparent, non-breakable” lid, but this too may be rejected as lacking support or for vagueness as well. Can we now say that “the patentee could not reasonably be expected to have described [i.e., claimed] the insubstantial substitute in question”? Future decisions will tell us.

## VI. ISSUES ON ESTOPPEL NOT ADDRESSED BY *FESTO*

The Supreme Court’s *Festo* opinion does not address a number of issues on prosecution history.

### A. ARGUMENTS

A patent owner may, in the face of an examiner’s prior art-based rejection, decline to amend or cancel claims, instead making arguments distinguishing the claims from the prior art. The Federal Circuit recognizes that an estoppel may arise from arguments (“argument-based estoppel”) as well as from narrowing claim amendments (“classic estoppel”). See, e.g., *Bayer AG v. Elan Pharmaceutical Research Corp.*, 212 F.3d 1241, 54 USPQ2d 1711 (Fed. Cir. 2000). In *Festo*, the Supreme Court addresses only estoppel based on amendments. Its holding rejecting the complete bar rule logically extends to any estoppel based on arguments. With argument-based estoppel, it is often less difficult to assess what territory was surrendered because the written argument presents its own “rationale.”

### B. CANCELLATIONS — NEW CLAIMS

A patent owner may allege infringement under the doctrine of equivalents of claims that, technically, were not the subject of a narrowing amendment during prosecution.

Returning to the example, assume the patent owner originally asserted three claims:

1. “An improved shipping container comprising a lid . . . .”
2. “The container of claim 1, said lid comprising a *steel* lid.”

3. “An improved shipping container comprising a *metal* lid . . . .”

As in the original example, the examiner rejects claim 1 based on the reference showing a *glass* lid but indicates that claim 3 is allowable and that claim 2 will be allowable if amended to make it independent. The patent owner cancels claim 1 and amends “dependent” claim 2 to make it independent (i.e., “An improved shipping container comprising a steel lid.”). Technically, claim 3 was not amended. Claim 2 was amended in a way that did not narrow its scope because, as a dependent claim, it included all of the limitations from the claim or claims upon which it depended plus the limitations that it stated. Thus, the amendment is truly formal.

In an infringement suit, the patent owner asserts that the patent’s claims (steel lid, metal lid) are infringed under the doctrine of equivalents by the accused container with the carbon fiber composite lid. The patent owner argues that there is no estoppel because there has been no narrowing amendment. The Federal Circuit has rejected this argument. See *Mycogen Plant Science, Inc. v. Monsanto Co.*, 243 F.3d 1316, 58 USPQ2d 1030 (Fed. Cir. 2001) (“We do not discern any legally significant difference between canceling a claim having a broad limitation and replacing it with a claim having a narrower limitation, and amending a claim to narrow a limitation. To do so would place form over substance and would undermine the rules governing prosecution history estoppel laid out in *Festo* allowing patent applicants simply to cancel and replace claims for reasons of patentability rather than to amend them.”). See also *Intermatic Inc. v. Lamson & Sessions & Co.*, 273 F.3d 1355, 61 USPQ2d 1075 (Fed. Cir. 2001) (a limitation added by amendment to one claim in a patent during a reexamination creates an estoppel for the limitation in all the patent’s claims, including claims not amended during either the original or the reexamination prosecution).

The Supreme Court in *Festo* does not address this issue in any way, and, therefore, one should assume that the Federal Circuit will follow its precedent in regard to when a claim has, in substance, been narrowed by amendment.

### C. WHAT IS A LIMITATION (ELEMENT)?

In its ruling in *Festo*, the Federal Circuit made it abundantly clear that an estoppel against equivalents

applies only against a claim element (limitation) that was the subject of a narrowing amendment. An amendment narrowing one limitation in a claim does not preclude the patent owner from asserting the doctrine of equivalents with regard to other limitations in the claim.

