CERTIFICATES OF CORRECTION CORRECTED: THEIR HISTORY AND RETROACTIVE APPLICATION

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This Note is the first scholarship to fully investigate the history and evolution of certificates of correction, which are issued to correct errors in patents. The U.S. Patent and Trademark Office has a long history of issuing such certificates, stretching all the way back to the nineteenth century, but no one has yet researched how the statute authorizing certificates of correction came to be what it is today. This Note explains how certificates of correction historically were essentially the more efficient equivalent of a reissued patent. This historical analysis, I argue, can be helpful in interpreting the current statute.

I then use the history of certificates of correction as a springboard to discuss how such certificates are treated today, particularly with respect to their retroactive application. Currently, the leading case on the issue—Southwest Software, Inc. v. Harlequin Inc.—denies that certificates of correction have any retroactive effect, a decision based almost solely on the plain text of the statute (as the Federal Circuit claimed there was a lack of legislative history). This Note provides the first analysis of the harmful effects such a policy can have and then suggests several different approaches courts can take to avoid those effects. Primarily, Southwest Software should be reconsidered in light of the statute's long history identified herein. Instead of refusing to allow certificates to have any retroactive effect, courts should apply the same retroactivity standard they do to reissued patents and reexamination certificates.

Even if Southwest Software is not reconsidered, though, this Note suggests alternative approaches, such as refusing to extend the case to certain factual circumstances I describe that can make nonretroactivity particularly harmful, or using the doctrine of judicial correction to fix the patent retroactively. The latter approach has been adopted in some cases but questioned in others, and this Note argues that it should be given broader application in this context. Finally, as a last resort this Note urges Congress to amend the certificate of correction statute to parallel the language found in the reissued patent statute to allow retroactive application in at least some circumstances.

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INTRODUCTION

Over the last ten years, the U.S. Patent and Trademark Office (PTO) has issued an average of 230,540 patents per year.¹ On top of that, the PTO has also issued an average of 659 reissued patents and 595 reexamination certificates each year.² And these numbers have only been increasing.³ As with any bu-

^{1.} See U.S. Patent Statistics, Calendar Years 1963-2014, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/web/offices/ac/ido/oeip/taf/us_stat.pdf (last visited Mar. 30, 2015).

^{2.} See id. Compare Ex Parte Reexamination Filing Data—September 30, 2013, U.S. PAT. & TRADEMARK OFF. (Nov. 22, 2013), http://www.uspto.gov/patents/stats/ex_parte _historical_stats_roll_up_EOY2013.pdf (stating that the PTO had issued 9991 ex parte reex-amination certificates since 1981 as of September 30, 2013), and Inter Parte Reexamination Filing Data—September 30, 2013, U.S. PAT. & TRADEMARK OFF. (Nov. 22, 2013), http:// www.uspto.gov/patents/stats/inter_parte_historical_stats_roll_up_EOY2013.pdf (stating that the PTO had issued 696 inter partes reexamination certificates since 1981 as of September 30, 2013), with Ex Parte Reexamination Filing Date—December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigationcenter.com/wp-content/uploads/2010/02/2003-12-31 -Ex-Parte.pdf (last visited Mar. 30, 2015) (stating that the PTO had issued 4887 ex parte reexamination certificates since 1981 as of December 31, 2003), and Inter Partes Reexamination Filing Data—December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -Ex-Parte.pdf (last visited Mar. 30, 2015) (stating that the PTO had issued 4887 ex parte reexamination certificates since 1981 as of December 31, 2003), and Inter Partes Reexamination Filing Data—December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -December 31, 2003, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -December 31, 30, 30, U.S. PAT. & TRADEMARK OFF., http://ptolitigation center.com/wp-content/uploads/2010/02/2003-12-31 -December 30, 2013, U.S. PAT. & TRADEMARK OFF., htt

reaucracy, especially one charged with printing such large numbers of publications each year, mistakes happen—a word misspelled or misplaced, a figure left out, an old version published rather than the new, or sometimes even an entire claim or limitation missing from the patent. Luckily, Congress has provided for just such occasions. Section 254 of Title 35 of the U.S. Code allows the PTO to issue "certificates of correction" when, through the fault of the PTO, a mistake appears in a published patent.⁴ In total, the PTO issued 25,088 certificates of correction in fiscal year 2014.⁵

A problem arises, however, when the patentee seeks to assert her corrected patent in a court of law. From which date can the patentee make an infringement claim? The date the original patent issued? The date the reissued patent or reexamination certificate issued, if applicable? The date the PTO became aware of the error? Or should courts use some other metric entirely?

The retroactivity problem with respect to certificates of correction is particularly acute in cases in which the error first appears in a reissued patent or reexamination certificate. Normally, a patentee is allowed to sue for infringement predating the issuance of a reissued patent or reexamination certificate as long as the new and old claims are substantially the same.⁶ But the Federal Circuit held in *Southwest Software, Inc. v. Harlequin Inc.* that a certificate of correction is a bright line, barring all claims for infringement predating its issuance.⁷ In that case, an appendix had been accidentally omitted from the official patent but later was added back in through a certificate of correction. The Federal Circuit, however, held that the appendix could not be considered in determining the patent's validity in a suit for damages predating the issuance of the certificate.⁸ If the same rule applies to certificates correcting reissued patents or reexamination certificates, it could wipe out *years* of infringement through no fault of the patentee.

- 7. 226 F.3d 1280, 1294 (Fed. Cir. 2000).
- 8. Id. at 1283, 1291.

^{2015) (}stating that the PTO had issued only 1 inter partes reexamination certificate since 1981 as of December 31, 2003).

^{3.} See U.S. Patent Statistics, Calendar Years 1963-2013, supra note 1; see also Michael D. Frakes & Melissa F. Wasserman, Does the U.S. Patent and Trademark Office Grant Too Many Bad Patents?: Evidence from a Quasi-Experiment, 67 STAN. L. REV. 613, 622 (2015) (describing the "[I]ong-term trends in the number of patents issued").

^{4. 35} U.S.C. § 254 (2013). A separate provision allows the PTO to issue certificates of correction when a patentee, rather than the PTO itself, is responsible for an error. 35 U.S.C. § 255. Section 255 is similar to § 254 in many ways, but because there are differences in the statutory wording, legislative history, requirements, and equities, I confine my analysis in this Note to § 254. Nevertheless, many of the same arguments may apply to § 255.

Additionally, the PTO may issue a certificate of correction to correct the list of inventors. 35 U.S.C. § 256. This particular provision differs substantially from §§ 254 and 255 and has already been held to apply retroactively, *see* Roche Palo Alto LLC v. Ranbaxy Labs. Ltd., 551 F. Supp. 2d 349, 358-59 (D.N.J. 2008), so this Note does not address § 256.

^{5.} U.S. PATENT & TRADEMARK OFFICE, FISCAL YEAR 2014 PERFORMANCE & ACCOUNTABILITY REPORT 166 tbl.25 (2014).

^{6.} See infra notes 132-35 and accompanying text.

Despite the importance of these issues, there is a dearth of legal research on the topic. In fact, this Note provides the first in-depth examination of the history of certificates of correction and finds extensive legislative history that has thus far been ignored by the courts. Using this research as a springboard, this Note then argues that *Southwest Software* should be reconsidered, or at the very least not extended to certificates of correction as applied to reissued patents or reexamination certificates.⁹ Instead, courts should apply the same standard that applies to reissued or reexamined patents: certificates of correction should have retroactive application so long as the corrected patent is "substantially the same" as the uncorrected patent. Alternatively, this Note proposes that courts embrace judicial correction of errors in patents (and the attendant retroactivity) in an attempt to lessen the harshness of a bright-line rule prohibiting any retroactive effect.

Part I traces the long history of certificates of correction, providing the first scholarly analysis of where today's § 254 began. Part II reviews how courts so far have approached certificates of correction, specifically in the context of retroactivity. Part III explains why the current approach is problematic even now and how it could be even more problematic in the case of certificates of correction issued to correct a reissued patent or reexamination certificate. Part IV proposes a multipart solution: Subpart A argues that, in light of the newly analyzed history of certificates of correction, courts should allow such certificates to function retroactively, particularly in the context of reissued patents or reexamination certificates, while using the intervening rights doctrine as a safeguard. But even if a court were to bar all certificates of correction from operating retroactively, Subpart B argues that courts should embrace judicial correction of errors in patents, thereby providing another avenue by which patentees can recover for preissuance infringement. Finally, and as a last resort if courts are unwilling to act, Subpart C urges Congress to amend § 254 to include the language that the reissue and reexamination statutes have that allows reissued patents and reexamination certificates to have retroactive effect in appropriate cases.

Whatever the approach, the problem is clear: patentees are forfeiting years of infringement claims through no fault of their own, and the threat of such forfeiture can impact other behaviors, such as decreasing a patentee's willingness to draw errors to the PTO's attention for correction or encouraging patentees to pursue more costly alternatives to certificates of correction, such as complete reissues. Armed with a new and fuller understanding of the history of certifi-

^{9.} A reissued patent may be issued if, after the original patent is issued, it is, "through error, deemed wholly or partly inoperative or invalid, by reason of 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." 35 U.S.C. § 251.

Reexamination certificates are issued when the PTO cancels, confirms, amends, or adds claims after an issued patent has gone through reexamination proceedings, in which the PTO reassesses the patent's validity. *Id.* § 307.

cates of correction, courts should take this opportunity to allow patentees to claim what is rightfully theirs.

I. CERTIFICATES OF CORRECTION

A. History

Mistakes in issued patents have been a problem from the Patent Office's inception.¹⁰ At least as early as 1892, the Patent Office made it a habit to issue certificates of correction when an error in a patent was identified.¹¹ In doing so, however, the Office was acting without authorization. As a result, in *Edison Electric Light Co. v. U.S. Electric Lighting Co.*, the Second Circuit held that a certificate of correction was entirely irrelevant because "the statute providing for no subsequent alteration [of a regularly issued patent] by the patent office, ... the action of the commissioner in indorsing [the patent] with an attempted 'correction' was without jurisdiction, and wholly void."¹² The court concluded that a mistake in an issued patent could only be corrected through reissuance.¹³

Nevertheless, the Patent Office continued making corrections to issued patents. At a 1912 House committee hearing on a bill to authorize the issuance of certificates of correction, the Commissioner of Patents testified on the need for such a bill. He explained that the Office had made a practice, for at least the previous thirty or forty years, of correcting errors in patents by issuing certificates of correction.¹⁴ As the Commissioner testified, "[f]requently we find wrong words used by the inventor, and also errors made by the office and by the Public Printer. . . . All of which we issue certificates of correction for."¹⁵ The Assistant Commissioner further testified that, at the time, the Office was finding errors in about 10 patents (out of around 700 printed) each week.¹⁶ The congressmen attending the hearing questioned the need for a statute authorizing such corrections if the Office was already making them, to which the witnesses

^{10.} The PTO was known as the Patent Office from 1836 to 1975. *Records of the Patent and Trademark Office*, NAT'L ARCHIVES, http://www.archives.gov/research/guide-fed -records/groups/241.html (last visited Mar. 30, 2015).

^{11.} See, e.g., Edison Elec. Light Co. v. U.S. Elec. Lighting Co., 52 F. 300, 312 (2d Cir. 1892) (discussing the invalidity of a certificate of correction).

^{12.} *Id*.

^{13.} *Id*.

^{14.} Patent Office Certificates of Correction: Hearings on H.R. 7710 Before the H. Comm. on Patents, 62d Cong. 54-55 (1912) [hereinafter Hearings] (statement of Hon. Edward B. Moore, Comm'r of Patents).

^{15.} Id. at 54.

^{16.} Id. (statement of Frederic A. Tennant, Assistant Comm'r of Patents).

expressed a concern that a court would find such corrections invalid, citing the *Edison Electric* case as evidence.¹⁷

The Patent Office did admit that its power to correct patents was somewhat limited, though. The Assistant Commissioner, for example, testified that the PTO

correct[s] errors which occur in patents merely in the phraseology of the specifications and some, excepting material errors, in the claims. We very seldom correct an error in a claim for the reason that is the effective part of the patent and not subject to correction after the patent has once been granted. ¹⁸

The Office acknowledged that errors in the claims were just as likely to happen as errors elsewhere, and that "[i]t sometimes happens . . . that the printers will pull the type or mix up words of the claim so it is utterly unintelligible, or so the claim would have a different meaning."¹⁹ In those circumstances, the Office insisted the patentee's "way of correction is by way of a reissue."²⁰

It was clear throughout the hearing that the Patent Office's main goal was to minimize the costs of errors. The witnesses again and again emphasized the enormous burden placed on the Office of having to identify all errors or reprint entire patents, some of which could span hundreds of pages.²¹ And while some congressmen seemed to think the problem of errors could be solved by adding additional proofreaders or requiring a patentee to give a final sign-off on the patent, the witnesses were insistent that such alternatives were too costly and time-consuming.²²

22. See, e.g., *id.* at 52 (statement of George W. Whittlesey, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington) ("I think it would involve an enormous expense [to send proofs from the printer back to the PTO before final issuance of the patent], because it would involve the appointment of several additional proof readers at the Patent Office."); *id.* at 53 (statement of Hon. Edward B. Moore, Comm'r of Patents) (explaining that "frequently....[the Patent Office] can not communicate with the holder of the patent," and that "to have these proofs sent to the inventor in a large case.... would mean a long delay, and [the Office] ha[s] such an enormous volume of business that we can not handle it"); *id.* at 58 (statements of Frederic A. Tennant, Assistant Comm'r of Patents, and Rep. William A. Oldfield, Chairman, H. Comm. on Patents) (explaining that publishing correc-

^{17.} *Id.* at 55 (statement of W.W. Dodge, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington). When asked why there were not more court decisions addressing the validity of certificates of correction, the Commissioner speculated that he did "not think it is generally known we have not the authority." *Id.* (statement of Hon. Edward B. Moore, Comm'r of Patents).

