No. 00-1543

In the Supreme Court of the United States

FESTO CORPORATION,

PETITIONER,

 ν .

SHOKETSU KINZOKU KOGYO KABUSHIKI CO., LTD., A/K/A SMC CORPORATION AND SMC PNEUMATICS, INC.,

RESPONDENTS.

On Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF OF AMICUS CURIAE FEDERAL CIRCUIT BAR ASSOCIATION IN SUPPORT OF PETITIONER

GEORGE E. HUTCHINSON
EXECUTIVE DIRECTOR,
FEDERAL CIRCUIT
BAR ASSOCIATION
1300 I Street, N.W.
Suite 700
Washington, D.C. 20005
(202) 408-4000

CLAIRE LAPORTE
(Counsel of Record)
MITCHELL J. MATORIN
ROBERT L. BOCCHINO JR.
MEGAN H. MACK
MARK A. REILLY
FOLEY, HOAG & ELIOT LLP
One Post Office Square
Boston, MA 02109
(617) 832-1000
Counsel for Amicus Curiae
Federal Circuit Bar Association

TABLE OF CONTENTS

STATEMENT OF INTEREST OF AMICUS CURIAE 1
SUMMARY OF THE ARGUMENT1
ARGUMENT3
I. THE COMPLETE BAR DOES NOT FAIRLY OR EFFECTIVELY IMPLEMENT THE DOCTRINE OF PROSECUTION HISTORY ESTOPPEL4
A. Under the Complete Bar, the Scope of the Estoppel Is Unrelated to the Conduct Giving Rise to the Estoppel
B. The Complete Bar Is Unfair in Its Retroactive Application
C. The Complete Bar Does Not Promote the "Notice Function" of Patent Claims and May Have Incidental Negative Effects
RATIONALLY AND CONSISTENTLY APPLIED. 11
A. Several Basic Principles Have Long Guided the Application of the Flexible Bar
The Asserted Scope of Equivalents Must Be Consistent with Arguments Made to the Patent and Trademark Office
The Asserted Scope of Equivalents Must Not Capture the Prior Art
3. The Asserted Scope of Protection Must Be Narrower Than What the Patentee Claimed Before the Amendment
4. If the Above Criteria Are Met, There Is No Estoppel

B. There Was No Genuine Conflict in the Prior Case Law Applying the Flexible Bar.	20
Applied by Placing the Burden on the Patentee to Demonstrate a Scope of Protection Committee	
with the Prosecution History.	. 24
CONCLUSION	28

TABLE OF AUTHORITIES

Cases

Black & Decker, Inc. v. Hoover Serv. Ctr., 886 F.2d 1285 (Fed. Cir. 1989)20
Cohen v. Cowles Media Co., 501 U.S. 663 (1991)5
Control Resources, Inc. v. Delta Elecs., Inc., 133 F. Supp. 2d 121 (D. Mass. 2001)6
Desper Prods., Inc. v. QSound Labs, Inc., 157 F.3d 1325 (Fed. Cir. 1998)13
Environmental Instruments, Inc. v. Sutron Corp., 877 F.2d 1561 (Fed. Cir. 1989), overruled on other grounds by Cardinal Chem. Co. v. Martin Int'l, Inc., 508 U.S. 83 (1993)
Exhibit Supply Co. v. Ace Patents Corp., 315 U.S. 126 (1942)
Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000) (en banc) passim
Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605 (1950)10
Great Northern Corp. v. Davis Core & Pad Co., 782 F.2d 159 (Fed. Cir. 1986)20
Hubbell v. United States, 179 U.S. 77 (1900) 12, 13, 26
Hughes Aircraft Co. v. United States, 717 F.2d 1351 (Fed. Cir. 1983)
Hurlbut v. Schillinger, 130 U.S. 456 (1889)20

Insituform Techs., Inc. v. Cat Contracting, Inc., 99 F.3d 1098 (Fed. Cir. 1996)19	Senmed, Inc. v. Richard-Allan Med. Indus., Inc., 888
Keystone Driller Co. v. Northwest Eng'g Corp., 294 U.S. 42 (1935)15, 16	F.2d 815 (Fed. Cir. 1989), overruled on other grounds by Cardinal Chem. Co. v. Martin Int'l, Inc., 508 U.S. 83 (1993)
Kinzenbaw v. Deere & Co., 741 F.2d 383 (Fed. Cir. 1984)	Wang Labs., Inc. v. Toshiba Corp., 993 F.2d 858 (Fed. Cir. 1993)
Laitram Corp. v. Morehouse Indus., Inc., 143 F.3d 1456 (Fed. Cir. 1998)	Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17 (1997)
Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449 (Fed. Cir. 1998)	Zenith Labs., Inc. v. Bristol-Myers Squibb Co., 19 F.3d 1418 (Fed. Cir. 1994)
Mannesmann Demag Corp. v. Engineered Metal Prods. Co., 793 F.2d 1279 (Fed. Cir. 1986)16, 17	Rules
Merck & Co. v. Mylan Pharms., Inc., 190 F.3d 1335 (Fed. Cir. 1999)	Supreme Court Rule 37.3(a)
	Supreme Court Rule 37.6
New Hampshire v. Maine, U.S, 121 S. Ct. 1808 (2001)	Other Authorities
Payne v. Tennessee, 501 U.S. 808 (1991)7	William M. Atkinson et al., Was Festo Really Necessary?, 83 J. Pat. & Trademark Off. Soc'y
Phoenix Caster Co. v. Spiegel, 133 U.S. 360 (1890) 14, 15	111 (2001)
Prodyne Enters., Inc. v. Julie Pomerantz, Inc., 743 F.2d 1581 (Fed. Cir. 1984)20, 23, 24	Brief of Amicus Curiae Federal Circuit Bar Association in Support of Petition for Writ of Certiorari (May 9, 2001)
Quill Corp. v. North Dakota, 504 U.S. 298 (1992)8	Donald S. Chisum, <i>Chisum on Patents</i> (2000)6, 22
Royer v. Coupe, 146 U.S. 524 (1892)16, 17	
Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420 (Fed. Cir. 1997)	Note, To Bar or Not To Bar: Prosecution History Estoppel after Warner-Jenkinson, 111 Harv. L. Rev. 2330, 2335-36 (1998)
3	Restatement (Second) of Contracts § 90 (1981)5

STATEMENT OF INTEREST OF AMICUS CURIAE

The Federal Circuit Bar Association ("FCBA") is a national organization comprising approximately 2,400 attorneys whose practice concerns the United States Court of Appeals for the Federal Circuit in all aspects of its jurisdiction. The FCBA offers a forum for common concerns and dialogue between the bar and the judges of the Federal Circuit. One of the purposes of the FCBA is to offer assistance and advice to the federal courts, including briefs amicus curiae, on matters affecting practice before the Federal Circuit and lower tribunals. 1

The members of the FCBA represent a cross-section of the community affected by the patent laws. The clients of the FCBA's members include not only patent holders, but also licensees and members of the public whose goal is to avoid or defend against accusations of infringement.

