

**JUDGE LEARNED HAND GUIDES THE FEDERAL
CIRCUIT: A MODEL FOR A UNIFORM
DOCTRINE OF PROSECUTION
HISTORY ESTOPPEL**

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I. INTRODUCTION

During the first half of the present century, Judge Learned Hand was instrumental in developing the patent law doctrine of prosecution history estoppel. Courts still use this doctrine to interpret the scope of an invention. Through prosecution history estoppel, the prior history of a patent claim may bar a patent holder from reinterpreting the claim to argue infringement or to avoid an attack on the claim's validity.¹

Initially, courts were able to apply prosecution history estoppel uniformly because jurists such as Hand grounded the doctrine firmly in identified policy bases. First, Hand saw a parallel between a patent and a contract. This parallel enabled Hand to borrow certain contract policies as a foundation for the patent doctrine of prosecution history estoppel. Second, Hand viewed the doctrine as part of the Patent and Trademark Office administrative process. In understanding how prosecution history estoppel fitted into this process, courts further solidified their ability to apply the doctrine uniformly. Unfortunately, during the second half of this century courts lost sight of the policy bases for prosecution history estoppel. As a result, the courts failed to apply the doctrine uniformly. Because the lack of certainty evident in applying prosecution history estoppel was characteristic of the patent field in general, Congress took action. Congress created the United States Court of Appeals for the Federal Circuit.

The patent world heralded the birth of the United States Court of Appeals for the Federal Circuit (Federal Circuit) on October 1, 1982.² Lawyers and judges hoped the Federal Circuit would give the patent field doctrinal uniformity and consequent certainty in litigation. Congress enhanced the possibility of attaining this goal by granting the court unique appellate jurisdiction. Geographically, the Federal Circuit's jurisdiction encompasses the nation. Substantively, the Federal Circuit enjoys exclusive jurisdiction over three types of patent litigation: United States District Court holdings,³ decisions by the Patent and Trademark Office on patent applications and interferences,⁴ and monetary claims against the United States for unauthorized use of patented inventions.⁵

¹ An alternate, more narrow definition of prosecution history estoppel would bar a patent holder from using the doctrine of equivalents (*see infra* notes 28-30 and accompanying text) to broaden a patent claim after the patent holder had restricted that claim to secure the patent.

² Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25, 37 (codified at 28 U.S.C. § 1295(a) (1982)).

³ The district courts have exclusive original subject matter jurisdiction over cases "arising under" the patent laws. 28 U.S.C. § 1338(a) (1982). Whenever such jurisdiction is based "in whole or in part" on the patent section of 28 U.S.C. § 1338(a), the Federal Circuit acquires exclusive appellate jurisdiction. Federal Courts Improvement Act of 1982, 28 U.S.C. § 1295(a)(1) (1982). This jurisdiction includes all patent infringement suits.

⁴ The term *interference* refers to a Patent and Trademark Office proceeding designed to determine the priority of an invention between two or more parties claiming rights in the same subject matter. 35 U.S.C. § 135 (1982).

⁵ The Federal Circuit consolidated the Court of Claims and the Court of Customs and Patent Appeals. Patent-related jurisdiction of the two abolished courts transferred to the Federal Circuit. Therefore, the new court acquired the Court of Customs and Patent Appeals' jurisdiction over decisions on patent applications and interferences. Federal Courts Improvement Act of 1982, 28 U.S.C. § 1295 (1982); *see also* Chisum, *Introductory Survey*, 15 INTELL. PROP. L. REV. xli (1983). The Federal Circuit also acquired the Court of Claims' jurisdiction to review

Uniformity and certainty represent worthy goals in patent law; both are conspicuously absent from the field.⁶ This absence promotes unpredictable litigation outcomes, attorneys' inability to counsel clients, and forum shopping.⁷ Inconsistencies arise in two ways when federal courts construe federal patent laws. First, differences in attitude among circuit judges create variations. Under similar facts, courts may apply the same standard but reach different conclusions. Second, the United States Supreme Court continually fails to resolve conflicting rules among the various federal circuit courts.⁸ Without guidance, the circuits are unsure what constitutes the federal patent law.

An example of the confusion is the federal circuit courts' conflict on the issue of prosecution history estoppel, or "file wrapper estoppel."⁹ The circuit courts' decisions reflect four distinct types of prosecution history estoppel: classic prosecution history estoppel, estoppel by admission, non-art estoppel, and reverse estoppel. Some courts broadly adopt all four types, while others reject all but one. To predict the outcome of litigation involving prosecution history estoppel, an attorney must first ask, "In what circuit is the suit?" The Federal Circuit, however, does not use any of the four types of prosecution history estoppel. Rather, the Federal Circuit intends to forge a novel approach. By shunning traditional categories and designing a practical doctrine, the Federal Circuit can create uniformity and certainty for prosecution history estoppel.

By creating the Federal Circuit, Congress unquestionably sought to stimulate appellate review of the lower courts' patent decisions, thus approaching the goal of improved uniformity and certainty.¹⁰ According to Chief Judge Markey, with the aid of exclusive jurisdiction the Federal Circuit was ready to accept the challenge of unifying and clarifying patent law."¹¹ The Chief Judge predicted that accepting the challenge might earn the plaudits of Learned Hand,

monetary claims for unauthorized governmental use of patented inventions. Federal Courts Improvement Act of 1982, 28 U.S.C. § 1295 (1982); see also Davis & Frei, *The New Court of Appeals for the Federal Circuit: Its Patent Law Legacy from the Court of Claims*, 10 APLA Q.J. 243 (1982).

⁶ This note addresses the inter-circuit conflicts over one aspect of the infringement issue: prosecution history estoppel. Judge Markey, Chief Judge of the Federal Circuit, noted disagreement over additional substantive patent issues. Markey, *The Phoenix Court*, 10 APLA Q.J. 227, 232-35 (1982). For a discussion of these conflicts, see Ryan, *The "Muncie Gear" Doctrine and the Effect of Section 132 Upon It*, 11 Loy. U. Cm. L.J. 375 (1980); Zieg, *Developments in the Law of "On Sale"*, 58 J. PAT. OFF. Soc'y 470 (1976).

⁷ For a recent evaluation of forum shopping in patent litigation and the potential effect the Federal Circuit might have on this problem, see Note, *An Appraisal of the Court of Appeals for the Federal Circuit*, 57 S. CAL. L. REV. 301, 320 (1984). All three of the factors noted in the text complicate preparation for infringement litigation. For further discussion of patent infringement, see 35 U.S.C. § 271 (1982). This note discusses infringement *infra* note 22 and accompanying text.

⁸ The Supreme Court seldom grants certiorari to resolve conflict among the circuits about patent law. In the 35 years since *Jungersen v. Ostby & Barton Co.*, 335 U.S. 560, *reh'g denied*, 336 U.S. 915 (1949), the only patent case in which the Supreme Court attempted to resolve a conflict is *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Goldstein, *Conflicting Rules of Patent Law Within the Federal Judicial System*, 12 INTELL. PROP. L. REV. 135, 136 (1980).

⁹ The doctrine became established and enforced under the name "file wrapper estoppel." The Federal Circuit coined the phrase "prosecution history estoppel" to refer to the traditional doctrine of file wrapper estoppel. See, e.g., *Thomas & Betts Corp. v. Litton Sys.*, 720 F.2d 1572, 1579 (Fed. Cir. 1983). This note uses the terms interchangeably.

¹⁰ Markey, *The Court of Appeals for the Federal Circuit-Challenge and Opportunity*, 15 INTELL. PROP. L. REV. 3, 5-6 (1983).

¹¹ *Id.* at 5.

Holmes, Brandeis, and Cardozo.¹² Among those names, Learned Hand's is the most significant because Hand formulated many of the pioneering rules governing prosecution history estoppel.¹³

Although Judge Hand's holdings regarding prosecution history estoppel would suffer redress today,¹⁴ Hand's policies remain useful. Unfortunately, the federal circuit courts have lost sight of Hand's views, or have simply adopted other policies, thereby creating diverse interpretations of prosecution history estoppel. Returning to the foundation laid by Hand will foster uniformity. Judge Hand proposed two policy bases for prosecution history estoppel. First, the judge applied general contract theories, such as the parol evidence rule regarding interpretation of integrated agreements, to the patent document. Second, Hand recognized the importance of available administrative remedies. Congress may delegate the power to make rules and decide particular cases to an administrative agency such as the Patent and Trademark Office. Prosecution history estoppel prevents a litigant from circumventing available administrative remedies.

This note proposes that in developing a practical doctrine of prosecution history estoppel, the Federal Circuit should return to Judge Learned Hand's two policy bases. To support that proposition, this note explores the applicability of these policies to prosecution history estoppel. In addition, this note reviews the federal circuit courts' various judicial interpretations of the doctrine. This note identifies four types of prosecution history estoppel and explains the lack of uniformity. Finally, this note recommends a strategy for applying the doctrine of prosecution history estoppel that accepts the teachings of Learned Hand and is consistent with the Federal Circuit doctrine developed to date. The recommended strategy would attain the Federal Circuit's goals of uniformity and certainty.

II. BACKGROUND

A. *The Process of Patent Prosecution and Patent Litigation*

The process of obtaining a patent, or the *prosecution* of a patent, involves an application, amendments, office actions, and other communication between the Patent and Trademark Office and the patent applicant or the applicant's representative.¹⁵ The "file wrapper"¹⁶ discloses the

¹² The entire quotation reads:

[I]f all of us welcome the challenge and grasp the opportunity present in the creation of this new court—if we remain dedicated to the blindfolded Lady of Justice—then, when our work is done and our time is run, other romancers of that Lady-like Learned Hand, and Holmes, and Brandeis, and Cardozo—may say to us when we meet them—well done!

Id. at 8.

¹³ *Keith v. Charles E. Hires Co.*, 116 F.2d 46 (2d Cir. 1940) (even when estoppel arises, claims may be liberally interpreted); *Salvage Process Corp. v. Acme Tank Cleaning Process Corp.*, 94 F.2d 69 (2d Cir. 1938) (a court should enforce the patent as the bargain between the parties); *Catalin Corp. of Am. v. Catalazuli Mfg. Co.*, 79 F.2d 593 (2d Cir. 1935) (estoppel should not result from a patent holder's responses to an examiner's rejection on formal grounds); *Lyon v. Boh*, 1 F.2d 48 (S.D.N.Y. 1924), *rev'd*, 10 F.2d 30 (2d Cir. 1926) (the patent holder may not rely upon the doctrine of equivalents when the patent holder creates a prosecution history estoppel); *A.G. Spalding & Bros. v. John Wanamaker*, 256 F. 530 (2d Cir. 1919) (the patent applicant's arguments may not create an estoppel); *Quinn v. J.H. Faw, Inc.*, 235 F. 166 (S.D.N.Y. 1916) (if the patent holder fails to appeal an action, the allowed claim marks the limit of the scope of the patent).

¹⁴ Heyman, *File Wrapper Estoppel*, in INFRINGEMENT OF PATENTS 209, 222-26 (Practising Law Institute 1981).

¹⁵ *Id.* At 257 n.1.

history of this prosecution. Thus, the file wrapper is the record of Patent and Trademark Office proceedings upon which a patent issues.¹⁷ Because the file wrapper compiles only documents, however, researching the file wrapper cannot always reveal all matters relevant to the prosecution. The examiner's comments¹⁸ and the applicant's arguments made in oral interviews,¹⁹ perhaps by telephone, are absent unless transcribed.²⁰ Nevertheless, most communications relevant to the prosecution appear in the file wrapper.

A patent containing one or more patent claims must distinctly point out and describe the subject matter which the invention covers.²¹ In a suit for infringing an issued patent,²² the court must interpret the patent under the general rule that the patent claims are the only definitive statement of the invention.²³ The court performs a two-step analysis. First, infringement of a patent claim, and hence the patent, occurs when the accused device or process contains elements²⁴ identical to each element set forth in the claim.²⁵ An exact copy of the patented

¹⁶ The term derives from the wrapper-like paper jacket which stores the file of written documents in the Patent and Trademark Office. P. ROSENBERG, PATENT LAW FUNDAMENTALS § 17.07, AT 17-41(1984).

¹⁷ Congress provided the procedures by which a patent issues in 35 U.S.C. §§ 151, 153 (1982).

¹⁸ An examiner is a civil service employee of the Patent and Trademark Office with "competent legal knowledge and scientific ability." *Id.* § 7. One of the examiner's duties is reviewing patent applications for compliance with statutes and rules. After examination, the examiner informs the applicant of the results and gives reasons for any rejection, objection, or requirement. *Id.* § 132; 37 C.F.R. §§ 1.104(b), 1.106-1.107 (1984).

¹⁹ After receiving results on the examiner's action that are "adverse in any respect," the applicant may request reexamination. 37 C.F.R. § 1.111(a) (1984). To qualify for reexamination, the applicant must respond to each ground of objection and rejection. *Id.* § 1.111(b), (c). In so responding, the applicant may request an interview with the examiner to discuss the question of patentability. *Id.* § 1.133.

²⁰ Richey, *file Wrapper Estoppel*, 23 J. PAT. OFF. SOC'Y 559, 561 (1941). The Federal Circuit has stated: "The record may not be complete with respect to all arguments made to the Patent and Trademark Office in the course of the two applications. (A telephone interview was conducted with the examiner, but no summary was recorded.)" *Caterpillar Tractor Co. v. Berco, S.p.A.*, 714 F.2d 1110, 1115 (Fed. Cir. 1983). In *Litton sys. V. Whirlpool Corp.*, 728 F.2d 1423, 1439 (Fed. Cir. 1984), the same court considered cases where the patent applicant conducted an interview with the examiner. Citing 37 C.F.R. § 1.133, the court cautioned the applicant to provide a written record of the substance of any such meeting or discussion to include in the prosecution history. 728F.2d at 1439.

²¹ 35 U.S.C. § 112 (1982).

²² The patent holder or assignee (*see id.* § 152) possesses "the right to exclude others from making, using or selling the invention throughout the United States" for a term of 17 years. *Id.* §154. The patent holder may enforce this right of exclusion in a civil action for infringement. *Id.* § 281. In such an action, the court may issue an injunction, *id.* § 283, award damages, *id.* §284, and, in exceptional cases, attorney's fees, *id.* 285.

²³ *Continental Paper Bag Co. v. Eastern Paper Bag Co.*, 210 U.S. 405, 419 (1908) (in order for a patent to be infringed, at least one claim must be infringed).

²⁴ In order to comply with 35 U.S.C. § 112 (1982), which requires patent claims "particularly pointing out and distinctly claiming" the invention, patent claim language has become stylized and conventional. A claim format typically includes three parts: preamble, transition, and body. The body will list the *elements* that define the device or process to be patented. D. CHISUM, PATENTS § 8.06(1) (1984).

