Stake Your (Linking) Claim: Assessing The Impact Of In Re Doyle On Patent Reissue

Grace C. Y. Leung

Abstract

A common problem encountered during patent prosecution is a restriction requirement. According to In re Doyle, the failure to assert linking claims that read on non-elected claims is an error correctable by reissue. This paper argues that the Doyle court was correct in holding that Doyle was distinguishable from In re Orita. Allowance of genus claims that link previously non-elected claims comports with the patent statute. As the public is on notice that patent claims may be broadened within two years, the Doyle holding ensures that the patentee is given the full breadth of protection necessary to "promote the Progress of Science and the useful Arts." Patentees are advised to review patents issued in the last two years where the patent application was subject to a restriction requirement and a divisional application was not filed. A reissue may be granted for genus claims that would cover some of the originally non-elected claims.

Copyright © 2003 The John Marshall Law School

Cite as 2 J. MARSHALL REV. INTELL. PROP. L. 360
STAKE YOUR (LINKING) CLAIM: ASSESSING THE IMPACT OF IN RE DOYLE ON PATENT REISSUE

GRACE C. Y. LEUNG*

[The public knows, or should know, that an issued patent can be broadened by reissue during a two-year period following issuance. The public is therefore on notice that at least some matter can be ‘dedicated to the public’ in error, and that the error, if caught in time, can be corrected by reissue.1

INTRODUCTION

In a top-secret, private laboratory operating under a clever guise of a law school journal office, a scientist discovers some compounds.2 In filling out her application for a patent, she writes out a specification and broad claims for the compounds covering four species:3 c1, c2, c3, and c4. The examiner for the United States Patent and Trademark Office (“PTO”) subjects the claims to a restriction requirement: Group I of “protein compounds” must include c1 and c2 and Group II of “organic compounds” must include c3 and c4. The inventor amends her claim to elect only Group I and cancels c3 and c4. The patent for Group I issues but the inventor declines to file a divisional application. Later, without doing anything else, will she be able to get a broadening reissue for claims that link the subject matter from the issued patent and the non-elected claims?

The short answer, according to In re Doyle4, is yes because a failure to assert linking claims that read on non-elected claims is an error correctable by reissue.5 The complexity of the patent laws dealing with making corrections to a patent after it has been properly granted is four-fold: the patentee must consider prior art, the scope of the claims in the original patent granted, the error itself and whether it is a


1 In re Doyle, 293 F.3d 1355, 1364 (Fed. Cir. 2002).

2 The idea for this hypothetical was derived from an article written by Linda E. Alcorn and Teresa U. Medler, The Johnson & Johnson Case, Part II: Arguing Against Dedicated to the Public, 8 No. 9 INTELL. PROP. STRATEGIST 6 (June 2002).

3 See DONALD S. CHISUM, CHISUM ON PATENTS, § 12.03[3] (2002) (describing the genus-species relationship as it applies to restriction requirements). In patent law, “genus” claims are broad claims encompassing a multiple embodiments of the invention. Id. In contrast, “species” claims are narrower claims, generally a singular embodiment of a variable. Id.

4 293 F.3d 1355 (Fed. Cir. 2002).

5 See 35 U.S.C. § 251 (2000). Reissues are granted where the issued patent is “wholly or partially inoperative or invalid . . . .” Id. Furthermore, note that if the rejection of the claims in the original patent had been due to prior art rather than a restriction requirement, the “recapture rule” would apply, and the patentee would be barred from reissuing the non-elected claims after deliberately surrendering them during prosecution in order to obtain her patent. See U.S. Patent and Trademark Office, Manual of Patent Examining Procedure § 1412.02 (8th ed., 2001) (hereinafter “MPEP”).
“fixable” error, and the post-issue method of correction that is best suited to correct the error.

In Doyle, the Federal Circuit allowed a reissue with broadening genus claims that linked prior non-elected species claims. This article analyzes the Federal Circuit’s decision in Doyle and offers suggestions on how to ameliorate the reissue process. Part I traces the history of reissue in the Patent Act and the case law leading up to Doyle. Part II analyzes Doyle and considers the impact of the Doyle decision on the future of patent law. Part III proposes several statutory changes in light of issues raised by Doyle and in conjunction with policy arguments that have been made by the legal community in the past few decades.

I. BACKGROUND

A. Issue as a Post-Grant Revision of a Patent

The Constitution gives Congress the power to enact laws related to patents. Patent applications are reviewed and examined by the PTO to ensure the requirements of Title 35 of the United States Code are met, and patents are granted to those inventions that, among other requirements, are “useful,” novel, and non-obvious with respect to prior art. For each patent application, the patentee provides a written description of the invention in what is known as the “specification,” concluding with “one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.”

Despite numerous checks and balances, errors in the application may still find their way into issued patents. Four types of post-grant revisions of patents are...
available to patent holders: disclaimer,\textsuperscript{14} certificate of correction,\textsuperscript{15} reexamination,\textsuperscript{16} and reissue.\textsuperscript{17} This comment focuses on the last method, reissue.

Patent reissues are largely controlled by Sections 251\textsuperscript{18} and 252\textsuperscript{19} of the Patent Act. For a fee, and on the surrender of the original patent, the Director of the PTO may reissue a patent for the unexpired time from the original patent if the original patent is "wholly or partly inoperative or invalid, due to a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent...."\textsuperscript{20} However, the application for reissue must not be based on an error "made with deceptive intention," as a reissued patent will not be granted even if the patent is deemed inoperative or invalid where fraud is involved.\textsuperscript{21} Upon a reissue grant, the patent holder will again have the right to exclude all others from practicing the same invention for the rest of the valid term.\textsuperscript{22}

B. The Development of Reissue in The Patent Act

i. History of Reissue

While no statutory provisions existed in the eighteenth century to permit corrections to issued patents,\textsuperscript{23} in 1825, the Secretary of State issued a new patent to Joseph Grant for the rest of the original patent's term when he surrendered his original patent due to its "defective specification."\textsuperscript{24} The Supreme Court would uphold the patent reissue in \textit{Grant v. Raymond.}\textsuperscript{25} Later, the Patent Acts of 1832,\textsuperscript{26}

\begin{footnotes}
\begin{enumerate}
\item Grant v. Raymond, 31 U.S. (6 Pet.) 218, 222 (1832). The patent was for a "winding machine for setting up hat bodies." \textit{Id}. at 242.
\end{enumerate}
\end{footnotes}
1836, and 1870 codified the authority of patent officials to reissue patents for the same invention when mistakes or inadvertent errors made without fraud were found in issued patents. The reissued patent was valid for the rest of the original term. It was not until the Act of 1870 that "new matter" was expressly barred from reissue applications.