Critical to the application of estoppel is the question: what is a limitation (element)? With the “shipping container” example, assume that the patent owner amends the claim from “lid” to “metal lid.” The patent owner asserts the claim against an accused container that lacks a lid, using instead a metal leaf expander. Is the patent owner estopped by the amendment? Is the amended term “metal lid,” in effect, *two* limitations, one, a limitation on the composition of the component (metal), which was amended, and a second, a limitation on the shape and function of the component (a lid), which was not amended?

The “what is a limitation” question was critical under a “complete bar” approach, but it is less so with the approach taken by the Supreme Court in *Festo*. The Supreme Court indicates that there is no foreclosure of equivalents “for aspects of the invention that have only a peripheral relation to the reason the amendment was submitted.” In the example, the metal expander equivalent, an alleged insubstantial change from a metal lid, had only a “peripheral” or “tangential” relation to the reason for the metal amendment, which was to distinguish a prior art glass lid container.

#### D. LAW OR FACT?

Under the *Festo* standard, is prosecution history estoppel a question of law resolvable earlier in litigation, for example, by a motion for summary judgment? Or does it admit the prospect of disputed fact issues that require a hearing or trial? Whether an alleged equivalent was “foreseeable,” and whether a patent could not “reasonably” be expected to have drafted a claim covering an alleged equivalent, could be considered fact questions requiring proof by evidence.

Under settled law, the core question of equivalency under the doctrine of equivalents is a question of fact. If there are genuine disputed fact questions on whether an accused equivalent is an insubstantial change from the claimed invention, summary judgment is not appropriate, and there must be a trial. The trial will be before a jury if either the patent owner or the accused infringer so requests.

In *Warner-Jenkinson*, the Supreme Court took note of “the concern over unreviewability due to black-box jury verdicts.” A jury, being a group of citizens who may have little experience with patents and the technology underlying a charge of infringement, deliberates in secret after hearing the evidence, the arguments of counsel, and the judge’s instruction. The jury may be asked to answer specific questions, but it will never provide detailed findings in support of its verdict on infringement. This contrasts with the written findings of facts and conclusions of law that a district court judge provides when a trial is without a jury. In reviewing a jury verdict, a court must “presume that the jury resolved all factual disputes in favor of the prevailing party,” and “must leave those findings undisturbed as long as they are supported by substantial evidence.” *Sibia Neurosciences, Inc. v. Cadus Pharmaceutical Corp.*, 225 F.3d 1349, 55 USPQ2d 1927 (Fed. Cir. 2000).

There is a suspicion that juries may not understand and properly apply the law to the evidence in a complex patent trial and that they may render verdicts based on irrelevant considerations. Some district court judges question this suspicion, noting that juries almost always reach the same conclusion that the judge who listened to the evidence would have reached. But, given jury trial procedure and the constricted standard of review, a party found guilty of infringement under the doctrine of equivalents faces an uphill battle in convincing the district court judge or the court of appeals that the jury’s verdict should be overturned.

In *Warner-Jenkinson*, in response to the concern about the “unreviewability” of jury verdicts based on the doctrine of equivalents, the Supreme Court set forth “guidance” in the notorious footnote 8. The Court indicated that judges should not be reluctant to grant summary judgment before trial when “no reasonable jury could determine two elements to be equivalent.” It also indicated that “various legal limitations” on the doctrine should “be determined by the court, either on a pretrial motion for partial summary judgment or on a motion for judgment as a matter of law at the close of the evidence and after the jury verdict.” One legal limitation was “if prosecution history estoppel should apply.”