²⁵ Consider the following hypothetical example. The main problem with mousetraps is that they require the mouse to come to the trap. Brilliant (*B*), an inventor, notices that mice, and only mice emit a certain chemical, MC (mouse chemical). *B* designs a mousetrap on wheels, called "Miranda Mouse," that will follow the chemical and travel twice as fast as the average mouse. The first draft of a patent might appear as follows:

What is claimed is:

1. a mousetrap capable of motion [*preamble*] comprising, in combination [*transition*];
*a shape resembling a mouse having a front face, a tail, and a body [an *element*];
a sensor to detect the chemical MC attached to said front face [a second *element*];
means for propelling said mousetrap attached to said body [a third *element*];

invention meets this test. In such a case, the challenged device or process will literally infringe the patent claim.²⁶ Normally, however, an allegedly infringing device will not exactly copy the patented device.²⁷ The court, in its discretion, may then perform the second step toward finding infringement: the court may expand the literal wording of a patent claim by using the “doctrine of equivalents.”²⁸

The doctrine of equivalents permits the patent holder to assert that the patent covers not only the perceived device or process patented, but also equivalent devices or processes.²⁹ Courts developed the doctrine of equivalents to protect patent holders from devices or processes that differ from the patented invention merely in name, form or shape.³⁰ When a court expands a

means for providing power to said mousetrap [a fourth *element*];
an electric probe attached to said front face of said mousetrap [a fifth *element*].*

2. A mousetrap as claimed in claim 1 wherein said shape is 5 inches long with a 3/4 inch diameter.
3. A mousetrap as claimed in claim 1 wherein said mousetrap is aluminum.
4. A means for propulsion as claimed in claim 1 wherein at least two wheels are recessed in the bottom of said body of said mousetrap.
5. A power means as claimed in claim 1 wherein said power means is entirely contained within said body of said mousetrap, enables said mousetrap to attain a speed of at least 15 m.p.h., and provides electric current to said electric probe.
6. An electric probe as claimed in claim 1 wherein said probe derives sufficient power to kill mice from said power means.

The language between the two asterisks comprises the *body* of the claim. This note uses the Miranda Mouse example to clarify certain patent concepts throughout the note.

²⁶ See *infra* text accompanying notes 80-88 for a discussion of the role of literal infringement in the prosecution history estoppel strategy of the Federal Circuit.

²⁷ Dvorak, *That Perplexing Problem-The Doctrine of File Wrapper Estoppel*, 50 J. PAT. OFF. SOC'Y 143, 143 (1968). Reaching a conclusion regarding literal infringement is difficult because terms of a claim may be subject to different interpretations. Heyman, *supra* note 14, at 213. The Fifth Circuit stated:

If patents were interpreted only by the literal scope of their claims, however, minor deviations in the structure of almost any invention could be devised to elude the reach of the patent's protection. Thus, experience with patent cases demonstrates that seldom may the question of infringement be determined on the literal words of the claim.

Zeigler v. Philips Petroleum Co., 483 F.2d 858, 868 (5th Cir.), *cert. denied*, 414 U.S. 1079 (1973). Learned Hand was eloquent: “But often even with the most sympathetic interpretation the claim cannot be made to cover an infringement which in fact steals the very heart of the invention; no matter how auspiciously construed, the language forbids.” *Keith v. Charles E. Hires Co.*, 116 F.2d 46, 48 (2d Cir. 1940).

²⁸ The courts use the doctrine of equivalents to interpret the scope of claims in the absence of literal infringement. In essence, a court disregards claim wording in order to protect the real invention. See *Keith v. Charles E. Hires Co.*, 116 F.2d 46, 48 (2d Cir. 1940).

Reconsider the Miranda Mouse example, *supra* note 25. Competitor (*C*) designs a mousetrap using plastic construction. *C*'s design would not literally infringe *B*'s patent claim number 3 because Miranda Mouse uses aluminum. Yet the court might interpret the scope of *B*'s patent claim number 3 to include a lightweight material such as plastic. Thus, the court might invoke the doctrine of equivalents to protect *B*'s real invention. (In anticipation of *C*'s guile, *B* might insert “a lightweight material” rather than “aluminum” in the original drafting of *B*'s patent claim number 3. Such insertion, however, assumes that no particular reason exists to require aluminum, such as cost or shiny attraction for mice.)

²⁹ *Graver Tank & Mfg. v. Linde Air Prods.*, 339 U.S. 605 (1950). The Graver Court advised that equivalence must be determined on a case-by-case basis, because one must view each element of the claim in light of the prior art, the element's qualities, the element's purposes for use, and the functions that the element performs in the patented invention. *Id.* at 609. In addition, equivalency requires that a person “reasonably skilled in the art” in question must have been able to recognize the interchangeability of the patent and the alleged infringing ingredients. *Id.*

³⁰ “[I]f two devices do the same work in substantially the same way, and accomplish substantially the same result, they are the same, even though they differ in name, form, or shape.” *Graver Tank & Mfg. v. Linde Air Prods.*, 339 U.S. 605, 608 (1950), *quoting* *Union Paper Bag Mach. Co. v. Murphy*, 97 U.S. 120, 126 (1878). See

patent claim by using the doctrine of equivalents, however, the court contradicts the theory that patent claims measure the coverage of the patent and define the invention.³¹ In theory, the doctrine of equivalents could endanger the entire patent system.³²

To protect the integrity of the patent system, courts created the doctrine of prosecution history estoppel.³³ This doctrine precludes a patent holder in an infringement suit from construing the patent claim so that the claim recaptures breadth which the patent holder gave up during prosecution. Materials contained in the prosecution history will bar, or *estop*,³⁴ the patent holder from asserting infringement.

also Zeigler v. Philips Petroleum Co., 483 F.2d 858, 868 (5th Cir.), cert. denied, 414 U.S. 1079 (1973). The Federal Circuit took this approach in Carman Indus. v. Wahl, 724 F.2d 932 (Fed. Cir. 1983) (citing the *Graver* definition of equivalents to hold that application of the doctrine of equivalents was proper). *See also* Perkin-Elmer Corp. v. Computer vision Corp., 732 F.2d 888, 900 (Fed. Cir. 1984) (applying the *Graver* test in assessing equivalency); Thomas & Betts Corp. v. Litton Sys., 720 F.2d 1572, 1579 (Fed. Cir. 1983) (citing *Graver* as the leading case on the doctrine of equivalents); Hughes Aircraft Co. v. United States, 717 F.2d 1351, 1361 (Fed. Cir. 1983) (citing the *Graver* definition of equivalents in recognizing that the doctrine of equivalents is unnecessary when literal infringement exists); Caterpillar Tractor Co. v. Berco, S.p.A., 714 F.2d 1110, 1115 (Fed. Cir. 1983) (holding the *Graver* test was met). The doctrine of equivalents thus prevents infringement that, though not literal, would render a patent holder's right a "hollow and worthless thing." *Graver*, 339 U.S. at 607.

³¹ *See* Winans v. Denmead, 56 U.S. (15 How.) 330, 347 (1853) (Campbell, J., dissenting); Keith v. Charles E. Hires Co., 116 F.2d 46, 48 (2d Cir. 1940).

³² Borg-Warner Corp. v. Paragon Gear Works, Inc. 355 F.2d 400, 404 (1st Cir. 1965), cert. *Dismissed*, 384 U.S. 935 (1966).

³³ Prosecution history estoppel is a limiting principle that "strikes a compromise" between the doctrine of equivalents and the alternative of holding a patent holder to the literal wording of the claims. Borg-Warner Corp. v. Paragon Gear Works, Inc., 355 F.2d 400, 405 (1st Cir. 1965), cert. *dismissed*, 384 U.S. 935 (1966). Heyman defines the doctrine as "an equitable rule of law which limits the extent to which patent claims may be interpreted beyond their literal meaning." Heyman, *supra* note 14, at 211. The court in Duplan Corp. v. Deering Milliken, Inc., 379 F. Supp. 388 (D.S.C. 1974), provides a fine discussion of the doctrine. The Duplan court offers the definition given in Berry Bros. v. Sigmon, 317 F.2d 700, 706 (4th Cir. 1963), as "the most succinct": "A patentee, having deliberately taken a position in the Patent Office proceedings to induce the grant of the patent to him, is not thereafter permitted to repudiate that position. This is what is meant by file wrapper estoppel." Duplan, 379 F. Supp. at 392.

Whether prosecution history estoppel applies independently of the equivalents doctrine is uncertain. Some courts apply estoppel only when the patent owner relies on the doctrine of equivalents. D. CHISUM, *supra* note 24, at 18-55. Judge Hand said, "The 'estoppel' is itself important only as a bar to any resort to the doctrine of equivalents." Keith v. Charles E. Hines Co., 116 F.2d 46, 48 (2d Cir. 1940). When interpreting the issue of literal infringement, courts often look to the prosecution history for definitions of terms found in the claims. Application of prosecution history estoppel thereby limits the court's interpretation of the claim language. Some courts call this limitation prosecution history estoppel; others call the limitation a separate rule of claim interpretation. Heyman, *supra* note 14, at 213. Further, application of prosecution history estoppel often extends beyond issues of infringement to encompass claim validity. *See infra* notes 55-58 and accompanying text.

³⁴ The patent holder is *estopped* from invoking the doctrine of equivalents after having previously limited the scope of claims by amendment. Such limitations most frequently involve cancelling claims or narrowing broad claims (but may arise from statements made to the examiner *see infra* notes 46-50 and accompanying text) following the Patent and Trademark Office Examiner's rejection of the application as unpatentable. *See, e.g.,* I.T.S. Rubber Co. v. Essex Rubber Co., 272 U.S. 429, 443-44 (1926); Exhibit Supply Co. v. Ace Patents Corp., 315 U.S. 126, 136 (1942).

The Miranda Mouse example, *supra* note 25, illustrates how cancellations, amendments (e.g., narrowing claims), and statements following rejection of the patent application estop a patent holder's resort to the doctrine of equivalents. The Patent and Trademark Office Examiner might find the description of "means for providing power" in B's claim number 1 and "power means" in B's claim number 5 too broad, and reject these claims. In order to secure the patent, B must take action. First, B could cancel element 4 of claim number 1 and all of claim number 5, leaving no description of "power means." Second, B could amend the claims to include "an AA battery power supply." This amendment is narrower than the previous "power means"

If the doctrine or prosecution history estoppel rarely appeared in patent litigation, the doctrine would be commensurately insignificant. Once a patent issues, however, the entire prosecution history is open to public inspection,³⁵ and parties in patent infringement actions commonly introduce prosecution history into evidence.³⁶ Moreover, standard procedure dictates that each side must examine the prosecution history thoroughly in prospective litigation,³⁷ because parties so frequently argue prosecution history estoppel. Courts frequently review the prosecution history during prosecution of a *reissue* patent application.³⁸ Therefore, prosecution history estoppel has a widespread influence on patent litigation.

B. *Types of Prosecution History Estoppel*

Unfortunately, the courts have not applied prosecution history estoppel uniformly. The United States circuit courts have adopted various interpretations of prosecution history estoppel in determining how the doctrine applies. Confusion reigns not only concerning which interpretation a court should accept, but about how many interpretations exist.³⁹ This note identifies four types of prosecution history estoppel.⁴⁰

language and would probably eliminate the examiner's grounds for rejection. In either case, however, *C* might develop a mousetrap powered differently, perhaps by a solar cell, to avoid infringing *B*'s patent. *B*'s amendment or cancellation estops *B* from claiming that the original "power means" language, or any equivalent, covers the solar cell.

Finally, *B* might contest the examiner's rejection. *B* might believe that Miranda Mouse is useful only indoors against house mice, where a solar cell would be impractical. Therefore, the only possible "power means" would be some sort of battery. *B*'s statements on the subject could convince the examiner that, given the situation, the patent should issue. *C* might then develop a solar-powered mousetrap with outdoor field mice as the prey. Although a "power means" would appear to cover a solar cell, *B*'s later statements estop *B* from contesting *C*'s device.

³⁵ The Patent and Trademark Office maintains strict confidence regarding the developing history during prosecution. 35 U.S.C. § 122 (1982); 37 C.F.R. § 1.14 (1984); see U.S. PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE §§ 608.01(h)-.01(q) (4th ed. 1979 & 1982) [hereinafter referred to as PROCEDURE MANUAL]. The PROCEDURE MANUAL has no binding force on the courts, but it commands notice as an official interpretation of statutes and regulations with which it does not conflict. Patent attorneys and examiners commonly rely on the PROCEDURE MANUAL as a guide in procedural matters. *Litton Sys. v. Whirlpool Corp.*, 728 F.2d 1423, 1439 (Fed. Cir. 1984). After the patent issues, however, the prosecution history is open to the public. 37 C.F.R. § 1.11 (1984). See *Ziegler v. Philips Petroleum Co.*, 483 F.2d 858, 870 (5th Cir.), cert. Denied, 414 U.S. 1079 (1973).

³⁶ The practice of offering the contents of the prosecution history as evidence to ascertain the true scope of a patent is well established. See, e.g., *Hubbell v. United States*, 179 U.S. 77, 80 (1900); *Phoenix Castor Co. v. Spiegel*, 133 U.S. 360, 364 (1890) ("A copy of the file wrapper and its contents, in the matter of the patent, is found in the record").

³⁷ Anderson & Beggs, *Patents – Infringement and Enforcement*, INTELL. PROP. L. § 5.6 (IICLE 1978).

³⁸ *Smith v. General Foundry Mach.*, 174 F.2d 147 (4th Cir.), cert. Denied, 338 U.S. 689 (1949). Occasionally, a patent will issue containing errors. If the mistake is inadvertent or attributable to the Patent and Trademark Office, the patent holder may cancel or surrender the original patent and receive a corrected, *reissued* patent. 35 U.S.C. § 251 (1982). The reissued patent, to the extent that its claims are identical to the original patent, has the same legal standing as the original and assumes the remainder of the term of the surrendered patent. *Id.* § 252. *Grant v. Raymond*, 31 U.S. (6 Pet.) 218, 241 (1832), illustrates the rationale for granting reissue patents: "That sense of justice and of right which all feel, pleads strongly against depriving the inventor of the compensation thus solemnly promised [an exclusive right], because he has committed an inadvertent or innocent mistake."

³⁹ Carole F. Barrett found that courts adopt three distinct interpretations of file wrapper estoppel: classic file wrapper estoppel, estoppel by admission, and non-art estoppel. Further, Barrett states that some jurisdictions accept all three forms while others apply only one or two. Barrett, *The Application of the Doctrine of File Wrapper*

The first interpretation of prosecution history estoppel, *classic* prosecution history estoppel,⁴¹ is the most narrow and most common. A patent holder often makes “changes,”⁴² which narrow the patent claims, to avoid an examiner’s *prior art*⁴³ rejection.⁴⁴ A patent holder alleging infringement cannot broaden the meaning of the narrowed patent claims to recover matter thus abandoned during prosecution in the Patent and Trademark Office. All jurisdictions uniformly accept and apply this narrow, classic rule.⁴⁵

Prosecution history estoppel by *admission*,⁴⁶ in contrast,⁴⁷ is subject to debate among the circuit courts. Estoppel by admission results from admissions, arguments, and remarks of an

Estoppel to Prevent Recapture of Abandoned Patent Claims, 54 ST. JOHN’S L. REV. 767 (1980), reprinted in 13 INTELL. PROP. L. REV. 263 (1984). In contrast, the court in *Duplan Corp. v. Deering Millikan, Inc.*, 379 F. Supp. 388, 392-93 (D.S.C. 1974), proposed two types of file wrapper estoppel comparable to Barrett’s classic and admission forms. At least one author has adopted the view of the *Duplan* court. Comment, *File Wrapper Estoppel: The Effect of Attorney’s Remarks During the Prosecution of a Patent Application*, 13 HOUS. L. REV. 378, 380 (1976).

⁴⁰ Appendix A provides a summary of the different positions of the United States Supreme Court, the Court of Customs and Patent Appeals, the Court of Claims, and the circuit courts of appeal.