^{18.} Id. at 57 (statement of Frederic A. Tennant, Assistant Comm'r of Patents).

^{19.} Id.

^{20.} Id.

^{21.} See, e.g., *id.* at 52 (statement of George W. Whittlesey, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington) ("[I]t takes a very expert person to go through those papers and determine what is actually the proper wording."); *id.* at 54 (statement of Hon. Edward B. Moore, Comm'r of Patents) ("[Permitting issuance of certificates of correction] enables us to get rid of a vast amount of work without employing an additional force. I think to handle that great mass of cases in a year, it would take at least 30 or 40 clerks additional."); *id.* at 59 (statement of Walter F. Rogers, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington) ("It costs a great deal sometimes to correct [an error]; it may cost a great deal of money to get it corrected.").

Despite these efficiency concerns, even in 1912, some congressmen and witnesses had concerns about giving notice to the public about a change in the patent. The hearing's attendees recognized that even a minor typographical error can "change[] the entire scope and meaning of that patent—absolutely and utterly."²³ To ameliorate these concerns, W.W. Dodge, a witness representing the Patent Law Association of Washington, suggested "that before any correction is made a public notice be given in the Gazette or some other paper that would reach the parties generally in interest, notifying them they are going to correct the patent in such and such a way."²⁴ The attendees even contemplated what legal effect should attach to such a correction. Specifically, it was asked what the legal effect would be if "a garbled patent" was issued and a corrected patent issued in its place.²⁵ All seemed to agree that "so far as the actual legal rights are concerned it would not affect the patent."²⁶ Publishing notice of the correction, it seemed, would be adequate to make the correction valid.²⁷

Despite the apparent widespread agreement that some correction process was necessary, Congress did not act immediately. It was not until 1925 that Congress gave the Patent Office statutory authorization to issue certificates of correction.²⁸ Though the statute has been amended over the last ninety years, the first version was similar to the sections currently in force today. In particular, the relevant part of the 1925 statute read:

[W]henever a mistake in a patent or trade-mark registration, incurred through the fault of the Patent Office, is clearly disclosed by the records or files of the office, a certificate, stating the fact and nature of such mistake, signed by the Commissioner of Patents and sealed with the seal of the Patent Office, may be issued, without charge, and recorded in the records of patents or trade-marks, and a printed copy thereof attached to each printed copy of the patent or trademark registration, and such certificate shall thereafter be considered as part of the original, and every patent or trade-mark registration, together with such

23. *Id.* at 56 (statement of W.W. Dodge, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington).

25. Id. at 59 (statement of Rep. Irvine L. Lenroot, Member, H. Comm. on Patents).

26. *Id.* (statements of Rep. Irvine L. Lenroot, Member, H. Comm. on Patents, and Walter F. Rogers, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington).

27. See *id.* at 56-57 (statement of W.W. Dodge, Member, Patent Laws and Rules Comm. of the Patent Law Association of Washington) (proposing an amendment to the bill that would "provid[e] that before any correction is made a public notice be given in the Gazette or some other paper that would reach the parties generally in interest, notifying them they are going to correct the patent in such and such a way"); *id.* at 60 (statement of Rep. Martin A. Morrison, Member, H. Comm. on Patents) (noting that the purpose of publication would be to give the certificate validity).

28. Act of Mar. 4, 1925, Pub. L. No. 68-610, § 1, 43 Stat. 1268, 1268-69 (codified as amended at 35 U.S.C. § 254 (2013)).

tions in the Official Gazette "would take the additional time for the publication—probably not less than 30 days," and rejecting the idea because the Committee Chairman did "not want to get anything in this statute that will string out this business and postpone and delay it any more than under the present law").

^{24.} Id. at 56-57.

certificate, shall have the same effect and operation in law on the trial of all actions for causes thereafter arising as if the same had been originally issued in such corrected form.²⁹

The statute was finally enacted with very little fanfare—so little fanfare, in fact, that one congressman suggested that it was "of such minor importance that it should be taken up now and passed" rather than spending time considering it.³⁰ The bill consisted of only two and a half pages, and when asked to make a brief statement about it, Representative Lanham explained that its purpose was "to save time and money and also promote efficiency in the operation of the Patent Office."³¹ He further justified the bill by pointing out that "[t]here has been a custom prevailing in the Patent Office for 30 years ... to append a certificate of correction to the patent to show that the error was a typographical error," thereby "obviat[ing] the necessity of reprinting the entire patent."³² Hearing concerns that the bill would require additional employees or expense, Representative Lanham explained that the bill "saves expense. It saves the reprinting of patents and allows the offering of these amended patents, with these certificates in them, in evidence rather than requiring a reprint of the entire patent."³³ The Speaker of the House then asked for objections and heard none, at which point the Clerk reported the bill. After being engrossed and read a third time per procedure, the bill passed.³⁴ Such was the extent of the debate and passage of the original certificate of correction statute.

The statute has gone through several revisions throughout the years. In particular, in 1946, the authority to issue certificates of correction for errors in trademark registrations was separated out into its own statute.³⁵ The move was made as part of a broader attempt to collect all of the trademark statutes in one place, rather than having them scattered throughout the U.S. Code.³⁶ Most notably for our purposes, the new trademark correction statute omitted, as it still does today, the phrase "for causes thereafter arising," though the statute does state that the trademark correction will "thereafter have the same effect."³⁷ Un-

^{29.} Id.

^{30. 65} CONG. REC. 6842 (1924) (statement of Rep. Blanton).

^{31.} Id. (statement of Rep. Lanham).

^{32.} Id. at 6843.

^{33.} Id.

^{34.} Id.

^{35.} Lanham Act, Pub. L. No. 79-489, § 7(f), 60 Stat. 427, 430-31 (1946) (codified as amended at 15 U.S.C. § 1057(g) (2013)).

^{36.} S. REP. No. 79-1333, at 4 (1946) ("There are many statutes dealing with trademarks which are widely scattered and difficult to access. There are provisions dealing with trade-marks in tariff acts and other unlikely places. It seems desirable to collect these various statutes and have them in a single enactment.").

^{37.} Compare 15 U.S.C. § 1057(g) ("Whenever a material mistake in a registration, incurred through the fault of the United States Patent and Trademark Office, is clearly disclosed by the records of the Office a certificate stating the fact and nature of such mistake shall be issued without charge and recorded and a printed copy thereof shall be attached to each printed copy of the registration and such corrected registration shall *thereafter have the same effect* as if the same had been originally issued in such corrected form, or in the discre-

fortunately, the legislative history does not reveal the reason for the difference in wording between the trademark and patent correction statutes.

In 1952, the certificate of correction provision itself was recodified with some slight wording and grammatical changes. The largest change was an addition at the end of the statute stating that the "Commissioner may issue a corrected patent without charge in lieu of and with like effect as a certificate of correction,"³⁸ which was done in an attempt to make the patent certificate of correction statute more consistent with the trademark correction statute.³⁹ To-day, § 254 reads:

Whenever a mistake in a patent, incurred through the fault of the Patent and Trademark Office, is clearly disclosed by the records of the Office, the Director may issue a certificate of correction stating the fact and nature of such mistake, under seal, without charge, to be recorded in the records of patents. A printed copy thereof shall be attached to each printed copy of the patent, and such certificate shall be considered as part of the original patent. Every such patent, together with such certificate, shall have the same effect and operation in law on the trial of actions for causes thereafter arising as if the same had been originally issued in such corrected form. The Director may issue a corrected patent without charge in lieu of and with like effect as a certificate of correction.⁴⁰

B. Certificates of Correction Today

Today, the PTO has an established process for issuing certificates of correction, as set out in 37 C.F.R. § 1.322. Specifically, the regulation explains that a certificate of correction can be issued at the patentee's request, by the PTO acting *sua sponte*, or on the basis of information supplied by a third par-

38. Patent Act of 1952, Pub. L. No. 82-593, § 254, 66 Stat. 792, 809 (codified as amended at 35 U.S.C. § 254).

tion of the Director a new certificate of registration may be issued without charge. All certificates of correction heretofore issued in accordance with the rules of the United States Patent and Trademark Office and the registrations to which they are attached shall have the same force and effect as if such certificates and their issue had been specifically authorized by statute." (emphasis added)), *with* 35 U.S.C. § 254 (2013) ("Whenever a mistake in a patent, incurred through the fault of the Patent and Trademark Office, is clearly disclosed by the records of the Office, the Director may issue a certificate of correction stating the fact and nature of such mistake, under seal, without charge, to be recorded in the records of patents. A printed copy thereof shall be attached to each printed copy of the patent, together with such certificate, shall have the same effect and operation in law on the trial of actions *for causes thereafter arising* as if the same had been originally issued in such corrected form. The Director may issue a correction." (emphasis added)).

^{39.} The 1952 act also added § 255, which allows for the correction of "clerical or typographical" errors, or those "of minor character," that were made in good faith by the patentee. *Id.* § 255, 66 Stat. at 809-10 (codified as amended at 35 U.S.C. § 255). This addition was also made to be more consistent with the trademark correction law. *See* S. REP. No. 82-1979, at 27 (1952).

^{40. 35} U.S.C. § 254.

ty.⁴¹ In any event, the patentee will be notified of any proposed correction and will have the opportunity to be heard on the issue before a certificate issues.⁴²

The Manual of Patent Examining Procedure (MPEP), essentially a patent examiner's handbook, elaborates that the PTO has discretion to decline to issue a certificate of correction, even when a mistake exists. The PTO may decline to issue a certificate where, for example, the intended meaning is obvious from context, the error is "of a minor typographical nature," or the error should be "readily apparent to one skilled in the art."⁴³ In such cases, the patentee or the PTO may instead choose to insert the relevant correspondence into the patent file, "serv[ing] to call attention to the matter in case any question as to it subsequently arises."⁴⁴

Today, it appears that both the PTO and patentees have taken full advantage of certificates of correction. Over the past year, the PTO has issued an average of 463 certificates of correction each week,⁴⁵ a large increase from the 10 per week noted by the Assistant Commissioner in 1912. In fiscal year 2013, over half of those certificates were issued under § 254 due to the PTO being at fault for the error.⁴⁶

45. This average was calculated using the list of certificates of correction issued published in the *Official Gazette* of the PTO from September 24, 2013, to September 23, 2014.

46. It is difficult to determine exactly how many certificates were issued under the authority of each of §§ 254-256 because certificates as issued and appended to patents provide no indication of the statutory authority under which the PTO was acting at the time. Indeed, courts have sometimes found it "unclear from the record" under which section the PTO was acting. *See* Roche Palo Alto LLC v. Ranbaxy Labs. Ltd., 551 F. Supp. 2d 349, 355 (D.N.J. 2008). Nevertheless, it is possible to reverse engineer the number of each type of certificate by looking at the fees collected by the PTO. A § 254 correction is free of charge, but a § 255 correction costs \$100 and a § 256 correction costs \$130. Using those data, one can derive that of the 24,738 certificates issued in the 2013 fiscal year, U.S. PATENT & TRADEMARK OFFICE, *supra* note 5, at 166 tbl.25, 13,541 were issued under the authority of § 254. The PTO collected \$1,086,600 in § 255 fees and \$43,030 in § 256 fees, meaning the Office issued 10,866 § 255 corrections and 331 § 256 corrections. *See* U.S. PATENT & TRADEMARK OFFICE, FISCAL YEAR 2015 PRESIDENT'S BUDGET: THE USPTO CONGRESSIONAL BUDGET JUSTIFICATION app. 6 at 181-82 (2014).