Pursuant to Supreme Court Rule 37.3(a), the FCBA has conferred with the parties regarding the filing of this brief amicus curiae, and both parties have consented to its filing. Evidence of the written consent of the parties has been filed separately herewith.

SUMMARY OF THE ARGUMENT

The majority decision below, Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558 (Fed. Cir. 2000) (en banc), abrogated the longstanding "flexible bar" approach to prosecution history estoppel, under which a narrowing claim amendment would preclude a later assertion of infringement by equivalents only if the applicant had actually surrendered the accused subject matter through the amendment. Under the Federal Circuit's new rule, which it

¹ Pursuant to Supreme Court Rule 37.6, the FCBA states that no counsel for a party authored this brief in whole or in part. No person or entity, other than the *amicus curiae*, its members, or its counsel, made any monetary contribution to the preparation or submission of the brief.

termed a "complete bar," the patentee is absolutely precluded from asserting infringement by equivalents as to narrowing amendments made for patentability reasons, regardless of whether the accused subject matter was actually surrendered by the amendment.

- 1. The Federal Circuit's "complete bar" is unjustified for at least three reasons. First, it violates a basic principle, common to estoppel doctrines in all areas of the law, that the scope of the estoppel should be related to the conduct giving rise to the estoppel. Under the complete bar, the court examines only whether a claim amendment is narrowing, rather than whether the accused subject matter was in fact surrendered by the amendment. Second, the complete bar, which represents a significant break from prior law, is unfair in its retroactive application. By eliminating available equivalents even as to subject matter not disclaimed in an amendment, the decision below abruptly narrowed the scope (and reduced the value) of existing patents, all of which were prosecuted in light of the flexible bar. Third, although the Federal Circuit asserted that the complete bar would improve the "notice function" of patents by making the scope of patent coverage clearer, it may in fact have the opposite effect. Because it discourages claim amendments while encouraging "stealth" prosecution tactics, the complete bar may well reduce the transparency of prosecution history as a whole.
- 2. The Federal Circuit justified its adoption of the complete bar by suggesting that the flexible bar had become "unworkable," but this assertion is incorrect. While the application of the flexible bar was based on a careful examination of the facts of each case, and therefore was not always simple, it was hardly "unworkable." Rather, the flexible bar had long been applied according to several basic principles developed by this Court and the Federal Circuit. First, the scope of equivalents asserted by the patentee must

Trademark Office during prosecution of the patent. Second, the asserted scope of equivalents cannot capture the prior art. Third, the asserted scope of equivalents cannot be so broad as to restore the claim to the scope it had prior to an amendment. These principles should continue to be applied, with the clarification that the burden should be on the patentee to show that the scope of equivalents asserted meets the standards set forth above. If the patentee can make such a showing, there should be no estoppel.

ARGUMENT

For over one hundred years, this Court and other courts, including the Federal Circuit, have applied the doctrine of prosecution history estoppel by carefully examining the prosecution history to determine what subject matter the patent applicant in fact surrendered through a claim amendment. Under the so-called "flexible bar" in force prior to the decision below, there would be an estoppel only if the patentee's assertion of infringement by equivalents were inconsistent with the earlier surrender of subject matter. In addition to being well established and relied on by numerous patentees, this approach is fair and rational, because it tailors the scope of the estoppel to the scope of what was actually surrendered.

The Federal Circuit abrogated the flexible bar in favor of a "complete bar," under which a narrowing amendment results in complete loss of the doctrine of equivalents as to elements added by the amendment, regardless of the actual scope of surrender. This approach is unfair in its inflexibility and retroactive application and will not ultimately serve the purposes that the Federal Circuit articulated in adopting it. Although the majority below raised legitimate concerns regarding the application of prosecution history estoppel, those concerns can be adequately addressed through proper

application of the principles that have long guided courts in determining the scope of surrender.

Accordingly, prosecution history estoppel arising from a claim amendment should operate as a flexible bar applied in the following way. First, the court should determine whether the claim amendment was narrowing. If it was not, there is no estoppel, because nothing was surrendered. If it was, an estoppel is presumed unless the patentee can show either (1) that the amendment was not made for a substantial reason related to patentability or (2) that there is a scope of protection that both captures the accused device and does not capture material surrendered to the public during prosecution.²

- I. THE COMPLETE BAR DOES NOT FAIRLY OR EFFECTIVELY IMPLEMENT THE DOCTRINE OF PROSECUTION HISTORY ESTOPPEL.
 - A. Under the Complete Bar, the Scope of the Estoppel Is Unrelated to the Conduct Giving Rise to the Estoppel.

Prior to the ruling below, prosecution history estoppel was thought to prevent the recapture of subject matter disclaimed during the prosecution of a patent application. Patent applicants would often submit broad claims, which would be narrowed in response to prior art rejections and other patentability concerns raised by the examiner. Applicants would also address the examiner's concerns by making arguments concerning their inventions and the scope of protection they sought. Prosecution history estoppel prevented patentees from contradicting these statements, on

² In addition to arguing that prosecution history estoppel should operate as a flexible bar, Petitioner Festo Corporation argued below that there should be no estoppel at all as to amendments made voluntarily or for purposes of clarification, rather than to distinguish prior art. The FCBA expresses no opinion regarding these issues.

which the Patent and Trademark Office, the public, and the patentee's competitors were entitled to rely. See, e.g., Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1432 (Fed. Cir. 1997) ("A patentee is not free to retrade or renege on a deal struck with the PTO during patent prosecution."); Zenith Labs., Inc. v. Bristol-Myers Squibb Co., 19 F.3d 1418, 1424 (Fed. Cir. 1994) (stating that patentee may not "obtain, through litigation, coverage of subject matter relinquished during prosecution").