Until Topliff v. Topliff was handed down by the Supreme Court in 1892, reissue applications to better clarify or correct the written description were common, but applications to broaden the scope of the original description were rarely successful. The main problem associated with broadening issued patents through reissue was the effect of the new patent on the public. The world outside the PTO would have known only of the original patent and, consequently, may have made investments and used resources that did not infringe under the original patent but nonetheless violated the claims of the reissued patent.

ii. Intervening Rights

The courts struggled to reconcile the rights of the patentee and the rights of the public. In the 1915 decision Autopiano Co. v. American Player Action Co., the Second Circuit broke new ground as the first court to protect an accused infringer from the effects of a reissued patent. Ultimately, in Sontag Chain Stores v. National Nut Co. of Cal., the Supreme Court held that an alleged infringer who is

---

27 Act of July 4, 1836, ch. 162.
29 See CHISUM, supra note 3, § 15.02.
30 Id.
31 See Act of July 8, 1870, supra note 28, at 198.
32 CHISUM, supra note 3, § 15.02. "New matter" is a term of art and a historical limitation in patent reissue applications that is still present in statutory law today. Id. New substantive matter that would belong in a separate patent application should not be included in a reissue application.
33 145 U.S. 156 (1892).
34 Id. at 171 (discussing the right of the patentee to get a reissue); see also CHISUM, supra note 3, § 15.02[5].
36 222 F. 276 (2d Cir. 1915).
38 222 F. 276 (1915). In Autopiano, the plaintiff surrendered his original patent for player pianos for a first reissue with narrower claims. Id. at 280. After the reissue was granted, he then applied for a second reissue that broadened the claims and effectively returned the patent to its original wording. Id. The court held that the defendant, who had manufactured pianos in the interim between the two reissues, was not liable for infringement on estoppel grounds. Id. at 282; see also CHISUM, supra note 3, § 15.02[6] (discussing intervening rights in the context of the development of reissue patents).
39 310 U.S. 281 (1940). The decision in Sontag settled 25 years of inconsistent holdings that followed Autopiano, but left unresolved was the reasoning for the award of intervening rights. See Janicke, supra note 37, at 33. At the present time, the rights under reissue as found under 35 U.S.C. § 252 (2001) also apply to reexamination situations. See MPEP, supra note 5, § 2293 (2001).
unaware of the original patent and uses a machine after the original patent has issued, but before the reissue application for a broader claim is filed, has intervening rights that would bar injunctive relief against a continued use of the invention.

iii. Complicating the Criteria

While the Sontag Chain Stores decision provided some guidance, case law still showed a lack of consistency on what type of broadening reissues could be granted. The sole requirement was that applications for broadening reissues must be made within two years of the original patent issue. Two years later, in U.S. Industrial Chemicals, Inc. v. Carbide Carbon Chemicals Corp., the Supreme Court set forth a more definite test for determining if the broadening reissue was properly granted. The court explained that "[i]t must appear from the face of the instrument that what is covered by the reissue was intended to have been covered and secured by the original."

An early interpretation of error for the purposes of patent reissue was any "inadvertence, accident, or mistake." Although this interpretational standard still


41 See Janicke, supra note 37, at 33 (citing Sontag, 310 U.S. at 283-84 and cases therein). The two-year statute of limitation was later codified in 35 U.S.C. § 251 (2000).

42 315 U.S. 668 (1942).

43 See id. at 676 (emphasis added) (elaborating on the "same invention" requirements from Parker & Whipple Co. v. Yale Clock Co., 123 U.S. 87, 99 (1887); see also Flower v. Detroit, 127 U.S. 563, 571 (1888). See generally CHISUM, supra note 3, § 15.02 [d] (discussing the history of the "same invention" requirement). It may appear that "face value" is a valued aspect of claim drafting; a contradictory point of note lies in the doctrine of equivalents where one can show infringement if the accused infringing device is substantially similar to the claim. Although the Supreme Court held in Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 25 (1997), that the doctrine of equivalents was valid and rejected the argument that it contravenes the reissue process, the Supreme Court greatly limited the effects of the doctrine of equivalents in Festo Corp v. Shoketsu Kinzoku Kogyo Kabushki Co., 535 U.S. 722 (2002). Thus, Federal Circuit Judge Helen Nies' dissent in Warner-Jenkinson, where she remarked that "[t]he patentee is much better off evading the reissue procedure which Congress has provided, and resorting to its counterpart, the doctrine of equivalents, created out of the judiciary's sense of 'fairness']", Hilton Davis Chem. Co. v. Warner-Jenkinson Co., 62 F.3d 1512, 1560 (1995), no longer is as persuasive as it was at the time.

44 The exception of "deceptive" intention was also paired with "fraudulent" intention in section 64 of former Title 35 and is well established by case law. See R.S. § 4916; Act of May 24, 1928, ch. 730, 45 Stat. 732; see also In re Orita, 550 F.2d 1277, 1280 n. 6 (C.C.P.A 1977) (demonstrating that cases continue to follow the historical equitable estoppel principles, citing In re Cornell, 150 F.2d 702 (Ct. Cust. App. 1945), and In re Smyser, 135 F.2d 747 (Ct. Cust. App. 1943); In re Wesseler, 367 F.2d 838, 834, (C.C.P.A. 1966) (explaining that "Congress did not intend to alter the test of 'inadvertence, accident, or mistake' established in relation to the pre-1952 [Patent Act] rules").
remains in court decisions, the wording is not found in the current statutes, and only “deceptive intentions” remain.45

C. The Supreme Court and Federal Circuit Decisions Before In re Doyle

In the early decades of patent drafting, the courts used claims solely for determining novelty.46 During the nineteenth century, however, claims evolved into the basis of determining infringement.47 Two years before the 1952 Patent Act, the Supreme Court in Graver Tank & Manufacturing Co. v. Linde Air Products Co.48 quite succinctly stated that “[i]f accused matter falls clearly within the claim, infringement is made out and that is the end of it.”49

While the claims determine the scope of the invention, this does not resolve the matter. Both the courts and Congress recognized that the careful drafting of claims might nonetheless result in errors in the final issued patent;50 thus, certain errors made in the claims could be corrected through reissue.51 However, the United States Court of Customs and Patent Appeals (“CCPA”) denied the patent reissue applicants this option in In re Orita.52

45 See 35 U.S.C. § 251 (2000). For an inoperative or invalid patent to qualify for reissue, the error at issue must not have been made with “deceptive intention.” Id. The MPEP, supra note 5, § 1448 (emphasis added), explains that while there is an “[e]xamining” of whether there is a lack of deceptive intent for reexamination purposes for reissue applications at the PTO, there is no actual “investigation” of fraud, inequitable conduct, or duty of disclosure issues.” Rather, the applicant’s statement of lack of deceptive intent in the reissue oath as required by 37 C.F.R. § 1.175 (1997) is taken as dispositive. Id. The exceptions that may lead to an investigation include “an admission or judicial determination of fraud, inequitable conduct, or violation of the duty of disclosure.” Id.