Following *Warner-Jenkinson* and its own prior decisions, the Federal Circuit has consistently held that prosecution history estoppel is a purely legal issue, resolvable by summary judgment, and reviewable on appeal de novo (that is, without deference to the trial court’s decision). E.g., *Cybor Corp. v. FAS*

*Technologies, Inc.*, 138 F.3d 1448, 46 USPQ2d 1169 (Fed. Cir. 1998) (in banc). The court maintained this view even though it had, before *Festo*, indicated that estoppel is to be applied according to what “a reasonable competitor would conclude was surrendered during prosecution.” E.g., *Bayer AG v. Elan Pharmaceutical Research Corp.*, 212 F.3d 1241, 54 USPQ2d 1711 (Fed. Cir. 2000) (rejecting a patent owner’s attempt to create a fact issue by submitting a declaration of a patent law professor on the meaning of a patent’s prosecution history; “To allow a particular part of the prosecution history estoppel inquiry (such as the matter of what a reasonable competitor would conclude was surrendered during prosecution) to be a question of fact would hamper the promotion of uniformity by binding this court to the deference required with respect to fact findings at the trial level.”)

In *Festo*, the Supreme Court says nothing directly about the law-fact question. It indicates that “[o]n the record before us,” it “cannot say” that the patent owner “has rebutted the presumption of estoppel and complete surrender.” But it does not rule as a matter of law that equivalency was precluded. A question remains whether the patent owner “can demonstrate that the narrowing amendments did not surrender the particular equivalents at issue.” This “should be determined in the first instance by further proceedings in the Court of Appeals or the District Court.”

The Federal Circuit will likely continue to treat prosecution history estoppel as a question of law just as it so treats the construction of patent claim language. Thus, it will expect the parties to create a record in the district court. Likely also, district courts will hold hearings on estoppel as part of, or in addition to, the *Markman* hearings held on claim construction. The Federal Circuit will then review the district court’s decision de novo.

The *Festo* test for estoppel may well require the submission of “extrinsic” evidence, but the Federal Circuit has held that the absorption of extrinsic evidence during claim construction does not create questions of fact requiring a trial. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 34 USPQ2d 1321 (Fed. Cir. 1995) (in banc), *aff’d*, 517 U.S. 370, 38 USPQ2d 1461 (1996) (“Through [the] process of construing claims by, among other things, using certain extrinsic evidence that the court finds helpful and rejecting other evidence as unhelpful, and resolving disputes en route to pronouncing the meaning of claim language as a matter

of law based on the patent documents themselves, the court is not crediting certain evidence over other evidence or making factual evidentiary findings. Rather, the court is looking to the extrinsic evidence to assist in its construction of the written document, a task it is required to perform. . . . The district court’s claim construction, enlightened by such extrinsic evidence as may be helpful, is still based upon the patent and prosecution history. It is therefore still construction, and is a matter of law subject to de novo review.”).

## VII. IMPLICATIONS FOR OTHER PATENT LAW ISSUES

In *Festo*, the Supreme Court directly addresses two specific issues concerning prosecution history estoppel, but its opinion rests on important general themes that will influence the development and application of patent law in the future.

### A. GENERAL THEMES: LIMITING PER SE RULES AND DISRUPTIVE RULE CHANGES

Two general themes permeate the Court’s opinion.

First, the Court cautions courts against excessive use of “per se” legal rules to simplify complex issues. For example, it notes that “the clearest rule of patent interpretation, literalism, may conserve judicial resources but is not necessarily the most efficient rule.” Later, it notes that a “complete bar” rule avoided the need to inquire into what a narrowing amendment surrendered, but such a rule could not be justified because it was inconsistent with the purpose of the more fundamental doctrine, prosecution history estoppel.

Second, the Court cautions courts against changing rules to alter property rights, including the rights of patent owners. It chastised the Federal Circuit for ignoring “the guidance of *Warner-Jenkinson*, which instructed that courts must be cautious before adopting changes that disrupt the settled expectations of the inventing community.”

“[T]he doctrine of equivalents and the rule of prosecution history estoppel are settled law. The responsibility for changing them rests with Congress. . . . Fundamental alterations in these rules risk destroying the legitimate expectations of inventors in their property.”

These two themes are in tension with the tone of some

important recent Federal Circuit decisions, which have adopted new per se rules and emphasized the need for certainty and clarity. Three of those decisions are: *Johnson & Johnston Associates Inc. v. R.E. Service Co., Inc.*, 285 F.3d 1046, 62 USPQ2d 1046 (Fed. Cir. 2002) (en banc); *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 285 F.3d 1013, 62 USPQ2d 1289 (Fed. Cir. 2002); and *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 59 USPQ2d 1121 (Fed. Cir. 2001).