Unfortunately, this same analysis cannot be done accurately for years prior to fiscal year 2013 because the PTO only recently began charging fees for § 256 corrections. None-theless, the number of § 255 corrections issued in recent years (as derived through the process described above) has remained relatively constant. *See* U.S. PATENT & TRADEMARK OFFICE, FISCAL YEAR 2014 PRESIDENT'S BUDGET app. 3 at 166 (2013) (showing collections of \$1,087,300 in § 255 fees, and therefore 10,873 § 255 corrections, in fiscal year 2012); U.S. PATENT & TRADEMARK OFFICE, FISCAL YEAR 2013 PRESIDENT'S BUDGET app. 2 at 147 (2012) (showing collections of \$975,000 in § 255 fees, and therefore 9750 § 255 corrections, in fiscal year 2011). It is therefore reasonable to assume that the number of § 256 corrections has also remained relatively stable, leading to the conclusion that § 254 corrections likely predominate in most years.

^{41. 37} C.F.R. § 1.322(a)(1) (2014). Information on the proportion of corrections initiated through each process are not available.

^{42.} *Id.* § 1.322(a)(4).

^{43.} MPEP § 1480 (9th ed. Mar. 2014).

^{44.} *Id*.

The types of errors corrected come in a wide variety. Errors occur in all parts of the patent—the specification, the drawings, the claims, the name of the assignee, and beyond.⁴⁷ Some corrections are extremely minor, merely inserting punctuation or correcting an obvious typographical error.⁴⁸ Others are somewhat more significant, such as changing "assuming" to "assigning"⁴⁹—a change that could be particularly important in the patent context, in which a single word can be critical in determining invalidity or infringement. But even then, sometimes changing an entire word might not be too significant if, for example, it is fairly obvious that the printed word is incorrect and the correct word is apparent.⁵⁰ Finally, some corrections are obviously major—for example, corrections that add a new claim to or replace a mistaken claim in the published patent.⁵¹

With certificates of correction being so prevalent in patent practice, how the issuance of such a certificate affects litigation regarding the patent is of paramount importance.

II. THE FEDERAL CIRCUIT'S CURRENT APPROACH TO CERTIFICATES OF CORRECTION

Southwest Software, Inc. v. Harlequin Inc. presented the first opportunity for the Federal Circuit to address the retroactive applicability of certificates of correction.⁵² In that case, the relevant patent issued in December 1992.⁵³ In January 1995, Southwest Software, the owner of the patent, sued Harlequin and ECRM Trust for infringement of its patent on a method and apparatus used by the printing industry for improving the quality of printed images.⁵⁴ During the

^{47.} See, e.g., U.S. Patent No. 8,847,714 (filed Oct. 10, 2013) (correcting a misspelling of the assignee's name); U.S. Patent No. 8,845,246 (filed Jan. 19, 2011) (correcting a misspelling of the prosecuting law firm's name); U.S. Patent No. 7,075,910 (filed Oct. 12, 2001) (correcting errors in the drawings and specification); U.S. Patent No. 6,359,981 (filed Oct. 14, 1997) (correcting an error in the "Related U.S. Application Data" and "Cross Reference to Related Documents" sections (capitalization altered)).

^{48.} See, e.g., U.S. Patent No. 8,848,668 (filed June 28, 2012) (changing "an UMTS" to "a UMTS"); U.S. Patent No. 6,999,434 (filed Nov. 28, 2000) (changing, inter alia, "encapulated" to "encapsulated"; "comprising" to "comprising:"; and "steps of" to "steps of:").

^{49.} See, e.g., U.S. Patent No. 7,031,278 (filed Oct. 12, 2001).

^{50.} See, e.g., U.S. Patent No. 6,743,285 (filed Aug. 16, 2000) (changing "canine" to "carmine" in a patent in which the word "carmine" appeared six other times, the use of the word "canine" at issue was the only use of that word in the patent, and the patent involved pigments, therefore arguably making the correction obvious from the face of the patent).

^{51.} See, e.g., U.S. Patent No. 8,865,767 (filed Aug. 29, 2011) (adding two claims that were mistakenly omitted from the published patent); U.S. Patent No. 7,477,824 (filed Apr. 5, 2006) (replacing an entire claim in the published patent).

^{52. 226} F.3d 1280 (Fed. Cir. 2000).

^{53.} *Id.* at 1284. The patent was reexamined, and the reexamination certificate issued in February 1995, *id.* at 1285, but the error that ultimately needed to be corrected appeared in the original patent.

^{54.} Id. at 1287, 1293.

course of the litigation, however, the defendants realized that a "Program Printout Appendix" that contained PostScript code necessary to the patent had been accidentally omitted from the certified copy of the patent.⁵⁵ Accordingly, in August 1996, the defendants moved for summary judgment of invalidity, arguing that omission of the appendix meant the patent's specification failed 35 U.S.C. § 112's best mode and enablement requirements.⁵⁶ In response, Southwest Software requested that the PTO issue a certificate of correction under § 254 to add the appendix, a request that the PTO granted in April 1997.⁵⁷ Nevertheless, the defendants again moved for summary judgment, this time arguing that the certificate of correction was invalid, and that even if it was valid, it was not effective in the current suit since the certificate of correction was issued after initiation of the suit.⁵⁸ The district court rejected each of these arguments, and the defendants appealed to the Federal Circuit.⁵⁹

At the Federal Circuit, the parties disputed the "effective date" of the certificate of correction: Should it be effective from the day the original patent issued in 1992, as the patentee argued? Or the day the certificate itself issued in 1997, as the defendants argued? The Federal Circuit acknowledged that this was a question of first impression.⁶⁰ In deciding the case, the court began with the text of § 254, which provides that "[e]very such patent, together with such certificate, shall have the same effect and operation in law on the trial of actions *for causes thereafter arising* as if the same had been originally issued in such corrected form."⁶¹ Focusing on the phrase "for causes of action thereafter

61. 35 U.S.C. § 254 (emphasis added).

^{55.} Id. at 1287.

^{56.} *Id.* at 1287, 1293. Section 112 requires that every patent "shall . . . enable any person skilled in the art to which it pertains . . . to make and use the [invention], and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention." 35 U.S.C. § 112 (2013). The enablement requirement ensures that the patentee sufficiently describes the invention such that it can be made and used by others once the patent expires.

The best mode requirement has essentially become a legal nullity, as the America Invents Act did away with lack of a best mode disclosure as grounds for invalidity. Leahy-Smith America Invents Act, Pub. L. No. 112-20, sec. 15(a), § 282, 125 Stat. 284, 328 (2011) (codified at 35 U.S.C.§ 282(b)(3)) ("[T]he failure to disclose the best mode shall not be a basis on which any claim of a patent may be canceled or held invalid or otherwise unenforceable"). But even before the Act went into effect, patents were only declared invalid under the best mode requirement if the patentee both knew of a better embodiment of her invention than she disclosed in the patent and *intentionally* concealed it. *See* Ateliers de la Haute-Garonne v. Broetje Automation USA Inc., 717 F.3d 1351, 1356-57 (Fed. Cir. 2013). Such strict requirements, particularly because they necessitated occupying the patentee's mind at the time of patent filing, made successful invalidation of patents for violation of the best mode requirement quite difficult and rare.

^{57.} Sw. Software, 226 F.3d at 1287, 1293.

^{58.} Id. at 1287-88.

^{59.} Id. at 1288-89.

^{60.} Id. at 1293.

arising," the court decided that the "certificate of correction is only effective for causes of action arising after it was issued."⁶²

In so holding, the Federal Circuit rejected the patentee's arguments for allowing the certificate to apply retroactively. First, the patentee argued that "thereafter arising" referred to the date the patent issued, not the date the certificate issued. The court was not convinced, though, explaining that such an interpretation would not "represent the most natural reading of the statutory language."⁶³ The patentee also argued that the defendants' proposed interpretation would render the phrase "such certificate shall be considered part of the original patent" surplusage.⁶⁴ But the court similarly rejected that argument, explaining that it was necessary to clarify that the certificate is considered part of the original patent at all times when it is effective.⁶⁵

Finally, the patentee pointed to *Eagle Iron Works v. McLanahan Corp.*, in which the Third Circuit (before the creation of the Federal Circuit) considered the retroactivity of a certificate of correction issued under § 255.⁶⁶ There, the Third Circuit held that § 255 "permits a minor error, when made in good faith, to be corrected. In effect, the correction is given retroactive application in order that intervening rights may not be alleged."⁶⁷ The Federal Circuit discounted this precedent, however, explaining that it was not bound by decisions rendered by other circuit courts on matters within the Federal Circuit's exclusive jurisdiction.⁶⁸ Moreover, the court explained that it was not persuaded by *Eagle Iron Works*'s analysis because the Third Circuit had not explained how its holding was supported by the language of the statute.⁶⁹

After rejecting the patentee's arguments, the Federal Circuit turned to notice concerns. Allowing retroactivity, the court explained, could lead to "illogical and unworkable result[s]" in some circumstances.⁷⁰ In particular, the court was concerned that an obviously invalid patent might issue and "reasonable competitors" would rely on that invalidity in conducting their affairs.⁷¹ Years later, a patentee could obtain a certificate of correction, fixing the invalidity problem, and then sue any competitors who had reasonably relied on the incorrect patent for years of past infringement. "[I]t does not seem to us to be asking too much," the court chided, "to expect a patentee to check a patent when it is issued in order to determine whether it contains any errors that require the issuance of a certificate of correction."⁷² In comparing the relative fault of the rea-

- 68. Sw. Software, 226 F.3d at 1296.
- 69. Id. at 1296-97.
- 70. Id. at 1295.

^{62.} Sw. Software, 226 F.3d at 1294.

^{63.} Id. at 1295.

^{64.} Id. at 1294.

^{65.} Id. at 1295.

^{66.} Id. at 1296.

^{67.} Eagle Iron Works v. McLanahan Corp., 429 F.2d 1375, 1383 (3d Cir. 1970).

^{71.} *Id*.

^{72.} Id. at 1296.

sonable competitor who justifiably relied on a patent and a patentee who had failed to recognize a significant omission from his own patent, the court unambiguously sided with the faultless competitor.

Because the Federal Circuit concluded that the certificate was only effective as of the date of its issuance and the certificate issued after the patentee filed its suit, the court concluded that the certificate should not have been considered for purposes of the pending case.⁷³ The Federal Circuit remanded the case to the district court for a determination of whether the patent was invalid in the absence of the appendix, but made a point to note that even assuming the patent was invalid before the correction, "the invalidity ceased on April 1, 1997, when the PTO issued the certificate of correction."⁷⁴

Importantly, Southwest Software was decided without a complete understanding of the history of certificates of correction. In fact, the court itself acknowledged that "[n]either party cites to the legislative history of 35 U.S.C. § 254. This is understandable, as it sheds little light on the issue before us."⁷⁵ The court was wrong, however. The Federal Circuit confined its search to what little was said about the statute at its official passage in 1925. In fact, the entirety of the court's analysis consisted of quoting the 1925 version of the statute and Representative Lanham's statement prior to its passage.⁷⁶ Of course, this meant the court neglected to consider the long history of certificates of correction prior to congressional authorization, as discussed above, and the underlying similarities to reissued patents. Yet one would think that such historical practice would be critical, or at least noteworthy, given that Congress passed the statute, as it often does,⁷⁷ with the backdrop of the years of experience the PTO already had. Such history, therefore, should have been important to the effort to implement Congress's understanding of what it was endorsing. Nevertheless, courts (and even litigants) since Southwest Software have likewise failed to recognize the existence or importance of the much longer history of certificates of correction.⁷⁸

^{73.} Id. at 1297.

^{74.} Id.

^{75.} *Id.* at 1294 n.9. The Federal Circuit seemed disinclined to consider legislative history in any event, explaining that "Congressional intent, as clearly expressed in legislative history, could not 'trump the irrefutably plain [statutory] language that emerged when Congress actually took pen to paper." *Id.* at 1294 (alteration in original) (quoting Van Wersch v. Dep't of Health & Human Servs., 197 F.3d 1144, 1152 (Fed. Cir. 1999)).

^{76.} Id. at 1294 n.9.

^{77.} See Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Curran, 456 U.S. 353, 378 (1982) ("[T]he initial focus must be on the state of the law at the time the legislation was enacted. More precisely, we must examine Congress' perception of the law that it was shaping or reshaping.").

^{78.} See, e.g., Superior Fireplace Co. v. Majestic Prods. Co., 270 F.3d 1358, 1369 (Fed. Cir. 2001) ("We note that neither of the parties has directed us to any legislative history that we should consider."); Roche Palo Alto LLC v. Ranbaxy Labs. Ltd., 551 F. Supp. 2d 349, 357 n.6 (D.N.J. 2008) ("Neither party cites to the legislative history of Section 254 or 256.").

Southwest Software has gone largely unchallenged since its issuance, with courts applying it to bar consideration of certificates of correction in suits alleging infringement that occurred before the certificate's issuance.⁷⁹ Unfortunately, the result has been patentees losing the ability to enforce their rights for years through no fault of their own.

