UNDERSTANDING THE BACKLOG PROBLEMS ASSOCIATED WITH REQUESTS FOR CONTINUED EXAMINATION PRACTICE

SEAN TU[†]

ABSTRACT

One of the greatest problems facing the current patent administration is a long patent pendency period. This study focuses on Request for Continued Examination (RCE) practice, and its effects on the current patent application backlog problem. RCEs are used to continue prosecution after a patent examiner has issued a final rejection. However, now that RCEs are placed on an examiner's special docket, some examiners may pick up prosecution one to two years after the last action. Accordingly, there are great inefficiencies that may be created by this delay, such as relearning issues and questions from the previous action, diminished value of examiner interviews, and a higher likelihood of transfer to a new examiner. This study suggests that the RCE problem may be much worse for some art units compared to others. Specifically, the RCE problem is unevenly distributed between certain art units with technology center 1600 (biotechnology and organic chemistry) suffering the most from unexamined RCEs, while technology center 2800 (semiconductors, electrical and optical systems and components) remain unaffected. This RCE backlog can result in a delay of approximately three years for some art units. Possible solutions to the RCE problem include creating a two-track examiner specialization program: one track focusing on drafting office actions and a second track focusing on finding relevant prior art. Another possible solution would be to create a new type of request to reopen prosecution after final to allow applicants to enter new narrowing amendments or add new declarations without adding new arguments. A final solution may be to place the RCE back in the examiner's normal docket and not in the examiner's special new docket.

[†] Associate Professor, West Virginia University College of Law. Sincere thanks to the many readers who offered comments on earlier drafts, including Michael Risch, Hal Wegner, and Jason Rantanen. This work was funded in part by the West Virginia University College of Law Bloom Research Fund.

INTRODUCTION

One of the greatest problems facing the current patent administration is a long patent pendency period. Long pendency periods for patent applications can negatively affect innovators, competitors and the institutional reputation of the patent office itself. The prosecution¹ of a patent application is a long and arduous road that often takes more than three years before a patent is obtained. Currently, the unexamined patent application backlog stands at approximately 600,000 applications.² Additionally, it takes approximately 18.1 months before the United States Patent and Trademark Office (USPTO) even picks up an application.³ With 8,407 patent examiners and a budget of over \$1.7 billion dollars, it is important to understand where and why this delay is occurring.⁴ It is important to note that the USPTO takes this problem seriously, and has made great strides in reducing the backlog from over 750,000 applications in 2009 to approximately 600,000 applications in 2014.⁵

This study focuses on Request for Continued Examination (RCE) practice, and its effects on the current patent application backlog problem. Part I discusses the patent prosecution process and how RCEs fit into that scheme as well as the problems associated with RCE practice. Part II discusses when and why applicants use RCEs and which technology centers have the greatest backlog of RCEs. Part III examines the USPTO's current solutions both to the general backlog problem and also the USPTO's response to the growing backlog of RCEs. Part IV suggests alternative solutions to the RCE backlog problem, and Part V concludes.

Long pendency periods can harm applicants, competitors, consumers and the patent office. Applicants may be particularly harmed when dealing with technologies that change quickly or are rapidly rendered obsolete. If a specific technology lifespan is only one to two

¹ Patent prosecution is the interaction between applicants (the inventor(s)) and the patent office. Patent prosecution includes the process of writing and filing a patent application and pursuing protection for the patent application with the patent office. The applicant "prosecutes" the patent application in the patent office to obtain a patent.

² Data Visualization Center, UNITED STATES PATENT AND TRADEMARK OFFICE, http://www.uspto.gov/dashboards/patents/main.dashxml (last visited Feb. 10, 2015) (showing 610,227 unexamined patent applications).

 $[\]overline{}^{3}$ Id.

⁴ *Id.*; *see also* USPTO, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2012 (2012).

⁵ USPTO, PERFORMANCE AND ACCOUNTABILITY REPORT FISCAL YEAR 2012, at 3 (2012); see also Data Visualization Center, supra note 2.

years, the patent value may be greatly diminished if the patent prosecution process spans approximately three to five years. Applicants are also harmed because patent term is calculated based on a twenty year period following the date of the initial application or priority date for the eventually-issued patent. Therefore, in general, the longer an application remains in prosecution, the shorter the effective enforcement period.⁶ Additionally, competitors are harmed because parties who may release new products cannot rely on the legal certainty of a patent. Competitors are then forced to either delay release of their products or release the product and face the threat of future litigation. Consumers are also hurt by long patent pendency times because innovative products may not come to market quickly, or may include a premium as companies account for possible litigation costs. Finally, the USPTO's institutional reputation is also harmed if delays are too prolonged. Especially in light of possible fee diversion,⁷ it is important for the USPTO to examine patents to a final disposition (allowance or abandonment) as quickly as possible.⁸