⁴¹ Some courts have described this interpretation as “traditional” prosecution history estoppel. *Heyman*, *supra* note 14, at 211.

⁴² Historically, the circuits split this single type into two subdivisions which hinge on the word *changes*. Several circuits applied prosecution history estoppel only when an applicant amended patent claims to distinguish cited prior art and secure a patent. See, e.g., *Williams Bit & Tool Co. v. Christensen Diamond Prods.*, 399 F.2d 628, 634 (5th Cir. 1968) (citing supporting authority from the Second and Fourth Circuits). The alternate viewpoint expanded the classic prosecution history estoppel doctrine to include changes made by cancellation or addition of claims. All jurisdictions accept this latter stance today.

The Miranda Mouse example, introduced *supra* note 25, addressed prosecution history estoppel regarding changes made by cancellation or addition of claims. See *supra* note 34. The Miranda Mouse example also illustrates the more restrictive classic prosecution history estoppel: only the changes needed to obtain an allowance in light of prior art create an estoppel. Perhaps before *B* sought a patent, *C* produced a wind-up mousetrap useful upon sighting a mouse. *C*’s device constitutes prior art. Therefore, the examiner would reject *B*’s general “power means” language as infringing the prior art. In order to secure the patent, *B* could restrict Miranda Mouse to “an AA battery power supply,” thus excluding use of a wind-up mouse. The patent would issue upon this change, but all courts would find that *C*’s subsequent solar-cell-powered mousetrap does not infringe *B*’s patent.

In the example *supra* note 34, the prior art did not require *B* to change the claim to avoid infringement. Traditionally, some courts would have refused to consider prosecution history estoppel. Those courts would thus have found a solar cell and an AA battery equivalent. However, all courts today would apply prosecution history estoppel, giving the classic doctrine expanded scope, and find that the solar cell and AA battery were different power means.

⁴³ 5 A. DELLER, DELLER’S WALKER ON PATENTS § 453, at 361 (2d ed. 1972), defines *prior art* as anything of tangible form, upon which the Patent and Trademark Office may properly rely in patent cases to reject a matter of substance, not form, in a pending application for a patent.

⁴⁴ If the patent examiner finds that the applicant claims an invention that is either not novel because it has been previously invented, 35 U.S.C. § 102 (1982), or not an invention because it would have been obvious to a person “skilled in the art” at the time, *id.* § 103, the examiner will reject the claims and state the reasons. Usually the examiner informs the applicant of the prior art which is the basis for the rejection. *Id.* § 132.

⁴⁵ Classic estoppel is common among all the courts in large measure because the Supreme Court provided guidance. See, e.g., *Graham v. John Deere Co.*, 383 U.S. 1, 33 (1966) (Courts stated and applied classic estoppel to the patent holder’s claims); *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126, 136 (1942).

⁴⁶ This type of prosecution history estoppel has also been called “estoppel by attorney’s remarks,” “something akin to estoppel,” “estoppel by omission,” and “estoppel by denial.” *Heyman*, *supra* note 14, at 257 n.5. This note uses the terminology of *Duplan Corp. v. Deering Millikan, Inc.*, 379 F. Supp. 388, 392 (D.S.C. 1974): “estoppel by admission.”

⁴⁷ See *Duplan*, 379 F. Supp. At 394, for a good analogy illustrating the difference between classic estoppel and

applicant or the applicant's representative during prosecution of a patent application. These statements attempt to convince the examiner that the patent claims are distinguishable from the prior art.

When the patent claims and prior art are distinguishable, the prior art fails to cover the same process or device that the patent claim covers.⁴⁸ Despite an earlier lack of agreement,⁴⁹ all circuits today hold that estoppel by admission applies when claims have been amended—whether narrowed or abandoned—based solely or primarily upon the admissions. Whether admissions without accompanying claim changes create an estoppel is an open question.⁵⁰

A third interpretation of prosecution history estoppel permits an estoppel when the patent examiner's *non-art or formal*⁵¹ rejections induce claim changes. The examiner may reject a patent claim not because the claim encroaches on prior art, but because the claim form is incorrect.⁵² Although numerous circuit decisions refuse to give estoppel force to amendments based on formal grounds,⁵³ a uniform rule is lacking.⁵⁴ Thus, whether non-art prosecution

estoppel by admission.

⁴⁸ Welch v. General Motors Corp., 330 F. Supp. 80, 84 (E.D. Va.), *aff'd*, 170 U.S.P.Q. (BNA) 1 (1970).

⁴⁹ Traditionally, all courts regarded the patent application as a completely integrated agreement between the patent holder and the Patent and Trademark Office. Under orthodox contract theory, statements made by the parties during prosecution were extrinsic to the application and inadmissible under the parol evidence rule. *See, e.g.*, Catalin Corp. of Am. v. Catalazuli Mfg., 79 F.2d 593, 594 (2d Cir. 1935) (refusing to consider verbal arguments used by solicitors to the examiner). Such statements, however, were a fruitful source of information and therefore gradually became accepted as evidence in the circuit courts. *See, e.g.*, Quikey Mfg. v. City Prods., 409 F.2d 876, 878-79 (6th Cir. 1969) (construing a patent claim narrowly, based upon the inventor's statements). The Supreme Court has made no firm ruling on the use of such statements, and confusion has resulted among the circuits. Comment, *supra* note 39, at 381.

⁵⁰ Parties often make admissions without changing the claim. The examiner may believe the claim as written is invalid. The applicant may offer to explain the claim's true scope. When this explanation satisfies the examiner, for example, by restricting the claim's scope, the examiner may allow the claim.

⁵¹ Patent examiners may reject claims for either prior art, PROCEDURE MANUAL, *supra* note 35, § 706.02, or non-prior art reasons, *id.* § 706.03. Premises for prior art rejections include anticipation and the lack of novelty, 35 U.S.C. § 102 (1982), and obviousness, *id.* § 103. Non-art rejections include those premised on vagueness and indefiniteness, nonstatutory subject matter, incompleteness, prolixity, old combination, aggregation, multiplicity, new matter, obvious method, undue breadth, and lack of utility under 35 U.S.C. § 101. *See* PROCEDURE MANUAL, *supra* note 35, § 706.03. *See also* Barrett, *supra* note 39, at 768 n.12, reprinted in 13 INTELL. PROP. L. REV. AT 264 N.12.

The Miranda Mouse example, *supra* note 25, illustrates one possible non-art rejection. The fourth element of claim 1 and claim 5 refer to a power means. Does a "power means" include wind sails and solar cells as well as AA batteries? The examiner might find that "power means" is vague and indefinite, or overly broad. Thus, if B filed the patent as written, the patent might be rejected. The objection would be on *non-art* grounds.

⁵² *See supra* note 43 for a definition of *prior art*.

⁵³ Trio Process Corp. v. L. Goldstein's Sons, 461 F.2d 66, 75 (3d Cir. 1972) (the patent holder redrafted misdescriptive claims, and therefore equitable considerations precluded depriving the patent holder of the benefits of his invention based on a formalistic rule of the Patent and Trademark Office); Ellipse Corp. v. Ford Motor Co., 452 F.2d 163, 168 (7th Cir. 1971) (only changes in the claim language required to avoid prior art may restrict the scope of a claim); Bishman Mfg. v. Stewart-Warner Corp., 380 F.2d 336, 340 (7th Cir. 1967) (the doctrine of prosecution history estoppel did not apply when the examiner rejected claims based on formal, rather than substantive, objections); Catalin Corp. of Am. v. Catalazuli Mfg., 79 F.2d 593, 594 (2d Cir. 1935) (an estoppel should not result from patent holder's responses to an examiner's rejection on formal grounds).

⁵⁴ Coleco Indus. v. United States Int'l Trade Comm'n, 573 F.2d 1247, 1258 (C.C.P.A. 1978) (whenever a patent holder invokes the doctrine of equivalents, the case is open to rebuttal based on any statements made during the prosecution); Borg-Warner Corp. v. Paragon Gear Works, 355 F.2d 400, 406 (1st Cir. 1965) (the focus

history estoppel applies is debatable.

Sometimes application of prosecution history estoppel extends beyond issues of infringement to issues of claim validity.⁵⁵ On rare occasions, the Patent and Trademark Office Examiner may reject narrow claims as unpatentable or invalid, yet later allow broader claims. Because courts most frequently invoke classic prosecution history estoppel, in which the original, amended claim is broader than that allowed, the fourth type of estoppel may be called *reverse* prosecution history estoppel.⁵⁶ The Supreme Court has suggested that courts may apply reverse prosecution history estoppel to bar a narrow interpretation of a claim urged by a patent holder to avoid invalidity.⁵⁷ Such authority is unclear, however, and some circuits disagree.⁵⁸

C. The Federal Circuit

The Federal Circuit improved the nonuniformity of the patent law almost immediately. In *South Corp. v. United States*, the court's first published opinion, the Federal Circuit adopted the precedent of the Court of Claims and the Court of Customs and Patent Appeals.⁵⁹ The precedents of these courts did not often conflict, because the Court of Claims deferred to the Court of Customs and Patent Appeals' views on patent matters.⁶⁰ This deference, however, did not settle all issues relating to precedent either in the patent area generally or, more specifically,

should be on what the applicant surrendered rather than on the reason why the examiner required a change, because a patent may be just as invalid based on an inadequate description as on the prior art), *cert. denied*, 384 U.S. 935 (1966).

⁵⁵ Three elements are critical to a valid claim: novelty, utility, and nonobviousness. 35 U.S.C. §§ 101, 102, 103 (1982); *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966). Chief Judge Markey provided an excellent discourse on general issues of validity and the interrelationships between §§ 101, 102, and 103 in *Nickola v. Peterson*, 580 F.2d 898, 906-11 (6th Cir. 1978). *See also* 35 U.S.C. § 282 (1982): "A patent shall be presumed valid. Each claim of a patent . . . shall be presumed valid independently of the validity of other claims. . . ."

⁵⁶ *Bendix Corp. v. United States*, 199 U.S.P.Q. (BNA) 203 (Ct. Cl., Trial Div. 1978), *aff'd*, 600 F.2d 1364 (Ct. Cl. 1979):

[B]y applying a doctrine which may be called "inverse file wrapper estoppel," a patentee may establish entitlement to a broad construction of the literal claim language if, during prosecution of the application, . . . the claim language is broadened to take advantage of the latitude afforded by the lack of pertinence of the cited references.

Id. at 225. A reference to the *Miranda Mouse* example, *supra* note 25, clarifies reverse prosecution history estoppel. The fifth element of claim 1, claim 5, and claim 6 refer to an electric probe that will kill mice. The examiner might reject such language as obvious to one skilled in the art of mice control or not novel because mousetraps which electrocute already exist. B might alter the patent to "a means for killing mice," a broader claim. With accompanying statements that such means will include novel mouse-threatening devices such as lasers, darts, or chemicals, the examiner might allow the rewritten claim. Later, however, C might attack B's broad claim as invalid. B could not offer a narrow interpretation of "a means for killing mice" to avoid invalidity.

⁵⁷ *Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co.*, 152 U.S. 425, 429 (1894) (although courts most frequently invoke the rule of patent construction when the original claim is broader than that allowed, the rule and rationale are the same if the rejected claim is narrower). *See also* *Schriber-Schroth Co. v. Cleveland Trust Co.*, 311 U.S. 211 (1940) (the Supreme Court reaffirmed *Morgan Envelope*, applying the precise language used in the earlier case).

⁵⁸ *Ingersoll-Rand Co. v. Brunner & Lay, Inc.*, 474 F.2d 491, 498 (5th Cir.), *cert. denied*, 414 U.S. 865 (1973) (the trial court estopped plaintiff from contending that amended claims were patentable and nonobvious, but the Fifth Circuit reversed, holding that applying prosecution history estoppel outside the estoppel's normal context was erroneous). For a discussion of the conflicting positions, see Goldstein, *supra* note 8, at 141-42.

⁵⁹ *South Corp. v. United States*, 690 F.2d 1368, 1370 (Fed. Cir. 1982) (en banc). The Court of Claims and the Court of Customs and Patent Appeals are the two predecessor courts to the Federal Circuit. *See supra* note 5.

⁶⁰ *See, e.g., Arshal v. United States*, 621 F.2d 421, 425 n.8 (Ct. Cl. 1980) (the Court of Claims generally accorded the decisions of the Court of Customs and Patent Appeals great weight and respect).

in applying prosecution history estoppel.

Comparing Court of Claims and Court of Customs and Patent Appeals decisions which examine prosecution history estoppel exposes potential inconsistencies. For example, in an explicit holding, the Court of Customs and Patent Appeals allowed non-art estoppel.⁶¹ This explicit holding, however, does not appear in a Court of Claims opinion. Conversely, the Court of Claims' strong language applying reverse estoppel⁶² does not appear in Court of Customs and Patent Appeals cases. Finally, although the Court of Claims upheld estoppel by admission alone, without claim amendment, the Federal Circuit might restrict the Court of Claims' opinions to particular factual settings. The unequivocal holding of the Court of Customs and Patent Appeals in *Coleco Industries v. United States International Trade Commission*,⁶³ on the other hand, is not subject to such restriction. Thus, the Federal Circuit's adoption of the two courts' precedents⁶⁴ does not necessarily provide guidance about what to expect from the court.⁶⁵ As is shown below, the Federal Circuit has adopted neither of the predecessor courts' views about prosecution history estoppel.

III. PROSECUTION HISTORY ESTOPPEL-THE PRESENT JUDICIAL VIEW

A. *The Federal Circuit Approach*

The various judicial interpretations of prosecution history estoppel contributed to the lack of certainty and uniformity inherent in patent law before 1982. Wisely, the Federal Circuit refrains from such confusing, categorical interpretations of the prosecution history estoppel doctrine. The court apparently intends to forge a novel approach, to provide certainty and uniformity in a practical manner. In holdings and in dicta, the Federal Circuit often addresses the issue of prosecution history estoppel. The court rarely decides that estoppel applies, however.⁶⁶ The court therefore limits development of a new approach. Nevertheless, Federal Circuit cases provide insight into the development of the court's position on the doctrine, during the circuit's short existence.

1. *The Early View: An Affirmative Defense Related to Prior Art*

The Federal Circuit's evolving position suffers from sporadic development, with resulting confusion for litigants, the Patent and Trademark Office, and other courts. For example, the court initially viewed prosecution history estoppel as an affirmative defense. When

⁶¹ *Coleco Indus. v. United States Int'l Trade Comm'n*, 573 F.2d 1247 (C.C.P.A. 1978).

⁶² *Bendix Corp. v. United States*, 199 U.S.P.Q. (BNA) 203 (Ct. Cl., Trial Div. 1978), *aff'd*, 600 F.2d 1364 (Ct. Cl. 1979) (per curiam).

⁶³ 573 F.2d 1247 (C.C.P.A. 1978).

⁶⁴ *South Corp.*, 690 F.2d at 1368.

⁶⁵ Wendel, *Things You Must Know About the New Court of Appeals for the Federal Circuit*, 1983 PAT. L. ANN. 177, 183-84. In certain areas, such as the construction and application of claims to accused devices and processes, and the formulation of money remedies, the Court of Claims actually has greater experience than the Court of Customs and Patent Appeals. Neither court has experience in other areas. Chisum, *supra* note 5, at x1ii.