An important exception to the trend toward per se rules is the interesting decision on “prosecution laches.” *Symbol Technologies, Inc. v. Lemelson Medical, Education & Research Foundation*, 277 F.3d 1361, 61 USPQ2d 1515 (Fed. Cir. 2002)

The Supreme Court’s *Festo* opinion may slow, if not reverse, the trend in Federal Circuit decisions to adopt per se rules that “conserve judicial resources” but are not the “most efficient” approach to a problem in patent law.

#### **B. DOCTRINE OF EQUIVALENTS— DEDICATION BY UNCLAIMED DISCLOSURE: JOHNSON & JOHNSTON ASSOCIATES**

In *Johnson & Johnston Associates Inc. v. R.E. Service Co., Inc.*, 285 F.3d 1046, 62 USPQ2d 1046 (Fed. Cir. 2002) (in banc), the Federal Circuit, sitting in banc, adopted a per se rule restricting assertions of infringement under the doctrine of equivalents. When a patent discloses subject matter but does not claim it, the subject matter is “dedicated to the public” and cannot be held to be an infringing equivalent of that which the patent literally claims.

In a sense, *Johnson* extends the concept of prosecution history estoppel. A patent owner surrenders not only what was originally claimed but given up by amendment but also what could have been claimed because of its disclosure — but was not. It imposes a heightened burden on those who draft and prosecute patent applications to exercise great care in deciding what to disclose and what to claim. Claiming too narrowly can result in a dedication; claiming too broadly can lead to rejection, amendment, and estoppel.

In *Johnson*, the patent at issue claimed a structure concerning the manufacture of printed circuit boards. The patent claim required an *aluminum* substrate. The patent specification disclosed that aluminum was the preferred material for the substrate but that other

materials, including *steel*, could be used. An accused structure used a steel substrate.

The majority affirmed the rule stated in *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 39 USPQ2d 1001 (Fed. Cir. 1996), that “when a patent drafter discloses but declines to claim subject matter, as in this case, this action dedicates that unclaimed subject matter to the public.”

“Application of the doctrine of equivalents to recapture subject matter deliberately left unclaimed would ‘conflict with the primacy of the claims in defining the scope of the patentee’s exclusive right.’ . . . [A] patentee cannot narrowly claim an invention to avoid prosecution scrutiny by the PTO, and then, after patent issuance, use the doctrine of equivalents to establish infringement because the specification discloses equivalents. `Such a result would merely encourage a patent applicant to present a broad disclosure in the specification of the application and file narrow claims, avoiding examination of broader claims that the applicant could have filed consistent with the specification.’ *Maxwell*, 86 F.3d at 1107 (citing *Genentech, Inc. v. Wellcome Found. Ltd.*, 29 F.3d 1555, 1564, 31 USPQ2d 1161, 1167 (Fed. Cir. 1994).”

A decision subsequent to *Maxwell*, *YBM Magnex Inc. v. Int’l Trade Comm’n*, 145 F.3d 1317, 46 USPQ2d 1843 (Fed. Cir. 1998), “purported to limit *Maxwell* to situations where a patent discloses an unclaimed alternative distinct from the claimed invention.” In *Johnson*, the Federal Circuit overruled *YBM Magnex* to the extent that it conflicts with the court’s holding.

The court’s opinion was “per curiam,” that is, without a judge named as author. Several Federal Circuit judges filed concurring opinions addressing issues concerning dedication and the doctrine of equivalents.

Dissenting, Judge Newman complained that the majority had created “a new absolute bar to equivalency, a bar that applies when there is no prosecution history estoppel, no prior art, no disclaimer, no abandonment.”