This traditional understanding of prosecution history estoppel was consistent with many other estoppel doctrines. Promissory estoppel, for example, precludes a party from denying the existence of a contract implied by that party's words or actions. See, e.g., Cohen v. Cowles Media Co., 501 U.S. 663, 668-72 (1991); Restatement (Second) of Contracts § 90 (1981). Likewise, judicial estoppel prevents a party to a legal proceeding from asserting a position inconsistent with an earlier position on which the party prevailed or the court relied, if the inconsistency would cause unfairness or prejudice. See, e.g., New Hampshire v. Maine, ____ U.S. ___, 121 S. Ct. 1808, 1814-15 (2001). The rationale of these estoppel doctrines and of prosecution history estoppel is the same: in each case, a litigant is precluded from contradicting an earlier position in a way that would be unfair.

The "complete bar" adopted by the Federal Circuit is inconsistent with these traditional conceptions of estoppel. Under the complete bar, the court makes no effort to ascertain what the patentee surrendered during prosecution or whether the patentee's assertion of infringement is inconsistent with that surrender. Instead, the patentee is precluded from asserting any infringement by equivalents as to a claim element added or narrowed by amendment. The "estoppel" is thus unrelated to what the applicant actually surrendered. See William M. Atkinson et al., Was Festo Really Necessary?, 83 J. Pat. & Trademark Off. Soc'y 111,

136 (2001) ("When an amendment is made in the face of prior art, the only thing that is evident is that the parties did not expect that the claim would encompass that prior art as it is characterized in the record. There is no basis to presume that they contemplated that the claims would or would not read on other devices that were not disclosed.").³

This result is unfair to the patent holder. As discussed below, a careful analysis of the prosecution history will often show that a surrender of some subject matter during prosecution is consistent with a later assertion of infringement as to other subject matter that was not surrendered. See infra Part II.A (explaining how the courts have traditionally ascertained the scope of surrender under the "flexible bar" abrogated by the decision below). Under the complete bar, a court would find an estoppel in these cases, even though the patentee had not surrendered the subject matter in question. While it is entirely fair to estop an actor from contradicting herself, it is unfair to prevent her from taking a position on an issue that is unrelated to her previous representations.⁴

The complete bar adopted by the Federal Circuit represents an abrupt break with precedent. As the majority below recognized, the complete bar conflicts with numerous Federal Circuit decisions dating back to the decision in *Hughes Aircraft Co. v. United States*, 717 F.2d 1351 (Fed. Cir. 1983). See Festo, 234 F.3d at 574-75. Thus, the Federal Circuit's adoption of the complete bar conflicts with the principle of stare decisis.

This Court has often emphasized the importance of stare decisis, noting that, although not an "inexorable command," Payne v. Tennessee, 501 U.S. 808, 828 (1991), the doctrine "promotes the evenhanded, predictable, and consistent development of legal principles, fosters reliance on judicial decisions, and contributes to the actual and perceived integrity of the judicial process." Id. at 827. One of the principal purposes of the doctrine is to avoid the unfairness inherent in a sudden change in rules on which individuals and businesses have previously relied. See id. at 828 ("Considerations in favor of stare decisis are at their acme in cases involving property and contract rights, where reliance interests are involved"). Thus, stare decisis is particularly important in the patent context, where individuals and businesses prosecute patent applications and negotiate licenses in reliance on the rules established by the courts to govern the scope of patent protection. Indeed, in Warner-Jenkinson, this Court declined to adopt a rule that might have increased certainty at the expense of disturbing the settled expectations of patentees and the Patent and Trademark Office:

That petitioner's rule might provide a brighter line for determining whether a patentee is estopped under certain circumstances is not a sufficient reason for adopting such a rule. This is especially

³ Some commentators have suggested other rationales for prosecution history estoppel. For example, Chisum suggests that the doctrine is rooted in the notion of exhaustion of administrative remedies. If a patent applicant agrees with a position taken by the examiner during prosecution, the patentee may not later challenge that same position in the courts. See 7A Donald S. Chisum, Chisum on Patents § 18.05[1][c], at 18-422 (2000). Under this rationale, it is equally important to ascertain the scope of surrender as precisely as possible, so that the patentee may assert positions that are, in fact, consistent with his statements and actions during prosecution.

⁴ At least one district court has already expressed frustration with the complete bar for precisely this reason. See Control Resources, Inc. v. Delta Elecs., Inc., 133 F. Supp. 2d 121, 136, 137 (D. Mass. 2001) (criticizing the "cursory examination of the prosecution history" called for by Festo and stating that, although the complete bar mandated an estoppel, a "thorough review of the prosecution history" showed that the patentee "did not abandon the entire range of [equivalents]").

true where, as here, the PTO may have relied upon a flexible rule of estoppel when deciding whether to ask for a change in the first place. 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.

Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 32 n.6 (1997); cf. Quill Corp. v. North Dakota, 504 U.S. 298, 317 (1992) (noting importance of stare decisis where prior case law has "engendered substantial reliance and has become part of the basic framework of a sizable industry").

The complete bar adopted by the majority below is contrary to these principles. Every patent now in effect was prosecuted in view of the flexible bar. Over the past two decades, every inventor who amended her patent application, whether to distinguish prior art or for some other reason related to patentability, did so with the understanding that she would still be entitled to a certain range of equivalents when enforcing her patent. As Judge Newman pointed out below, a mere ten to fifteen percent of simple patent applications issue without amendment, and the number of complex patents that are not amended is "vanishingly small." Festo, 234 F.3d at 638 n.21 (Newman, J., concurring in part and dissenting in part). Thus, the new complete bar affects the scope of most of what Judge Michel estimated to be 1.2 million unexpired and enforceable patents. See id. at 618 (Michel, J., concurring in part and dissenting in part). The decision below has abruptly rewritten the law in a way that unfairly disrupts these reliance interests.