⁶⁶ Appendix B provides a summary of the Federal Circuit holdings on the issue of prosecution history estoppel.

an appellant failed to raise the prosecution history estoppel defense at trial, the Federal Circuit cited Federal Rule of Civil Procedure 8(c) and refused to reach the prosecution history estoppel issue.⁶⁷ In *McGill Inc. v. John Zink Co.*,⁶⁸ however, the court held that prosecution history can be a claim construction tool-over and above the doctrine's role in an estoppel context. Prosecution history estoppel thus evolved quickly in the short existence of the Federal Circuit. A restricted affirmative equitable defense, waived if not raised at trial, grew into a doctrine with wide application, in the court's discretion, as a claim construction tool.

A second and more vital source of evolutionary confusion centers on the relationship between prosecution history estoppel and prior art. During 1983, the Federal Circuit apparently intended that a party could predicate an estoppel upon changes or arguments which the applicant advanced to obtain a patent over prior art only. Three cases illustrate the court's position. In *Fromson v. Advance Offset Plate, Inc.*,⁶⁹ the district court took note of some of the arguments made by Fromson during prosecution of his application and found no infringement. The Federal Circuit, however, found Fromson's arguments irrelevant as immaterial to considering the prior art.⁷⁰ As a result, the Federal Circuit vacated and remanded the district court's holding of infringement which relied on the district court's interpretation of the claims. In a second case, *Caterpillar Tractor Co. v. Berco, S.p.A.*,⁷¹ the Federal Circuit upheld a verdict of infringement. The rejection at issue did not relate to prior art. Therefore, the court found nothing in the prosecution history to estop the plaintiff from asserting the doctrine of equivalents. Finally, the Federal Circuit emphasized the prior art in *Schenck v. Nortron Corp.*⁷² Nortron asserted prosecution history estoppel, but the court had difficulty with Norton's position: Schenck did not insert the patent claim language, upon which Nortron based estoppel, to avoid prior art. Thus, the Federal Circuit's early position seemed to relate prosecution history estoppel directly to the prior art. One commentator referred to the court's stance as "prior art estoppel."⁷³

This early Federal Circuit position was at times equivocal. The Federal Circuit initially suggested that applicants' arguments, submitted to obtain the patent, might create an estoppel even when not made to avoid prior art.⁷⁴ Further, early Federal Circuit cases contain conflicting language about whether, to create an estoppel, amendments of the patent claim must overcome rejection based on prior art.⁷⁵ Recent 1984 cases resolved this conflict and rejected a doctrine of

⁶⁷ *Carmen Indus. v. Wahl*, 724 F.2d 932, 942 (Fed. Cir. 1983). However, in a later decision, *Bayer Aktiengesellschaft v. Duphar Int'l Research B.V.*, 222 U.S.P.Q. (BNA) 649 (Fed. Cir. 1984), the Federal Circuit considered a magistrate's incorrect statement of the doctrine despite the fact that prosecution history estoppel was not an issue in the case. Judge Kashiwa's opinion stated that the misimpression potentially affected the magistrate's decision. *Bayer* might be confined, however, to the specific and unusual facts of the case. *Id.* at 654.

⁶⁸ 736 F.2d 666, 673 (Fed. Cir. 1984).

⁶⁹ 219 U.S.P.Q. (BNA) 83, 89 (D. Mass.) *vacated*, 720 F.2d 1565, 1570 (Fed. Cir. 1983).

⁷⁰ 720 F.2d 1565, 1570 (Fed. Cir. 1983).

⁷¹ 714 F.2d 1110, 1115 (Fed. Cir. 1983).

⁷² 713 F.2d 782, 786 (Fed. Cir. 1983).

⁷³ T. Arnold & M. Lynch, *Infringement of Inventions* 32 (1984) (unpublished manuscript available from the Houston law firm of Arnold, White & Durkee).

⁷⁴ The court said: "The estoppel applies to claim amendments to overcome rejections based on prior art, *Dwyer v. United States*, 357 F.2d 978, 984 (Ct. Cl. 1966), and to arguments submitted to obtain the patent, *Coleco Indus. V. I.T.C.*, 573 F.2d 1247, 1257 (C.C.P.A. 1978)." *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1362 (Fed. Cir. 1983). The second phrase suggests by negative implication that estoppel might be based on arguments not related to prior art.

⁷⁵ Contrast the court's statement in *Hughes Aircraft*; 717 F.2d at 1362, *supra* note 74, with the following

prior art estoppel.⁷⁶ The Federal Circuit’s test of infringement suggests that the court will find estoppel based on arguments or amendments.⁷⁷ Whether the patent holder submitted the arguments or amendments to avoid prior art is irrelevant. Thus, following a growth period, the Federal Circuit seems to advocate a more expansive doctrine of prosecution history estoppel than the “prior art estoppel” originally revealed.

2. *Three Inquiries Before Applying the Doctrine*

Federal Circuit decisions seem to be gradually evolving toward a uniform, yet practical, strategy for applying prosecution history estoppel. As in any evolutionary process, however, progress occurs discontinuously. Some decisions give little insight; others, such as *McGill Inc. v. John Zink Co.*,⁷⁸ thoroughly outline certain aspects of the Federal Circuit’s approach. Pieced together, the Federal Circuit cases may construct a uniform, practical approach to prosecution history estoppel.⁷⁹ This approach requires three judicial inquiries before the court applies the doctrine of prosecution history estoppel. There must be no direct literal infringement of the claims, the claims must be ambiguous, and there must not be any contributory literal infringement of the claims.

The doctrine of literal infringement is the source of two of the three necessary inquiries. *Fromson v. Advance Offset Plae, Inc.* is the key case establishing the role of literal infringement in the prosecution history estoppel strategy.⁸⁰ In refusing to apply estoppel, the court suggested that two separate types of literal infringement might exist.⁸¹ The first type of literal infringement is *direct* literal infringement. *Direct* is appropriate terminology because the court makes an infringement inquiry directly without resorting to the prosecution history. If the claim language is clear, the court first interprets the claim as a matter of law.⁸² On the other hand, in the second type of literal infringement, *contributory* literal infringement, the prosecution history contributes

statement by the same *Hughes* court: “William’s amendment of the claims did not relate to any disclosure, in the prior art or elsewhere . . .” *Id.* At 1363. *Hughes* asserted infringement of the William’s patent under the doctrine of equivalents, and the court accepted this argument, thus refusing to find an estoppel.

⁷⁶ In attempting to avoid applying prosecution history estoppel based on the prior art distinction, two parties cited *Hughes Aircraft*. See *Kinzenbaw v. Deere & Co.*, 741 F.2d 383 (Fed. Cir. 1984); *McGill Inc. v. John Zink Co.*, 736 F.2d 666 (Fed. Cir. 1984). Neither party was successful. In *Kinzenbaw*, Deere argued that limitations placed on its claims during prosecution were unnecessary to distinguish the prior art. The court nevertheless declined to inquire into the extent to which the narrowing limitation was necessary to overcome the prior art, and the court recognized an estoppel. *Kinzenbaw*, 741 F.2d at 389. Similarly, *McGill* contended that prosecution history estoppel did not apply because the contested claim failed to qualify as an amendment or distinction in response to a prior art rejection. The court denied this contention in applying prosecution history estoppel against *McGill*: the prosecution history may be used as a claim-construction tool as well as in a strict estoppel context. *McGill*, 736 F.2d at 673.

⁷⁷ The Federal Circuit said: “If equivalence appears, infringement will be found unless (1) arguments or amendments made by applicant during prosecution (prosecution history estoppel) estop the patentee; . . . or (2) the equivalent device is within the public domain, *i.e.*, found in the prior art.” *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 900 (1984).

⁷⁸ *McGill*, 736 F.2d 666.

⁷⁹ Many aspects of the approach constructed below, through analysis of Federal Circuit cases, are elements of this note’s recommendation. Appendix C provides a schematic outline of the recommendation.

⁸⁰ 720 F.2d 1565 (Fed. Cir. 1983).

⁸¹ The court said: “If there be literal infringement, direct and contributory (as there may be under a proper construction of the claims), the doctrine[of prosecution history estoppel] is irrelevant.” *Id.* at 1571.

⁸² *McGill*, 736 F.2d at 671.

to construing the claim.⁸³ The factfinder⁸⁴ interprets a reasonably disputed claim by referring to extrinsic evidence: the prosecution history.

When applying the three-part analysis to determine whether prosecution history estoppel applies the Federal Circuit first considers direct literal infringement. In *Bayer Aktiengesellschaft v. Duphar International Research B.V.*,⁸⁵ the Federal Circuit held that the issue at trial was whether or not Bayer literally infringed Duphar's patent claim. Therefore, the court did not reach the doctrine of prosecution history estoppel.⁸⁶ The court admonished the magistrate for considering the doctrine. In three earlier cases the Federal Circuit began its analysis by determining that there was no literal infringement.⁸⁷ *Amstar Corp. v. Envirotech Corp.*⁸⁸ stands for a similar proposition. The court found that Envirotech's attempt to show prosecution history estoppel wasted the court's time. Because the appellant declined to challenge the patent claims at issue, the court's interpretation of the claims was unnecessary. The Federal Circuit thus refused to consider the prosecution history when interpreting the claims is unnecessary – for example, when direct literal infringement of the claims exists.

Handling Envirotech's argument in this fashion, the Federal Circuit suggested the second inquiry of the analysis: if a claim were ambiguous and open to challenge, the court might consider the prosecution history. The Federal Circuit does not explicitly state that a court must find the patent claim ambiguous before that court considers prosecution history estoppel.⁸⁹ Two of the court's most recent decisions, however, contain language consistent with an ambiguity requirement. The *Bayer* court refused to consider the prosecution history after finding that Duphar's purported interpretation of its claim was "frivolous."⁹⁰ Attempting to apply its own interpretation to the patent claims, Duphar essentially requested a finding that the claims were ambiguous and therefore needed construction. The court refused to construe the claims, implicitly holding that the claims were not ambiguous.

The second Federal Circuit case that seems to require ambiguity is *Seattle Box Co. v. Industrial Crating & Packing, Inc.*⁹¹ The dispute in *Seattle Box* involved the scope of Seattle Box's patent claim. The district court had found literal infringement, but the appellant argued that the claim language was ambiguous. Noting the presumption of validity that is accorded claims,⁹² the Federal Circuit affirmed the district court's holding. Although the Federal Circuit

⁸³ Inquiry into contributory literal infringement occurs after the court finds the claim ambiguous.

⁸⁴ *McGill*, 736 F.2d at 672 (if a claim is ambiguous, and extrinsic evidence is necessary to explain the claim, interpretation of the claim should be left to the factfinder).

⁸⁵ 222 U.S.P.Q. (BNA) 649 (Fed. Cir. 1984).

⁸⁶ The Federal Circuit did, however, correct the magistrate's misstated definition of prosecution history estoppel. *Id.* at 653.

⁸⁷ *Carman Indus. V. Wahl*, 724 F.2d 932, 941-42 (Fed. Cir. 1983) (the court held that literal infringement of the patent did not exist, then found infringement under the doctrine of equivalents); *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1361 (Fed. Cir. 1983) (the doctrine of equivalents enters only when literal infringement is absent); *Caterpillar Tractor v. Berco, S.p.A.*, 714 F.2d 1110, 1115 (Fed. Cir. 1983) (the court found no literal infringement before considering Caterpillar's reliance on the doctrine of equivalents and Berco's counter-reliance on prosecution history estoppel).

⁸⁸ 221 U.S.P.Q. (BNA) 649, 656 (Fed. Cir. 1984).

⁸⁹ The proposal found in Appendix C is explicit. Before addressing the doctrine of prosecution history estoppel, a court must find the patent claims ambiguous.

⁹⁰ 222 U.S.P.Q. (BNA) at 653.

⁹¹ 731 F.2d 818 (Fed. Cir. 1984).

⁹² *Id.* at 828. *See also* 35 U.S.C. § 282 (1982).

has neglected to endorse the ambiguity requirement explicitly, the court's analyses do not reject the inquiry. The Federal Circuit could clarify such analyses by acknowledging that unambiguous claims are not subject to the doctrine of prosecution history estoppel.

Once the court finds a patent claim ambiguous, the court addresses the third inquiry before applying prosecution history estoppel: contributory literal infringement. The prosecution history should be admissible to aid the court's claim interpretation with respect to potential contributory literal infringement.⁹³ A finding that literal infringement of the patent claims is absent must rest on the court's construction of those claims.⁹⁴ In *Schenck v. Nortron Corp.*,⁹⁵ the district court judge considered the prosecution history and Nortron's arguments that the claim language was ambiguous. The judge discussed and rejected the contention that the prosecution history estopped a finding of infringement.⁹⁶ In finding contributory literal infringement, the judge did not mention the doctrine of equivalents; Nortron's assertion rested entirely on the patent claim language.⁹⁷ The Federal Circuit affirmed.⁹⁸

3. *Applying the Doctrine – the Interplay Between the Prosecution History and the Doctrine of Equivalents*

No doubt remains that the doctrine of equivalents comes into play only when no actual literal infringement exists.⁹⁹ Thus, the Federal Circuit never reaches the doctrine of equivalents when the court finds literal infringement.¹⁰⁰ When a party predicates its case for infringement on the doctrine of equivalents, having stipulated the absence of literal infringement, the judge must use discretion in assigning proper weight to the prosecution history.¹⁰¹

Once reached, the doctrine of equivalents may allow a party to avoid the doctrine of prosecution history estoppel and successfully plead infringement.¹⁰² The Federal Circuit considered the interplay between these doctrines in *Kinzenbaw v. Deere & Co.*¹⁰³ Deere attempted to avoid prosecution history estoppel. The court quickly dismissed this attempt because Deere had not invoked the doctrine of equivalents to provide convincing reasons justifying enlarging the patent claims' literal scope. Therefore, the Federal Circuit estopped Deere from arguing an enlarged scope for the claims, found no equivalence, and refused to find infringement. The court recognized this interplay between the doctrine of equivalents and

⁹³ Appendix C proposes that once ambiguity exists in the patent claim, the court may use the prosecution history to evaluate contributory literal infringement.

⁹⁴ *Carman Indus. V. Wahl*, 724 F.2d 932, 941 (Fed. Cir. 1983).

⁹⁵ 570 F. Supp. 810 (M.D. Tenn. 1982).

⁹⁶ Appendix C uses the terminology "contributory" literal infringement.

⁹⁷ Judge Nixon's approach is consistent with the prosecution history estoppel strategy that this proposes. Appendix C outlines this strategy. The court must find literal infringement inapplicable before the doctrine of equivalents is relevant.

⁹⁸ *Schenck v. Nortron Corp.*, 713 F.2d 782, 786 (Fed. Cir. 1983).

⁹⁹ *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1361 (Fed. Cir. 1983).

¹⁰⁰ In *SSIH Equip. S.A. v. United States Int'l Trade Comm'n*, 718 F.2d 365 (Fed. Cir. 1983), the court reversed a finding of literal infringement and remanded the case for consideration of equivalence. Similarly, the Federal Circuit has stated that "there is no literal infringement of those claims. Thus Caterpillar necessarily relies on the doctrine of equivalents. . . ." *Caterpillar Tractor v. Berco, S.p.A.*, 714 F.2d 1110, 1115 (Fed. Cir. 1983).

¹⁰¹ For a discussion of "proper weight," see *infra* note 111 and accompanying text.

¹⁰² The Federal Circuit noted: "Once it is determined that the doctrine of equivalents is applicable, a finding of infringement is not certain." *Carman Indus. V. Wahl*, 724 F.2d 932, 942 (Fed. Cir. 1983).