A. Factors Contributing to Long Pendency Durations

There are many factors that contribute to long pendency times. Some of these factors occur from the USPTO side, and others occur from the applicant side. Factors on the USPTO side include: (1) a large influx of patent applications, (2) high examiner turnover rates, and (3) fee diversion. As the number of patent applications filed increases, the backlog of applications increases lengthening the time needed for prosecution. Compounding the problem is the fact that there are high examiner turnover rates,⁹ which requires some duplication of work by a second examiner. Factors on the applicant side include: (1) delayed

⁶ 35 U.S.C. §154 (b) helps to remedy some of the patent term loss due to delays caused through no fault of the patentee. Additionally, pre-GATT applications (those applications filed before June 8, 1995) can have a patent term calculated 17 years from the issue date, rather than 20 years from the priority date.

⁷ The USPTO fees that it generates are not all funneled back into the agency. Instead some fees are diverted to other programs. A previous report by the National Academy of Public Administration argues that the backlog of unexamined patent application is the direct result of fee diversions. NAT'L ACAD. OF PUB. ADMIN., U.S. PATENT AND TRADEMARK OFFICE: TRANSFORMING TO MEET THE CHALLENGES OF THE 21ST CENTURY 42–46 (2005).

⁸ Dennis Crouch, *Welcome Back Fee Diversion: USPTO Likely to Begin Sending Collected Fees Back to Treasury*, PATENTLYO (April 16, 2013), http://www.patentlyo.com/patent/2013/04/welcome-back-fee-diversion-uspto-likely-to-begin-sending-collected-fees-back-to-treasury.html.

⁹ Dennis Crouch, *Patent Examiner Experience Levels*, PATENTLYO (Feb. 5, 2010), http://patentlyo.com/patent/2010/02/patent-examiner-experience-levels.html.

response times, (2) continuation applications (continuation applications, divisional applications and continuation-in-part applications), (3) request for continued examination (RCE), and (4) appeals. Prolonged prosecution times can be created when applicants file a response to Office actions after the three-month shortened statutory period usually given to respond. Additionally, significant delays can result when the applicant files a continuation application or appeals the examiner's rejection(s).

In this study, we focus on patent delays caused by Request for Continued Examination Practice. However, we briefly summarize some USPTO strategies that have been implemented to reduce the patent application backlog.

B. Request for Continued Examination (RCE) Practice

1. General

Patent prosecution is a back and forth negotiation between the patent examiner and the applicant. In general, the role of the patent examiner is to review and determine if the application meets the minimum standards of patentability. The examiner reviews the specification and claims of the application as well as the prior art (other patents or publications that are related to the invention) to determine if the patent application meets the standards of patentability. The patent prosecution process is ex parte and, in general, is closed to the public. Although the public cannot generally comment during patent prosecution, the file histories (the discussions between the applicant and examiner) are open to the public and frequently updated on the USPTO web portal (Public Patent Application Information- Public PAIR).

Typically in patent prosecution, the examiner will first review the specification and claims and then search the literature for prior art. The examiner can either (1) allow the claims to go onto a patent, or (2) reject the claims in a non-final Office action. If the examiner rejects the claims, the applicant has a chance to respond to the first non-final rejection by (1) amending the claims, or (2) arguing that the claims are patentable by disclosing information or submitting a declaration showing that the invention is patentable. The examiner then reviews the applicant's response and can do one of three things. First, the examiner could find the applicant's arguments convincing and/or that the applicant's amendments overcome the rejection, thus allowing the application to become a patent. Second, the examiner could submit new If the action is a final Office action, then the applicant can: (1) file an after final response (which may or may not be entered into the record by the examiner), (2) abandon the application, (3) appeal the rejection to the Patent Trial and Appellate Board (PTAB), or (4) try to continue the negotiation with the examiner. An applicant can try to continue the negotiation with the examiner using one (or more) of four different procedures: (a) file a continuation application (CON), (b) file a continuation in part application (CIP), (c) file a divisional (DIV) application, and/or (d) file an RCE.¹¹

2. Continuing the Negotiation

Continuing the negotiation (CON, CIP, DIV and/or RCE) allows the applicant to resume prosecution with the examiner without losing the priority date and originates from the same general invention disclosure (the "parent" application).¹² The USPTO does not have a limit on the number of continuations that may be filed by the inventor as long as the applications are timely and a fee is paid.

There are slight differences between the four types of methods that are used to continue prosecution with the examiner. Continuation applications contain different claim scope from their parent application but must claim only that which was disclosed in the parent application.¹³ Similarly, CIP applications also claim priority to the parent application but adds new matter that does not gain the benefit of the parent's priority date.¹⁴ Thus, a CIP gains the priority date for those claims that are based on the material disclosed on the parent application, but does not gain the benefit of the priority date for the new material that was disclosed in the CIP. In CIP applications, the priority date is determined on a claim-by-claim basis. A DIV application is usually filed where the parent application was

¹⁰ If, however, a new rejection is necessitated because of the applicant (i.e. amended the claims or presented evidence), then the examiner may issue a final Office action instead of a non-final Office action.