#### **C. WRITTEN DESCRIPTION — CLAIMS STATED IN TERMS OF BIOLOGICAL FUNCTION PER SE INSUFFICIENT: ENZO BIOCHEM V. GEN- PROBE**

An interesting example of a case adopting a new per se rule dealing with patentability rather than patent claim scope is *Enzo Biochem, Inc. v. Gen-Probe Inc.*, 285 F.3d 1013, 62 USPQ2d 1289 (Fed. Cir. 2002).

In *Enzo*, the Federal Circuit held that a district court correctly granted summary judgment that claims in a patent owner's patent that were directed to nucleic acid probes that selectively hybridize to gonorrhoeae bacteria DNA were invalid for failure to comply with the written description requirement. The claimed inventions were described in terms of function, the degree of hybridization, that is, in terms of what the claimed material did, rather than in terms of structure or physical characteristics.

The patent claim 1 was to a composition of matter comprising a nucleotide sequence for which there is a ratio greater than about five of (1) the amount of the sequence that hybridizes to a chromosomal gonorrhoeae bacteria DNA to (2) the amount of the sequence that hybridizes to another, genetically homologous bacteria DNA. This claim was invalid because the composition was defined only by its biological activity or function, to wit, its ability to selectively hybridize.

Claim 4 was to a nucleotide sequence of claim 1 consisting of one of three actual probes that the patent owner had deposited in a public depository. The subject matter of this narrower claim was also invalid because it defined the deposited probes only by function and does not "identify the chemical structure of the probes themselves." The public deposit did "not substitute for a description of an invention in the specification."

The patentability of claims to biological subject matter stated broadly or in terms of function are traditionally evaluated under the Section 112 "enablement" requirement. A claim is not "enabled" if a person of ordinary skill in the art would have to had engaged in unreasonable experimentation to make and use the subject matter of the claim. Enablement is assessed according to the "Wands" factors. *In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988).

Also, cases dealing with subject matter other than biological material confirm that inventions may be claimed in terms of function, so long as the requirements of novelty, nonobviousness, definiteness and enablement are met. See, e.g., *In re Schreiber*, 128 F.3d 1473, 44 USPQ2d 1429 (Fed. Cir. 1997) ("A patent applicant is free to recite features of an apparatus either structurally

or function.").

Hence, the question arises: what is the basis for the court in *Enzo* invalidating the claims without a determination on enablement and merely because of the use of function to describe the invention?

The distinct "written description" requirement of Section 112, relied upon in *Enzo*, developed as a means for limiting a patent applicant's ability to change the scope of his claims after filing a patent application. A patent applicant may, for example, attempt to change and broaden the claim only after becoming aware of a competitor's product that would not be covered by the claims as originally filed. See, e.g., *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 56 USPQ2d 1481 (Fed. Cir. 2000); *Gentry Gallery, Inc. v. Berklinc Corp.*, 134 F.3d 1473, 45 USPQ2d 1498 (Fed. Cir. 1998). Generally, written description problems did not arise with "original claims," that is, the claims contained in the application as it is filed in the Patent and Trademark Office.

In two cases prior to *Enzo*, the Federal Circuit did apply the written description requirement to original claims concerning isolated DNA sequences encoding for known human proteins, such as erythropoietin and insulin. *Fiers v. Revel*, 984 F.2d 1164, 25 USPQ2d 1601 (Fed. Cir. 1993); *Regents of University of California v. Eli Lilly & Co.*, 119 F.3d 1559, 43 USPQ2d 1398 (Fed. Cir. 1997). These cases may be distinguished as special situations due to the nature of the patented subject matter. They deal with DNA sequences, genes, whose theoretical existence and function were either known or predictable: the gene exists but no one yet knows its precise structure. With such genes, it might make some sense to say that merely describing a gene by reference to its biological function was not a complete invention. Contrariwise, *Enzo* involved a purely artificial, human-made structure — constructed DNA probe — that did not perform an existing biological function.