46 Janicke, supra note 37, at 39 n.126, (citing Karl B. Lutz, Evolution of the Claims of U.S. Patents, 20 J. PAT. & TRADEMARK OFF. SOCY 134, 147, 488 (1938)).

47 Id.


49 Id. at 607.


51 See supra text accompanying note 16. The PTO made a substantial overhaul of the patent reissue procedure and guidelines in the late 1970s; specifically the PTO sought to “improve the quality and reliability of issued patents.” Janis, supra note 16, at 16 (quoting 42 Fed. Reg. 5588 (1977)). The new regulation, known as the Dann Amendments, paved the way for a more user-friendly system. Id. at 17-19. For example, reissue application files became open to the public, no-defect re-issues were permissible, and a public protest procedure came into place. Id. at 18. Some of the decisions were perhaps too liberal and uncontrolled, however, by 1982 the PTO had eliminated the no-defect reissue procedure and had scaled back on its former open-arm policy for public protesting. Id. at 19.

52 550 F.2d 1277 (C.C.P.A. 1977).
In *Orita*, the patent application was subjected to a restriction requirement. Due to their failure to file a divisional application, the applicants tried to apply for a reissue of their patent that would have, in effect, added four claims substantially identical to their non-elected claims. The applicants explained their error was made without deceptive intent, but the court found the alleged error was not the type of error reissue was meant to address. Further, the court found that the copendency requirement of Section 120 was incorporated in Section 121. The statutes required an applicant who wished to have the benefit of an earlier filing date, despite canceling claims to meet an examiner’s restriction requirement, to file a divisional application. To allow a reissue in this particular case would circumvent this copendency requirement.

The Court of Appeals for the Federal Circuit ("Federal Circuit") echoed the holding in *Orita* in their review of *In re Weiler*, where the applicants failed to timely file a divisional application for the non-elected claims. There, the Federal

---

53 The patent included claims 1-4 to compounds and a method for their preparation. *Id.* at 1277. Dependent claims 5-8 included a color-developable coating composition, an emulsion, and a coated sheet, such that these latter claims shared a compound of generic claim 1. *Id.* at 1278. The examiner required that the applicants limit their claims to one invention per application as codified in Section 251 of the Patent Act. *Id.* The applicant’s counsel elected claims 1-4 and preserved the right to traverse the examiner’s restriction but it was never perfected, thus, the applicants filed an application for reissue. *Id.* at 1278-79.


55 Pursuant to 37 CFR 1.175(a), the applicants for reissue must file a statement under oath or declaration which includes: “(3) When it is claimed that such patent is inoperative or invalid ‘by reason of the patentee claiming more or less than he had a right to claim in the patent,’ distinctly specifying the excess or insufficiency in the claims.”

56 *Orita*, 550 F.2d at 1280.

57 *Orita*, 550 F.2d at 1280-81.


59 *Orita*, 550 F.2d at 1280-81.

56 Pursuant to 37 CFR 1.175(a), the applicants for reissue must file a statement under oath or declaration which includes: “(3) When it is claimed that such patent is inoperative or invalid ‘by reason of the patentee claiming more or less than he had a right to claim in the patent,’ distinctly specifying the excess or insufficiency in the claims.”

57 *Orita*, 550 F.2d at 1280.


60 *Orita*, 550 F.2d at 1280-81.


62 *Orita*, 550 F.2d at 1281. The court was quite unsympathetic to the applicant’s arguments, explaining that “[s]ection 251 is not a panacea designed to cure every mistake which might be committed by an applicant or his attorney, and the case at bar exemplifies a mistake which this section cannot cure.” *Id.*

63 *Id.* at 1280 (holding acquiescence to an examiner’s requirement for restriction is not an error correctable by reissue).

64 790 F.2d 1576 (Fed. Cir. 1986). The original patent application filed contained eleven claims, and the examiner held that there were actually “three independent and distinct inventions.” *Id.* at 1578. A section 121 restriction requirement was effected between Claims 1-7 (assay method), Claims 8 and 11 (an “organic compound,” and Claims 9 and 10 (“a protein compound”). *Id.*

65 *Id.* at 1578-79. Claim 1 was the independent claim and dependent claims 2-7 followed. These claims compromised the original patent, “Method for Quantitative Analysis for Limonin.” Claim 1 read:

A method of quantitative analysis of limonin which comprises reacting a known amount of limonin-specific antibodies, with a mixture of a known volume of

---
Circuit provided a clearer analysis for determining whether a correctable error was present, and required that in the original patent, there must be an “intent to claim” the matter that the applicant now asserts is the error at the heart of the reissue. Consequently, although “error” is interpreted liberally, no error correctable by reissue was present. The applicant was wrong to apply for reissue.

Another reissue applicant challenged the Board’s denial of an application in In re Watkinson. Watkinson argued that the error in the original patent was her sample containing an unknown amount of limonin and a known amount of a limonin-derivative labeled with an enzyme or with a radioactive isotope, determining the amount of labeled limonin-derivative which has reacted with said antibodies and calculating therefrom the unknown amount of limonin in said sample. Id. at 1578.

The two rejected claims in the reissue patent application were claims 13 and 19. Id. at 1579. Claim 13 read: “A method for developing citrus fruit strains low in limonin content, which method comprises identifying by the use of limonin-specific antibodies as an analytical reagent the limonin-low mutants in a breeding or cell culture program, and propagating said mutants.” Id. at 1578. Claim 19 reads: “A gamma globulin fraction comprising antibodies reactive with limonin, said antibodies being formed consequent to injecting into an animal a limonin-protein conjugate.” Id. at 1578-79.