C. The Complete Bar Does Not Promote the "Notice Function" of Patent Claims and May Have Incidental Negative Effects.

The Federal Circuit adopted the complete bar to improve the "notice function" of patent claims — i.e., the role of the claims in specifying exactly what is protected and what is available to the public. See Festo, 234 F.3d at 575-76. While this goal is an important one, the complete bar is not a logical or effective way to achieve it. In addition, the complete bar may have incidental negative effects on patent prosecution and litigation.

First, the complete bar discourages claim amendments, one of the public's primary resources for ascertaining the scope of the claimed invention. Prior to the ruling below, the dialogue between applicant and examiner that arose as a result of amendments would create a public record clarifying and defining the invention. Competitors and others could use this record in assessing the scope of protection and, if necessary, in litigating with the patentee. By contrast, if the complete bar is upheld, applicants will have strong incentives to avoid amending the claims altogether, because doing so will lead to complete loss of the doctrine of equivalents. Applicants may draft narrow claims that are likely to be allowed without amendment. Applicants will also be encouraged to seek examiner interviews in the hope of having claims allowed without amendment or argument. As a result, the complete bar may well decrease, rather than increase, the transparency of prosecution history as a whole. See Brief of Amicus Curiae Federal Circuit Bar Association in Support of Petition for Writ of Certiorari at 8-11 (May 9, 2001) [hereinafter "FCBA Petition Brief"].

Second, the complete bar may also discourage inventors — especially small inventors — from applying for patents and may increase the burdens on the Patent and Trademark Office. Under the complete bar, even one piece of prior art

uncovered during prosecution could lead to a claim amendment and complete loss of the doctrine of equivalents. Therefore, the complete bar requires applicants to increase greatly their pre-application prior art searching, a step that could significantly increase cost. Accordingly, the patent system may become unfairly burdensome and expensive for individuals and small businesses. The complete bar may also discourage patent applications altogether, because inventors may decide that preserving their inventions as trade secrets is preferable to disclosing them to the public in exchange for more expensive or weakened patent protection. Further, because of the negative consequences of patent amendments, applicants will have additional incentives to contest rejections by the examiner rather than overcoming them by amendment. Accordingly, the complete bar may also increase the burdens on the PTO and, ultimately, the Federal Circuit. See FCBA Petition Brief at 12-13, 16-17.

Third, the unpredictability that the Federal Circuit sought to eliminate with the complete bar is inherent in the doctrine of equivalents itself. The Federal Circuit argued that, under a flexible approach in which some equivalents are deemed surrendered by an amendment and others are not, it is "virtually impossible to predict before the decision on appeal where the line of surrender is drawn." Festo, 234 F.3d at 575. In fact, drawing the "line of surrender" is not any more difficult or less predictable than ascertaining the scope of equivalents under the doctrine of equivalents in the first place. The same considerations enter into both determinations. Compare Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 609 (1950) ("What constitutes equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case.") with infra Part II.A (discussing the similar evidence and analytical methods on which courts have traditionally

relied in applying the flexible bar).⁵ Thus, the Federal Circuit's reasoning, if followed to its logical conclusion, would require the abrogation of the doctrine of equivalents altogether. This result, of course, is fundamentally at odds with this Court's long line of precedents culminating in Warner-Jenkinson, which reaffirmed the doctrine.

II. THE FLEXIBLE BAR HAS BEEN AND CAN BE RATIONALLY AND CONSISTENTLY APPLIED.

The Federal Circuit abrogated the longstanding flexible bar approach to prosecution history estoppel because it concluded that this approach had become "unworkable." Festo, 234 F.3d at 575. The Federal Circuit also concluded that there was a conflict between two lines of Federal Circuit cases applying the doctrine of prosecution history estoppel. See id. at 572-74. The FCBA respectfully disagrees with these conclusions. While the flexible bar has not always been applied with ideal clarity or consistency, the solution to this problem is to improve the application of the doctrine, not to abandon decades of precedent in favor of an entirely new rule that is likely to have unintended negative consequences. As discussed below, the flexible bar can be applied in a way that, while faithful to the purposes of the doctrine as developed by this Court and other courts, also addresses the concerns raised by the Federal Circuit below and by this Court in Warner-Jenkinson.

A. Several Basic Principles Have Long Guided the Application of the Flexible Bar.

In the decision below, the Federal Circuit suggested that no meaningful principles had guided or could guide the application of the flexible bar in prosecution history estoppel

⁵ Nor is the problem of ascertaining the scope of available equivalents any more difficult or less predictable than claim construction. In both cases, the court must examine the claims, the specification, and the prosecution history and determine the scope of patent protection.

cases. The court stated that the plaintiff invariably argues for a broad scope of equivalents, the defendant for a narrow scope, and the court must draw an arbitrary line somewhere between these extremes. See Festo, 234 F.3d at 574-75, 577. These suggestions are an oversimplification. In fact, the flexible bar consists of several interrelated principles that are fair and rational and can be consistently applied. As shown below, this Court and other courts have long used, and should continue to use, these principles to determine what the applicant surrendered through a narrowing amendment.⁶

1. The Asserted Scope of Equivalents Must Be Consistent with Arguments Made to the Patent and Trademark Office.

The first principle underlying the flexible bar is fundamental to the concept of estoppel: the scope of protection sought by the patentee must be consistent with any arguments made to the Patent and Trademark Office to obtain the patent. For example, if the applicant specifically identified certain features as contributing to the patentability of the invention, those features must be present in the accused product. In *Hubbell v. United States*, 179 U.S. 77 (1900), for example, the patent claimed an improvement in rifle cartridges. During the prosecution history, the patentee explained that the "distinguishing feature" of his invention was that "the fulminate . . . is compelled to diffuse its explosive force, *not in a central stream*, but in a diffused

body into the base of the powder charge." *Id.* at 80 (emphasis added). This Court held that the patentee's argument precluded the patentee from asserting infringement as to a device in which the explosive force entered in a central stream. *See id.* at 85-86.