¹¹ Mark A. Lemley & Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U. L. REV. 63, 101, 101 n.155 (2004) (discussing elimination of the Continued Prosecution Applications (CPA) in favor of the RCE*; see also* MPEP 201.06(b) (8th ed. Rev. 7, Sept. 2008).

¹² 35 U.S.C. §§ 120, 121, 132(b) (2012); MPEP 201.04 (8th ed. Rev. 7, Sept. 2008).

¹³ MPEP 201.07 (8th ed. Rev. 7, Sept. 2008).

¹⁴ MPEP 201.08, .11(I)(B) (8th ed. Rev. 7, Sept. 2008).

required to divide the parent application into one or more divisional application, each claiming one single invention.¹⁵ The RCE is not technically a new application, but allows the applicant to resume prosecution of the patent even after prosecution of the application is closed by the examiner. The purpose of the RCE is to allow continued examination of an application notwithstanding a final rejection and to avoid the need to file a continuation application with a loss of all earned patent term adjustment.

3. RCE Practice

RCEs are filed to gain further consideration of patent application after the examiner closes prosecution.¹⁶ An examiner can close prosecution when the examiner issues a final rejection, a notice of allowance, or when the applicant files an appeal.¹⁷ However, unlike the CON, CIP or DIV, the RCE is not a new application, and thus does not create a second, co-pending application.

Section 4403 of the "American Inventors Protection Act of 1999" establishes the applicant's right to continued examination.¹⁸ An RCE may be filed if the application is under a final rejection, appeal, under an *Ex parte Quayle* action, or even if the application is in a notice of allowance.¹⁹ 37 C.F.R. 1.114 provides the procedure by which an applicant may obtain continued examination by filing a submission and paying a specified fee. An RCE can include information such as an information disclosure statement, an amendment to the written description, claims or drawings, new arguments or new evidence supporting patentability.²⁰ Once an RCE is filed, the USPTO withdraws the finality of any Office action and the submission is entered and considered by the examiner. Any previously-filed unentered amendments, amendments filed with the RCE, and any amendments filed prior to the mailing of the next Office action are entered into the file.

¹⁵ 35 U.S.C. § 121 (2012).

¹⁶ 37 C.F.R. § 1.114(a) (2015).

¹⁷ 37 C.F.R. § 1.114(b) (2015).

¹⁸ 35 U.S.C. § 132(b) (2011).

¹⁹ RCEs may not be filed in a provisional application, application for a utility or plant application filed before June 8, 1995, an international application filed under 35 U.S.C. 363 before June 8, 1995, an application for a design patent, or a patent under reexamination. *See* 37 C.F.R. §1.114(e). For rules regarding the specific circumstances in which an RCE can/cannot be filed, see also REQUEST FOR CONTINUED EXAMINATION PRACTICE AND CHANGES TO PROVISIONAL APPLICATION PRACTICE http://www.uspto.gov/web/offices/com/sol/og/2000/week36/patdept.htm (visited May 20, 2015).

²⁰ 37 C.F.R. § 1.114(c)).

Additionally, RCEs are filed after the examiner issues a notice of allowance. Applicants file RCEs to reopen prosecution after allowance, because they wish to enter in newly discovered evidence that is material to patentability. With the RCE, the examiner can review the newly submitted references to ensure that the prior art does not affect patentability.

A timely filed RCE will allow the applicant to reopen patent prosecution even after a final rejection or notice of allowance. Once an RCE is filed, the prosecution cycle begins again.²¹ Applicants can file an unlimited number of RCEs to obtain the desired breadth of claims. However, for post-GATT applications, there would be a rational endpoint to the number of RCEs filed, since the duration in prosecution diminishes the patent term.²² Accordingly, barring any USPTO delays, applicants should not keep an application in prosecution for more than 20 years.²³ As discussed below, some commentators suggest that this unlimited number of RCEs (along with continuation applications) introduces substantial applicant-generated delay, uncertainty for competitors, wearing down of the examiner, and submarine patenting.²⁴

With respect to continuation or RCE practice, the difference between a non-final action and final Office action is important. A nonfinal Office action raises an issue for the first time. It stands to reason that a continuation or RCE should not be necessary to respond to a nonfinal action, because this is the first time that the applicant sees a new argument or new piece of prior art raised by the examiner. Accordingly, an applicant can respond to the examiner's non-final Office action without additional USPTO fees.²⁵ In contrast, a final Office action is appropriate when the applicant's response to the prior Office action fails to address or overcome all issues previously raised by the examiner. A final rejection closes patent prosecution. Thus, to continue prosecution

²¹ 37 C.F.R. § 1.114(c).