III. PROBLEMS WITH THE FEDERAL CIRCUIT'S CURRENT APPROACH

The unfortunate effects flowing from the Federal Circuit's current approach are both direct, impacting how litigation happens in courts, and indirect, impacting how both patentees and alleged infringers prepare for such litigation. Subparts A and B, respectively, describe each of these effects. Overall, patentees are less able to protect their patents, and the current approach likely results in less disclosure to the PTO and the public at large and ultimately more needless time and expense wasted on the patent system.

A. Direct Effects on Patentees' Ability to Pursue Claims

Faced with a patent containing an error, patentees are left with few options when a certificate of correction does not have any retroactive effect. First, the patentee may attempt to rely on the uncorrected patent, but doing so is both counterintuitive and risky, as described in Subpart 1. Subpart 2 describes the particularly problematic situation in which the error appears in a reissued patent or reexamination certificate. In such cases, the patentee is in a particular bind and likely has no choice but to write off any pre-certificate of correction in-fringement no matter how diligent the patentee was in correcting any errors. Finally, as explained in Subpart 3, the patentee can resolve to pursue claims for only post-certificate activity by alleged infringers. But of course doing so means the patentee may have to forgo significant damages.

^{79.} See, e.g., H-W Tech., L.C. v. Overstock.com, Inc., 758 F.3d 1329, 1334 (Fed. Cir. 2014); Superior Fireplace, 270 F.3d at 1373; Lamoureux v. AnazaoHealth Corp., 669 F. Supp. 2d 227, 236-37 (D. Conn. 2009); Cordance Corp. v. Amazon.com, Inc., No. 06-491-MPT, 2009 WL 2252556, at *3 (D. Del. July 28, 2009); Lucent Techs., Inc. v. Microsoft Corp., 544 F. Supp. 2d 1080, 1096 (S.D. Cal. 2008); STMicroelectronics, Inc. v. Motorola, Inc., 327 F. Supp. 2d 687, 700-01 (E.D. Tex. 2004); SDS USA, Inc. v. Ken Specialties, Inc., No. 99-133, 2002 WL 31055997, at *23-24 (D.N.J. Aug. 28, 2002); Adrain v. Hypertech, Inc., No. 2:98-CV-37C, 2001 WL 740542, at *4-5 (D. Utah Apr. 18, 2001) (holding that a § 255 certificate to correct the filing date could not operate retroactively even though the alleged infringers most likely had notice of the correct filing date).

The only exception to the widespread holdings that certificates of correction are not retroactive, regardless of the particular equities of the situation at hand, has been in cases in which the certificate was issued pursuant to 35 U.S.C. § 256, which allows for the correction of inventorship. *See Roche Palo Alto*, 551 F. Supp. 2d at 350-51.

1. Rely on the uncorrected patent

In some cases, the patentee can proceed based on the uncorrected patent, as if the certificate had never issued, and may still be successful. In fact, this is exactly what happened on remand in *Southwest Software*: the district court determined that, even without the missing appendix, the patent satisfied the best mode and enablement requirements of 35 U.S.C. § 112.⁸⁰ But, of course, had the PTO correctly done its job in the first place, there would have been no need to waste time and expense litigating the question.

Additionally, it seems odd for a patentee to rely on a patent that was essentially issued in error. Patents are presumed valid, but only because the PTO has certified that the patent meets all of the patenting requirements. This is the rationale behind requiring alleged infringers to provide clear and convincing evidence to overcome the presumption of validity.⁸¹ The Supreme Court has even acknowledged that where the basis for the validity challenge was not before the PTO, the rationale for the presumption is weakened and "a jury instruction on the effect of the new evidence can, and when requested, most often should be given."⁸² On this rationale, then, it would seem that when a patentee is relying on an uncorrected patent, the jury should be notified that the PTO never actually approved of the patent as issued. But doing so would, of course, increase the likelihood that a jury would find the patent invalid. Requiring the patentee to overcome yet another hurdle (or at least a higher one) and adding an additional layer of complication to a problem caused by the PTO's own error seems unnecessary and perhaps unfair.

In any event, the patentee's attempt to rely on an uncorrected patent may be unavailing in many cases, resulting in the patent being declared invalid (and therefore unenforceable) or not infringed, at least until the date a certificate of correction issues.⁸³ This will be most common when the PTO has made the most egregious errors, as those are the errors most likely to result in invalidation of the patent.

Of course, there is something to be said for the Federal Circuit's insistence that it is not much to ask for the patentee to review his patent for errors once it

^{80.} Sw. Software, Inc. v. Harlequin Inc., No. A 95-CA-032 SS, 2001 U.S. Dist. LEXIS 26106, at *15-17 (W.D. Tex. July 18, 2001).

^{81.} See Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2243 (2011) (affirming the use of the clear and convincing evidence standard and noting that the Federal Circuit had based this rule "on 'the basic proposition that a government agency such as the [PTO] was presumed to do its job" (alteration in original) (quoting Am. Hoist & Derrick Co. v. Sowa & Sons, Inc., 725 F.2d 1350, 1359 (Fed. Cir. 1984))); KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 426 (2007) ("[T]he rationale underlying the presumption [is] that the PTO, in its expertise, has approved the claim").

^{82.} Microsoft Corp., 131 S. Ct. at 2250-51.

^{83.} *See, e.g.*, Carotek, Inc. v. Kobayashi Ventures, LLC, 875 F. Supp. 2d 313, 336 (S.D.N.Y. 2012) (ruling that because a patent becomes valid as of the issuance of the certificate of correction, the patentee could not "recover for acts of infringement occurring prior to that point").

is issued. Not doing so might even be called negligent. And as between a negligent patentee and a faultless accused infringer lacking notice, it may be sensible to side with the infringer. But the reality of the situation is usually much different. For example, even assuming the patentee diligently reviews the issued patent immediately and promptly notifies the PTO of any error, it takes time to fill out the paperwork to request the correction and for the PTO to investigate whether issuing a certificate is appropriate. Of the certificates of correction issued in a four-week span from August to September 2014, for example, the minimum amount of time between patent issuance and certificate of correction issuance was eight weeks.⁸⁴ While unenforceability for two months might not seem significant at first glance, one can easily imagine cases in which extensive infringement occurs only during a short time period, such as a one-time event, or the patent is so valuable or the volume of use so great that even a small amount of "missed" infringement adds up to a significant sum of forgone damages. And patentees with a certificate of correction for an error in a reissued patent or reexamination certificate may be in an even worse position, possibly barred from pursuing claims for years of infringement, no matter how diligent they are, as described below.

2. Special concerns raised by reissues and reexaminations

The extent of the inequity is particularly apparent in the case of reissues and reexaminations, where the blame cannot always be laid at the patentee's feet but the consequences of a certificate of correction are even more dire. A certificate of correction in such a context may leave the patentee with few to no options to recover for *years* of infringement, all through no fault of her own. Especially in such circumstances, a bright-line rule prohibiting the retroactivity of all certificates of correction is inappropriate.

Take, for example, a patent whose claims are canceled in reexamination several years after the patent's original issuance, but similar claims are then issued on a reexamination certificate attached to the original patent. Assume, though, that the PTO made an error on the reexamination certificate that resulted in the new claims, as issued, being nonsensical. The patentee, of course, notices immediately and requests a certificate of correction. The PTO acquiesces and issues a certificate within a couple of months.⁸⁵ The patentee has done eve-

^{84.} See U.S. Patent No. 8,781,555 (filed Mar. 2, 2010) (showing a patent issue date of July 15, 2014, and a certificate of correction issue date of September 9, 2014).

^{85.} Indeed, this is not an entirely hypothetical scenario. Two related cases with similar facts are ongoing in the District of Delaware. *See* Parallel Networks Licensing LLC v. Microsoft Corp., No. 1:13-cv-02073 (D. Del. filed Dec. 20, 2013); Parallel Networks Licensing LLC v. Int'l Bus. Machs. Corp., No. 1:13-cv-02072 (D. Del. filed Dec. 20, 2013); U.S. Patent No. 6,415,335 (filed Jan. 19, 1999); U.S. Patent No. 5,894,554 (filed Apr. 23, 1996). Both defendants have attempted to limit discovery of documents created prior to the issuance of the certificates of correction on the grounds that no infringement claim can be brought for any pre-certificate actions. *See* Microsoft Corp., No. 1:13-cv-02073 (Aug. 18, 2014); Defendant

rything "right" by immediately reviewing the issued reexamination certificate and notifying the PTO of the error. It would be hard for even the *Southwest Software* court to find fault with any of his actions. The result, though? The patentee might not be able to recover for *any* past infringement. In normal circumstances, a patentee would be able to argue that the reexamined claims and the original claims were substantially similar, and therefore he should be able to claim infringement from the date the original patent issued.⁸⁶ But because a certificate of correction issued, infringement claims are effectively "cut off" prior to the date of the certificate.

In such a case, it would be difficult to argue that the patentee bears any fault. Nevertheless, a blind application of *Southwest Software* would suggest that the result should be no different: the patentee may not rely on the certificate of correction in alleging infringement for any time prior to the certificate's issuance. And blind application is not exactly unexpected given how broadly *Southwest Software* has been applied.⁸⁷ Indeed, courts have been unwilling to distinguish *Southwest Software* even in the face of inequities. For example, in *Adrain v. Hypertech, Inc.*, the court acknowledged that the notice and equity concerns that partially drove the *Southwest Software* court arguably were not present since both the error and its correction (in this case the patent's effective filing date) were apparent on the face of the patent.⁸⁸ Even assuming that were the case, though, the court insisted that the other ground for the *Southwest Software* court's holding—a strict textual reading of § 254—still applied, and therefore the certificate could not justify a retroactive infringement claim.⁸⁹

And the patentee with a corrected reissued patent or reexamination certificate is in an even worse position: while the patentee in *Southwest Software* was at least able to rely on the uncorrected patent, the patentee in a reexamination context is unlikely to have the same ability. While the patentee could probably rely on the uncorrected reexamination certificate, that would only cover the few months of infringement between the reexamination certificate's issuance and the certificate of correction's issuance. Attempting to rely on the original patent might present the best prospects for obtaining a judgment, but in most cases do-

IBM's Answering Brief in Opposition to Plaintiff's Motion to Compel, *Int'l Bus. Machs. Corp.*, No. 1:13-cv-02072 (Aug. 11, 2014). In addition, IBM moved for partial judgment on the pleadings based on its claim that Parallel Networks cannot maintain any suit arising out of pre-certificate of correction infringement. *See* Defendant IBM's Opening Brief in Support of Its Motion for Partial Judgment on the Pleadings Regarding Plaintiff's Pre-Certificate of Correction Infringement Claims, *Int'l Bus. Machs. Corp.*, No. 1:13-cv-02072 (Aug. 11, 2014). Judge Robinson recently rejected Parallel Networks's request to judicially correct the claims and granted IBM's motion for partial summary judgment on the pleadings with respect to all infringement claims predating the certificate of correction's issuance. Memorandum Opinion, *Int'l Bus. Machs. Corp.*, No. 1:13-cv-02072 (Mar. 17, 2015).

^{86.} See infra notes 132-35 and accompanying text.

^{87.} See supra note 79 (citing cases applying Southwest Software's bright-line rule prohibiting any retroactive effect).

^{88.} No. 2:98-CV-37C, 2001 WL 740542, at *4 (D. Utah Apr. 18, 2001).

^{89.} Id.

ing so will be impossible. After reissue or reexamination, "original claims that are not reissued in identical form become unenforceable."⁹⁰ Thus, unless the claims that appeared in the (uncorrected) reissue or reexamination certificate are identical to the claims that appeared in the original patent, the patentee cannot rely on the original patent to pursue a claim for pre-certificate of correction infringement. But, of course, the very fact that a certificate of correction is necessary probably indicates that the likelihood of the new and old claims being identical is quite small. In most cases, then, a patentee will effectively be left with no recourse for infringement prior to the issuance of a certificate of correction. All because of a PTO error.

3. Only pursue claims for post-certificate infringement

If a patentee cannot or does not want to rely on the uncorrected patent, she can still make a claim for any infringement that occurred after the certificate's issuance.⁹¹ But losing the ability to pursue a claim for pre-certificate infringement could wipe out *years* of liability. For example, the plaintiff in *Southwest Software* stood to lose the ability to claim over four years of infringement (at least December 1992, the date the patent issued, to April 1997, the date the certificate of correction issued) if the uncorrected patent was held invalid.⁹² The longer the error goes uncorrected, the longer the patentee could effectively be unable to enforce her patent.

Of course, there is something to be said for expecting a patentee to be diligent and, as the *Southwest Software* court put it, "check a patent when it is issued in order to determine whether it contains any errors that require the issuance of a certificate of correction."⁹³ This was particularly true in *Southwest Software*, where the error was the omission of an appendix over 300 pages long and the error went uncorrected for years. One would think that a patentee would realize his patent is 300 pages shorter than expected, and do so before it has to be pointed out by a defendant in the middle of litigation.