*Enzo* may be deemed another example of a per se rule — biological subject matter may not be described or claimed by reference to function — designed to obviate a difficult fact-based inquiry, i.e., enablement under the *Wands* factors. The Federal Circuit noted that the rule could be applied to grant summary judgment because the court merely needed to read the patent.

"The [accused infringers] demonstrated that the claims were insufficiently described as a matter of law by the clear and convincing

evidence in the patent document itself, viz., the failure of the patent to describe the claimed sequences by anything other than their function. [The patent owner] failed to raise any genuine issues of fact as to the actual description in the patent, which did not adequately characterize the claimed invention.”

If one resolved this case under a traditional, general standards approach, one would have needed a lot of evidence, leading to a trial, on whether the inventors’ disclosure of three probes enabled broadly persons skilled in this art to make other probes to achieve the same function.

Based on the Supreme Court’s themes in *Festo*, one may well ask: the new per se rule may “conserve judicial resources” — but is it the most “efficient” rule — that is, is it consistent with fundamental patent policy?

#### **D. “ON SALE” BAR — CONTRACT LAW OFFER REQUIRED: *GROUP ONE V. HALLMARK***

An interesting example of a new per se rule that favors patent owners is *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 59 USPQ2d 1121 (Fed. Cir. 2001).

Under the Patent Act’s Section 102(b) statutory bar provision, an inventor is barred from obtaining a patent if the invention was “on sale” more than one year before filing a patent application in the United States.

A recurring problem with the “on sale” bar is determining the start of the one-year bar period when an inventor or his company simultaneously develop an inventive concept and commercially market the concept, such as by promoting a potential product to customers. The invention cannot not be “on sale” until it exists. Does an invention exist when it was merely described (a “conception”), or must a prototype be built and tested (a reduction to practice)?

Prior to 1998, Federal Circuit applied a “flexible” “totality of the circumstances” test in applying the “on sale” bar. It did not require that an invention have been reduced to practice, only that it was “substantially complete.” Decisions in particular cases became difficult to reconcile, and a great deal of uncertainty arose.

In the key 1998 decision, *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 48 USPQ2d 1641 (1998), the Supreme

Court “swept away [the Federal Circuit’s] ‘totality of the circumstances’ analysis of the on-sale bar and replaced it with a two-part test: ‘First, the product must be the subject of a commercial offer for sale . . . . Second, the invention must be ready for patenting.’”

Under the facts in *Pfaff*, there was no question that the invention had been the subject of a commercial offer. The inventor had signed a contract to produce and sell embodiments of the invention to a major customer. Thus, the first prong (commercial offer for sale) was met. The dispute was over the second prong. The inventor had not built or tested an embodiment of the invention. The Supreme Court held that the invention was nevertheless “ready for patenting” because the inventor had prepared detailed specifications showing how to make the invention.

In *Group One*, the court held that *Pfaff*’s “commercial offer” requirement can only be met by an “offer which rises to the level of a commercial offer for sale, one which the other party could make into a binding contract by simple acceptance (assuming consideration).” Federal common law, based on the Uniform Commercial Code, governs whether activity constitutes an offer.

This holding created a new per se rule. The Federal Circuit had, prior to *Pfaff*, suggested, at least in dictum, that the commercialization of the invention could place an invention on sale even though there was no technical contract offer. *RCA Corp. v. Data General Corp.*, 887 F.2d 1056, 12 USPQ2d 1449 (Fed. Cir. 1989). There was not a hint in the Supreme Court’s *Pfaff* opinion that it equated commercial offer with a technical contract offer. Indeed, the Court used an alternative phrase “first marketed commercially.”