²² This is because patent term is determined as twenty years from the date on which the application for the patent was filed in the United states or, if the application contains a specific reference to an earlier filed application or applications under 35 U.S.C. § 120, 121 or 365(c), from the date on which the earliest such application was filed. 35 U.S.C. § 154 (2012); *see also* Uruguay Round Agreements Act, Pub. L. No. 103-465, § 532(a)(1), 108 Stat. 4809 (1994).

 $^{^{23}}$ One caveat is for patents filed before June 8, 1995, where patent term is determined as the greater of the "twenty-year term" (as outlined above) or seventeen years from the patent grant.

²⁴ Mark A. Lemley & Kimberly A. Moore, *supra* note 11, at 65.

²⁵ In general, the only fees associated with a response to a non-final Office action are extension of time fees due to a shortened statutory response period.

with the examiner, an applicant must file either a continuation application or an RCE in response to the examiner's final Office action.

Two USPTO Rules/Practices lead to RCEs. First, MPEP §706.07(a) allows a new rejection in a final Office action based on a reference submitted in an IDS.²⁶ As an initial matter, it may seem that this rule is fair, because the examiner would have to do more work to review applicant cited art. However, the applicant may not have control over the timing of the submission of the IDS. For example, if an IDS is filed to cite to reference(s) newly cited in a foreign application. Second, MPEP §706.07(b) allows a final Office action as the first Office action in a continuation application or RCE. Specifically, this rule allows the examiner to finally reject the response immediately subsequent to the filing of the RCE, if all the claims in the application after the entry of the RCE are drawn to the same invention claimed in the application prior to submission and would have been properly finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to the filing of the RCE.²⁷ Applicants who receive a first action final will likely have to file an additional continuation or RCE.

4. Differences between RCE Practice and Continuation Practice

Procedurally, the continuation application is a new application and will receive a new application number. In contrast, an RCE simply is the continued examination of the old application. A continuation application may be filed at any time during the pendency of an application (i.e. before the application is abandoned or issues as a patent). An RCE may only be filed under specific circumstances.²⁸

Depending on the page count and claim counts, the USPTO filing fees for a continuation application can be less than those for an RCE. While continuation applications and RCEs would both be docketed on the examiner's "special new" docket,²⁹ examiners may be incentivized to pick up a continuation application rather than an RCE because of the higher counts associated with a continuation application in contrast to an RCE.

Continuation applications, however, differ substantively from RCEs when it comes to patent term calculations. Under the Patent Term

²⁶ MPEP 706.07(a) (8th ed. Rev. 7, Sept. 2008).

²⁷ MPEP 706.07(b) (8th ed. Rev. 7, Sept. 2008).

²⁸ See MPEP 201.11(B)(i), supra note 14, for general circumstances under which an RCE can be filed.

²⁹ The "special new" or "continuing new" docket includes all continuations, divisionals and RCEs from which (based on the effective filing date) there is an expectation that only one case needs to be acted upon each month.

Adjustment provisions, a continuation application is treated differently from an RCE.³⁰ Specifically, filing a continuation application will reset the PTA clock. In contrast, filing an RCE merely stops the accrual of USPTO delay days. Accordingly, if the pending application has significant USPTO delays (in comparison to applicant delays), PTA considerations may incentivize the applicant to file an RCE instead of a continuation application.

C. The RCE Problem

The RCE problem became prominent when the USPTO under the leadership of Director Dudas used rulemaking to cut off the number of RCE's and continuing applications that could be filed. After a groundswell of discontent from patent practitioners and a two-year battle, the USPTO, under the leadership of Director Kappos, withdrew its proposed rules package.³¹ The failed rules would have limited an inventor to filing two continuation applications of each type of invention disclosed in an original patent application, unless the application could show "good cause" for additional continuations.³² Additionally, under the failed rules, applicants could only file one RCE for each "family" of applications, unless the applicant could show good cause for additional RCEs.³³

The total pendency time for those applications with at least one RCE is 59.4 months.³⁴ This is in contrast to the total pendency for applications with and without an RCE, which is 37.3 months.³⁵ Accordingly, those applications with at least one RCE take almost two additional years to prosecute.

Although the 2007 rules package that would limit continuation practice failed, the USPTO has implemented new rules that discourage RCE filings. Specifically, on November 15, 2009, the USPTO implemented several changes that greatly effected RCE pendency generated by the USPTO. First, newly filed RCEs are now placed on the examiner's "special new" docket instead of her "amended" docket.³⁶ Second, the USPTO changed the "count system" such that examiners

³⁵ Id.

³⁰ 35 U.S.C. § 156(b) (2012).

³¹ Tafas v. Kappos, 586 F.3d 1369, 1371 (Fed. Cir. 2009) (en banc).

³² 71 Fed. Reg. 48-61 (Jan. 3, 2006).

³³ Id.

³⁴ Data Visualization Center, supra note 2.