But as they say, bad facts make bad law. While the equities in certain situations may disincline courts to give a patentee what appears to be a "free pass" for his own negligent or dilatory behavior, there are other situations in which the equities should weigh heavily toward the patentee. For example, a patentee

^{90.} Fresenius USA, Inc. v. Baxter Int'l, Inc., 721 F.3d 1330, 1338 (Fed. Cir. 2013) (emphasis omitted); *see also id.* at 1340 ("In sum, under either the reissue or reexamination statute, if the PTO confirms the original claim in identical form, a suit based on that claim may continue, but if the original claim is cancelled or amended to cure invalidity, the patentee's cause of action is extinguished and the suit fails.").

^{91.} E.I. du Pont de Nemours & Co. v. MacDermid Printing Solutions, L.L.C., 525 F.3d 1353, 1362 (Fed. Cir. 2008) (holding that a patentee may bring suit for infringement occurring after the issuance of a certificate of correction).

^{92.} Sw. Software, Inc. v. Harlequin Inc., 226 F.3d 1280, 1284, 1293-94 (Fed. Cir. 2000).

^{93.} Id. at 1296.

may collect a reasonable royalty for patent infringement beginning from the date a patent *application* is published, even if the actual patent has not yet issued.⁹⁴ Assume the application is published correctly, but the actual patent contains a serious error. In such a situation, even if the patentee diligently informs the PTO of the mistake and requests a certificate of correction immediately, a strict application of *Southwest Software* would prevent the collection of preissuance royalties. And if the patent has remained in examination for a lengthy period, the lost royalties may be large.⁹⁵

B. Indirect Effects on Patentees' and Competitors' Primary Conduct

Besides direct effects on the inability to pursue claims for past infringement, the prohibition on retroactive effect of certificates of correction can have secondary effects on primary behaviors. Knowing that certificates of correction can effectively cut off infringement claims, both patentees and alleged infringers will have perverse incentives. As described in Subpart 1, patentees will be less likely to bring errors to the attention of the PTO by asking for certificates of correction, undercutting the very notice purpose the patent system is supposed to fulfill, possibly even more so than allowing certificates of correction to operate retroactively. And even if patentees must bring the error to the PTO's attention, they are more likely to pursue the much more expensive avenue of correction through reissuance. Competitors, on the other hand, will have every incentive to attempt to convince the PTO to issue a certificate of correction, thereby minimizing damages, as explained in Subpart 2.

1. Patentees

Faced with the knowledge that a certificate of correction has no retroactive effect, a patentee will have incentives to avoid the need to obtain one. This can, of course, be done in two ways: ensuring the absence of a mistake in the first place and, assuming an error occurs, doing whatever is possible to avoid obtaining a certificate of correction while still maintaining the ability to pursue an infringement claim. The former option, however, is impossible in the case of § 254 because the very predicate of a certificate of correction issued under that

^{94. 35} U.S.C. § 154(d) (2013). A patentee cannot file suit, though, until the patent issues. See id.

^{95.} The average pendency from application to issuance or abandonment was 26.9 months as of February 2015. *Traditional Total Pendency*, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/dashboards/patents/kpis/kpiOverallPendency.kpixml (last visited Mar. 30, 2015). In the past, though, the wait has been much longer. In October 2013, for example, the average pendency was 32.2 months. *Id.* If there is an appeal to the Patent Trial and Appeal Board, the wait is even longer; as of February 2015, the average time from application to Board decision was 88.6 months. *Pendency from Filing to Board Decision*, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/dashboards/patents/kpis/kpiFilingToBoard.kpixml (last visited Mar. 30, 2015). Of course, it is easy to imagine the extent of royalties that could accrue over so many months.

section is that the PTO was at fault for the error. The PTO may send the incorrect claims to the printer after the inventor has signed off on them, or the error may occur at the printer, after the patentee has seen the claims for the last time but before the "official" patent is printed.⁹⁶ Aside from printing the certified copy of a patent themselves, which is, of course, impossible, there is simply no way for patentees to completely prevent the intrusion of an error before issuance. And even immediately notifying the PTO and asking for a certificate of correction may significantly shrink damages.⁹⁷

The patentee, then, is left with option two-finding a way to avoid obtaining a certificate of correction while still maintaining the ability to pursue an infringement claim. Faced with an incorrect patent, a patentee might do this in several ways. First, if the error is slight or subtle enough that it might not be caught by an alleged infringer, the patentee might be willing to gamble and not correct the patent. The problem with this approach, though, is that the patentee will likely have a heavier burden to prove infringement or validity given that the patent is not exactly what it was supposed to be. Even aside from the concerns relevant to the patentee, there is a notice problem for society as a whole. Obviously, everyone would prefer an absolutely accurate patent to an inaccurate one.⁹⁸ But the best way to achieve that goal is to incentivize the person most familiar with the patent-the patentee-to correct the patent when an error is discovered. Yet effectively punishing the patentee by cutting off infringement upon the issuance of a certificate of correction is a disincentive. Under a strict nonretroactivity regime, then, it is likely that more patents go uncorrected.

Second, a patentee with an error in his patent could gamble that a court will be willing to judicially correct the patent. In certain circumstances, courts are willing to correct errors in patents, and such judicial correction will operate retroactively.⁹⁹ The willingness of a court to make the correction is, of course, unknowable ex ante, so a patentee will have to wait in a state of uncertainty before finding out if this strategy has been successful. This approach also has the same public notice problems of the previous approach; it is more socially advantageous for any correction to come ex ante, in the form of a certificate permanently attached to a patent, rather than ex post, in the form of a judicial decision. Yet given the choice, most patentees would likely pursue the option allowing claims for retroactive damages.

^{96.} See, e.g., Hearings, supra note 14, at 54 (statement of Hon. Edward B. Moore, Comm'r of Patents) ("These errors creep in from all directions and go through three or four different sources, as I said—the Public Printer, the inventor, and the office.").

^{97.} See supra note 84 and accompanying text.

^{98.} See E.I. du Pont de Nemours & Co. v. MacDermid Printing Solutions, L.L.C., 525 F.3d 1353, 1362 (Fed. Cir. 2008) ("It is, of course, desirable to have applicants correct the PTO's mistakes . . . as soon as possible so that the correct information is reflected in published applications and issued patents.").

^{99.} See infra Part IV.B.

Finally, a patentee could take the more drastic measure of requesting a reissuance under § 251. That section provides that "[w]henever any patent is, through error, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, . . . the Director shall . . . reissue the patent for the invention disclosed in the original patent."¹⁰⁰ Indeed, as mentioned above, reissue was the suggested remedy in 1912 when the mistake was too large for the PTO to feel comfortable correcting the error itself with a certificate.¹⁰¹ Even now, the MPEP suggests that mistakes by the patentee that do not qualify for a certificate of correction under § 255, which gives the PTO the authority to issue certificates of correction in cases in which the error was the fault of the patentee, can be remedied by filing a reissue application.¹⁰²

Nevertheless, this approach presents a host of its own problems. The very existence of § 254 indicates that reissuance every time an error is discovered is not ideal. In fact, the purpose of § 254 was "to save time and money and also promote efficiency in the operation of the Patent Office," thereby "obviat[ing] the necessity of reprinting the entire patent."¹⁰³ Encouraging reissuance defeats this purpose. The PTO will have to handle additional applications, even as they are laboring under a backlog of nearly 600,000 unexamined applications¹⁰⁴— not to mention the additional time and expense necessary to reprint the entire reissued patent rather than just the additional sheet or two of paper to be appended to the existing patent. Add to that the additional time, expense, and effort expended by the (completely faultless) patentee, and it is clear that any policy that effectively encourages reissuance is a step in the wrong direction.

2. Alleged infringers

Patentees are not the only actors whose primary behaviors can be affected by the prohibition on certificates of correction having any retroactive effect. Alleged infringers would of course like to limit the window of infringement, and convincing the PTO to issue a certificate of correction is one way to accomplish that purpose. If a competitor happened across an error in a patent, even before any litigation was instituted, it would have every incentive to keep that error hidden for as long as possible, because the longer it goes uncorrected, the longer infringement can occur without any repercussions. This, of course, raises the same notice concerns discussed above. And upon being accused of infringement, competitors are more likely to comb through patents and their file histories in an attempt to find an excuse to notify the PTO of a potential need

^{100. 35} U.S.C. § 251(a) (2013).

^{101.} See supra notes 18-20 and accompanying text.

^{102.} MPEP, supra note 43, § 1481.

^{103. 65} CONG. REC. 6842-43 (1924) (statement of Rep. Lanham).

^{104.} February 2015 Patents Data, at a Glance, U.S. PAT. & TRADEMARK OFF., http://www.uspto.gov/dashboards/patents/main.dashxml (last visited Mar. 30, 2015).

for a certificate of correction. But doing so increases the time and expense of litigation and the burden on the PTO to address such notifications.

Furthermore, and perhaps more of a concern, is the possibility that alleged infringers will see this as yet another benefit of requesting a reexamination. Anyone can request that the PTO reexamine an issued patent, and if the PTO agrees to do so, the result may be canceled or amended claims.¹⁰⁵ In fact, depending on the type of reexamination (ex parte or inter partes), 77% to 91% of claims are invalidated in reexamination proceedings.¹⁰⁶

The nonretroactivity of certificates of correction could present yet another incentive to pursue reexamination. Even if the original patent did not contain an error, a reexamination certificate may, therefore requiring a certificate of correction and wiping out years of infringement. And even if the odds of each of those events happening are small, with the large size of patent damages nowa-days,¹⁰⁷ it may still be an avenue worth pursuing in some cases. Yet reexamination is an enormous drain on time and resources—both the patentee's and the PTO's, and sometimes the alleged infringer's. Reexamination may also significantly delay the resolution of infringement suits in district courts, as those proceedings are usually stayed pending the outcome of a reexamination.¹⁰⁸ The overall impact of more reexaminations, then, is increased time and expense for all involved.

Given the problems posed by a bright-line rule prohibiting retroactive application of all certificates of correction, it is necessary to consider alternative approaches that could ameliorate the problem.

IV. AVENUES FOR RELIEF

In this Part, I propose several alternatives that could mitigate the problems identified above. Some of the proposals can be adopted immediately by district

^{105.} See generally 12 DONALD S. CHISUM, CHISUM ON PATENTS: A TREATISE ON THE LAW OF PATENTABILITY, VALIDITY, AND INFRINGEMENT §§ 3400-3470 (LexisNexis 2015).

^{106.} Ben Kerschberg, *The Strategic Use of Patent Reexamination*, FORBES (June 6, 2011, 10:15 AM), http://www.forbes.com/sites/benkerschberg/2011/06/06/the-strategic-use -of-patent-reexamination.

^{107.} See PRICEWATERHOUSECOOPERS LLP, 2013 PATENT LITIGATION STUDY: BIG CASES MAKE HEADLINES, WHILE PATENT CASES PROLIFERATE 7-8 (2013), available at http://www.pwc.com/en_US/us/forensic-services/publications/assets/2013-patent-litigation-study.pdf (showing that the median damages award in patent cases was \$4.9 million from 2007 to 2012, with five cases resulting in damages of \$1 billion or more).

^{108. 2} ETHAN HORWITZ & LESTER HORWITZ, HORWITZ ON PATENT LITIGATION § 14.08[2][a][i] (2014) (noting that "the inherent power of the court to stay proceedings pending the outcome of a PTO reexamination is often exercised" and that "[s]ome courts have found that 'there is a liberal policy in favor of granting motions to stay proceedings pending the outcome of USPTO reexamination or reissuance proceedings,' and other courts have referred to granting such stays as 'routine" (footnote omitted) (quoting Donnelly Corp. v. Guardian Indus. Corp., No. 05-74444, 2007 WL 3104794, at *3 (E.D. Mich. Oct. 22, 2007); Spread Spectrum Screening LLC v. Eastman Kodak Co., 277 F.R.D. 84, 87 (W.D.N.Y. 2011))).

courts, without any change in binding law, while others would most likely require action on the part of the Federal Circuit (most likely en banc), the Supreme Court, or Congress. All should be seriously considered, though, as faultless patentees should not have to forfeit claims for years of infringement for the simple fact that the PTO introduced an error into a patent.