Another case illustrating this principle is Senmed, Inc. v. Richard-Allan Medical Industries, Inc., 888 F.2d 815 (Fed. Cir. 1989), overruled on other grounds by Cardinal Chemical Co. v. Martin International, Inc., 508 U.S. 83 (1993). The patent at issue in Senmed claimed an improvement in a surgical skin stapler. As originally drafted, the relevant claim required means for moving a row of staples "toward" the surface of the "anvil," about which the staples were formed as they were fired. Id. at 820. The examiner rejected the claim in light of prior art disclosing means for moving the forwardmost staple to a position above the anvil surface, after which the "staple driver" (another component of the stapler) moved it onto the anvil surface and formed it. In response, the applicant amended the claim to require means for placing "a forwardmost staple of said row on said anvil surface." Id. (emphasis added). The applicant argued that this amendment distinguished the prior art because, in the invention as claimed, the staple driver "need only form the staple about the anvil surface, the driver not having to shift the staple to the anvil surface." Id. (emphasis added). In light of this argument, the court held that the patentee was estopped from asserting infringement by equivalents as to a stapler in which the staple driver did shift the staple to the anvil surface. See id.; see also, e.g., Desper Prods., Inc. v. QSound Labs, Inc., 157 F.3d 1325, 1338-40 (Fed. Cir. 1998) (patentee was bound by arguments made during prosecution history even if prior art might have been distinguished on different ground); Wang Labs., Inc. v. Toshiba Corp., 993 F.2d 858, 867-68 (Fed. Cir. 1993) (in patent claiming memory module, protection limited to single-row construction emphasized in argument to

⁶ While the majority below asserted that the decisions of this Court regarding prosecution history estoppel do not "fully address[] the range of equivalents that is available once prosecution history estoppel applies" and that the Federal Circuit must "independently decide the issue," Festo, 234 F.3d at 571, this assertion is not entirely correct. As shown below, this Court has consistently decided questions of prosecution history estoppel by carefully considering the prosecution history. Under the Federal Circuit's complete bar, the courts must abandon this careful factual analysis. Thus, the complete bar is inconsistent with this Court's prior decisions.

examiner, even if dual-row construction might have been patentable); Environmental Instruments, Inc. v. Sutron Corp., 877 F.2d 1561, 1565-66 (Fed. Cir. 1989) (applicant limited to literal scope of "figure eight in cross section" language in amendment where patentee had emphasized this specific feature in argument to examiner), overruled on other grounds by Cardinal Chem. Co. v. Martin Int'l, Inc., 508 U.S. 83 (1993).

2. The Asserted Scope of Equivalents Must Not Capture the Prior Art.

Under the flexible bar as traditionally applied, the patentee is estopped from asserting that features present in the prior art are equivalent to elements of the claimed invention. For example, in Phoenix Caster Co. v. Spiegel, 133 U.S. 360 (1890), the patent at issue claimed "a twowheeled caster in which the axis of the floor-wheels could oscillate relatively to the furniture leg." Id. at 367. During prosecution, however, it became apparent that the applicant was not the first inventor of this type of caster. Therefore, the applicant narrowed his claims to describe more specifically the elements of his invention, one of which was a "rocker-formed collar bearing or its mechanical equivalent." Id. at 367-69. Despite the explicit reference to equivalents in the claim, this Court held that the scope of protection could not be construed as broadly as the patentee urged:

In view of the state of the art, as shown by the various patents put in evidence, the words "the rocker-formed collar-bearing or its mechanical equivalent," in the claim of the Martin patent, cannot embrace all modes of affording vertical support between the floor-wheel housing and the furniture plate, whereby lateral oscillation of such housing is permitted; and those words must be restricted to such a bearing resting on a collar

beneath the floor-wheel housing, as is shown in the Martin patent.

Id. at 368-69 (emphasis added). In other words, this Court ruled that, if the scope of protection were drawn as broadly as advanced by the patentee, the patent would improperly capture the prior art. Because the accused device lacked a "rocker-formed collar bearing," there was no infringement. See id. at 369.

In Laitram Corp. v. Morehouse Industries, Inc., 143 F.3d 1456 (Fed. Cir. 1998), the Federal Circuit similarly found an estoppel in light of the prior art cited and distinguished during prosecution. The patent in that case claimed "modules," or links, of a conveyor belt chain. One disputed issue concerned the shape of the "driving surface," or area of engagement between the chain and the driving wheel of the conveyor. The district court held, and the appeals court agreed, that the claim literally required "angled" and "planar" driving surfaces. The court based this claim construction in part on art distinguished by the applicant during prosecution that described driving surfaces that were cylindrical in shape. Under this claim construction, there was no literal infringement, because the driving surfaces of the accused module were curved. See id. at 1458-63.

The appeals court agreed with the district court's further conclusion that the patentee was estopped from asserting infringement under the doctrine of equivalents as to the curved driving surfaces. The court noted that the defendant's curved surfaces were "only trivial variants" of the cylindrical surfaces in the prior art that the applicant had distinguished. See id. at 1464. Thus, as in Phoenix Caster, the court found an estoppel because the scope of patent protection sought by the patentee was so broad that it would have encompassed the prior art. See id.; see also, e.g., Keystone Driller Co. v. Northwest Eng'g Corp., 294 U.S. 42, 48 (1935) (if claims were read as broadly as patentee urged,

they would describe devices in the prior art); Merck & Co. v. Mylan Pharms., Inc., 190 F.3d 1335, 1341-42 (Fed. Cir. 1999) (no infringement by equivalents as to type of polymer described in prior art); Litton Sys., Inc. v. Honeywell, Inc., 140 F.3d 1449, 1462-63 (Fed. Cir. 1998) (no infringement by equivalents as to type of ion beam source described in prior art).

3. The Asserted Scope of Protection Must Be Narrower Than What the Patentee Claimed Before the Amendment.

Courts have also consistently found an estoppel where the scope of protection asserted by the patentee under the doctrine of equivalents is indistinguishable from what the patentee had claimed prior to the amendment. See, e.g., Royer v. Coupe, 146 U.S. 524, 532 (1892) ("[A] patentee cannot successfully contend that his patent shall be construed as if it still contained the claims which were . . . rejected and withdrawn."); Mannesmann Demag Corp. v. Engineered Metal Prods. Co., 793 F.2d 1279, 1284 (Fed. Cir. 1986) (noting that patentee is "not entitled to the original scope of its unamended claims").