¹⁰³ 741 F.2d 383, 389-90 (Fed. Cir. 1984).

estoppel as governing a determination of infringement.¹⁰⁴

The sequence of applying the two doctrines¹⁰⁵ involves three steps.¹⁰⁶ First, does the claimed invention differ from the alleged infringing device or process? If not, literal infringement precludes applying prosecution history estoppel. Second, are the invention and device or process sufficiently similar to be equivalents?¹⁰⁷ If not, the doctrine of equivalents is inapplicable. Third, once the court finds equivalence, infringement exists unless prosecution history estoppel applies. Thus, even equivalent processes or devices may not infringe the patent because the doctrine of equivalents applies before and is subservient to prosecution history estoppel.¹⁰⁸

Different courts give varying weight to the prosecution history in limiting the doctrine of equivalents. Some courts have taken the erroneously restrictive view that any amendment to the patent claims will bar all resort to the doctrine of equivalents. This restrictive approach limits the patent holder to the literal language of the issued claims.¹⁰⁹ In *Hughes Aircraft Co. v. United States*, the Federal Circuit rejected this view.¹¹⁰ Narrowing of claims during prosecution did not prove fatal because the court found infringement of Hughes' patent under the doctrine of equivalents. The Federal Circuit decided that the court's discretion allowed it to evaluate the "nature and purpose" of prosecution history material. Thus, the court would decide the weight accorded the prosecution history, providing for a limiting effect on the doctrine of equivalents ranging from "great to small to zero."¹¹¹ Material in the prosecution history may have great effect, estopping any resort to the doctrine of equivalents. On the other hand, the prosecution history may have merely an evidentiary effect on the doctrine of equivalents.¹¹²

¹⁰⁴ *Caterpillar Tractor*, 714 F.2d at 1115.

¹⁰⁵ Appendix C is a schematic diagram that outlines the relationship between the doctrine of equivalents and the doctrine of prosecution history estoppel.

¹⁰⁶ The sequence finds support in *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 900 (Fed. Cir. 1984).

¹⁰⁷ The court adopts the test of equivalence stated in *Graver Tank & Mfg. V. Linde Air Prods.*, 339 U.S. 605, 608 (1950). See *supra* note 30 for a statement of the test.

¹⁰⁸ *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1363 (Fed. Cir. 1983).

¹⁰⁹ *Weber Elec. Co. v. E.H. Freeman Elec. Co.*, 256 U.S. 668, 677-78 (1921) (when a patent holder voluntarily amends a claim to avoid rejection, that patent holder may not resort to the doctrine of equivalents); *Ekco Prods. V. Chicago Metallic Mfg.*, 347 F.2d 453, 455 (7th Cir. 1965) (a patent holder that amends a claim after rejection to secure an allowance is held strictly to the letter of the claim granted); *Nationwide Chem. Corp. v. Wright*, 584 F.2d 714, 718-19 (5th Cir. 1978) (citing *Ekco*, the court refused to look beyond the fact that the patent holder amended claims in holding appellant strictly to the claims granted.)

¹¹⁰ 717 F.2d 1351 (Fed. Cir. 1983). The court said:

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. The effect may or may not be fatal to application of a range of equivalents broad enough to encompass a particular accused product. It is not fatal to application of the doctrine itself.

Id. at 1363.

¹¹¹ *Id.*

¹¹² Such a stance is apparent in Appendix C. A court may consider the prosecution history insufficient to bar applying the doctrine of equivalents. Yet the evidentiary effect of the prosecution history may be adequate to overcome other evidence indicating that the claims are equivalent.

When a court considers the evidentiary weight allowed the prosecution history, that court must decide what in the prosecution history demands consideration as evidence. In the past, attempts to assign weight by dividing the prosecution history estoppel into categories of non-art, arguments, and amendments have proved successful. The Federal Circuit's general statements that a court may evaluate the circumstances surrounding a patent application¹¹³ led two commentators to believe the court was suggesting that the entire United States prosecution history of a patent may be relevant evidence in an infringement suit.¹¹⁴ Certainly the Federal Circuit did nothing to dispel this belief in *Caterpillar Tractor Co. v. Berco, S.p.A.*,¹¹⁵ when commenting on the significance of Caterpillar's instructions to foreign counsel and representations to foreign patent offices. Although the cited instructions and representations were insufficient to bar infringement in the case at hand, when such matters are relevant, the court held that they must be considered.¹¹⁶ Thus, when a court construes or interprets patent claims, the court must consider numerous factors. The Federal Circuit recommends that a court consider the prosecution history of the patent as one such factor.¹¹⁷

The Federal Circuit's position on the evidentiary weight that the court accords prosecution history is the final element of the court's prosecution history estoppel strategy. In summary, that strategy represents an evolving, novel approach. The Federal Circuit has negated its early position that prosecution history estoppel is an affirmative defense related to prior art only. Instead, the court makes three inquiries before reaching the doctrine of prosecution history estoppel: direct literal infringement, ambiguity, and contributory literal infringement. Having reached the estoppel issue, the court assigns appropriate weight to the prosecution history when evaluating the interplay between the doctrine of equivalents and the doctrine of prosecution history estoppel. Although the evolutionary Federal Circuit strategy is equivocal, the strategy avoids the diverse interpretations of prosecution history estoppel apparent in the circuits.

B. Policy Bases for Prosecution History Estoppel

The reason for diverse interpretations of the doctrine of prosecution history estoppel is basic: courts do not agree on a single policy basis to establish firm grounds upon which to build uniformity and certainty. In *Exhibit Supply Co. v. Ace Patents Corp.*, the seminal case, the United States Supreme Court apparently based prosecution history estoppel on a theory of abandonment and disclaimer.¹¹⁸ The theory in *Exhibit Supply* was that by assenting to the

¹¹³ Claims must be construed in connection with the "circumstances surrounding the inception of the patent application." *Fromson v. Advance Offset Plate*, 720 F.2d 1565, 1569 (Fed. Cir. 1983). "The court first examined the invention and the alleged infringing device to ascertain if the circumstances were proper for application of the doctrine of equivalents. . . ." *Carman Indus. V. Wahl*, 724 F.2d 932, 942 (Fed. Cir. 1983).

¹¹⁴ *T. Arnold & M. Lynch*, *supra* note 73, at 20.

¹¹⁵ 714 F.2d 1110, 1116 (Fed. Cir. 1983).

¹¹⁶ This approach is consistent with the note's proposal. Once a court finds that the patent is ambiguous, it may consider all evidence relevant to finding estoppel. For a similarly lenient view toward prosecution history as evidence, see *McGill Inc. v. John Zink Co.*, 736 F.2d 666 (Fed. Cir. 1984).

¹¹⁷ *Id.* at 673.

¹¹⁸ 315 U.S. 126 (1942). The Supreme Court held that the patent holder of a pinball machine who claimed a conductor standard "carried by a table" and amended the claim to read "embeddled in a table" abandoned all conductor standards embraced in the difference.

By the amendment [the patent holder] recognized and emphasized the difference between the two phrases and proclaimed his abandonment of all that is embraced in that difference The difference which he thus disclaimed must be regarded as material, and since the amendment operates as a disclaimer of that difference

cancellation of the patent claim and by amending the claim, the applicant abandoned the original claim. Abandonment, however, is not a fully satisfactory rationale for prosecution history estoppel.¹¹⁹ The circuits express this view by refusing to limit prosecution history estoppel to its classic form.¹²⁰ Thus, confusion surrounding the doctrine arises because the circuits have rejected the Supreme Court's rationale. In addition, the Court failed to update its original position. Without satisfactory guidance, the circuits developed their own varying policy reasons for, and correspondingly various doctrines of, prosecution history estoppel.¹²¹

The starting point for an analysis of prosecution history estoppel is determining the proper policy basis for the doctrine. From this policy basis, a uniform doctrine can evolve, providing certainty in litigation. Prosecution history estoppel is not akin to the equitable doctrine of estoppel, although elements of equity pervade prosecution estoppel. Of the three recognized kinds of estoppel in the general law, estoppel by deed and estoppel by judgment are subject to the same rules as a contract.¹²² Application of estoppel in pais, the third kind, requires three elements: an act that the actor should reasonably expect to induce reliance on the part of an adversary; actual reliance and action by the one misled; and injury caused by such reliance.¹²³ In patent cases, however, the defendant seldom proves that the defendant suffered injury by relying on material in the prosecution history.¹²⁴ *Estoppel* also suggests an affirmative defense which the defendant must plead and prove. Nonetheless, even when a party does not invoke estoppel at trial, the court may exercise estoppel in construing a patent claim and hence determining infringement.¹²⁵ Therefore, courts do not treat prosecution history estoppel as a form of general estoppel.¹²⁶ Because it is not a true estoppel, the "anomalous"¹²⁷ nature of prosecution history

it must be strictly construed against him It follows that what the patentee, by a strict construction of that claim, has disclaimed . . . cannot now be regained

Id. at 136-37.

¹¹⁹ The problem is that an essential element of abandonment is an intention to relinquish the matter abandoned. Nonetheless, having discovered from the prosecution history that a patent holder amended an original claim, a court normally does not complete the analysis by considering the patent holder's intent regarding the scope of abandonment. Dvorak, *supra* note 27, at 145-46. Rather, the estoppel applies regardless of intent. *Cf.* Parke, Davis & Co. v. American Cyanamid Co., 207 F.2d 571, 574 (6th Cir. 1953):

An applicant cannot qualify the effect of his acquiescence in the rejection of a claim by stating to the Patent Office that it is not an acquiescence and that he expects to insist upon his right to cover the same ground which the rejected claim covered under other and amended claims.

Learned Hand found the doctrine of estoppel by abandonment "anomalous." Lyon v. Boh, 1 F.2d 48, 50 (S.D.N.Y. 1924), *rev'd*, 10 F.2d 30 (2d Cir. 1926).

¹²⁰ The Supreme Court's decision in *Exhibit Supply Co. v. Ace Patents Corp.*, 315 U.S. 126 (1942), proposed the abandonment theory as a rationale supporting classic prosecution history estoppel. *See supra* text accompanying notes 41-45.

¹²¹ *See supra* text accompanying notes 39-58.

¹²² For a discussion of contract theory as a ground for prosecution history estoppel, see *infra* text accompanying notes 135-55.

¹²³ *See* RESTATEMENT (SECOND) OF CONTRACTS § 90 (1965).

¹²⁴ As one commentator notes, "It is particularly difficult to picture the large number of alleged infringers sifting through the patent office files and being misled by applicants' statements contained in those records." Dvorak, *supra* note 27, at 144.

¹²⁵ *General Instrument Corp. v. Hughes Aircraft Co.*, 399 F.2d 373 (1st Cir. 1968). The Federal Circuit has been confused on this issue. *See supra* text accompanying notes 67-68.

¹²⁶ Perhaps the term resulted from an early view that prosecution history estoppel was important only as a bar to the doctrine of equivalents.

¹²⁷ Learned Hand found the doctrine of prosecution history estoppel anomalous when judged by other legal theories:

estoppel leaves open the question whether a workable policy basis exists. Developing such a policy requires examining analogous legal theories from fields other than patent law.¹²⁸ The underlying rationale of patent laws will, in part, be similar to other theories.

Resolving patent infringement cases involves two inquiries. First, a court must determine the scope of the claims. Second, the court must decide whether the defendant's device or process infringes the claimed invention.¹²⁹ Both inquiries require claim interpretation. Patent claims, however, are part of a statutory scheme predicated on a requirement of clarity.¹³⁰ The applicant must state explicitly what the invention entails in clear and exact terms. Drawings may illustrate the applicant's statement.¹³¹ A mandatory oath impresses upon the applicant the solemnity and importance of the written application. In short, Congress prescribed the statutory claiming requirement specifically to direct the patent applicant to define the invention precisely.¹³² In a case addressing this issue, the Supreme Court considered a construction of the claim that differed from the plain meaning of the claim's terms to be an evasion of the law.¹³³

The whole doctrine is somewhat anomalous at best, since it involves looking at preliminary negotiations in the interpretation of a formal document intended to be the final memorial of the parties' intentions. The practice, however, is too well settled for us to disturb, and we have no intention of casting doubt upon it. A.G. Spalding & Bros. V. Wanamaker, 256 F. 530, 533-34 (2d Cir. 1919).

¹²⁸ Consider one commentator's proposal: "If we are to resolve the problems posed by the doctrine of file wrapper estoppel and give full effect to the spirit of our patent system, undoubtedly we could begin by avoiding some of the prevalent legal analogies and by recognizing the underlying purpose of our patent laws." Dvorak, *supra* note 27, at 150. Dvorak's view seems reasonable if, for example, *avoiding* means refusing to adopt fully a contract theory as the sole basis for prosecution history estoppel, because no single analogy will suffice. If Dvorak means that courts should reject some analogies, such as estoppel, while retaining other analogies, that proposal also is sensible.

¹²⁹ McGill Inc. v. John Zink Co., 736 F.2d 666, 671 (Fed. Cir. 1984).

¹³⁰ The statute, 35 U.S.C. § 111 (1982), introduces requirements for the patent application: "Such application shall include (1) a specification as prescribed by section 112 of this title; (2) a drawing as prescribed by section 113 of this title; and (3) an oath by the applicant as prescribed by section 115 of this title." The specification section provides:

The specification shall contain a written description of the invention . . . in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains . . . to make and use the same

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Id. § 112 (1982). The oath section states: "The applicant shall make oath that he believes himself to be the original and first inventor of the process, machine . . . or improvement thereof, for which he solicits a patent" *Id.*

§ 115 (1982).

¹³¹ The following drawing illustrates the applicant's statement of invention provided *supra* note 25.

MIRANDA MOUSE

1. Mouse-Shaped Decoy to Confuse Mice
2. Front Face
3. Tail
4. Body
5. Sensor to Detect Mice
6. Means for Propulsion
7. Power Means
8. Electric Probe

¹³² Although not specifically addressing patent issues, Justice Frankfurter's comment in *West Virginia ex rel. Dyer v. Sims*, 341 U.S. 22 (1951) is appropriate: "Though circumstances of its drafting are likely to assure great care and deliberation, all avoidance of disputes as to scope and meaning is not within human gift." *Id.* at 28.

¹³³ *White v. Dunbar*, 119 U.S. 47, 51-52 (1886).

The Court also characterized patent claiming as a patent applicant's most solemn act.¹³⁴ The statutory scheme described above suggests that an administrative law analysis might prove helpful in understanding prosecution history estoppel. Furthermore, precision in terms, an oath and solemnity, and clear writing are requirements that suggest contract theory. Therefore, analogies to both contract and administrative law may serve as policy grounds for the doctrine of prosecution history estoppel.

I. Contract

The statutory language involving patent claims suggests that contract theory provides a policy basis for prosecution history estoppel. A patent, precise and clear by prescription,¹³⁵ unambiguously represents an integrated instrument in the nature of a contract.¹³⁶ The parties are the patent holder and the public, represented by the government through the patent examiner. The prosecution history is analogous to preliminary negotiation between parties to a patent contract. Judge Learned Hand, the architect of many early prevailing views of prosecution history estoppel, relied heavily on general contract theories about interpreting integrated agreements. Judge Hand explicitly referred to a patent as a written contract,¹³⁷ and found patent claims analogous to the agreement of the promisor. Therefore, courts were to read patent claims as written, just as courts read the language of other formal documents meant as the final expression of parties' intentions.¹³⁸ Hand expressed this position clearly in *Catalin Corp. of America v. Catalazuli Manufacturing Co.*¹³⁹ *Catalin* set the standard for the Second Circuit and induced a number of other circuit courts to adopt similar positions.¹⁴⁰

¹³⁴ Mahn v. Harwood, 112 U.S. 354, 360-61 (1884).