A. Retroactivity with Intervening Rights

The first and most preferable approach is to allow retroactivity but also apply the doctrine of intervening rights in appropriate cases to address notice concerns. Of course, fully implementing this approach would require reconsideration of *Southwest Software*, likely by the Federal Circuit sitting en banc or by the Supreme Court. Admittedly, the prospects for such reconsideration appear slim; after all, Southwest Software has been the law now for over fourteen years and the Federal Circuit has shown no willingness to reconsider it, nor have district courts made any apparent attempt to limit Southwest Software's holding.¹⁰⁹ The Supreme Court could grant certiorari in a case that presents the issue and overrule Southwest Software, but the Court only grants plenary review in about 100 cases per Term,¹¹⁰ and patentees may be reluctant to bring cases presenting the issue in the face of such overwhelming Federal Circuit precedent.¹¹¹ But at the very least, courts can limit Southwest Software's bright-line rule to, for example, only certificates of correction that correct an error in an original patent. In other cases—for example those involving certificates of correction issued to correct errors in reissued patents or reexamination certificates-courts should take the opportunity to distinguish Southwest Software and allow retroactive application.

^{109.} See sources cited supra note 79.

^{110.} *The Justices' Caseload*, SUP. CT. U.S., http://www.supremecourt.gov/about/justice caseload.aspx (last visited Mar. 30, 2015). Only 73 merits opinions were released during October Term 2013. Kedar S. Bhatia, *Stat Pack for October Term 2013*, SCOTUSBLOG 1 (July 3, 2014), http://sblog.s3.amazonaws.com/wp-content/uploads/2014/07/SCOTUSblog_Stat _Pack_for_OT13.pdf. The number of merits opinions has sharply declined in the past couple of decades. *See id.* at 16.

^{111.} For example, in the Parallel Networks litigation referenced in note 85, the patentee has not even made an attempt to distinguish *Southwest Software* or argue that it should be overruled. Instead, the patentee appears to have conceded that the certificates of correction cannot operate retroactively, but instead has argued for judicial correction. *See* Plaintiff Parallel Networks Licensing, LLC's Opening Brief in Support of Its Motion to Correct Claims of the Patents-in-Suit at 2, Parallel Networks Licensing LLC v. Microsoft Corp., No. 1:13-ev-02073 (D. Del. Oct. 7, 2014) ("If the Court declines to grant the retroactive correction, Parallel Networks will likely have lost five years of the life of its Patents-in-Suit as the result of a simple administrative error by the PTO."). The judge recently refused the patentee's request to judicially correct the claims in the suit against IBM. *See* Memorandum Opinion, *su-pra* note 85.

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1. Equivalence to reissued patents

To truly understand § 254, it is necessary to consider the PTO's full history of patent corrections. Doing so reveals a strong argument that Congress originally considered certificates of correction a more efficient version of reissued patents. And because both in the past and today reissued patents, at least in some circumstances, can permit claims for retroactive infringement, the same should be the case for certificates of correction.

a. History of reissued patents

As explained in Part I, it was not until 1925 that the PTO actually had statutory authority to issue certificates of correction. Up to that point, the PTO resorted to issuing unauthorized certificates of correction (of questionable legality) and, in the most serious circumstances, reissued patents. Looking to how the courts approached reissued patents in the past, then, can inform how courts today should approach certificates of correction.

The Supreme Court first addressed the validity of reissued patents in Grant v. Raymond in 1832.¹¹² The patentee originally obtained a patent in 1821, but that patent was "cancelled, owing to the defective specification," and a new patent was issued in 1825.¹¹³ After the patentee brought an infringement suit, the defendant objected that the Secretary of State (who was then charged with issuing patents) did not have the power to accept the surrender of an invalid patent and then reissue a corrected patent for the unexpired term.¹¹⁴ The Justices, however, were unconvinced. Though they admitted that the exact words of the law did not permit the Secretary to take such actions, the Justices found authorization in "the general spirit and object of the law"-to secure the rights of patentees to which they were entitled.¹¹⁵ In fact, the Supreme Court was concerned about just such a situation as that addressed by § 254. Chief Justice Marshall wrote for the Court, "If the mistake should be committed in the department of state, no one would say that it ought not to be corrected."¹¹⁶ He continued, "All would admit that a new patent, correcting the error, and which would secure to the patentee the benefits which the law intended to secure, ought to be issued."¹¹⁷ Though the patent in the suit had been reissued because of a mistake on the patentee's part, the Court still held that as long as the error was made in good faith, a reissued patent was appropriate.¹¹⁸

The defendant, of course, responded with the notice argument that the Southwest Software court later found so convincing. Specifically, the defendant

113. Id. at 239.

- 115. Id. at 241.
- 116. Id. at 242.
- 117. *Id*.

^{112. 31} U.S. (6 Pet.) 218 (1832).

^{114.} Id. at 240.

^{118.} Id. at 242-43.

argued that "those skilled in the art . . . , perceiving the variance between the specification and the machine, and availing themselves of it, may have constructed, sold and used the machine without infringing the legal rights of the patentee, or incurring the penalties of law."¹¹⁹ The alleged infringer was thus concerned that "[t]he new patent would retro-act on them, and expose them to penalties to which they were not liable when the act was committed."¹²⁰

Again, the Justices were unconvinced, explaining "[t]his objection is more formidable in appearance than in reality. It is not probable that the defect in the specification can be so apparent as to be perceived by any but those who examine it for the purpose of pirating the invention. They are not entitled to much favour."¹²¹ The Court went on to note, however, that such a defense was not raised in that case, and therefore might be successfully raised in the future, as "[t]he defence when true in fact may be sufficient in law."¹²² Nevertheless, the very fact that the Court emphasized that the argument, at least in the abstract, was not compelling is indicative of how the Court approached patent corrections.

In response to *Grant*, Congress passed a bill specifically authorizing reissued patents in the case of "inadvertence, accident, or mistake, and without any fraudulent or deceptive intention."¹²³ In doing so, Congress made an effort to resolve an issue that had arisen in *Grant*. Specifically, the defendant had argued that obtaining an initial patent and then surrendering that patent effectively dedicated the invention to the public, and therefore could not be the basis for a reissued patent.¹²⁴ In the new statute, Congress specifically instructed that "no public use or privilege of the invention so patented, derived from or after the grant of the original patent, . . . shall, in any manner, prejudice [the patentee's] right of recovery for any use or violation of his invention after the grant of such new patent."¹²⁵

Just a few years later, in 1836, Congress repealed all of the previous patent laws and reenacted them in a single title of the U.S. Code.¹²⁶ The provision allowing for reissued patents was among the statutes repealed and reenacted, but with some slight changes.¹²⁷ Most relevant here, the new statute omitted the sentence specifically providing that a previous patent and use of the applicable invention would not bar infringement. Instead, the new provision provided that the reissued patent, "together with the corrected description and specification,

^{119.} Id. at 243.

^{120.} Id.

^{121.} *Id*.

^{122.} Id. at 244.

^{123.} Act of July 3, 1832, § 3, 4 Stat. 559, 559 (repealed 1836).

^{124.} *Grant*, 31 U.S. (6 Pet.) at 244. The Supreme Court had rejected this argument because the Justices believed the reissued patent had "relation" to the original patent and "may be considered as appended to the original application." *Id.*

^{125.} Act of July 3, 1832, § 3, 4 Stat. at 559.

^{126.} See Patent Act of 1836, 5 Stat. 117.

^{127.} Id. at 122.

shall have the same effect and operation in law, on the trial of all actions hereafter commenced for causes subsequently accruing, as though the same had been originally filed in such corrected form, before the issuing out of the original patent."¹²⁸

This language, as a replacement for the "public use" language in the 1832 statute, is indicative of what Congress meant in using the phrase "causes subsequently accruing." In fact, the replacement suggests that the "subsequently accruing" language was only meant to prevent alleged infringers from arguing that infringement for claims that accrued after the original patent was surrendered was barred on the basis that the invention had been put into public use before the reissued patent was granted. Indeed, the Supreme Court has considered the relevant sections as nearly equivalent.¹²⁹ In *Stimpson v. West Chester Railroad*, for example, the Court interpreted the "causes subsequently accruing" section to mean that "any person using an invention protected by a renewed patent subsequently to the date of this act is guilty of an infringement, however long he may have used the same after the date of the defective and surrendered patent."¹³⁰

Admittedly, the Supreme Court never had a need to determine whether these statutes allowed claims for infringement that occurred before the corrected patent issued.¹³¹ Instead, courts began applying the doctrine of intervening rights to reissued patents. Specifically, courts began recognizing as an equitable matter that a competitor "who, pending the application and granting of the reissue, manufactures and sells articles which infringe the reissued patent may be protected on principles of estoppel from the literal application of the [reissued patent statute], which makes the operation of the reissue relate to the date of the original patent."¹³² Applying intervening rights allowed courts to balance the concern for public notice with the need to protect patentees' rights.

Today, the doctrine has been codified in the reissue statute. In particular, 35 U.S.C. § 252 provides that a

reissued patent shall have the same effect and operation in law, on the trial of actions for causes thereafter arising, as if the same had been originally granted in such amended form, but in so far as the claims of the original and reissued patents are substantially identical, such surrender shall not affect any action then pending nor abate any cause of action then existing, and the reissued patent, to the extent that its claims are substantially identical with the original

^{128.} Id.

^{129.} See Stimpson v. W. Chester R.R., 45 U.S. (4 How.) 380, 402-03 (1846); see also Sontag Chain Stores Co. v. Nat'l Nut Co. of Cal., 310 U.S. 281, 287 (1940) ("The two [reissue provisions] are declared substantially alike.").

^{130.} Stimpson, 45 U.S. (4 How.) at 402-03.

^{131.} See, e.g., *id.* at 402 ("[T]he question does not arise, whether an action could be sustained for a violation of the right prior to the corrected patent.").

^{132.} Keller v. Adams-Campbell Co., 264 U.S. 314, 317 (1924).

patent, shall constitute a continuation thereof and have effect continuously from the date of the original patent. 133

The section further specifically provides for the protection of alleged infringers whose actions infringe the reissued patent but did not infringe the patent as originally issued.¹³⁴ The same protection has since been extended to new or amended claims in reexamination certificates.¹³⁵ The result, then, has been that when the claims found in a reissued patent or reexamination certificate are "substantially identical" to the claims in the original patent, the new or amended claims are given retroactive effect.

b. Implications for certificates of correction

The history of reissued patents can thus provide a framework in which to allow certain certificates of correction to function retroactively. Specifically, if the certificates are "substantially identical" to what preceded them, they should be given retroactive effect. While drawing parallels between certificates of correction and reissued applications should be compelling in and of itself given that certificates historically have been considered an alternative to a reissue, this approach is particularly compelling when a certificate of correction has to be issued to correct a reissued patent or reexamination certificate. Aside from the more concerning equity problems discussed above, the "substantially identical" test may be easier to apply in the context of reissues or reexaminations because the certificate can be compared to the original patent rather than the uncorrected version, which in some cases may be nonsensical. The PTO would essentially treat the reissued patent or reexamination certificate as if it never existed. Doing so would be consistent with how the Supreme Court has historically treated the PTO's attempts to correct errors, even in the absence of statutory authority.¹³⁶

This approach should satisfy the notice concerns evinced in *Southwest Software*, as it has been sufficient to address similar concerns in the reissue and reexamination contexts. If new claims are not similar enough to old claims to provide notice, intervening rights will apply and the infringer will be protected. But if the claims are similar, the patentee maintains his right to pursue claims for past infringement.

^{133. 35} U.S.C. § 252 (2013).

^{134.} *Id.* ("A reissued patent shall not abridge or affect the right of any person or that person's successors in business who, prior to the grant of a reissue, made, purchased, offered to sell, or used within the United States, or imported into the United States, anything patented by the reissued patent, to continue the use of, to offer to sell, or to sell to others to be used, offered for sale, or sold, the specific thing so made, purchased, offered for sale, used, or imported unless the making, using, offering for sale, or selling of such thing infringes a valid claim of the reissued patent which was in the original patent.").

^{135.} Id. § 307(b).

^{136.} See supra Part I.A.

Moreover, examining the history of reissued patents and the evolving statutory language can be instructive regarding how to interpret § 254 as it currently exists. In particular, the "thereafter arising" language is reminiscent of the "subsequently accruing" language first introduced in the 1836 statute authorizing reissued patents. The language in § 254 has been used to justify prohibiting any retroactive effect, but as discussed above, the 1836 language likely had nothing to do with retroactivity, and instead was merely an attempt to prevent defendants from arguing that an invention had been dedicated to the public by prior use. With that in mind, courts should be more reluctant to place so much weight on that particular phrase.

2. Read in light of the entire patent statute

Aside from the particular history of reissued patents and the applicable intervening rights doctrine, § 254 should be read in the context of the overall patent scheme and its underlying purpose. All patent statutes, for example, should be read with an eye toward the fundamental goal of all patent laws, as set out in the Constitution—encouraging the progress of the arts and sciences.¹³⁷ This is most often and effectively done, as explained in *Grant*, by giving inventors an incentive to invent—a "reward stipulated for the advantages derived by the public for the exertions of the individual, and . . . intended as a stimulus to those exertions."¹³⁸ Yet a bright-line rule prohibiting any retroactive application that effectively forces a patentee to forfeit part of that reward, through no fault of her own, is at odds with that underlying purpose and should be critically examined.