This Court applied this principle in Exhibit Supply Co. v. Ace Patents Corp., 315 U.S. 126 (1942), a case discussed by the en banc majority below. The patent at issue in Exhibit Supply claimed a target that closed an electrical switch when struck by a ball on a pinball table. See id. at 128. As originally drafted, the claim required that "conductor means" providing the switch contact be "carried by" the table. During prosecution, the patentee overcame a prior art rejection by changing the language "carried by" to "embedded in," which this Court construed to mean "solidly set or firmly fixed in the table." Id. at 132-33, 135. In light of the amendment, the patentee was estopped from asserting infringement as to conductor means not "embedded in" the table, even if such means were arguably equivalent. See id.

at 136-37. This result follows directly from the principle set forth above: if the Court had agreed with the patentee and relaxed the requirement that the conductor means be "solidly set or firmly fixed in the table," the scope of equivalents would have been no narrower than the scope of the claim before the amendment. Certainly the patentee did not attempt to articulate any scope that was broader than "embedded in" yet narrower than "carried by." See id. at 136 ("[I]t has long been settled that recourse may not be had to [the doctrine of equivalents] to recapture claims which the patentee has surrendered by amendment.").

Similarly, in *Mannesmann*, the patentee was estopped from arguing that pipes separated by a tolerance of 1/16" to 1/32" infringed patent claims requiring that the pipes be "in a contacting relation." The claim language had originally required only that the pipes be "closely adjacent," and the amendment was made to distinguish prior art. *See Mannesmann*, 793 F.2d at 1285 ("[T]he enlarged claim interpretation that Mannesmann seeks to apply to the [defendant's] structure falls squarely within the claim scope that Mannesmann relinquished to overcome the cited references."); *see also Royer*, 146 U.S. at 531-32 (patentee was limited to specific steps of claimed process and could not receive broader scope of protection that he had initially sought but had relinquished during prosecution).

4. If the Above Criteria Are Met, There Is No Estoppel.

Significantly — and in stark contrast to the "complete bar" adopted by the *en banc* majority below — there is no estoppel under the flexible bar if it is possible to articulate a scope of equivalents that captures the accused method or device, is consistent with arguments made to the Patent and Trademark Office, does not capture the prior art, and is identifiably narrower than the scope of the pre-amendment claim. A leading example of these principles is *Hughes*

Aircraft Co. v. United States, 717 F.2d 1351 (Fed. Cir. 1983).

In Hughes, the patent in suit claimed a "spin-stabilized" satellite capable of maintaining its position above the earth. See id. at 1352. During prosecution, the applicant, Williams, had added limitations to the claims to distinguish prior art, including a patent issued to McLean. See id. at 1355. One such added limitation was that certain information be transmitted to the ground for use in calculating the position of the satellite. There was no literal infringement of this element because the accused device — which took advantage of later technological improvements — used on-board computers to perform the calculations. See id. at 1360-61, 1365.

Nevertheless, the Federal Circuit held that there was no estoppel. The court noted that the McLean patent disclosed a target-seeking space vehicle (missile) that, like the Williams invention, was spin-stabilized and used a pulsed jet. Hence, the plaintiff would have been estopped from "obtaining a claim interpretation so broad as to encompass the McLean structure, or to encompass all structures in which a pulsed jet is used to precess the spin axis of a spin-stabilized body." Id. at 1354-56, 1362. However, the McLean patent did not, as Williams did, disclose a fixed external coordinate system for controlling the position of the satellite with respect to the earth and the sun. Further, Williams had specifically referred to this feature of his invention in distinguishing McLean. See id. at 1355-56. In addition, the Williams invention was controllable from the ground, and the McLean device was not. See id. at 1363. Thus, the distinguishing features of the invention (a fixed external coordinate system and ground control) could be defined more broadly than the literal claims, but still consistently with the prosecution history, and were present in the accused device. See id. at 1362 ("Williams did not, of course, surrender subject matter

related to employment of an on-board computer to accomplish in a differently timed manner what is accomplished by his disclosed structure.").

Another example of this principle is Insituform Technologies, Inc. v. Cat Contracting, Inc., 99 F.3d 1098 (Fed. Cir. 1996). The patent in that case claimed a method for impregnating a flexible sealing tube with resin so that the tube could be used to seal an underground pipe without excavating it. See id. at 1101-02. As originally drafted, the claims read on the Everson patent, which disclosed the use of a single vacuum at one end of the tube for drawing the resin through the tube. The applicant amended the claims to require that the vacuum cup be used at successive points along the tube through windows cut in the tube; when the resin was drawn up to a particular window, that window would be sealed and the vacuum placed at the next window. The applicant explained that this method was an improvement on the Everson method, which would require a very powerful vacuum for long tubes. See id. at 1103-04.

The defendant, Inliner, used two methods that were accused of infringing. In the first, multiple vacuum cups simultaneously created a vacuum through multiple windows in the tube. In another, the multiple cups were replaced by multiple "needles," or metal tubes, inserted into the sealing tube. See id. at 1104-05. Inliner argued that, in light of the amendment and arguments during the prosecution history, Insituform was estopped from asserting that the multiple cups and multiple needles were equivalent to the single cup claimed in the patent. The Federal Circuit disagreed. It noted that, while certain statements to the Patent and Trademark Office indicated that the applicant envisioned a single cup, the applicant was clearly pointing to the ability to use a less powerful vacuum as the distinguishing feature of the invention, and the defendant's processes possessed this advantage as well. See id. at 1108-09. Thus, as in Hughes,

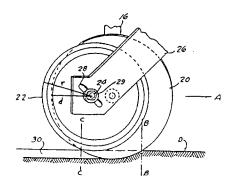
there was no estoppel because the asserted patent protection was consistent with the way the applicant had distinguished the prior art. See also, e.g., Hurlbut v. Schillinger, 130 U.S. 456, 465 (1889) (this Court refused to interpret a narrowing disclaimer so as to limit protection to the literal requirements of the claims); Black & Decker, Inc. v. Hoover Serv. Ctr., 886 F.2d 1285, 1294-95 (Fed. Cir. 1989) (no estoppel where, although accused vacuum cleaner lacked "snout" protecting motor housing, and snout was added during prosecution history to distinguish prior art, motor housing in accused product was configured to perform same function as snout, and cited prior art lacked this function); Great Northern Corp. v. Davis Core & Pad Co., 782 F.2d 159, 166 (Fed. Cir. 1986) (in patent claiming packaging material with "recesses," or holes in material for improving flexibility, there was no "surrender of all but the literal location of the recesses recited" where prior art did not disclose any recesses at all).