*Group One*’s rule, while ostensibly simpler to apply, may, again be questioned as not consistent with fundamental policy. For example, a more recent case shows how an inventor’s company can engage in extensive marketing and advertising activities for a product, including contacts with customers, more than a year before filing its patent application and yet not be guilty of an on sale bar. *Linear Technology Corp. v. Micrel, Inc.*, 275 F.3d 1040, 61 USPQ2d 1225 (Fed. Cir. 2001)

#### **E. PROSECUTION LACHES: UNREASONABLE DELAY IN PROSECUTING PATENT CLAIMS**

In *Symbol Technologies, Inc. v. Lemelson Medical,*

*Education & Research Foundation*, 277 F.3d 1361, 61 USPQ2d 1515 (Fed. Cir. 2002), the Lemelson Foundation (“Lemelson”) owned 185 patents that “generally involve machine vision and automatic identification technology and allegedly are entitled to the benefit of the filing date of two applications filed in 1954 and 1956.” Lemelson began sending letters to the customers of the plaintiffs, Symbol and Cognex, stating that the plaintiffs’ bar code scanners infringed the Lemelson patents. The plaintiffs responded by seeking a declaratory judgment that the Lemelson patents were invalid, unenforceable, and not infringed by the plaintiffs or their customers. The plaintiff’s main contention was that Lemelson had been guilty of “prosecution laches.” The district court dismissed the contention as being unsupported in law.

The Federal Circuit reversed, with one judge (Newman) dissenting. It held that “the equitable doctrine of laches may be applied to bar enforcement of patent claims that issued after an unreasonable and unexplained delay in prosecution even though the applicant complied with pertinent statutes and rules.” It traced the defense of prosecution laches back to two older Supreme Court decisions, *Woodbridge v. United States*, 263 U.S. 50 (1923); and *Webster Electric Co. v. Splitdorf Electrical Co.*, 264 U.S. 463 (1924).

The majority rejected Lemelson’s arguments that “1) the rule espoused in *Webster* and its progeny is limited to claims arising out of interference actions; 2) the plain language and legislative history of the Patent Act of 1952 forecloses the application of prosecution laches; and 3) two of our non-precedential opinions reject the prosecution laches defense . . . .”

In dissent, Judge Newman complained that the majority had created a new and uncertain “equitable cause of action called ‘prosecution laches.’”

“This judicial creation of a new ground on which to challenge patents that fully comply with the statutory requirements is in direct contravention to the rule that when statutory provisions exist they may be relied on without equitable penalty. The long-standing rule, until

today, is that when the statutory requirements for continuing applications are met, patents are not subject to attack on non-statutory grounds. It simply adds to the uncertainties of the patent grant, to create a new cause of action whereby routine actions, in full statutory compliance, can years later be challenged as having been done too late or having taken too long. The consequences of this new cause of action of ‘prosecution laches’ have not been explored, for this court is presented only with the concerns of those charged with infringing these Lemelson patents. However, the consequences are not limited to this case, but will open legally granted patents to a new source of satellite litigation of unforeseen scope, for the continuation practice is ubiquitous in patent prosecution.”

The *Symbol Technologies* decision does no more than recognize the defense of prosecution history in the abstract. It does not discuss the standards for determining whether the defense should be sustained in particular circumstances because of a patent owner’s delay in prosecuting patent claims. Realistically, the defense may be viable only in certain extreme circumstances involving very long prosecution delays.

For laches generally, there are two elements: (1) a right owner unreasonably and inexcusably delays asserting the right against a party, and (2) the delay materially prejudices the party. Applied to patent infringement suits, the delay period begins when a patent owner first knows or reasonably should have known of an accused infringer’s potentially infringing activity. See, e.g., *Wanlass v. General Electric Co.*, 148 F.3d 1334, 1337, 46 USPQ2d 1915, 1917 (Fed. Cir. 1998). In a prior in banc decision, the Federal Circuit indicated that “the period does not begin prior to issuance of the patent.” *A.C. Aukerman Co. v. R.L. Chabides Construction*, 960 F.2d 1020, 1032, 22 USPQ2d 1321, 1328 (Fed. Cir. 1992) (in banc). *Symbol Technologies* does not cite or distinguish *A.C. Aukerman*. Implicitly, it must view “prosecution laches” as a doctrine distinct from the standard laches defense asserted against infringement claims based on a delay in filing suit.

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