³⁶ USPTO, NOTICE OF CHANGE TO DOCKETING OF REQUESTS FOR CONTINUED EXAMINATION (Oct. 19, 2009), *available at* http://www.uspto.gov/patents/law/notices/rce_docket.pdf.

receive less credit ("counts") for reviewing multiple RCEs.³⁷ Together, these changes to RCE practice have caused significant delay in patent prosecution for specific technology types. Accordingly, the backlog of RCEs has grown from approximately 20,000 applications in November of 2009 to over 110,000 applications in March of 2013.³⁸ However, more recently, in part due to the "RCE leveling plan" the RCE has been reduced to 78,272 by the end of September 2013, and down to 46,441 as of October 1, 2014.³⁹ However, despite this progress there are still over 1,700 applications more than 24 months old still awaiting an action.⁴⁰

Before November 15, 2009, RCEs were docketed on the "amended" docket, which meant that examiners were forced to act on the RCE within two months of its arrival on the examiner's docket. Pre-November 15, 2009, an RCE was treated like any other response and did not significantly delay prosecution. Thus, pre-November 15, 2009 RCEs were examined within two months of docketing to the examiner. In contrast, under the post-November 15, 2009 rules, RCEs are now placed in the examiner's "special new" docket. This docket includes both continuation and divisional applications, as well as those applications that have been conferred "special" status under 37 C.F.R. § 1.102. Importantly, an examiner is required to act on only one item per month from her "special new" docket, post-November 15, 2009 RCEs could take year(s) before they are reviewed.

³⁷ Examiner productivity is judged by "counts." Counts help determine if an examiner is promoted or is given a salary bonus. Counts can be earned in many ways, such as by first office actions or disposal of cases by allowance or applicant abandonment. Although a "final rejection" is not awarded counts, issuing a response to a first RCE is given a count, with less credit given to every subsequent RCE. For an explanation of the "count" system, see Exam'r Docket, Time, and Activity Recordation [R–808.2012], MPEP 1705, *available at* http://www.uspto.gov/web/offices/pac/mpep/documents/1700_1705.htm (last visited Feb. 10, 2015); *see also* Memorandum from Peggy Focarino, Deputy Comm'r for Patents, U.S. Patent and Trademark Office (Aug. 31, 2010), *available at* http://www.popa.org/pdf/agreements/counts-31aug2010.pdf. ³⁸ Dennis Crouch, *USPTO Takes Action to Reduce RCE Backlog*, PATENTLYO (March 28, 2013), http://www.patentlyo.com/patent/2013/03/uspto-takes-action-to-reduce-rce-backlog.html.

³⁹ PATENT PUB. ADVISORY COMM., USPTO, PATENT PUBLIC ADVISORY COMMITTEE ANNUAL REPORT 2014 (2014).

⁴⁰ *Id.* at 25.

⁴¹ C.C. Brinckerhoff, et al., S.M., *Change in USPTO Processing of RCEs Likely to Significantly Delay Prosecution*, 158 INTELL. PROP. COUNSELOR, art. III (Feb. 2010).

Adding to the problem is the count system used to measure an examiner's productivity. Prior to November 15, 2009, examiners earned 1.0 counts for the first Office action in response to an RCE, while final and subsequent Office actions did not earn any further counts. Accordingly, the previous count system allowed an examiner to maximize counts by promptly examining RCEs, because an examiner would earn more credit for an RCE than a final (or other subsequent) Office action. In contrast, under the new count system, examiners still receive 1.0 count for the first RCE response, however, the examiner only receives 0.75 counts for each subsequent RCE filed. Additionally, the examiner receives 1.25 counts for the first Office action in a continuation or divisional application. Thus, the disincentive to review RCEs is twofold: (1) examiners earn less credit for a response to a second or subsequently filed RCE and (2) examiners earn more credit for a first Office action in a continuation or divisional application on her "special new" docket. Thus, given a choice, examiners who attempt to maximize their counts will pick up a continuation or divisional application instead of an RCE. Compounding this problem is the fact that an examiner is only required to pick up one item per month from her "special new" docket.

Finally, the USPTO has increased the fees associated with RCEs. Specifically, before March 18, 2013, all RCEs were \$930. In contrast, after March 18, 2013, the first RCE costs \$1,200 and the second and subsequent RCE costs \$1,700. The USPTO justifies the higher fees for second and subsequent RCEs by asserting that applicants who file more than one RCE are "using the patent system more extensively than those who file zero or only one RCE."⁴² Interestingly, as discussed in section II(B), below, this justification ignores the possibility that multiple RCEs may be required in consideration of Information Disclosure Statements, or applications that are assigned to difficult examiners. Additionally, this fee increase for second and subsequent RCEs goes against the Patent Public Advisory Committee (PPAC) recommendation to decrease fees for second and subsequent RCEs because "these RCEs are easier and cheaper to examine."⁴³

Indeed, previous commentators have shown an increase in RCE filings with a concurrent increase in the RCE backlog.⁴⁴ On average, there is a 5.9 month pendency from RCE filing to the next Office action.