On a more granular level, a strict nonretroactivity rule for certificates of correction is also out of step with the approach taken in other parts of the surrounding statutory scheme. Section 254 should be read in light of its related statutes, particularly §§ 251-256.¹³⁹ Indeed, courts have already recognized the relationship between reissued patents, reexamination certificates, and certificates of correction in other areas. One court has explained that "reissue and reexamination proceedings and issuances of Certificates of Correction have many similarities and should therefore be treated similarly."¹⁴⁰ The court reached that conclusion largely based on factors that are also relevant to retro-

^{137.} U.S. CONST. art. I, § 8, cl. 8; *see*, *e.g.*, Grant v. Raymond, 31 U.S. (6 Pet.) 218, 242 (1832) ("The laws which are passed to give effect to this purpose ought, we think, to be construed in the spirit in which they have been made"); *see also* Bilski v. Kappos, 561 U.S. 593, 648-49 (2010) (Stevens, J., concurring) (reaffirming *Grant*'s approach to construing patent statutes according to their underlying constitutional purpose).

^{138.} Grant, 31 U.S. (6 Pet.) at 241-42.

^{139.} See, e.g., Superior Fireplace Co. v. Majestic Prods. Co., 270 F.3d 1358, 1370 (Fed. Cir. 2001) (interpreting § 255 with the help of "not only the bare meaning of the words [of § 255] but also [their] placement and purpose in the statutory scheme," encompassing 35 U.S.C. §§ 251-256 (alterations in original) (citation omitted) (quoting Fanning, Phillips & Molnar v. West, 160 F.3d 717, 721 (Fed. Cir. 1998)) (internal quotation marks omitted)).

^{140.} Hallmark Cards, Inc. v. Lehman, 959 F. Supp. 539, 543 (D.D.C. 1997).

activity: First, all three provisions are located in the same title and chapter of the U.S. Code. Second, "the Patent Statute makes clear that the effect of a reissued patent, a reexamined patent, and a patent for which a Certificate of Correction has been granted are the same: all have the full force and effect of the original issued patent."¹⁴¹ The court reasoned that "[s]ince the three types of proceedings are so similar in their purpose and effect, logic dictates the conclusion that Congress intended the same framework . . . to apply under all three provisions."¹⁴²

Section 252, as explained above, allows for the retroactivity of certain reissued patents and reexamination certificates, so it seems out of place that § 254 would not provide a similar outlet. Such an outcome is particularly odd considering the equities of the matter. It would be strange for a patentee to receive more favorable treatment under § 252, in which a patentee requests reissuance because of an invalid patent, than § 254, in which the PTO inserted an error through no fault of the patentee. In the latter case, the patentee is completely faultless and the requirements for obtaining the desired relief are stricter (a certificate of correction under § 254 is only available if the mistake is apparent from the file history), yet strict application of Southwest Software would seem to indicate that the potentially at-fault patentee requesting reissuance under § 252 is in a better position. Surely this cannot be what Congress intended.¹⁴³ Given that in the surrounding statutory scheme, patentees who are more at fault than those seeking relief under § 254 may pursue infringement retroactively, with the intervening rights doctrine as a safety valve, the same approach should be applied under § 254.

Additionally, the fact that a certificate of correction issued under § 256 allows retroactivity also provides support for the argument that, read in context, § 254 certificates should also be given retroactive effect. Courts commonly give § 256 certificates correcting inventorship retroactive effect.¹⁴⁴ In explaining such a decision, one court has distinguished § 254 certificates on the ground that those certificates, unlike § 256 certificates, involve a "substantive change to the patent" and are filed "to put the public on notice of the new boundaries of the patented invention."¹⁴⁵ Nevertheless, such distinction does not address the concerns identified in *Southwest Software*. In that case, the court was concerned not just that a competitor would be unaware of the scope of the patent,

^{141.} *Id*.

^{142.} Id.

^{143.} *Cf. id.* ("[I]t would strain credulity to conclude that Congress did not provide for judicial review by third parties of PTO decisions when the PTO conducts a thorough and comprehensive review of a patent in reissue and reexamination proceedings, but intended that third parties have the right to judicial review when the PTO issues Certificates of Correction, which involves a far less intrusive examination of a patent for minor, typographical, and clerical errors.").

^{144.} See Roche Palo Alto LLC v. Ranbaxy Labs. Ltd., 551 F. Supp. 2d 349, 358-59 (D.N.J. 2008) (citing cases).

^{145.} Id. at 358.

but also that the competitor might believe the patent was deficient in any way that could make it invalid.¹⁴⁶ After all, recall that the relevant error in *Southwest Software* was the omission of an appendix that put the patent in danger of leaving the enablement and best mode requirements unsatisfied, *not* an error in the claims themselves. But an inaccurate list of inventors raises the same invalidity problem that a missing appendix might. Failure to accurately list all inventors raises the potential that an alleged infringer can claim the patent is invalid under 35 U.S.C. § 102(f).¹⁴⁷ Thus, if *Southwest Software* is correct, a "reasonable competitor" reading a patent it knows to have an inaccurate list of inventors would have the right to rely on that perceived invalidity. Nevertheless, courts have held that corrections to the list of inventors are retroactive.¹⁴⁸ In light of that precedent, § 254 certificates, read in context, should likewise be given retroactive effect.

Finally, though not specifically relevant to §§ 251-256, Congress and the PTO have already implicitly recognized the inequity of shortening the effective life of a patent as a result of the PTO's actions. For example, the normal patent term (under current law) is twenty years from the date of filing, but 35 U.S.C. § 154 allows a patent term to be "adjust[ed]" and extended if the PTO misses certain deadlines or takes longer than three years to issue the patent.¹⁴⁹ If Congress and the PTO do not believe a patentee should be deprived of part of his patent term when the PTO takes too long to issue a patent, nor should they believe a patentee should suffer that same fate when the PTO inserts an error into the patent.

Of course, certificates of correction present notice concerns that are not present when the PTO extends a patent term, but such extensions are not costless. Extending a patent term lengthens the time during which the patentee holds an effective monopoly over use of the invention, and thus imposes costs on society by limiting the inventory of freely available knowledge. Indeed, as the Supreme Court has explained, heavily relying on Thomas Jefferson's opinions on the subject, "the restrictive effect of the limited patent monopoly" places a heavy burden on society and must be outweighed by equally weighty justifications.¹⁵⁰ The point here is that while the burden placed on society by a certificate of correction and that placed by a patent term extension might be of different kinds (notice rather than monopoly), they certainly are not entirely in-

^{146.} Sw. Software, Inc. v. Harlequin Inc., 226 F.3d 1280, 1295-96 (Fed. Cir. 2000) ("[S]uch a claim would appear *invalid* to the public, and reasonable competitors would be justified in conducting their affairs accordingly." (emphasis added)).

^{147.} See, e.g., Pannu v. Iolab Corp., 155 F.3d 1344, 1348-50 (Fed. Cir. 1998).

^{148.} See Roche Palo Alto, 551 F. Supp. 2d at 358-59.

^{149. 35} U.S.C. § 154(b) (2013). Section 156 further allows a patentee to apply for an extended patent term in addition to any extension under § 154 if the patented product or method was "subject to a regulatory review period before its commercial marketing or use." 35 U.S.C. § 156. The existence of this provision further strengthens the argument that the patent statutes as a whole disfavor depriving a patentee of the time to assert his rights due to the actions or delays of others.

^{150.} Graham v. John Deere Co., 383 U.S. 1, 10-11 (1966).

comparable, and extensions are not costless. Having recognized the inequity of depriving a patentee of part of her patent term due to the PTO's delay, Congress and the PTO should similarly recognize the inequity of doing the same due to the PTO's error.

* * *

In sum, given this fuller examination of the history of certificates of correction and their more formal counterpart, reissued patents, *Southwest Software*'s reasoning should be reconsidered. But even if that particular case is not reconsidered, these arguments should provide reason enough for courts to decline to extend *Southwest Software* to, for example, certificates of correction issued to correct errors in reissued patents or reexamination certificates. Instead, courts should allow retroactive application with a safeguard of intervening rights, just as courts did in the case of reissued patents before the intervening rights doctrine in those circumstances was codified.

B. Judicial Correction

Even assuming a court is unwilling to challenge *Southwest Software*'s approach directly with respect to retroactivity, there is still a potential outlet allowing patentees to collect for past infringement in some cases. Specifically, courts can use the doctrine of judicial correction to fix certain errors and allow that correction to function retroactively.

Courts have long held that "obvious errors in the patent can be corrected by the district court in construing the patent."¹⁵¹ Otherwise, "if [courts] were to hold that the district court[s were] powerless to correct any and all errors when construing the patent, every patent containing an error . . . would be invalid until and unless corrected by the PTO."¹⁵² Yet that result, the Federal Circuit explained, would be unfair and "draconian."¹⁵³ Courts, therefore, can correct errors in patents when (1) "the correction is not subject to reasonable debate based on consideration of the claim language and the specification," and (2) "the prosecution history does not suggest a different interpretation of the claims."¹⁵⁴ Correcting such claims "is not in any real sense, a re-making of the claim; but is merely giving to it the meaning which was intended by the applicant and understood by the examiner."¹⁵⁵ If a court judicially corrects a claim,

^{151.} Novo Indus., L.P. v. Micro Molds Corp., 350 F.3d 1348, 1355 (Fed. Cir. 2003) (citing I.T.S. Rubber Co. v. Essex Rubber Co., 272 U.S. 429 (1926)).

^{152.} Id. at 1356.

^{153.} Id.

^{154.} Id. at 1354.

^{155.} *I.T.S. Rubber Co.*, 272 U.S. at 442; *see also* ISCO Int'l, Inc. v. Conductus, Inc., No. 01-487-GMS, 2003 WL 881005, at *2 (D. Del. Mar. 6, 2003) ("Disregarding the printing mistake does not change the meaning or scope of the claim at all, but merely recognizes

the effect is retroactive, allowing a patentee to pursue claims for infringement predating the court's decision to correct the patent.¹⁵⁶

To satisfy the first requirement, the error must be "evident from the face of the patent."¹⁵⁷ A court can look to both the claims and the specification to determine whether an error would be obvious to a person of ordinary skill in the art. In at least some cases, an error requiring a certificate of correction will be obvious from the face of the patent and therefore will clear this particular hurdle for judicial correction.¹⁵⁸

The more difficult question arises with respect to the second requirement. It is unclear whether the *correction* also has to be obvious from the face of the patent and the file history is only referenced to ensure it does not conflict with the proposed correction, or whether the court can look to the file history to determine the appropriate correction in the first place. The question does not appear to ever have been directly litigated, though there are cases suggesting both approaches.¹⁵⁹ In any event, in the future, courts should adopt the latter approach, looking to the file history for the correction once the mere existence of an error is obvious on the face of the patent. Doing so is consistent with the notice purposes underlying patent law. Judicial correction in these circumstances sufficiently protects the interests of the "reasonable competitors" about which the *Southwest Software* court was concerned. As one district court put it, "[A] reasonable competitor would know that a mere typographical error had occurred, and would conduct its affairs accordingly. It would be illogical for *rea*-

157. H-W Tech., L.C. v. Overstock.com, Inc., 758 F.3d 1329, 1333 (Fed. Cir. 2014) (quoting *Grp. One*, 407 F.3d at 1303) (internal quotation marks omitted).

158. See, e.g., Hoffer v. Microsoft Corp., 405 F.3d 1326, 1331 (Fed. Cir. 2005) (using the doctrine of judicial correction to correct a patent that was mistakenly printed with the incorrect antecedent claim number). In other cases, the mistake will not be apparent just from the face of the patent. See, e.g., Grp. One, 407 F.3d at 1303 (refusing to judicially correct a claim where a portion of a limitation was erroneously omitted but the incomplete limitation read coherently).

159. Compare Grp. One, 407 F.3d at 1303 ("[O]ne cannot discern what language is missing simply by reading the patent."), and ISCO Int'l, Inc., 2003 WL 881005, at *3 ("[I]n the present case, and in all of the cases which the court has reviewed in which courts have disregarded obvious typographical errors, the mistake as well as the intended meaning were both apparent [on the face of the patent]."), with Hoffer, 405 F.3d at 1331 ("[T]he correct antecedent claim is apparent from the prosecution history."), and 800 Adept, Inc. v. Murex Sec., Ltd., No. 6:02-CV-1354-ORL-28DAB, 2006 WL 2228925, at *5 n.2 (M.D. Fla. Aug. 3, 2006) (noting that "[t]he published claim differs from the claim language recited in the claims allowed by the Patent Office" and construing the claims in accordance with the file history).

the meaning and scope of the claim as any skilled person in the relevant art would perceive them.").