The court notes in its analysis that the “error” to be corrected by reissue is not a subjective error like “deceptive intention.” Id. at 1583 n.4. Weiler argued that he was ignorant of the drafting and claiming requirements while his counsel was ignorant of the invention, which resulted in his failure to claim the subject matter that the applicants now assert to be their invention. Moreover, although the Patent Act provides a variety of methods to correct issued patents, the court had to discourage applicants from scrambling for any seemingly “wrongful” action during their reissue application process. The court in Weiler suggested that “insight resulting from hindsight on the part of new counsel does not, in every case, establish error.” Id. at 1580.
acquiescence to a restriction requirement in the original application. The court held that there was no error because Watkinson should have “challenged the merits of the restriction requirement in the original application during the prosecution of the original application.”

Although the CCPA defined the analysis in Orita, it was not until Doyle that the Federal Circuit actually had a chance to review a lower court’s interpretation of the Orita doctrine and thus determine its proper applicability.

II. ANALYSIS

A. The Original Patent and Procedural History of In re Doyle

In Doyle, the inventor, Dr. Michael Doyle, discovered a genus of chiral transition metal catalysts and a method involving the use of this genus of catalysts to perform enantioselective reactions. On September 24, 1992, Dr. Doyle filed a patent application claiming his invention. The examiner imposed a nine-way restriction requirement on the grounds that the application was attempting to claim nine different inventions, and consequently, Dr. Doyle elected group VI only. Group VI consisted of method claims directed towards using the chiral transition metal estopped from obtaining claims that they could not claim in their original patent because they acquiesced to a requirement for restriction.

Chiral molecules have one or more chiral centers, which are centers to which different chemical groups may attach to form different compounds. The relative arrangements of the molecular structure are known as stereoisomers. A chiral molecule has a mirror image structure, its enantiomer, such that the two structures cannot be superimposed and have different properties. Scientists requiring only one structure would have to find some way to manufacture the sole variation of the molecule desired, or alternatively, attain a mixture of the enantiomers with the preferential result that the desired structure makes up a significantly large percentage of the mix with only a few isolated molecules of other disfavored structures. In pharmaceutical chemistry, enantioselective reactions have this precise function of producing a heightened quantity of only one structure of a target compound selected for its specific pharmacological properties.

Id.

72 Id; see also Weiler, 790 F.2d at 1576, 1582 (holding that cancelled claims could not be reissued upon no finding of error); Ball Corp. v. United States, 729 F.2d 1429, 1435 (Fed. Cir. 1984) ("The recapture rule bars the patentee from acquiring, through reissue, claims that are of the same or of broader scope than those claims that were canceled from the original application").

73 Watkinson, 900 F.2d at 233. The court could not have undergone the review of the examiner's restriction requirement that Watkinson demanded because "neither this court nor the board has jurisdiction in this proceeding to review the merits of a requirement for restriction under Section 121, as a restriction requirement is a matter within the discretion of the examiner and not tantamount to a rejection of claims." Id. The court in Watkinson admonished the applicant's attempt to file an application for a patent reissue when the proper procedure would have been to challenge the restriction immediately. Id.

74 Id.

75 Chiral molecules have one or more chiral centers, which are centers to which different chemical groups may attach to form different compounds. Id. The relative arrangements of the molecular structure are known as stereoisomers. Id. at 1356 n.1. A chiral molecule has a mirror image structure, its enantiomer, such that the two structures cannot be superimposed and have different properties. Id. at 1356. Scientists requiring only one structure would have to find some way to manufacture the sole variation of the molecule desired, or alternatively, attain a mixture of the enantiomers with the preferential result that the desired structure makes up a significantly large percentage of the mix with only a few isolated molecules of other disfavored structures. Id. In pharmaceutical chemistry, enantioselective reactions have this precise function of producing a heightened quantity of only one structure of a target compound selected for its specific pharmacological properties. Id.

76 U.S. Patent No. 5,296,595 (issued March 22, 1994).

77 Doyle, 293 F.3d at 1356.

78 Id.
catalysts to insert carbenes 79 into carbon-hydrogen, oxygen-hydrogen, nitrogen-hydrogen, and silicon-hydrogen bonds. 80 The other claims in the initial patent applications were cancelled. 81 No divisional applications were filed and the patent, U.S. Patent No. 5,296,595, issued on March 22, 1994. 82

Nearly two years later, on February 14, 1996, Dr. Doyle sought to broaden his patent and filed a request for reissue. 83 The proposed reissue genus claims covered the reaction of his catalysts with a genus of prochiral molecules. 84 This change would effectively include the already claimed reactions of the catalysts with the insertion of carbenes and “read on” 85 the claims of the non-elected Groups VII-IX. 86 The

79 See id. at 1356 n.3 ("A carbene is a CR2 fragment, where R represents a group bonded to the carbon atom.").
80 Id. at 1356.
81 Id. At this stage of the prosecution history, a patentee has the opinion to file divisional applications for the remaining non-elected claims, but here, Dr. Doyle did not attempt to do so. Id.
82 U.S. Patent No. 5,296,595 (issued March 22, 1994).
83 Dr. Doyle explained his reasoning for reissue:
the 595 patent is partially defective because the claims are narrower than they should be in view of the 595 patent's disclosure and the prior art. In particular, all 53 claims of the 595 patent are drawn to a method of enantioselectively inserting a carbene with a chiral catalyst. I now believe that the claims should have been broader in order to cover the use of the defined catalyst to enantioselectively catalyze reactions with a prochiral compound.