B. There Was No Genuine Conflict in the Prior Case Law Applying the Flexible Bar.

The en banc majority below pointed to a supposed conflict in prior case law as a reason to abrogate the flexible bar. According to the majority, while most of the pre-Festo cases had adopted a flexible approach to estoppel, there were actually two lines of authority — one applying the flexible bar as enunciated in Hughes, and the other adopting a "strict approach" inconsistent with the flexible bar. The court cited Kinzenbaw v. Deere & Co., 741 F.2d 383 (Fed. Cir. 1984), and Prodyne Enterprises, Inc. v. Julie Pomerantz, Inc., 743 F.2d 1581 (Fed. Cir. 1984), as applying the "strict approach." See Festo, 234 F.3d at 572-74. In fact, however, Kinzenbaw and Prodyne are consistent with Hughes and traditional prosecution history estoppel principles and do not support the Federal Circuit's new complete bar.

In Kinzenbaw, the patent in suit claimed a planter, a piece of farming equipment that cuts a furrow and plants seeds. The claimed planter had a pair of discs for cutting the furrow and a pair of gauge wheels "in face contact with" the outer surfaces of the discs. The wheels regulated the depth of the furrow and scraped dirt off the discs. As originally filed, the claim at issue contained the limitation — which we may call limitation (1) — that the gauge wheels must extend beyond the rear edges of the discs. The examiner rejected the claim in light of prior art disclosing adjustable wheels, on the ground that it would have been obvious to move the wheels into the position claimed by the applicant. See Kinzenbaw, 741 F.2d at 388.

In response, the applicant amended his claim by striking limitation (1) and replacing it with two limitations: (1') that the radius of the wheels (which we may call r) must exceed the distance (d) from the axis (i.e., center) of the wheels to the rear edges of the discs; and (2) that the radius of the wheels must be smaller than the radius of the discs. The examiner allowed the amended claim. See id. A modified drawing from the patent showing the discs (20) and wheels (22), as well as the radius of the wheels r and the distance from the center of the wheels to the rear edges of the discs d, is reproduced below.



In the defendant's device, the radius of the wheels exceeded the radius of the discs. The defendant's device therefore avoided limitation (2), and there was no literal infringement, although the device apparently met all other claim limitations. The plaintiff argued that the size of the gauge wheels was irrelevant, and that the defendant's device infringed by equivalents. The district court held, and the Federal Circuit panel agreed, that the applicant had "intentionally narrowed his claims in order to avoid the examiner's rejection," and the patentee was estopped to assert the equivalence of the device without limitation (2). See id.

This holding is fully consistent with the flexible bar as applied in *Hughes*. Indeed, *Kinzenbaw* is an easy case for finding an estoppel, because the stricken limitation (1) appears to be exactly identical in scope to the added limitation (1'). Because the wheels and discs must be in face contact, one can see that the wheels will extend beyond the edges of the discs to the rear (limitation (1)) if and only if r exceeds d (limitation (1')). Relaxing limitation (2) in the amended claim, as the plaintiff urged, would leave only limitation (1') — the scope of which is precisely the same as the scope of limitation (1) in the rejected claim. Accordingly, the estoppel in *Kinzenbaw* follows directly from the longstanding rule that a patentee may not argue for a construction of the patent that completely ignores a narrowing limitation. See supra Part II.A.3.

The language in *Kinzenbaw* quoted by the *Festo* majority and some commentators⁷ as supporting a "strict" approach to prosecution history estoppel was the court's response to the

⁷ See, e.g., 5A Donald S. Chisum, Chisum on Patents § 18.05[3][b][i], at 18-496 to 18-497 (2000); Note, To Bar or Not To Bar: Prosecution History Estoppel after Warner-Jenkinson, 111 Harv. L. Rev. 2330, 2335-36 (1998). The FCBA disagrees with the analysis advanced by these commentators.

patentee's argument that the radius limitation was "unnecessary" to distinguish the prior art. See Kinzenbaw, 741 F.2d at 389. Rejecting this argument, the court stated that it would not "undertake the speculative inquiry whether, if [the applicant] had made only [limitation (1')] in his claim, the examiner nevertheless would have allowed it." Id. While the precise meaning of this language is unclear, the court may have been invoking the rule that, while the patentee may argue about the scope of the disclaimer made through the amendment, he may not retract a surrender once made. See Warner-Jenkinson, 520 U.S. at 33 n.7 ("We do not suggest that, where a change is made to overcome an objection based on the prior art, a court is free to review the correctness of that objection when deciding whether to apply prosecution history estoppel."). Under this rule, the patentee was estopped from reclaiming the full scope of what the applicant had originally sought, even if the narrowing amendment was unnecessary to distinguish the prior art. In any event, nothing in Kinzenbaw suggests a "complete bar" that arises whenever an amendment is "narrowing," without regard to the specific facts of the case.8

Prodyne can be analyzed similarly. In a patent claiming a food cutting device, the relevant claim required that the wire cutting element be "looped around" part of a U-shaped bar. During the prosecution history, the patentee overcame a prior art rejection by substituting the phrase "looped around" for the phrase "attached to" in the claim as originally drafted. The defendant's device avoided literal infringement because its wire was attached through a slot and held in place by a knot, rather than being "looped around" the U-shaped bar as

⁸ Indeed, the court noted, as a basis for its holding, that the patent was an "improvement patent[] in a crowded art." *Kinzenbaw*, 741 F.2d at 389. To interpret *Kinzenbaw* as standing for a "complete bar" depending only on whether the amendment was "narrowing," one must ignore this aspect of the decision.

claimed. See Prodyne, 743 F.2d at 1582-83. The plaintiff in Prodyne did not even attempt to argue for a scope of equivalents of "looped around" that would embrace the accused device but would be narrower than "attached to" — the full scope of what was originally claimed. Instead, the patentee argued, like the plaintiff in Kinzenbaw, that the added limitation was "unnecessary." Unsurprisingly, the court declined to inquire as to whether the limitation was truly necessary; instead, it found an estoppel. See id. at 1583. Again, this result is mandated by the rule that a patentee may not completely avoid limitations it added in order to obtain allowance of the claims. Thus, the result in Prodyne, as in Kinzenbaw, is entirely consistent with Hughes and with the other decisions applying a flexible approach to prosecution history estoppel.