⁴² Setting and Adjusting Patent Fees, 78 Fed. Reg. 4211, 4245 (Jan. 18, 2013) (to be codified in scattered sections of 37 C.F.R.).

 $[\]frac{43}{1}$ Id.

⁴⁴ Dennis Crouch, *Patent Stats for FY 2012*, PATENTLYO (Nov. 14, 2012); *see* also Jason Rantanen, *Guest Post: The RCE Cliff*, PATENTLYO (Nov. 19, 2012) http://www.patentlyo.com/patent/2012/11/guest-post-the-rce-cliff.html.

However, this number may be deceptive since it is an average across all art units. Furthermore, these calculations do not include those RCEs that are still pending, and have not yet been picked up. Anecdotally, some art units experience much longer pendency periods. For example, in technology center 1600 (biotechnology), post-RCE delays can be a period of months to years.

Importantly, there are significant substantive inefficiencies created by RCE delays. If an RCE is taken up a year or two after the last action, examiners and applicants have to spend more time reviewing the record to re-learn the issues in question from the previous action. Additionally, previous knowledge, nuances and important peculiarities about the technology, claims and/or prior art may have been forgotten during the prolonged RCE delay period. Examiners will inevitably take more time to refamiliarize themselves with the application than if the RCE were examined without delay. Furthermore, interviews after RCE delays drastically diminish the value of an examiner interview, because the interview is mainly used to simply review the file to get the examiner back to where she was before the RCE was filed. Finally, due to the high turnover rate at the USPTO⁴⁵ (especially with junior examiners), RCEs are more likely to be transferred to a new examiner, who no longer has the benefit of a prior reading of the claims and specification or the prior art. A new examiner must start the examination without the benefit of prior interactions and applicants may have to refresh recollections. A simple solution may be to place RCEs back into the examiner's amended docket (discussed in section III(C) below).

I. RCE MECHANICS

A. When Are RCEs Used?

RCEs are filed in response to many factors. RCEs can be filed in to: (1) combat an erroneous final rejection, (2) submit claim amendments and/or evidence to address a new rejection in a final office action, (3) continue examination when a case is transferred to new examiner(s), and (4) submit an IDS after a final office action.

First, RCEs can be used by applicants to further arguments when examiners issue final rejections based on incorrect substantive arguments (i.e. flawed scientific analysis or the misinterpretation of current legal standards). Previous studies have shown that there are populations of examiners who issue patents at a very slow (longer than 5 years) and low

⁴⁵ Dennis Crouch, *Patent Examiner Experience Levels*, PATENTLYO (Feb. 5, 2010), http://www.patentlyo.com/patent/2010/02/patent-examiner-experience-levels.html.

rate (lower than 5 patents per year).⁴⁶ If these examiners are issuing defective rejections, then as a practical matter, filing an RCE may be necessary to continue prosecution with the examiner.

One such situation is exemplified when examiners first write long and complex formal rejections, often without a full search or full consideration of the prior art. Applicants are then required to overcome the complex formal requirements. Once formal requirements are traversed, then a final Office action is issued with a full consideration of the prior art. Although the new Office action (with prior art) should be a non-final Office action, often examiners make the new rejection a final Office action to garner additional counts. If an examiner pursues this strategy to maximize their counts, then applicants are forced to file RCEs or try to appeal the case to the PTAB.⁴⁷ In either case, prosecution is greatly delayed. RCEs filed in this scenario are used to combat examiner gamesmanship of the count system.

Second, RCEs are commonly filed to submit new claim amendments or evidence to address a new rejection in a final Office action or place the application in better condition for appeal. It often takes more than one round of prosecution for the applicant to understand the examiner's position, and also for the examiner to fully understand the RCEs filed in this situation may be used to clarify the invention. applicant's position or to help explain the amendments made to overcome the previous rejection or to help explain the nuances of the invention. RCEs are often filed to clarify claim scope in response to examiner's claim construction or in response to a 35 U.S.C. §112 rejection. Additionally, applicants may find it necessary to file an RCE to explain added features from the specification in response to a prior art rejection. For example, one common situation is when an applicant overcomes a 35 U.S.C. §102 anticipation rejection, but the same art is cited in a 35 U.S.C. §103 obviousness rejection. Furthermore, RCEs may be used when more time is necessary to gather data for an affidavit, or when there is a desire to place the application in better condition for appeal. Finally, RCEs may be used because a new decision by the Federal Circuit or the Supreme Court changes the law, thus requiring the applicant to amend the claims and/or present new arguments. RCEs filed in this manner are justified to help clarify applicant's position against a valid examiner rejection.