^{156.} See, e.g., Grp. One, Ltd. v. Hallmark Cards, Inc., 407 F.3d 1297, 1303 (Fed. Cir. 2005) (explaining that "in some circumstances the district court can correct errors retroactively" and providing the example of *Lemelson v. General Mills, Inc.*, 968 F.2d 1202 (Fed. Cir. 1992)); Advanced Tech. Incubator, Inc. v. Sharp Corp., No. 2:07-CV-468, 2009 WL 4403314, at *19 (E.D. Tex. June 26, 2009) (explaining that "[j]udicial correction of a claim is retroactive," but refusing to correct the claim at issue); Advanced Med. Optics, Inc. v. Alcon Inc., 361 F. Supp. 2d 370, 384 (D. Del. 2005) (applying a correction retroactively).

sonable competitors to rely upon an inadvertent error such as the one at issue here as the sole basis for avoiding a patent infringement lawsuit \dots ¹⁶⁰ It would be just as illogical for a competitor to identify an error on the face of the patent and *not* look to the file history in an attempt to determine the true intended meaning.

Yet one more hurdle may be interposed between a patentee asking for a judicial correction and actually obtaining that result. Specifically, some courts have suggested that judicial correction might not be appropriate in cases in which a certificate of correction has been issued. In Novo Industries, L.P. v. Micro Molds Corp., the Federal Circuit held that Congress did not intend §§ 254 and 255 to completely preempt courts' historical ability to judicially correct patents.¹⁶¹ In doing so, though, the court implicitly limited its holding to courts' ability "to correct patents by construction where no certificate of correction has been issued by the PTO."¹⁶² Some district courts have taken that comment to suggest that courts may not, in fact, judicially correct patents where a certificate has issued.¹⁶³ No court appears to have explicitly decided the issue, though the Federal Circuit in at least one case, Hoffer v. Microsoft Corp., held that a district court should have judicially corrected a patent on which a certificate of correction had been issued.¹⁶⁴ Nevertheless, even after Hoffer, disputes have persisted in district courts about whether judicial correction is appropriate after a certificate of correction has issued.¹⁶⁵

In any event, going forward district courts should be willing to judicially correct patents, even after the PTO has issued a certificate of correction. As the court recognized in *Novo Industries*, "[n]othing in the enactment of either section 255 or 254 suggests that Congress intended to overrule [*I.T.S. Rubber Co.*] v. *Essex Rubber Co.*] or to deny limited correction authority to the district

164. 405 F.3d at 1331. It does not appear that the specific issue of whether correction was appropriate in such circumstances was litigated. Instead, the dispute merely revolved around whether a court *ever* has the power to correct errors in an issued patent.

165. See, e.g., Cordance, 2009 WL 2252556; Advanced Tech. Incubator, 2009 WL 4403314.

^{160.} *ISCO Int'l, Inc.*, 2003 WL 881005, at *2-3 (quoting ISCO Int'l, Inc. v. Conductus, Inc., No. C.A. 01-487 GMS, 2003 WL 276250, at *4 n.4 (D. Del. Feb. 10, 2003) (citing Sw. Software, Inc. v. Harlequin Inc., 226 F.3d 1280 (Fed. Cir. 2000))).

^{161. 350} F.3d 1348, 1355-56 (Fed. Cir. 2003).

^{162.} Id. (emphasis added).

^{163.} See, e.g., Cordance Corp. v. Amazon.com, Inc., No. 06-491-MPT, 2009 WL 2252556, at *3 (D. Del. July 28, 2009) ("Amazon argues that this court does not have the authority to correct these claims and apply them retroactively after the PTO has already issued a certificate of correction."); Advanced Tech. Incubator, Inc. v. Sharp Corp., No. 2:07-CV-468, 2009 WL 4403314, at *19 (E.D. Tex. June 26, 2009) ("Judicial correction of an error in a patent may be available, at least where no certificate of correction has addressed the error"); *ISCO Int'l, Inc.*, 2003 WL 881005, at *4 ("The court recognizes that, since *Southwest*, there has not been a direct confrontation of the exact question raised in the present case, that is to say, the court's ability to disregard an obvious typographical error, not-withstanding a Certificate of Correction that issued after the lawsuit was initiated.").

courts."¹⁶⁶ The logic should not change after a certificate of correction issues. Furthermore, a rule to the contrary would likely discourage patentees from pursuing certificates of correction, particularly in marginal cases where a court might be willing to judicially correct a patent in the absence of a certificate. As explained above, it is preferable to encourage patent owners to correct patents as publicly as possible at the earliest time possible, but discouraging pursuit of certificates of correction by attaching disincentives undercuts that purpose.¹⁶⁷

Judicial correction is not a cure-all, as some mistakes will not be obvious from the face of the patent. Nevertheless, it is a promising approach for courts to take in an attempt to remedy the inequities of a bright-line rule that prohibits all retroactive application of certificates of correction. Courts should therefore be more willing to judicially correct claims, even where the correction is only apparent from the file history or where a certificate of correction has already issued.

C. Amend § 254

As a final remedy, it may be necessary for Congress to pass legislation amending § 254. Two options seem most obvious in light of the existing patent laws: importing § 252's approach to intervening rights, or adjusting the patent's term as the PTO already does when there is a prolonged delay in examining and issuing the patent.

First, Congress could add to § 254 language similar to that currently found in the § 252 reissue statute. In particular, Congress could add the following language (pulled largely from § 252) to clarify that, at least in some cases, a certificate of correction should not bar all retroactive claims:

In so far as the claims of the original patent or reexamination certificate and certificate of correction are substantially identical, such surrender shall not affect any action then pending nor abate any cause of action then existing, and the certificate of correction, to the extent that its claims are substantially identical with the original patent or reexamination certificate, shall constitute a continuation thereof and have effect continuously from the date of the original patent.

Making this change should ensure that courts treat certificates of correction exactly as they treat reissued patents or reexamination certificates. As argued in Part IV.A, that is exactly how the certificate of correction statute can and should be read in any event. But Congress can make its intent clearer and make outcomes more equitable by adding this language to § 254.

An alternative, but less ideal, option would be to adjust a corrected patent's term to add time that was "lost" while the patent went uncorrected. Taking this approach would be similar to how the patent statutes already treat patents whose issuance has been delayed by PTO action or inaction, as the PTO al-

^{166.} Novo Indus., 350 F.3d at 1355.

^{167.} See supra Part III.B.1.

ready must extend a patent's term in certain circumstances in which the PTO has missed response deadlines or the patent application was pending for over three years.¹⁶⁸ Applying this same fault-based analysis to § 254, where the PTO is "at fault" for a printing error that results in a period of infringement for which no damages are available, makes some degree of logical sense.

Nevertheless, this option, while an improvement on the status quo, would create its own problems. Some of these objections are easy to overcome; for example, this approach would certainly require an act of Congress and cannot be implemented by courts on their own, meaning that any implementation is entirely dependent on congressional action. Additionally, this approach would present a larger break from the status quo, which is sure to create some uncertainty and confusion, as any large change will. But a few final objections loom larger, and will likely result in both patentees and alleged infringers being unhappy.

With respect to patentees, this particular change would require patentees to "trade" early infringement for later infringement years down the road. But later infringement is almost certainly less valuable. Even aside from concerns about the time-value of money, ¹⁶⁹ a patent is likely to be most valuable early in its life. ¹⁷⁰ Patentees, therefore, would much rather have their certificate of correction function retroactively.

With respect to alleged infringers, they aren't likely to be happy with a system that prevents them from competing for even longer. This is particularly so if the competitor has invested resources in an infringing endeavor before the patent has been corrected.¹⁷¹ While the infringer would of course be happy that he is not liable for the pre-certificate infringement, those resources now must

^{168.} See 35 U.S.C. § 154(b) (2013).

^{169.} Put simply, \$10 million today is more valuable than \$10 million twenty years from now. A patentee would therefore much rather collect \$10 million today than \$10 million in the future.

^{170.} This is largely due to the fact that new technologies, especially in the computer and electronics industries, quickly become obsolete. *See, e.g.*, Robert Pitkethly, *The Valuation of Patents: A Review of Patent Valuation Methods with Consideration of Option Based Methods and the Potential for Further Research, in* U.N. ECON. COMM'N FOR EUR., INTELLECTUAL ASSETS: VALUATION AND CAPITALIZATION, at 42, 62, U.N. Doc. ECE/TRADE/334, U.N. Sales No. E.03.II.E.40 (2003) ("[T]he later years of a patents [sic] life are dominated by the effects of technical obsolescence . . . "); Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?*, 161 U. PA. L. REV. 1309, 1316 (2013) ("[P]roducts generally have short lifecycles relative to the patent term"); Scott Thorpe, Prepare Your Own Provisional Patent (Feb. 12, 2012), https://www.smashwords.com/books/download/132324 /1/latest/0/0/prepare-your-own-provisional-patent.pdf ("Patents are most useful, and valuable, early in the life of a new product or service.").

^{171.} The doctrine of equitable intervening rights, which allows a court to use its equitable power to sanction continued infringement in certain circumstances in which new or amended claims are not substantially identical to earlier claims, reflects this concern about wasted resources. *See* Seattle Box Co. v. Indus. Crating & Packing, 756 F.2d 1574, 1579 (Fed. Cir. 1985).

be wasted or put on hold until the patent term expires. Thus, any extension in the patent term will place a heavier burden on competitors.

Finally, and perhaps most importantly for legislators, this change would probably be disadvantageous for society at large, because the result would be to extend the limited monopoly, and all the inefficiency that attends it, further into the future. Indeed, some believe a reduction in patent terms is already called for, especially because late in a patent's life, patentees end up using the patent "as [a] tool[] to shakedown companies making devices thousands of times more sophisticated than those on the market when the patent was filed."¹⁷² Extending patent terms to make up for earlier "lost" infringement would just make those problems worse.

In sum, while requiring Congress to amend the statute is the least ideal approach to addressing the problem of the retroactivity of certificates of correction given the difficulty of moving legislation through Congress, it is a viable last resort. For all of the reasons described above, Congress should amend § 254 to include similar language to that already found in § 252, especially if courts cannot or will not act to correct the inequity themselves.

CONCLUSION

This Note has been the first attempt to describe the evolution of certificates of correction and how they are treated in courts. Unfortunately, such analysis has shown a myriad of problems that have been introduced by the Federal Circuit's current approach to the retroactivity of certificates of correction. Courts have a variety of options, on which this Note has elaborated, to address such problems. Ideally, the bright-line nonretroactivity approach adopted in *Southwest Software* would be reconsidered. In the context of the history of reissued patents and the statutory scheme as a whole, certificates of correction should be allowed retroactive effect in all cases in which a reissued patent would have similar effect. Intervening rights can provide the notice protection that drove the *Southwest Software* court.

Even if such reconsideration is not forthcoming, however, courts should take every opportunity to limit *Southwest Software* closely to its facts. For example, particularly in cases in which a certificate of correction has been issued to fix an error in a reissued patent or reexamination certificate, courts should limit *Southwest Software* and instead "piggyback" § 254 on § 252 to allow retroactivity. Because the most inequitable results are likely to happen in cases

^{172.} Brian J. Love, *Let's Use Patent Fees to Stop the Trolls*, WIRED (Dec. 20, 2012, 3:30 PM), http://www.wired.com/2012/12/how-to-stop-patent-trolls-lets-use-fees. In fact, an empirical analysis by Brian Love has shown that while product-producing companies generally assert their patent rights early in the patent's term, nonpracticing entities (or "patent trolls," as they are sometimes known) dominate patent litigation in the later years of a patent's life. *See generally* Love, *supra* note 170. Thus, any adjustment to the end of a patent term is likely to only advantage patent trolls, not the inventors or practicing entities themselves.

involving reexamination certificates or reissued patents, this more limited approach will at least resolve the most egregious outcomes.

Less effective, but better than nothing, is for courts to use their ability to judicially correct patents to give the corrections retroactive effect. The existing judicial correction doctrine is only in need of slight alteration and clarification to allow it to apply quite nicely to many errors that would normally require a certificate of correction.

Finally, if courts are unwilling to do this work and resolve the inequities that are cropping up through the fault of the PTO, Congress should step in and amend § 254. Specifically, Congress should amend § 254 to include the language from § 252, which authorizes reissued patents, that makes clear that new or amended claims can have retroactive effect in some circumstances. While this option is least preferable given the time and effort probably required for Congress to make the change—and the fact that courts, as described above, should be able to come to the same result themselves—it may be necessary in order to protect the rights patentees have earned. Any other result has the potential to undercut the benefits our patent system is supposed to offer to inventors.

Whatever the approach, it is well past time for either courts or Congress to keep the nation's word to the inventors who provide significant benefits to society. At the very least, a patentee should not have to forfeit claims for years of infringement merely because someone else, particularly the PTO, has made a mistake. It is time to act.