¹³⁵ See *supra* note 130.

¹³⁶ See, e.g., *D & H Elec. Co. v. M. Stephens Mfg.*, 233 F.2d 879, 883 (9th Cir. 1956) (the file wrapper records the preliminary negotiations for a patent contract); *Smith v. Mid-Continent Inv. Co.*, 106 F.2d 622, 624 (8th Cir. 1939) (the patent is a contract and grant such that the inventor's protection extends only to material stated in the claims); *Denominational Envelope Co. v. Duplex Envelope Co.*, 80 F.2d 186, 192-93 (4th Cir. 1935) (the court read the claims as written, like the language of any other formal statement intended as the parties' final agreement); and *Catalin Corp. of Am. v. Catalazuli Mfg.*, 79 F.2d 593, 594 (2d Cir. 1935) (if the doctrine of the integration of a written document has any basis at all that doctrine should apply to a patent).

¹³⁷ Judge Hand wrote:

A patent is peculiar among solemn written unilateral contracts [Prosecution history estoppel is anomalous because o]rdinarily the final writing, which incorporates a solemn agreement, is taken by the courts as the parties want it taken; that is, it is the sole resort for ascertaining their intentions, for the excellent reason that the parties meant it to be such. All prior negotiations are disregarded, since otherwise the chief purpose of reducing the contract to writing would be frustrated. However, there is the exception, well settled and very recently confirmed by the Supreme Court (*Weber Electric Co. v. Freeman Electric Co.*, 256 U.S. 668 . . . [1921]), that, if a patentee submits to the rejection of a claim while his application is in the Patent Office, he may not later insist that other claims which he does get are to be regarded as equivalent to that which was rejected.

Lyon v. Boh, 1 F.2d 48, 50-51 (S.D.N.Y. 1924), *rev'd*, 10 F.2d 30 (2d Cir. 1926).

¹³⁸ *Auto Pneumatic Action Co. v. Kindler & Collins*, 247 F. 323, 328 (2d Cir. 1917).

¹³⁹ 79 F.2d 593, 594 (2d Cir. 1935). Judge Hand stated:

[S]pecifications are intended to be the measure of the monopoly and of the contribution to the art. In each aspect they should be self-contained; that is the very purpose of their embodiment in a formal grant, which is all that is accessible to the public without much trouble and vastly more uncertainty. If the doctrine of the "integration" of a written instrument has any basis at all, surely it should apply to such a document

¹⁴⁰ *Smith v. Mid-Continent Inv. Co.*, 106 F.2d 622, 627 (8th Cir. 1939) (the language of the patent claims represents the true intent of the parties and the court refused to consider statements made by the applicant when the court interpreted the claims); *Denominational Envelope Co. v. Duplex Envelope Co.*, 80 F.2d 186, 192-93 (4th Cir.

Catalin further illustrates the way Hand applied contract theory to prosecution history estoppel.¹⁴¹ One requisite of patentability is lack of ambiguity in the patent claims. The parol evidence rule therefore renders the prosecution history inadmissible in most infringement suits.¹⁴² This aspect of the contract approach has other appeal beside the support of an esteemed judge. The prosecution history itself is fraught with ambiguity. Commonly, the prosecution history fails to include all of the proceedings.¹⁴³ The examiner most likely gave some of the patent holder's recorded arguments little, if any, consideration. The patent holder will often provide somewhat inaccurate arguments to meet a precise situation without regard to the future effect of such arguments.¹⁴⁴ Resort to such an ambiguous proceeding to vary terms of a statutory document presumed unambiguous, when the patent holder and examiner carefully considered the document's terms, is at best a questionable practice.¹⁴⁵ This parol evidence rule analogy serves the policy goal of uniformity in patent litigation and suggests a workable rule: a court should preclude prosecution history as evidence¹⁴⁶ unless the court finds the patent ambiguous.

Courts no longer strictly follow Judge Hand's position. Even the Second Circuit has become more liberal in applying prosecution history estoppel.¹⁴⁷ Courts have edged toward a more liberal position, resorting more readily to the prosecution history, without specifically overruling Judge Hand's view, however. The explanations that courts gave in Hand's time for the extensive use of prosecution history estoppel carry as little weight now as then. For example, many judges explained that all patents were ambiguous, and therefore found that the prosecution

1935) (citing *Byers Mach. Co. v. Keystone Driller Co.*, 44 F.2d 283 (6th Cir. 1930), the court quoted: "We read the claims as they are written, like the language of any other formal statement drawn up as the final memorial of the parties' intentions . . .").

¹⁴¹ Judge Hand stated:

We have often said that we would not look at the arguments used by solicitors to the examiners . . . for if a patent can be construed only by threading one's way through all the verbal ingenuities which casuistical solicitors develop to circumvent the objections of examiners, a labyrinth results, from which there is no escape.

Catalin Corp. of Am. v. Catalazuli Mfg., 79 F.2d 593, 594 (2d Cir. 1935).

¹⁴² Under orthodox contract law, the parol evidence rule precludes resort to extrinsic evidence of prior negotiations (the prosecution history) when a court construes a formal integrated contract (the patent) unless the contract is ambiguous.

¹⁴³ For example, telephone calls may not be recorded. *See supra* note 20 and text accompanying notes 15-20.

¹⁴⁴ One court said: "Distinctions are made and limitations are sometimes placed on language of claims by applicant's counsel which are somewhat inaccurate or made to meet a precise prior art citation, and without much thought as to their effect on other structures designed to avoid infringement." *Barrel Fitting & Seal Corp. of Am. v. American Flange & Mfg.*, 74 F.2d 569, 571 (7th Cir. 1935).

¹⁴⁵ For reasons discussed in the text, one commentator noted the proposal that the courts should never consider the prosecution history estoppel: "a file wrapper ought not to be considered even if there [has] to be a statute passed to that effect because . . . the net of the file wrapper is more harmful than beneficial, and, in addition, it greatly adds to the volume and confusion in a patent infringement suit . . ." Richey, *supra* note 20, at 570.

¹⁴⁶ The Federal Rules of Evidence apparently exempt arguments made during prosecution from the hearsay rule, rendering such arguments admissible. Fed. R. Evid. 801(d)(2) includes "admissions by [a] party-opponent" in defining "[s]tatements which are not hearsay" when:

The statement is offered against a party and is (A) his own statement, in either his individual or a representative capacity or (B) a statement of which he has manifested his adoption or belief in its truth, or (C) a statement by a person authorized by him to make a statement concerning the subject . . .

¹⁴⁷ *Cohn v. Coleco Indus.*, 558 F.2d 53 (2d Cir. 1977) (the court considered both the amendments and attorney's statements to determine whether estoppel applied); *Capri Jewelry, Inc. v. Hattie Carnegie Jewelry Enters.*, 539 F.2d 846, 851 (2d Cir. 1976) (arguments of applicant's attorney were essential limitations estopping the applicant from broadening claims under equivalency).

history was always relevant.¹⁴⁸ Although lay lawyers may find patent intricacies and terminology difficult, few patents are ambiguous to lawyers “skilled in the art.”¹⁴⁹ In addition, because the Federal Circuit is knowledgeable in patent law, not all patents are ambiguous to the Federal Circuit.

The courts’ increasingly extensive use of prosecution history estoppel, and therefore the expanding scope of prosecution history estoppel’s applicability, is attributable to three contract-related ideas. First, the law of contract has changed. Although conceding that extrinsic evidence must be accepted cautiously,¹⁵⁰ courts nonetheless construe contracts to effectuate the parties’ clear intentions. Courts turn to the prosecution history, therefore, because the prosecution history is too fruitful a source of information to ignore. Yet, even under this expansionist view, the prosecution history is not always admissible.¹⁵¹

Second, the contract analogy does not precisely fit the patent situation; a patent is not exactly a private contract. The agreement is not merely between the examiner and patent holder but involves a public interest.¹⁵² This interest would suffer if a patent holder could argue during the application process that a claim has limitations and later could offer opposing interpretations during litigation.¹⁵³ Thus, public policy concerns encourage a court to consider the prosecution history even when the parol evidence rule would preclude such evidence.

Finally, the courts increasingly apply prosecution history estoppel in conjunction with the growing interest in equitable concepts. Courts have become more concerned with the equities of litigants than with the need for certainty.¹⁵⁴ Extensive use of the doctrine of equivalents illustrates this trend. The doctrine of equivalents applies when it may be unfair to penalize a patent holder for prosecution history tending to limit the patent holder’s claims when the invention’s definition does not require a restricted interpretation.¹⁵⁵ Extensive use of prosecution history estoppel is commensurate with the courts’ resort to the doctrine of equivalents because prosecution history estoppel controls the scope of the doctrine of

¹⁴⁸ Richey, *supra* note 20, at 561.

¹⁴⁹ 35 U.S.C. § 112 (1982).

¹⁵⁰ See, e.g., *Cincinnati Milling Mach. V. Turchan*, 208 F.2d 222 (6th Cir. 1953) (noting the dangers inherent in using attorney’s remarks); *Wiegand v. W. Bingham Co.*, 106 F.2d 546, 548 (6th Cir. 1939) (the court conceded that extrinsic aid to construction must be accepted with caution, and suggested that a court should be no more reluctant to search for precise meaning in a patent claim than in a private contract); *Barrel Fitting & Seal Corp. v. American Flange & Mfg.*, 74 F.2d 569 (7th Cir. 1935) (emphasizing the need for caution, a court should, when using attorney remarks, take care to read the statements in context).

¹⁵¹ In the contract field, the divergent views of Williston and Corbin are unresolved. Williston would treat a writing, hence a patent, as a unique, compelling force subject to interpretation only under special circumstances. S. Williston & G. Thompson, *Williston on Contracts* §§ 616-18 (rev. ed. 1936). Corbin’s opposing view considers all language ambiguous and a writing integrated only when such writing means what the parties intended it to mean. A. Corbin, *Corbin on Contracts* §§ 581-83 (1960). In *Interform Co. v. Mitchell*, 575 F.2d 1270, 1275-77 (9th Cir. 1978), the court expressed the opinion that “[I]t is unlikely that any jurisdiction will inflexibly adopt one approach to the exclusion of the other”

¹⁵² In receiving a patent, the inventor essentially gains a monopoly for 17 years against the public. See *supra* note 22. The patent holder obtains the right to exclude the public from the free useful benefit of all or part of the invention. Only after the term of the patent expires will the public be able to use the invention.

¹⁵³ Heyman, *supra* note 14, at 254-55.

¹⁵⁴ Note, *The Interplay of the Doctrines of Equivalents and File Wrapper Estoppel*, 29 Geo. Wash. L. Rev. 917, 917 (1961).

¹⁵⁵ See 8 Geo. Wash. L. Rev. 871, 873 (1940). See also *supra* note 28.

equivalents.

The growth of the doctrine of prosecution history estoppel away from Hand's restricted view fails to diminish the importance of Hand's contribution to prosecution history estoppel. Hand prepared for this growth by tirelessly urging courts to apply the contract analogy to prosecution history estoppel. Although courts may discard the incidentals of Judge Hand's ideas,¹⁵⁶ the essence of his contract analogy remains.

2. *Exhaustion of Administrative Remedies*

Judge Hand's views provide a foundation for a second policy supporting prosecution history estoppel, administrative law. According to Learned Hand, the basis for prosecution history estoppel was the applicant's acquiescence to a rejection and the applicant's failure to use the administrative process to appeal the issue.¹⁵⁷ Hand found estoppel important only as a bar, or exception, to the doctrine of equivalents. Hand based this exception on the availability of administrative remedies both in the Patent and Trademark Office and in the courts.¹⁵⁸ The Supreme Court agreed with Hand's ideas.¹⁵⁹

Professor Chisum suggests that exhaustion of administrative remedies might be the most satisfactory rationale for prosecution history estoppel.¹⁶⁰ The administrative process is not so intimidating as to repel an applicant. Having rejected the applicant's claim, the examiner will give reasons for this action. The applicant may then either request an interview with the examiner to defend the claims, or amend the claims to accommodate the objections.¹⁶¹ Should the examiner and the applicant later agree during an interview, the patent will issue.¹⁶² If, on the other hand, the examiner again rejects the claim the applicant may appeal to the Board of Appeals within the Patent and Trademark Office.¹⁶³ If dissatisfied with the decision of these examiners, the applicant may take the cause before the Federal Circuit.¹⁶⁴ Thus, Congress

¹⁵⁶ This note does not adopt the views of Judge Hand completely. For example, Hand saw prosecution history estoppel "important only as a bar to any resort to the doctrine of equivalents." *Keith v. Charles E. Hires Co.*, 116 F.2d 46, 48 (2d Cir. 1940). Nonetheless, resort to the prosecution history should be permissible whenever ambiguity exists in the claims, whether the doctrine of equivalents is an issue or not.

¹⁵⁷ Citing Hand's opinion in *International Cellucotton Prods. V. Sterilek Co.*, 94 F.2d 10, 12 (2d Cir. 1938), one commentator stated, "To avoid an estoppel, the patent applicant must take issue with the rejection and appeal. If he chooses to compromise, he is bound only to the terms of his negotiated claims." P. Blaustein, *Learned Hand on Patent Law* 212 (1983).

¹⁵⁸ In *Musher Found. V. Alba Trading Co.*, 150 F.2d 885, 888 (2d Cir. 1945), Judge Hand stated:

It is of course a well-settled exception to the doctrine of equivalents that, when an examiner rejects a claim upon prior art and the applicant withdraws it, the disclosure pro tanto passes into the public domain The reason for this is that if the rejection is wrong, the applicant has remedies both in the Patent Office and in the courts

¹⁵⁹ If "dissatisfied with the rejection," the patent applicant should pursue his remedy by appeal; and when, in order to get a patent, the patent applicant accepts one with a "narrower claim," that patent applicant is bound by it. *I.T.S. Rubber Co. v. Essex Rubber Co.*, 272 U.S. 429, 443-44 (1926) (if an applicant wishes to preserve a rejected claim, he must protest that rejection in the Patent Office or in the courts); *Hubbell v. United States*, 179 U.S. 77, 83-84 (1900); *Shepard v. Carrigan*, 116 U.S. 593, 597 (1886).

¹⁶⁰ D. Chisum, *supra* note 24, § 18.05, at 18-58 (1984).

¹⁶¹ 35 U.S.C. § 132 (1982); 37 C.F.R. § 1.133 (1984); Procedure Manual, *supra* note 35, § 713.

¹⁶² 35 U.S.C. § 151 (1982).

¹⁶³ *Id.* § 134; 37 C.F.R. §§ 1.113, 1.191-1.198 (1984). For an explanation of the appeal procedure, see *id.* § 1.111.

¹⁶⁴ 35 U.S.C. § 141 (1982).

legislated the entire administrative process.