⁴⁶ Shine S. Tu, Unluck/Luck of the Draw: An Empirical Analysis of Examiner Allowance Rates, 2012 STAN. TECH. L. REV. 10 (2012).

⁴⁷ 35 U.S.C. § 6(a) (referencing the Patent Trial and Appeal Board, formerly known as the Board of Patent Appeals and Interferences).

The USPTO may argue that in each of these situations, the applicant could have presented these arguments in response to the non-final Office action. This is true, but there are many reasons why amendments /evidence might not have originally been presented. For example, applicants might have thought that previous arguments /explanations were sufficient. Alternatively, applicants might not have understood the examiner's true concerns until after the final Office action issued.

Third, RCEs are also used when cases are transferred to a new examiner. In a brief analysis of sample cases (approximately 50 cases from different technology centers) where prosecution took more than 10 years, all cases had at least two examiners. This may be unsurprising since when the case is transferred to a new examiner, the new examiner may ignore or find new art in her own independent search of the prior art. Additionally, because the new examiner brings a new perspective, new rejections may be issued based on this new perspective. Accordingly, RCEs may be necessary to continue the conversation between examiner and applicant when a new examiner is brought into the application review process.

Fourth, RCEs can be used to force the examiner to grant an examiner interview. Generally, examiner interviews are helpful to advance prosecution. Additionally, practitioners favor examiner interviews because, unlike the rest of the prosecution history which involves a written history, the interview is not transcribed and the interview summary is usually minimal and vague. This lack of written history is preferable to applicants because arguments can be advanced without creating prosecution history estoppel. Examiners are required to grant an interview after a non-final Office action, however, they are not required to grant an interview after a final Office action.⁴⁸ Interestingly, it has previously been found that "late" examiner interviews (interviews conducted after a final Office action) are more effective compared to "early" examiner interviews (interviews conducted before a final Office action).⁴⁹ Accordingly, applicants may wish to file RCEs to force examiners to conduct a "late" type interview, since they are not required to grant an interview after a final Office action.⁵⁰

⁴⁸ 37 C.F.R. 1.133; MPEP § 713.02, .09.

⁴⁹ *The Effectiveness of Examiner Interviews*, PATENTLYJOBS (July 20, 2009), http://www.patentlyo.com/patent/2009/07/the-effectiveness-of-examiner-interviews.html.

⁵⁰ Anecdotally, there are some art units that have a policy not to grant an interview if a final rejection has issued, rendering an RCE necessary. Letter from Intellectual Property Law Section, American Bar Association, to the PTO

A final common scenario where an applicant may need to file an RCE is when the application has been allowed (i.e. prosecution is concluded), but the applicant becomes aware of a new reference(s) that the examiner has not previously considered. This is particularly relevant for those applicants that have a significant number of related US and International applications pending at a given time. Specifically, this situation occurs when the applicant receives a new reference from an application in a foreign application counterpart or a related U.S. application. Accordingly, the applicant needs to file an Information Disclosure Statement (IDS) so that the examiner can review the new reference and determine if the application is still allowable in view of the newly cited reference. An RCE is one procedural mechanism that the applicant can use to allow the examiner to reopen prosecution to consider the application in light of the new reference.

Interestingly, the PTO has found that applicants file an RCE after allowance in approximately 11 percent of cases (16,261 applications out of 150,968).⁵¹ After sampling some file histories in which RCEs were filed after allowance, the USPTO found that when RCEs were filed after allowance, a larger number of references were cited in the IDSs (11 references) compared to those without an RCE (3 references). Furthermore, the USPTO found that "a substantially larger proportion of RCE filings (27%) included IDSs citing more than 20 references than without an RCE (4%)."⁵²

B. Who is Using RCEs?

To determine which art units experience the longest / shortest RCE response time, we turned to PatentAdvisor TM. PatentAdvisor TM is a database that provides patent office statistics derived from the file histories of applications since 1976. We counted every RCE with no corresponding next office action (Office Action, Notice of Allowance or Notice of Abandonment). We then segmented the data by art unit. Thus, for each art unit, we determined the number of RCEs pending response as of December 31, 2012.

Figure 1 below displays the results of our analysis. Each pie piece represents a specific technology center. Within each pie piece is a circle which represents individual art units within the technology center. The top number represents the individual art unit, while the bottom

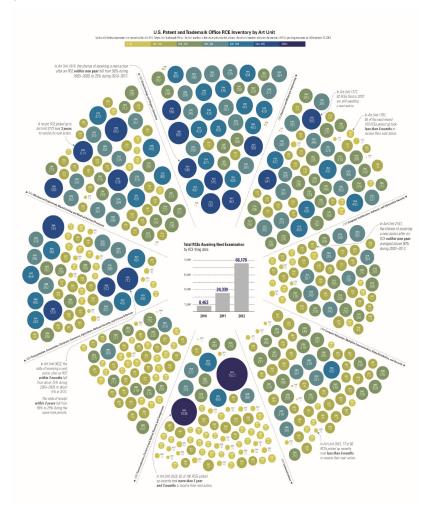
^{4 (}February 1, 2013) (in response to "Request for Comments on Request for Continued Examination (RCE) practice").