Doyle, 293 F.3d at 1357.
84 See id. at 1356 n.2, ("A prochiral compound is one that, while not yet chiral, can become so when it undergoes a chemical transformation").
85 Id.; see also CHISUM, supra note 3, at Glossary (defining a claim that “reads on” as one that "covers products or processes that contain all of the elements and limitations of the claim. In determining the coverage of a claim, it is not construed or applied by literal language alone; consideration is given to the prior art and the description of the invention in the specification"); Landis on the Mechanics of Claim Drafting, Practising Law Institute, § 18, n.5 (2000) ("each technical phrase in the claim must literally describe a corresponding element or connection, etc., found in the description").
86 Proposed claim 54 is illustrative of the other reissue claims:
A method of enantioselectively catalyzing a reaction comprising the steps of:
providing a prochiral compound, providing a chiral catalyst comprising a nucleus with a first and second atom of the same metal aligned on an axis, said metal selected from the group consisting of rhodium, ruthenium, chromium, molybdenum, tungsten, rhenium and osmium; and first, second, third and fourth bridging ligands oriented radially to the axis, each ligand having a first and second complexing atom, the first complexing atom of each of said bridging ligands being complexed with said first metal atom, and the second complexing atom of each of said bridging ligands being complexed to said second metal atom, said first bridging ligand further comprising a ring including said first complexing atom and attached to said second complexing atom, said ring also including a chiral center attached through a first bonding site to said first complexing atom, attached through a second bonding site to said ring, having a third bonding site occupied by a first substituent, and having a fourth bonding site occupied by a second substituent, and said second bridging ligand further comprising a ring including said second complexing atom and attached to said first complexing atom, said ring also including a chiral center attached through a first bonding site to said second complexing atom, attached through a second bonding site to said ring, having a third bonding site occupied by a first substituent, and having a fourth bonding site occupied by a second substituent, and wherein the R/S configuration of the chiral center on the second bridging ligand is the same as the R/S
examiner approved claims 1-53 for the reissue but refused to allow claims 54 through 71. Dr. Doyle appealed the lack of error finding and the applicability of the doctrine of recapture. The Board agreed with the examiner that there was a lack of error, but did not sustain the rejection under the doctrine of recapture. The Board ruled that the recapture doctrine, which prevents an applicant from claiming through reissue any matter that had been surrendered to overcome a rejection based on prior art, was inapplicable because Doyle's new claims were not canceled to overcome prior art, rather, the claims were canceled to overcome a restriction requirement.

Both the examiner and the Board based their decisions about the missing correctable error on the Orita doctrine; the proposed claims 54-71 of the patent reissue request could not be granted because the Orita doctrine precludes a reissue applicant from obtaining claims that read on to the non-elected groups when these proposed claims could have been prosecuted in a divisional application.

B. Affirming the Doyle Court's Analysis of Other Reissue Cases

In Doyle, the issue was whether a failure to present a linking claim, that is, a claim broad enough to "read on" or link two or more groups of claims subject to a restriction requirement, is an error correctable by reissue according to the Patent Act. This was an issue of first impression for the Federal Circuit. Although the Board had affirmed the examiner's rejection of claims 54-71 based on the Orita doctrine, the Federal Circuit in Doyle found the Board's interpretation of Orita too

configuration of the chiral center on the first bridging ligand, and reacting said prochiral compound and said chiral catalyst under conditions sufficient to cause the reaction.  

Doyle, 293 F.3d at 1357.


89 Id. at *2.

90 Id. at *3-5. The Board conceded with Doyle that the appealed reissue claims are not identical to the non-elected claims of the original application; however, the Board was persuaded that the proposed claims "nevertheless encompass the subject matter of each of the canceled, non-elected claims," and that was sufficient to bar the reissue. Id. at *3-4. Furthermore, the Board believed that granting a reissue for this type of linking claim would "circumvent the copendency requirement of Section 120 incorporated by reference in Section 251." Id. at *5.

91 Id. at *5-6.

92 Id.

93 See generally Orita, 550 F.2d 1277.

94 See Ex parte Doyle, 2000 WL 33118610, at *2-5.

95 See MPEP, supra note 5, § 809.03 (2001) ("Linking claims"); see also MPEP, supra note 5, § 809.04 ("Retention of Claims to Non-elected Invention").

96 Doyle, 293 F.3d at 1359.

97 Id.

98 See generally Orita, 550 F.2d 1277.
The court distinguished *Orita* and its progeny, including *Watkinson* and *Weiler*, and reversed the Board.

1. The Theory of Estoppel

The Court held that the theory of estoppel, at the heart of the *Orita* doctrine asserted by the Board, was not successful in arguing against the reissue. The rationale for estoppel is to prevent the holder of a patent from trying to claim aspects of an invention that were purposely excluded from a patent application so that a patent could be approved and issued by the PTO.

As the rationale for estoppel did not apply, Doyle's reissue application was distinguishable from earlier cases that precluded from reissue claims under the *Orita* doctrine. The court also looked at *Watkinson*, where Watkinson expressly acquiesced to the restriction and cancelled the non-elected claims. Watkinson was estopped in her reissue application because she was bound to her original decision to cancel the claims. However, Doyle "did not assert the reissue claims" exactly or in a similar form in his original application and "also never agreed to prosecute the reissue claims in a divisional application."

A further contention by the Court was that not only could Doyle assert these claims in his reissue, but pursuant to *MPEP* § 809.04, "these linking claims . . . should have been prosecuted with the elected group."

---

99 See *Doyle*, 293 F.3d at 1361. "[T]he rationale underlying *In re Orita* and the holding of that case extend only to claims that are identical to or of substantially similar scope to those of the non-elected group" and does not preclude broadening claims which read on non-elected subject matter. *Id.* (emphasis added).

100 See *Orita*, 550 F.2d 1277.

101 900 F.2d 230.

102 790 F.2d 1576.

103 *Doyle*, 293 F.3d at 1364.

104 See also *Watkinson*, 900 F.2d 230. *Watkinson* was the only Federal Circuit case to apply the *Orita* doctrine prior to *Doyle*.


106 See *Orita*, 550 F.2d 1277.

107 See *Watkinson*, 900 F.2d at 232.

108 *Id.*

109 *Doyle*, 293 F.3d at 1360.

110 See *MPEP*, supra note 5, § 809.4. For the retention of claims to non-elected inventions, the *MPEP* provides that "[i]f a linking claim is allowed, the examiner must thereafter examine species if the linking claim is generic thereto, or he or she must examine the claims to the non-elected inventions that are linked to the elected invention by such allowed linking claim." *Id.*

111 *Doyle*, 293 F.2d at 1360-62 (recognizing that if Doyle had declared the linking claim during the initial prosecution of his patent, "the examiner would have been required to lift the restriction requirement as to the other groups linked by the new claims and allow prosecution of those other groups").
Another aspect that distinguished Watkinson from Doyle was that while Doyle could have prosecuted his broader reissue claims in his original patent, Watkinson’s patent reissue attempt failed because she had already tried to make the exact claims in her original patent application. In Doyle’s first attempt to claim his discoveries, the claims covered too many aspects of the inventions. After the restriction, the claims did not cover enough of the invention. Thus, Doyle could have successfully claimed the middle ground in the original patent, and the board should have allowed the modified claims in the reissue declaration.