The fact that, indirectly, prosecution history estoppel is part of an administrative process gains importance when one considers the courts' increasing tendency to defer to legislatures and agencies. Today, courts will almost automatically defer to administrative expertise and legislative purpose in the patent area.¹⁶⁵ Congress empowered the United States Patent and Trademark Office, an administrative agency, to protect the public against unwarranted patent claims.¹⁶⁶ Examiners, experts in particular fields, rule on applications. The proceedings on each application are, in a sense, the legislative history of the particular patent. Viewed in this light, prosecution history estoppel maintains the primary jurisdiction of the Patent and Trademark Office by assuring the maximum possible exposure of a claim to the expertise of that agency. Accordingly, a court should not allow a patent holder to urge a claim interpretation removed from agency consideration. When an applicant forgoes an appeal from a rejection in favor of amending the patent claim the applicant precludes the agency from further interpreting the rejected claim.¹⁶⁷

The courts' refusal to consider whether an examiner was correct in rejecting claims reflects the deference that the courts accord the administrative procedure. The examiner's correctness is irrelevant to the estoppel issue.¹⁶⁸ Thus, one theory underlying prosecution history

¹⁶⁵ The court in *Williams Mfg. v. United Shoe Mach.*, 121 F.2d 273, 277 (6th Cir. 1941), addressing patent issues, noted "a growing recognition of finality that is generally being accorded to administrative determinations . . ."

Ethyl Corp. v. Environmental Protection Agency, 541 F.2d 1 (D.C. cir.) (en banc), *cert. Denied*, 426 U.S. 941 (1976), presents two judicial views whether in complex cases courts should defer to administrative agencies having legislative powers delegated by Congress. Although the deference question was not directly at issue in the case, Chief Judge Bazelon attempted to elucidate the issue in a concurring opinion. *Id.* at 66-67. Bazelon would preclude judges from de novo evaluation of legislative judgments in cases of technological complexity. Bazelon indicated that substantive review by technically illiterate judges is dangerously unreliable and invites simplistic judgments. Therefore, to improve administrative decisions, courts should concentrate on strengthening administrative procedures. Bazelon expressed his position succinctly in *International Harvester Co. v. Ruckelshaus*, 478 F.2d 615, 650-51 (D.C. cir. 1973) (Bazelon, C.J., concurring): "Socrates said that wisdom is the recognition of how much one does not know. I may be wise if that is wisdom, because I recognize that I do not know enough about [the technical matter] to decide . . ."

Judge Leventhal responded to Bazelon's arguments. While concurring with Bazelon, Leventhal would show more limited deference to administrative actions. Congress delegates legislative powers broadly because judicial review assures that agencies exercise delegated power reasonably. Therefore, Congress assumes that judges, who are probably not initially competent to decide issues of infringement in patent cases, will acquire the knowledge necessary for a decision. Leventhal concedes, however, that the court exercises a limited role in reviewing agency decisions; once the court finds the administrator's actions reasonable, the court's function ends. *Ethyl Corp.*, 541 F.2d at 68-69 (Leventhal, J., concurring). If courts accept either Leventhal's or Bazelon's approach, some deference to the Patent and Trademark Office as an administrative agency will follow.

¹⁶⁶ 35 U.S.C. §§ 1-14 (1982).

¹⁶⁷ *See, e.g., Borg-Warner Corp. v. Paragon Gear Works*, 355 F.2d 400, 405 (1st Cir. 1965) (When an inventor adopted a narrow definition in the Patent and Trademark Office to obtain a patent and then later relies on a broader definition in an infringement suit, that inventor circumvents the administrative procedures of the Office. Prosecution history estoppel is one way to avoid such circumvention.); *Austin Powder Co. v. Atlas Powder Co.*, 568 F. Supp. 1294 (D. Del. 1983) (a court should not grant material removed from the administrative process when an applicant forgoes an appeal from a rejection in favor of amendment).

¹⁶⁸ *See, e.g., Hubbell v. United States*, 179 U.S. 77, 83 (1900) (the court is not to inquire whether the examiner was right or wrong in rejecting the original claim); *I.T.S. Rubber Co. v. Essex Rubber Co.*, 272 U.S. 429, 443-44 (1926) (citing *Hubbell* with approval); *Strause Gas Iron Co. v. William M. Crane Co.*, 235 F. 126, 128 (2d Cir. 1916) (the examiner may be wrong in requiring a claim limitation, or the attorney may believe the limitation is

estoppel is that the applicant should have appealed the examiner's rejection if the applicant considered the rejection wrong. Acquiescence in the rejection estops the applicant from regaining matter which the applicant gave up to obtain the patent.

IV. RECOMMENDATION

The parol evidence rule of contract theory and deference to administrative expertise preclude courts from always considering the prosecution history.¹⁶⁹ The polar extreme would bar all reference to the prosecution history. Such an extreme is unsupportable. Deference can be rigid, but the court should not remove itself completely from the role of patent arbitrator. Furthermore, contract law occasionally recognizes the importance, even necessity, of extrinsic evidence. The judicial tool of prosecution history estoppel is valuable. When courts define prosecution history estoppel clearly and use the doctrine consistently, this tool will contribute to uniformity and certainty in patent law. Therefore, a moderate approach between the extremes is essential.

A court should permit the prosecution history to limit or to expand claim language, whether a party alleges literal infringement or infringement under the doctrine of equivalents. Both allegations require the court to read the claim language. Resort to the prosecution history will, of course, be more likely when a party invokes the doctrine of equivalents, which requires expanding the literal wording of a claim. Applicability of prosecution history estoppel is not more likely because semantic categories – such as *classic*, *admission*, *non-art*, and *reverse* estoppel – require increased resort to the prosecution history. Rather, when a party invokes the doctrine of equivalents, a court is more likely to resort to prosecution history estoppel because by using the doctrine of equivalents the court implies that the patent language is ambiguous. Without ambiguity in the claim, the parties need not resort to the doctrine of equivalents or the prosecution history to interpret the patent.¹⁷⁰

Courts should abandon confusing, arbitrary labels such as *classic*, *admission*, *non-art*, and *reverse* estoppel, along with the categorical applications of prosecution history that those labels represent. By deferring to administrative expertise and by using the parol evidence rule of contract theory – the dual policy bases of prosecution history estoppel – courts can establish a uniform doctrine. Both policy bases support a strong presumption that a patent is unambiguous and suggest that courts should interpret claims literally. The presumption that a patent is unambiguous is the first hurdle a party must overcome when attempting to introduce the prosecution history into an infringement suit, whether as part of an estoppel defense or as evidence. The party seeking to refer to matter in the prosecution history into an infringement suit, whether as part of an estoppel defense or as evidence. The party seeking to refer to matter

unnecessary, but estoppel does not depend on intent or correctness).

Judge Hand continually acknowledged the deference due the examiner. *Compare* the 1916 case of *Quinn v. J.H. Faw, Inc.*, 235 F.166, 169 (S.D.N.Y. 1916) (the patent holder “had his remedy by appeal, and only by appeal, if the examiner was wrong”), *with* *Musher Found. V. Alba Trading Co.*, 150 F.2d 885, 888 (2d Cir. 1945) (“if the rejection is wrong, the applicant has remedies both in the Patent Office and in the courts: remedies which the cancellation of the rejected claims necessarily surrenders”). Hand believed the court should give weight to the negotiations in the Patent Office and enforce the parties’ bargain. *See* *Salvage Process Corp. v. Acme Tank Cleaning Process Corp.*, 94 F.2d 69, 70 (2d Cir. 1938).

¹⁶⁹ This statement is true whether the prosecution history induces estoppel or is merely evidence.

¹⁷⁰ The distinction between literal infringement and the doctrine of equivalents remains. Appendix C is a schematic diagram illustrating the relationships involved.

in the prosecution history must overcome a presumption of clarity and prove the patent ambiguous. The patent is ambiguous if persons “skilled in the art” at the time of invention might reasonably interpret the patent claims differently. When the patent is ambiguous, the court may consider the prosecution history as evidence.

The final step of the proposed two-pronged test for applying prosecution history estoppel is to determine the weight accorded evidence found in the prosecution history. Such evidence must aid interpretation of claims that the court previously deemed ambiguous. The issue is whether this prosecution history evidence will have the force of estoppel, or serve merely as evidence for interpreting claims. The question is simply one of degree. The prosecution history evidence may be sufficiently strong to estop a proposed claim interpretation. On the other hand, such evidence may only restrict the court’s interpretation of certain elements of the claim. Therefore, flexibility demands that this question be left to judicial discretion for a case-by-case determination.

When a court evaluates the weight accorded material in the prosecution history, the court should apply a three-tiered hierarchy. Deference to an administrative agency and solemnity of contract require as the third and highest tier that the court give great weight to the written claims. The courts should, as a second tier, give less weight to written statements made by the examiner and patent holder. Whether ambiguity resulted from a claim change grounded on amendment, cancellation, or addition¹⁷¹ is of no consequence.¹⁷² Differentiating broadened or narrowed claims is equally irrelevant. If claims are ambiguous, resort to the prosecution history is defensible. Therefore, prosecution history estoppel applies to both classic and reverse estoppel situations.¹⁷³ The lowest tier of evidentiary weight includes oral statements recorded in the prosecution history.

Courts should abolish distinctions between statements which accompany claim amendments and statements which stand alone. This recommendation proposes a break with precedent. Although all courts agree that statements which accompany claim amendments will give rise to estoppel, most courts distinguish statements which stand alone. These courts prohibit mere admissions from creating the same estoppel effect.¹⁷⁴ Such a distinction is unwarranted. Ambiguity requires courts to consider all clarifying evidence. The court in its discretion should use great care in this area so that admissions alone normally will not create an estoppel. Equitable contract concepts enter at this point: injustice might result if a court holds a patent not infringed simply because a patent holder or the patent holder’s representative made an ill-advised argument. Given the totality of the circumstances, however, an admission alone might support an estoppel.

The final historical distinction arises over non-art estoppel. Most courts¹⁷⁵ refuse to give the force of estoppel to material in the prosecution history designed to meet formal, technical rules of the Patent and Trademark Office. In such a situation, courts often hold that depriving a

¹⁷¹ These grounds for claim change represent subdivisions of classic prosecution history estoppel.

¹⁷² All courts have abandoned the historical distinction between changes based on cancellation and addition and changes based on amendment only. *See infra* Appendix A. This note endorses such abandonment.

¹⁷³ Appendix A *infra* illustrates that all courts accept “classic” estoppel, and only the Fifth Circuit refuses to apply “reverse” estoppel.

¹⁷⁴ *See infra* Appendix A.

¹⁷⁵ *See infra* Appendix A.

patent holder of the benefits of an invention because of a formal, technical rule of the Patent and Trademark Office is inequitable.¹⁷⁶ Herein lies an important point in this note's proposal. Prosecution history estoppel is not an equitable doctrine, despite the influx of equitable principles from contract theory. Therefore, this note does not adopt arguments that prosecution history estoppel should result only from changes which overcome rejections caused by the prior art.¹⁷⁷ Few reasons exist to limit the applicability of prosecution history estoppel to claims surrendered to overcome a prior art rejection.¹⁷⁸ The rationale of prosecution history estoppel applies equally to non-art rejection. Every amendment, however, should not give rise to an estoppel. A non-art change sufficiently material to estop a proposed interpretation is not probable, but is possible. What the applicant surrendered, rather than the reason for the surrender, is the controlling consideration.

V. CONCLUSION

A holding of infringement or noninfringement often directly depends upon the court's interpretation of prosecution history estoppel. Therefore, the courts should adopt a uniform approach to this important doctrine in patent law. Unfortunately, the federal circuit courts have traditionally focused on confusing categorical interpretations of prosecution history estoppel and case-by-case equitable determinations, rather than on the public's need for certainty. Because of the variety of interpretations involved, the courts have not formulated a concrete evaluation of prosecution history estoppel capable of uniform application. If courts based prosecution history estoppel on the fundamental policies of the doctrine and refused to adhere to competing categories, much of the confusion and contradiction on this issue would disappear, and a functional interpretation of prosecution history estoppel could emerge.

Congress recognized the public's need for a clear delineation of patent law. In response to this public need, Congress requires the patent holder to describe an invention precisely. Congress created the Federal Circuit and granted it exclusive jurisdiction in a further attempt to promote uniformity and certainty in the law. The Federal Circuit has begun to accomplish some uniformity and certainty in the area of prosecution history estoppel. The Federal Circuit must, however, make explicit the analysis that the court is adopting.

This note urges the Federal Circuit to consider the contributions of Judge Learned Hand to the doctrine of prosecution history estoppel. Hand's ideas provide the policy basis upon which to construct a uniform approach. The strategy that this note proposes rests heavily on the views of Judge Hand. Although the approach is still so flexible that a patent litigant cannot feel entirely secure, at long last, clarity of prosecution history estoppel will promote that security.

KEVIN R. CASEY

¹⁷⁶ *Trio Process Corp. v. L. Goldstein's Sons*, 461 F.2d 66, 75 (3d Cir. 1972).

¹⁷⁷ *Ellipse Corp. v. Ford Motor Co.*, 452 F.2d 163, 168 (7th Cir. 1971).

¹⁷⁸ *Coleco Indus. v. United States Int'l Trade Comm'n*, 573 F.2d 1247, 1257-58 (C.C.P.A. 1978).

APPENDIX A*

WILL PROSECUTION HISTORY ESTOPPEL RESULT FROM:

ADMISSION ESTOPPEL?

<u>Court</u>	<u>With Amendments</u>	<u>Alone</u>
S. Ct.	Exhibit Supply Co. Graham	<i>But see</i> Keystone Driller Co.
1 st Cir.	Progressive Eng'g, Inc.	Progressive Eng'g, Inc.
2d Cir.	Cohn	No: Catalin Corp. of Am.
3d Cir.	Schmidinger N.Y. Asbestos Mfg.	Westinghouse Elec. Corp.
4 th Cir.	Duplan corp.	Duplan Corp.
5 th Cir.	John Zink Co. Nationwide Chem. Corp. Stewart-Warner Corp.	Duplan Corp. No: Williams Bit & Tool Co.
6 th Cir.	Wiegand Mid-West Wire Prods.	No: Byers Mach.
7 th Cr.	Bassick Co.	No: Bassick Co.
8 th Cir.	Steffan	No: Smith
9 th Cir.	D & H Elec. Co.	No: Fullerton Walnut Growers' Ass'n
10 th Cir.	CMI Corp.	No: Doran Coffee Roasting Co.
C.C.P.A.	Coleco Indus.	Coleco Indus.
Ct. Cl.	Telex Communication, Inc. General Elec. Co. Kornylak Corp.	Lavelle Aircraft Corp.
	All Courts Agree: Yes	Lack of Agreement

* For case citations, see the lists following Appendix A Charts.

Classic Estoppel?