C. The Flexible Bar Can Be Most Consistently Applied by Placing the Burden on the Patentee to Demonstrate a Scope of Protection Consistent with the Prosecution History.

The flexible bar should be applied in the future as it has in the past, with the clarification that the patentee should bear the burden of demonstrating a scope of equivalents consistent with both the prosecution history and the relief it seeks. Under this approach, the flexible bar should be applied as a rebuttable presumption similar to the presumption established by this Court in Warner-Jenkinson for the question whether "a substantial reason related to patentability" motivated the amendment. Warner-Jenkinson, 520 U.S. at 33. Whenever a claim has been subject to a narrowing amendment, an estoppel should be presumed as to infringement by equivalents of the limitation or limitations added in the amendment. The patentee may rebut this

⁹ As Judge Michel pointed out below, both *Kinzenbaw* and *Prodyne* cite and follow *Hughes*. See Festo, 234 F.3d at 610 (Michel, J., concurring in part and dissenting in part).

This application of the flexible bar follows logically from this Court's decision in *Warner-Jenkinson*. There, this Court stated:

Mindful that claims do indeed serve both a definitional and a notice function, we think the better rule is to place the burden on the patent holder to establish the reason for an amendment required during patent prosecution. The court then would decide whether that reason is sufficient to overcome prosecution history estoppel as a bar to application of the doctrine of equivalents to the element added by that amendment. Where no explanation is established, however, the court should presume that the patent applicant 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.

Warner-Jenkinson, 520 U.S. at 33. The proposed rule, which applies a similar presumption in a slightly broader context, is consistent with this reasoning. In the language quoted above, the phrase "reason for an amendment" refers to whether the amendment was "substantial" and "related to patentability" — i.e., why the patentee disclaimed subject matter through an amendment. The proposed rule extends

the presumption to include the question of what was disclaimed. If the patentee can establish that the accused subject matter was not disclaimed, then infringement by equivalents is possible. Otherwise, an estoppel should be presumed.

Extending the Warner-Jenkinson presumption in this manner would both preserve the definitional and notice functions of patent claims and ensure that prosecution history estoppel is rationally and consistently applied. It will not always be possible to ascertain the exact contours of what was surrendered through an amendment or argument. In doubtful cases, the rule gives the benefit of that doubt to the public. By placing the burden on the patentee, the rule also gives proper effect to the statements in the decisions of this Court that claim amendments are to be strictly construed. See, e.g., Hubbell, 179 U.S. at 83-84 ("[L]imitations imposed by the inventor, especially such as were introduced into an application after it had been persistently rejected, must be strictly construed against the inventor and in favor of the public, and looked upon as in the nature of disclaimers."). At the same time, the rule preserves a range of equivalents in cases where a line between what has and has not been surrendered can be reliably drawn. Thus, the rule reflects the basic principle — overlooked by the Federal Circuit's complete bar — that the scope of estoppel should be related to the actions creating it. The proposed rule should also encourage fuller explanation during prosecution by applicants who wish to avoid unfavorable presumptions in later litigation. By contrast, the complete bar, if upheld, is likely to encourage "stealth" prosecution by applicants wishing to avoid amendment altogether. See supra Part I.C.

The proposed rule also addresses the concerns raised in the majority decision below. For example, the court imagined that a value of "less than twenty" in a patent claim is amended to "less than five" in light of prior art disclosing a value of fifteen. The court then asked how it would be possible to draw a line between the value claimed (five) and the value disclosed in the prior art (fifteen). See Festo, 234 F.3d at 577. The proposed application of the flexible bar provides an answer to this question. Suppose, for example, that the value referred to the relative amount of a certain material in a chemical composition, and that the results taught in the patent could be achieved by using values up to six, perhaps in conjunction with slight deviations from the preferred embodiment of the patent in other respects. Suppose further that, beyond values of six, the properties of the composition changed in a way that made it behave less like the patented invention and more like the prior art disclosing "less than fifteen." In this case, the line could be drawn at six. If there were no such way to draw a line, however, no scope of equivalents would be available. 10 As this example shows, it is possible to apply the flexible bar rationally, and this Court should reinstate it.

¹⁰ The Federal Circuit's hypothetical is based on the facts of Warner-Jenkinson, where the numbers described the pH of a certain process. See Festo, 234 F.3d at 577 n.2. In Warner-Jenkinson, there was evidence that certain pH values would be avoided for a functional reason (they caused "foaming" problems). See Warner-Jenkinson, 520 U.S. at 1046 n.2.

CONCLUSION

For the foregoing reasons, *amicus curiae* Federal Circuit Bar Association respectfully requests that this Court reverse the *en banc* decision of the Federal Circuit and remand for an application of the flexible bar according to the principles set forth above.

Respectfully submitted,

GEORGE E. HUTCHINSON EXECUTIVE DIRECTOR, FEDERAL CIRCUIT BAR ASSOCIATION 1300 I Street, N.W. Suite 700 Washington, D.C. 20005 (202) 408-4000

CLAIRE LAPORTE
(Counsel of Record)
MITCHELL J. MATORIN
ROBERT L. BOCCHINO JR.
MEGAN H. MACK
MARK A. REILLY
FOLEY, HOAG & ELIOT LLP
One Post Office Square
Boston, MA 02109
(617) 832-1000
Counsel for Amicus Curiae
The Federal Circuit Bar
Association

Dated: August 31, 2001