Doyle was entitled to a reissue “by reason of [Dr. Doyle] claiming . . . less than he had a right to claim in the patent” pursuant to Section 251 of the Patent Act. The court also found that the correctable error in Doyle was distinguishable from Orita, because the patent issued in Orita contained no errors at all, rather, the applicant had claimed exactly what he intended to claim.

The court also found that Doyle was distinguishable from Weiler because the Weiler concerned a bar against reissue claims that did not have a showing of “intent to claim” in the original application. Thus, Weiler’s new claims were a separate invention, while Doyle’s new claims read on the elected group. Consequently, the Orita doctrine is applicable only to claims “identical to or of substantially similar scope to those of the non-elected group.” Comparatively, Doyle’s linking claims were “significantly broader” than the species claims of the non-elected groups, and are “obviously not of substantially similar scope as the non-elected species claimed” although the subject matter is the same as the issued patent.

---

112 Id.
113 See Watkinson, 900 F.2d at 231.
114 Doyle, 293 F.3d at 1358.
115 Id.
116 Id.
117 The granting of a reissue pursuant to Section 251 depends on how the courts construe the statute. It is a long held understanding that the reissue statute is “remedial in nature, based on the fundamental principles of equity and fairness, and should be construed liberally.” In re Weiler, 790 F.2d 1576, 1579 (Fed. Cir. 1986).
118 See 35 U.S.C. § 251 (2000); Doyle, 293 F.3d at 1360 (“In re Orita does not – and cannot – limit his statutory right to seek reissue under the circumstances”).
119 Orita, 550 F.2d at 1280.
120 Id. (“Patentee claimed exactly what they had a right to claim in the patent, no more nor less, and the appellant’s failure to timely re-file does not change this fact”).
121 See Doyle, 293 F.3d at 1362; see also Weiler, 790 F.2d at 1580.
122 Weiler, 790 F.2d at 1581.
123 Doyle, 293 F.3d at 1363.
124 Id. at 1361.
125 Id.
126 The claims in the reissue declaration are broader, however, the claims may not be so broad as to introduce new matter since no new matter can be introduced in the reissue declaration. See 35 U.S.C. § 251 (2000).
3. Copendency Argument

The Federal Circuit had two reasons for rejecting the Board’s argument that permitting linking claims by reissues will offset the statutory provisions of the copendency requirements in sections 120 \(^\text{127}\) and 121 \(^\text{128}\) of the Patent Act and thus adversely affect “the public interest in the certainty and finality of patent rights.”\(^\text{129}\)

First, the court held that Doyle does not concern the two statutes because the matter sought on reissue was not subject to a restriction requirement and could have been presented with the original application.\(^\text{130}\) Second, the court found Doyle’s situation “no more an affront to the public interest than any other broadening reissue.”\(^\text{131}\)

4. Divisional Applications versus Broadening Reissues

The other public interest argument made by the PTO Solicitor, that Doyle had dedicated the subject matter of his linking claims to the public by failing to file a divisional application\(^\text{132}\) on the non-elected groups, also failed.\(^\text{133}\) The Federal Circuit justified the reissue as part of Doyle’s “right to exclude.”\(^\text{134}\) Moreover, the reissue statutes put the public on notice\(^\text{135}\) for any infringement from the time between the issue of the original patent and the granting of the reissue by way of statutory intervening rights.\(^\text{136}\)

\(^{127}\) 35 U.S.C. § 120 (2000) (requiring that an earlier filing date is granted when a continuation or divisional application is filed “before the patenting or abandonment of or termination of proceedings on the first application or on an application similarly entitled to the benefit of the [first] filing date . . .”).


\(^{129}\) Doyle, 293 F.3d at 1363.

\(^{130}\) Id.

\(^{131}\) Id. (“Congress has weighed the benefits and burdens of allowing corrections of this sort of error by reissue, and has decided to allow broadening reissues, subject, of course, to certain safeguards: the two year time limitation and intervening rights.”); see also J. Christopher Carraway, The Uncertain Future of Enforcing Patents That Have Been Broadened Through Reissue, 8 Fed. Cir. B.J. 63, 70-75 (1998) (discussing the conflict of broadening reissues with the public notice and encouraging design around claims).

\(^{132}\) While Doyle did not file a divisional application prior to his reissue application, he must file a terminal disclaimer to get the reissued patent. Doyle, 293 F.3d at 1358, n.4. Otherwise, a conflict of obviousness-type double patenting would be created in reissue claims that are not distinct from the original patent. In re Londaro, 119 F.3d 960, 965 (Fed. Cir. 1997).

\(^{133}\) See Doyle, 293 F.3d at 1364.

\(^{134}\) Id.

\(^{135}\) Id. The public is therefore on notice that at least some [subject] matter can be “dedicated to the public” in error and that the error, if caught in time, can be corrected by reissue. . . . [I]f the patentee succeeds in obtaining a reissue that alters the scope of her right to exclude, then the public interest is protected through intervening rights.

\(^{136}\) Id. Reissues have the benefit of the same filing date as the original patent. See 35 U.S.C. § 251, ¶ 2 (2000). Thus, members of the public who were not infringers at the time of the patent issue may suddenly find themselves to be infringers once the reissue is granted. See id. n.5 (quoting Seattle Box Co. v. Indus. Crating & Packing Inc., 756 F.2d 1574, 1579 (Fed. Cir. 1985), for the proposition that “when certain conditions are present a reissue shall not abridge or affect certain
Ultimately, the Federal Circuit reversed the ruling of the Board to reject the pending claims and remanded for further proceedings.\footnote{Orita, 293 F.3d at 1364.}

C. The Effect of the Allowing Linking Claims by Reissue

Rulings in \textit{Orita, Weiler, Watkinson}, and most recently, \textit{Doyle}, have clarified and perhaps even expanded the former regime of patent reissues. In \textit{Doyle}, the Federal Circuit distinguished a number of prior cases, and in doing so, appears to have expanded the application of broadening reissue. However, some questions yet remain unanswered: for example, if an omission of a linking claim during a patent’s prosecution history is an error correctable by reissue, does policy suggest that the two year limitation on broadening reissuences should also apply to attempts to link claims?\footnote{See 35 U.S.C. §§ 251-52 (2000) (providing for a two-year statute of limitation on filing reissue applications and on recovery under the doctrine of intervening rights).} Also, the \textit{Orita} doctrine was understood by both the reissue application examiner and the Board to mean that any failure to file a divisional claim was not an error correctable by reissue, are there any other situations that could potentially draw more reissue applications to the PTO now that failure to assert a linking claim has been distinguished from a simple failure to file a divisional application?