<u>Court</u>	<u>Amendment Only</u>	<u>Cancellation & Addition</u>
S. Ct.	Exhibit Supply Co. Schriber-Schroth Co.	Exhibit Supply Co. Schriber-Schroth Co.
1 st Cir.	Borg-Warner Corp. Teledyne Mid-Am. Corp.	Borg-Warner Corp. Teledyne Mid-Am. Corp.
2d Cir.	Capri Jewelry, Inc.	Capri Jewelry, Inc. Keith
3d Cir.	Trio Process Corp.	Trio Process Corp.
4 th Cir.	Duplan Corp. Power Curbers, Inc.	Duplan Corp. Power Curbers, Inc.
5 th Cir.	Ziegler	Ziegler
6 th Cir.	Olympic Fastening Sys.	Olympic Fastening Sys.
7 th Cr.	Ekco Products	Ekco Prods.
8 th Cir.	L.S. Donaldson Co. Minnesota Mining & Mfg.	L.S. Donaldson Co. Minnesota Mining & Mfg.
9 th Cir.	Norwood Burgess & Assocs.	Norwood Burgess & Assocs.
10 th Cir.	Burger Train Sys.	Burger Train Sys.
C.C.P.A.	Coleco Indus.	Coleco Indus.
Ct. Cl.	Custer Telex Communications	Custer Telex Communications
	All Courts Agree: Yes	All Courts Agree: Yes

Will Prosecution History Estoppel Result From:

<u>Court</u>	<u>Reverse Estoppel?</u>	<u>Non-Art Estoppel?</u>
S. Ct.	Schriber-Schroth Co. Morgan Envelope Co.	No: Hubbell
1 st Cir.	Unknown	Borg-Warner Corp.
2d Cir.	Narda Microwave Corp.	No: Koppers Co.
3d Cir.	Unknown	No: Trio Process Corp.
4 th Cir.	Special Metals Corp.	No: **
5 th Cir.	No: Ingersoll-Rand Co.	No: Ziegler
6 th Cir.	Arco Indus. Kaiser Indus.	No. **
7 th Cr.	Bassick Co. Burland	No: Ekco Prods. Ellipse Corp. Bishman Mfg.
8 th Cir.	Criner	No: **
9 th Cir.	D & H Elec. Co. Cutter Labs, Inc.	No: Speed Shore Corp.
10 th Cir.	Unknown	No: McCullough Tool Co. Swanson
C.C.P.A.	Unknown	Coleco Indus.
Ct. Cl.	Bendix Corp. General Elec. Co.	Unknown
	Lack of Agreement	Lack of Agreement

** - Barrett, *The Application of the Doctrine of File Wrapper Estoppel to Prevent Recapture of Abandoned Patent Claims*, 54 ST. JOHN'S L. REV. 767, 781 N.80 (1980), reprinted in 13 INTELL. PROP. L. REV. 263, 277 n.80 (1981) (the First Circuit is the only circuit to adopt non-art estoppel).

Appendix A Case Citations

Supreme Court

Graham v. John Deere Co., 383 U.S. 1 (1966).
Keystone Driller Co. v. Northwest Eng'g Corp., 294 U.S. 42 (1935).
Exhibit Supply Co. v. Ace Patents Corp., 315 U.S. 126 (1942).
Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211 (1940).
Hubbell v. United States, 179 U.S. 77 (1900).
Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co., 152 U.S. 425 (1894).

First Circuit

Teledyne Mid-Am. Corp. v. International Tel. & Tel., 449 F.2d 502 (1st Cir. 1971).
Borg-Warner Corp. v. Paragon Gear Works, Inc., 355 F.2d 400 (1st Cir. 1965), *cert. denied*,
384 U.S. 935 (1966).
Progressive Eng'g, Inc. v. Machinecraft, Inc., 273 F.2d 593 (1st Cir. 1960).

Second Circuit

Narda Microwave Corp. v. General Microwave Corp., 675 F.2d 542 (2d Cir. 1982).
Cohn v. Coleco Indus., 558 F.2d 53 (2d Cir. 1977).
Capri Jewelry, Inc. v. Hattie Carnegie Jewelry Enters., 539 F.2d 846 (2d Cir. 1976).
Koppers Co. v. S & S Corrugated Paper Mach. Co., 517 F.2d 1182 (2d Cir. 1975).
Keith v. Charles E. Hires Co., 116 F.2d 46 (2d Cir. 1940).
Catalin Corp. of Am. v. Catalazuli Mfg., 79 F.2d 593 (2d Cir. 1935).

Third Circuit

Trio Process Corp. v. L. Goldstein's Sons, 461 F.2d 66 (3d Cir.), *cert. denied*, 409 U.S. 997
(1972).
Schmidinger v. Welsh, 383 F.2d 455 (3d Cir. 1967), *cert. denied*, 390 U.S. 946 (1968).
Westinghouse Elec. Corp. v. Hanovia Chem. & Mfg., 179 F.2d 293 (3d Cir. 1949).
N.Y. Asbestos Mfg. v. Ambler Asbestos Air-Cell Covering Co., 103 F. 316 (E.D. Pa.), *aff'd*,
112 F. 1022 (3d Cir. 1901).

Fourth Circuit

Special Metals Corp. v. Teledyne Indus., 717 F.2d 128 (4th Cir. 1983) (withdrawn at court's
request).
Duplan Corp. v. Deering Milliken, Inc., 444 F. Supp. 648 (D.S.C. 1977), *aff'd in part and
rev'd in part*, 594 F.2d 979 (4th Cir. 1979).
Power Curbers, Inc. v. E.D. Etnyre, 298 F.2d 484 (4th Cir. 1962).

Fifth Circuit

John Zink Co. v. National Airoil Burner Co., 613 F.2d 547 (5th Cir. 1980).
Nationwide Chem. Corp. v. Wright, 458 F. Supp. 828 (M.D. Fla. 1976), *aff'd*, 584
F.2d 714 (5th Cir. 1978).

Ingersoll-Rand Co. v. Brunner v. Lay, Inc., 474 F.2d 491 (5th Cir.), *cert. denied*, 414 U.S. 865 (1973).

Ziegler v. Phillips Petroleum Co., 483 F.2d 858 (5th Cir.), *cert. denied*, 414 U.S. 1079 (1973).

Williams Bit & Tool Co. v. Christensen Diamond Prods., 399 F.2d 628 (5th Cir. 1968).

Stewart-Warner Corp. v. Lone Star Gas Co., 195 F.2d 645 (5th Cir. 1952).

Sixth Circuit

Arco Indus. v. Chemcast Corp., 633 F.2d 435 (6th Cir. 1980).

Olympic Fastening Sys. v. Textron, Inc., 504 F.2d 609 (6th Cir. 1974), *cert. denied*, 185 U.S.P.Q. (BNA) 129 (1975).

Kaiser Indus. v. McLouth Steel Corp., 400 F.2d 36 (6th Cir. 1968), *cert. denied*, 393 U.S. 1119 (1969).

Mid-West Wire Prods. v. Wall Tube & Metal Prods., 266 F.2d 345 (6th Cir. 1959).

Wiegand v. W. Bingham Co., 106 F.2d 546 (6th Cir. 1939), *cert. denied*, 308 U.S. 627 (1940).

Byers Mach. v. Keystone Driller Co., 44 F.2d 283 (6th Cir. 1930).

Seventh Circuit

Burland v. Trippe Mfg., 543 F.2d 588 (7th Cir. 1976).

Ellipse Corp. v. Ford Motor, 452 F.2d 163 (7th Cir. 1971).

Bishman Mfg. v. Stewart-Warner Corp., 380 F.2d 336 (7th Cir. 1967).

Ekco Prods. v. Chicago Metallic Mfg., 347 F.2d 453 (7th Cir. 1965).

Bassick Co. v. Faultless Carter Corp., 105 F.2d 228 (7th Cir. 1939).

Eighth Circuit

Minnesota Mining & Mfg. v. Ditto, Inc., 221 F. Supp. 980 (D. Minn. 1963), *aff'd*, 336 F.2d 67 (8th Cir. 1964).

L.S. Donaldson Co. v. La Maur, Inc., 299 F.2d 412 (8th Cir. 1962).

Steffan v. Lew A. Maune Co., 234 F.2d 750 (8th Cir. 1956).

Criner v. Micro-Westco, Inc., 139 F.2d 681 (8th Cir. 1944).

Smith v. Mid-Continent Inv. Co., 106 F.2d 622 (8th Cir. 1939).

Ninth Circuit

Speed Shore Corp. v. Denda, 605 F.2d 469 (9th Cir. 1979).

Norwood v. Ehrereich Photo-Optical Indus., 529 F.2d 3 (9th Cir. 1975).

Burgess & Assocs. v. Klingensmith, 487 F.2d 321 (9th Cir. 1973).

D & H Elec. Co. v. M. Stephens Mfg., 233 F.2d 879 (9th Cir. 1956).

Cutter Labs., Inc. v. Lyophile-Cryochem Corp., 179 F.2d 80 (9th Cir. 1949).

Fullerton Walnut Growers' Ass'n v. Anderson-Barngrover Mfg., 166 F. 443 (9th Cir. 1908).

Tenth Circuit

Burger Train Sys. v. Ballard, 552 F.2d 1377 (10th Cir.), *cert. denied*, 434 U.S. 860 (1977).

CMI Corp. v. Metropolitan Enters., 534 F.2d 874 (10th Cir. 1976).

Swanson v. Unarco Indus., 479 F.2d 664 (10th Cir. 1973), *cert. denied*, 414 U.S. 1076 (1974).

McCullough Tool Co. v. Well Surveys, Inc., 343 F.2d 381 (10th Cir. 1965), *cert. denied*, 383

U.S. 933 (1966).

Doran Coffee Roasting Co. v. Wyott Mfg., 267 F.2d 200 (10th Cir. 1959).

Court of Customs and Patent Appeals

Coleco Indus. v. United States Int'l Trade Comm'n, 573 F.2d 1247 (C.C.P.A. 1978).

Court of Claims

Kornylak Corp. v. United States, 207 U.S.P.Q. (BNA) 145 (Ct. Cl., Trial Div. 1980).

Telex Communication, Inc. v. United States, 208 U.S.P.Q. (BNA) 265 (Ct. Cl., Trial Div. 1980).

Custer v. United States, 203 U.S.P.Q. (BNA) 784 (Ct. Cl., Trial Div. 1979), *aff'd*, 622 F.2d 554 (Ct. Cl.), *cert. denied*, 449 U.S. 1010 (1980).

Bendix Corp. v. United States, 199 U.S.P.Q. (BNA) 203 (Ct. Cl., Trial Div. 1978), *aff'd*, 600 F.2d 1364 (Ct. Cl. 1979).

General Elec. Co. v. United States, 572 F.2d 745 (Ct. Cl. 1978).

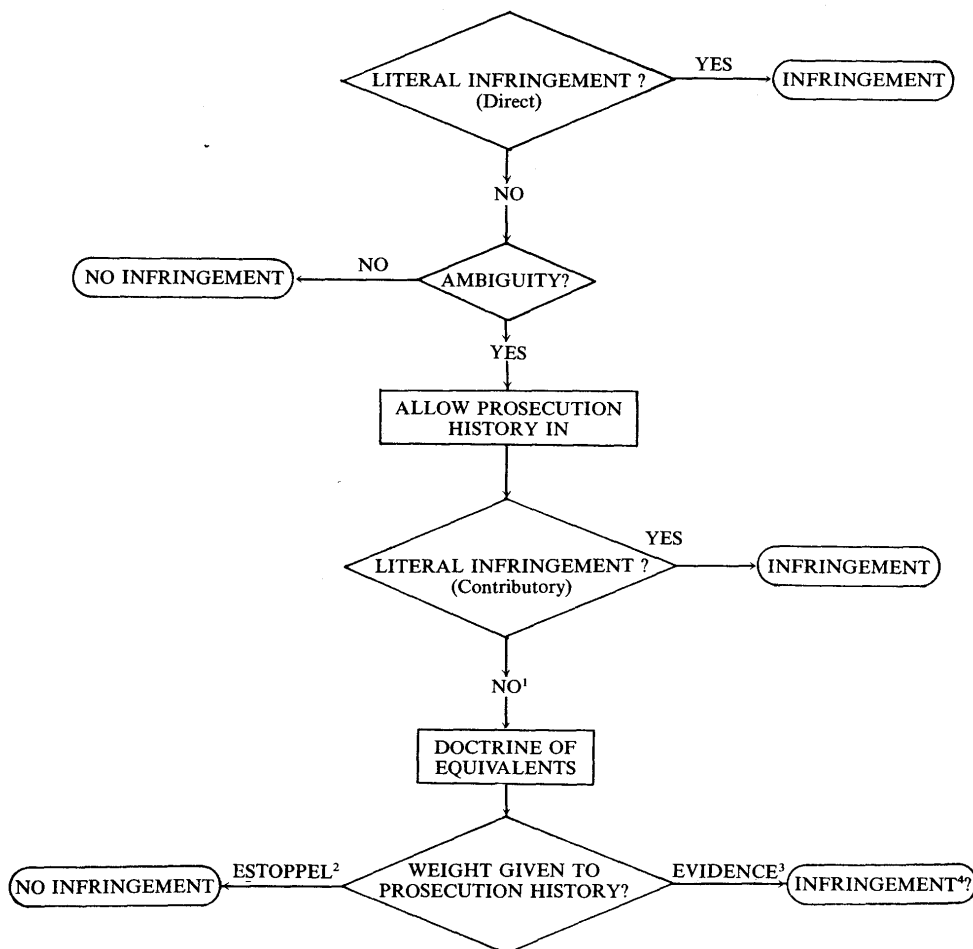
Lavelle Aircraft Corp. v. United States, 358 F.2d 1005 (Ct. Cl. 1966).

APPENDIX B

SUMMARY OF REPRESENTATIVE FEDERAL CIRCUIT CASES

<u>CASE</u>	<u>PROSECUTION HISTORY ESTOPPEL DISPOSITION</u>
1. Kinzenbaw v. John Deere & Co., 741 F.2d 383 (Fed. Cir. 1984).	Estoppel Invoked
2. Bayer Aktiengesellschaft v. Duphar Int'l Research B.V., 222 U.S.P.Q. (BNA) 649 (Fed. Cir. 1984).	None: issue not reached since not raised at trial
3. McGill Inc. v. John Zink Co., 736 F.2d 666 (Fed. Cir. 1984).	Estoppel Invoked
4. Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888 (Fed. Cir. 1984).	None: no basis to relitigate infringement
5. Amstar Corp. v. Envirotech Corp., 221 U.S.P.Q. (BNA) 649 (Fed. Cir. 1984).	No estoppel found
6. Seattle Box Co. v. Industrial Crating & Packaging, 731 F.2d 818 (Fed. Cir. 1984).	No estoppel found
7. Ball Corp. v. United States, 729 F.2d 1429 (Fed. Cir. 1984).	None: issue not reached
8. Carman Indus. v. Wahl, 724 F.2d 932 (Fed. Cir. 1983).	None: issue not reached since not raised at trial
9. Thomas & Betts Corp. v. Litton Sys., 720 F.2d 1572 (Fed. Cir. 1983).	No estoppel found
10. Fromson v. Advance Offset Plate, Inc., 720 f.2d 1565 (Fed. Cir. 1983).	None: estoppel not applicable; dicta indicate no estoppel
11. Hughes Aircraft Co. v. United States, 717 F.2d 1351 (Fed. Cir. 1983).	No estoppel found
12. Caterpillar Tractor v. Berco, S.p.A., 714 F.2d 1110 (Fed. Cir. 1983).	No estoppel found
13. Schenck v. Nortron Corp., 713 F.2d 782 (Fed. Cir. 1983).	No estoppel found
14. SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 713 F.2d 746 *Fed. Cir. 1983).	None: case remanded to consider issue
15. Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc., 707 F.2d 1376 (Fed. Cir. 1983).	None: issue not reached, decided on other grounds

APPENDIX C
SCHEMATIC DESCRIPTION
APPLICABILITY OF PROSECUTION HISTORY
ESTOPPEL



1. Prosecution history "estops" literal infringement
2. Prosecution history "estops" any infringement
3. Prosecution history as claim construction device
4. Infringement may be merited based on prosecution history