Patent drafters learned the important skill of wording claims.\footnote{See 1 PATENT APPLICATIONS HANDBOOK § 2-2 (2002). Claim structure consists of a preamble, transition statement and a body, and form a single sentence with a single period. \textit{Id.} The ideal claim is neither too broad, nor too narrow, and the invention is clearly and adequately described so that novelty and nonobviousness with respect to all prior art are present.} But ultimately, the patentee must retain a sizable stake in the claims for the purpose of retaining an exclusive right against the world.\footnote{See Kralovic, supra note 35, at 89-90 (suggesting that a tension is created between the patentee and the public in achieving the “economically advantageous” balance of the patent system’s objectives, namely to reward and encourage inventors, and to disclose new technologies in the useful arts to the public domain). Ironically, while the economic consequences of a granted patent is ultimately based on the ability to create a unique and distinguished market share for the invention, the build-up to that position in the form of a patent or reissue application is a much more dependent evaluation of prior art.} The question that the larger picture poses is whether the grant of reissue claims to the genus of non-elected claims is consistent with the procedures and goals of the patent system.
III. PROPOSAL

A. The Statutory Treatment of Linking Claims

The current U.S. Patent Act does not delineate the types or forms of error that are correctable by reissue, however, Doyle has clearly shown that a failure to assert a linking claim may be considered a section § 251 “error.” Authorities such as the Patent Office, which publishes the Manual of Patent Examination and Procedures, and even Congress, might consider revising the Patent Act to reflect the ongoing development of law surrounding the granting of reissues.

For example, while the court did not have to decide in Doyle whether linking claims correctable by reissue are likely subject to the two-year limitation on broadening reissues, the lack of any language to the contrary suggests that the same cut-off would apply. Since the court has interpreted the Patent Act to allow Doyle’s particular omission as “error” when the reissue claims read on to the non-elected claims, thus broadening the original claim, Congress should clarify if it is indeed their intent to place a time limit on the inclusion of the subject matter of non-elected claims.

As Doyle inferred, the policy of broadening reissue supports such a limitation in the interest of the patent's holder's right to claim no more and no less, than what was discovered. But the court made no finding that the interest of the patent holder is

---

141 While both the Patent Act under Title 35 of the United States Code and authoritative patent law guides such as the MPEP describe linking claims and its applications in claim drafting to some extent, not all countries with patent systems permit the use of linking claims. For example, in the Canadian patent system, linking claims are specifically discouraged and not authorized. See, e.g., The Canadian Patent Office Manual of Patent Office Practice, § 14.04.01, (1998), available at http://strategis.ic.gc.ca/sc_mrksw/cipo/patents/mopop/ch14_c.pdf (last visited February 3, 2003) (showing that linking claims are categorized under “Unacceptable Claim Groupings”). For example, where “Claim 1 to the combination of A, B and C; Claim 2 to the combination of E, F and G; Claim 3 to the combination of C, D and E; claim 3 . . . does not justify the inclusion of unrelated subcombinations in one application.” Id. Section 36(1) of the Canadian Patent Act (R.S., c. P-4) and Section 36 of the Canadian Patent Rules (P.C. 1996-1350 28 August, 1996) requires a restriction. Id.

142 The Federal Circuit mentions Congress twice in the Doyle opinion. The first reference is in an argument discussing the “benefits and burdens” on broadening reissues. Doyle, 293 F.2d at 1363. In the second reference, which was in response to the PTO Solicitor’s concern about the inadequacy of public notice if new linking claims were allowed by reissue, the court directs that if the statutory rights are “insufficient[,]” then “the remedy lies with Congress.” Id. at 1364.


144 Judge Learned Hand long ago expressed his opinion of the relation between reissue and public notice when he expressed that public notice is an important aspect of granting reissue. Otis Elevator Co. v. Atl. Elevator Co., 47 F.2d 545, 549-50 (2d Cir. 1931); see also Janicke, supra note 37, at 33.

145 A close reading of the court’s opinion in Doyle shows that while the court disagreed with the solicitor's argument that there is a lack of public notice for allowing linking claims that read on to non-elected claims, the court itself took no firm position on whether policy gives the court discretion to allow for greater consideration of public notice over that of the patent holder. 293 F.3d at 1364. Rather, the court silently points to the current statutory controls such as the statute of limitation. Id.

146 See 35 U.S.C. § 251 (2000) (allowing a reissue to be granted if the reason underlying the reissue is that the patentee claimed “more or less than he had a right to claim in the patent”).
greater than the interest of public notice.\textsuperscript{147} Statistically, reissue patent grants are increasing as the total number of patent grants increases, but there is no indication that there is a flux of reissue applicants flooding the system.\textsuperscript{148} There is ample room to expand reissue procedures. Consequently, it is likely that Congress will agree that a reissue should be granted to correct the error of failing to make a linking claim. If Congress' position is that public notice is not adequately protected by allowing this type of error to be corrected, a clarification now would ensure that little or no litigation would reach finality based on the court's current presumption of congressional intentions.

Furthermore, the PTO and Congress may look to the current reissue applications in the system and determine if there any other situations similar to a failure to assert a linking claim that may be categorically distinguished from the non-correctable failure to file a divisional application. However, a list delineating specific correctable errors by reissue is highly unlikely since error is liberally construed.\textsuperscript{149}

**B. Policy Arguments for the Promotion of Strategic Safeguards for the Patent Holder: Divisional Applications and Reissues**

In the early years of the patent system, there were severe consequences when a patentee surrendered a patent for a reissue.\textsuperscript{150} A patent holder today, however, has a large supporting framework to relinquish a patent.\textsuperscript{151} A goal of the patent system is

\textit{Doyle}, 293 F.3d at 1361 (holding that Doyle correctly identified an error in his existing patent as the "failure to claim as broadly as possible matter that could have been sought in the original application"). Thus, in the original patent, Doyle satisfies Section 251 by claiming less than he had a right to claim.

\textit{Doyle}, 293 F.3d at 1363 (the court clarified its position and effectively refused to act as a superlegislature by emphasizing that "[the court] may not rewrite the statute based on our own view of the proper outcome of that public policy debate"). Judge Clevenger's opinion of \textit{Doyle} is a detailed and careful analysis to distinguish earlier cases. There is no doubt that the Federal Circuit desired greater definiteness in the application of the \textit{Orita} doctrine, where in severe cases, the cost of a denial of a reissue could mean losing parts of an invention to the public domain.


\textsuperscript{149} Prior to 1928, a reissued patent, once granted, would "abate[] all causes of action and all suits based on the original patent." \textit{CHISUM}, supra note 3, § 15.05[1]. Thus, the patent holder who discovers a mistake must take a gamble: should a mistake in the original patent be quickly amended before an infringer can spot the loophole in the patent and design around it, or should the patent holder speedily conclude or terminate all suits before the reissue is granted?

\textsuperscript{151} Fortunately, by the late 1920s, Congress expressed its intention "to ameliorate the harsh effect of a patent's surrender" and adopted the rule that pending action and causes of action can
to allow the patent holder a patent that truly reflects the invention claimed even if it requires multiple reissue grants.\textsuperscript{152} The grant of reissue claims to the genus of non-elected claims is consistent with the ideals of the patent system\textsuperscript{153} and technology as it stands today.\textsuperscript{154}

Compared with the tools available in the early 1800s when the patent system was first forming, today’s science and technology requires significantly less research and development time to gather accurate and complex data about chemical structures and precision calculations.\textsuperscript{155} Meanwhile, both Congress and the courts are taking proper steps to ensure that the rights of the patent holder continue to expand to reflect the changing times. The language, terms, and scientific categories to which claims are drafted today, especially in the field of biotechnology, allows the patent drafter specificity in claiming an invention. However, a basic tenant of scientific classification is that some categories overlap or are subsets within a set. This lack of a bright line classification system may be a weakness when applied to determining the scope of a patent. When patent applicants draft claims using these categorical schemes,\textsuperscript{156} the patent system also becomes susceptible to the same weakness of categorization.

In allowing corrections to be made so that broader, linking claim may be inserted, the court in Doyle essentially recognized that this weakness in scientific categorization occasionally leads to confusion and mistakes in legal drafting. Essentially, the patent holder was a scientist who looked at the smaller picture first, before realizing that a large picture might have been claimed.\textsuperscript{157}

\section{C. Is There Already A Sufficient Remedy Available to Patent Holders?}

A potential counterargument to the Doyle decision is that the availability of a divisional application already provides a sufficient remedy for the patent holder who stand “to the extent that the claims of the original and reissued patents are identical.” Howes v. Medical Components, Inc., 814 F.2d 638, 645 (Fed. Cir. 1987).

\textsuperscript{152} This comports with a basic premise behind the reissue procedure: even when the reissue applicant chooses to reject or abandon the applicant, the original patent always “remains in full force.” 35 U.S.C. § 252, ¶ 1 (2000).

\textsuperscript{153} A reissue patent is a powerful process in that the reissue claims may be enforced against infringers in a number of litigations throughout the lifetime of the patent. Allan G. Altera, Expanding the Reissue Procedure: A Better Way to do Business, 1 J. INTELL. PROP. L. 185, 205-06 (1993) (discussing the advantages of the reissue procedures and how the reissue framework can be ameliorated and expanded so that the archaic doctrine of equivalents may be abolished).

\textsuperscript{154} The Doyle decision suggests the Federal Circuit believes that allow linking claims to broaden the scope of the patent is a reasonable type of correctable error under the traditional liberal interpretation of the reissue statutes.

\textsuperscript{155} Of course, one could argue that while the tools have improved, the problems have gotten tougher as well.

\textsuperscript{156} Even “genus” and “species,” terms of art in patent law, are borrowed from terms of art from scientific classification methods.

\textsuperscript{157} A good analogy is a discovery made under the microscope in which a scientist places a fly under a microscope and maneuvers the coarse focus knob up and down while looking at the specimen. The scientist may describe every part of every inch of the fly, but fail to state that it is a fly even though that was the obvious discovery. This form of mistake, under the Doyle ruling, is considered an inadvertent mistake correctable by reissue.
encounters a restriction requirement; thus, allowing a reissue for a failure to link claims is unnecessarily burdensome to the patent system. This argument fails, however, because it focuses on the patent system as a whole. As the Doyle court explained, the focus should be on the claims of the original patent to determine if the reissue claims could have been granted in the original.

The rights of the patentee should not be considered in terms of a tradeoff against the public's benefit in getting the best mode and description of the invention in the specification. The patent system is a balance of promises: the promise to the public that scientific advances will be revealed in detail and the promise to the patent holder that what is discovered can be protected. Thus, it is proper to permit a patentee to claim what was discovered even if it requires a second, third, or nth draft and, therefore, takes more time than a divisional application would allow. The right to a reissue is fundamental to the operation and goals of the patent system, and it is justified that the reissue procedure should allow multiple methods to make corrections that achieve this end.

III. CONCLUSION

The goal of the patent system is to provide a patent holder the right to excluded others from making, using, and selling the patented invention in the United States. The reissue process and procedure recognizes the sometimes fallible and difficult nature of patent drafting and patent issuance and strives to strike a balance between the patentee's and the public interests in correcting oversights and mistakes. The criteria upon which the PTO examiners and Board base their rejection of reissue applications are effectively narrowed by the decision of Doyle. Reissue claims to the genus of non-elected claims are permissible, and the Orita doctrine cannot be used to preclude the reissue claims for this type of failure to link claims.

The impact of the Doyle holding is not likely to be all that large. However, because Doyle broadens the rights of patent holders, the holders of currently valid patents issued in the past two years are well advised to revisit their files of prosecution history and take a second look at their non-elected claims and consider applying for a reissue.

---

158 One could say this type of argument is better made to the legislature. See Doyle, 293 F.3d at 1363-64.
159 Id. at 1360.
160 In 2002, there was only one reported "improper broadening" case in the United States court system and the alleged infringer prevailed. "Patstat.org." University of Houston Law Center, Institute for Intellectual Property & Information Law, available at http://www.patstats.org. (last visited February 01, 2003). In 2001, there were five cases of "improper broadening" that went to trial: two cases were at the trial court level and ended at summary judgment; one reached final judgment at the trial court; and two cases went to the appellate level and were affirmed. Id. In 2000, there were no "improper broadening" cases. Id.