⁵¹ USPTO, Power Point, *RCE Outreach Data*, slide 6, http://www.uspto.gov/sites/default/files/patents/init_events/rce_outreach_data.p ptx (last visited June 18, 2013).

⁵² *Id.* at slide 9.

number represents the number of RCEs pending as of December 31, 2012. The individual art units are also color coded to help show the backlog within each tech center. Dark blue represents a large backlog, while light green represents a shorter backlog. Additionally, the size of the circle corresponds to the size of the backlog of RCE's in the individual art unit.





Accordingly, one can visually see a greater number of RCEs present in technology center 1600 (Biotechnology and Organic Chemistry) when compared to technology center 2800 (Semiconductors, Electrical and Optical Systems and Components). This may be unsurprising since biotechnology applications may require significantly

more review time, or specialized knowledge compared to electrical applications. Similarly, one can see that certain art units have a greater backlog, even within the same technology center. For example, 2617 (Cellular Telephony) and 2629 (Display Systems) have a much greater backlog when compared to other art units within technology center 2600 (Communications). Again, this may be unsurprising since many more applications are filed dealing with cellular telephone technology (4,757 pending applications in art unit 2617) compared to fax technology (903 pending applications in art unit 2627). Accordingly, examiners in fax technology may be more willing and/or able to pick up more RCEs from their special docket compared to those examiners in cellular telephone technology. Mitigating this issue, there may be a higher number of examiners in art units with a higher number of pending applications. Accordingly, those art units that have higher pending applications may have more examiners, thus the RCEs may be spread out between many examiners creating smaller delay times. As discussed below, we did not calculate the number of active examiners present in each art unit.

In the center of the figure is a bar graph that shows the number of RCEs that are awaiting examination broken down by year. This figure shows that there is a significant number of RCEs filed in 2012 that are still awaiting examination. This number is unsurprising since RCEs should be taken in turn, and there is a selection bias towards later filed RCEs. Accordingly, one would expect the number of RCEs in 2012 to be greater in number since they will be taken up by the examiner later than an RCE that was filed in 2010.

There are two key limitations with this dataset. First, we have intentionally excluded data regarding average response time for responding to an RCE for each art unit. This is because the RCE pendency data is skewed because we do not count an RCE until it has been acted on. Thus, all of the unexamined RCEs are not counted. Accordingly, the average response time would be misleading. Second, we did not determine the number of active examiners in each art unit. Thus, although the backlog may look high in absolute numbers, the response time may be reasonable simply because it is spread over a large number of active examiners.

Finally, it is important to understand who is not filing an RCE. There are some applicants who may choose to abandon their applications rather than filing an RCE. First, small inventors may be disproportionately hurt by these new RCE changes. Specifically, small inventors who are very cost sensitive are less willing to file an RCE because of cost concerns and are more likely to abandon an application due to costs associated with RCEs.⁵³ Additionally, inventors who work in fields where rapidly-changing technologies may cause a patent to be valued less highly may choose to abandon applications rather than file an RCE.

II. CURRENT USPTO SOLUTIONS TO THE BACKLOG PROBLEM

A. General Solutions to the Backlog Problem

The USPTO has recognized the large backlog problem, and has created several programs to attack the backlog. Some of these programs include: (1) the "patent prosecution highway" (PPH), (2) accelerated examination (several programs), and (3) the examiner interview program.

The Patent Prosecution Highway (PPH) program allows applicants who file international applications to save time and money as well as enhance quality.⁵⁴ This program allows US patent examiners to partially rely on patent examination of related applications in other countries. Under the PPH, an applicant which has a ruling on claim(s) in a related patent family member from a participating foreign patent office may request the fast track of examination of corresponding claims in the US. This program allows for accelerated prosecution based on the work previously done by the foreign patent office, with the goal of reducing examination workload and improving patent quality. Currently the USPTO has PPH arrangements with the: IP Australia (IPAU), Austrian Patent Office (APO), Canadian Intellectual Property Office (CIPO), China (SIPO), Denmark (DKPTO), European Patent Office (EPO), National Board of Patents and Registration of Finland (NBPR), Hungary (HPO), Iceland Patent Office (IPO), Israeli Patent Office (ILPO), Japan Patent Office (JPO), Korean Intellectual Property Office (KIPO), Nordic Patent Institute (NPI), Norwegian Industrial Property Office (NIPO), National Industrial Property Institute of Portugal (INPI), Russian Federal Service for Intellectual Property (ROSPATENT), Singapore (IPOS), Spanish Patent and Trademark Office (SPTO), Swedish Patent Registration Office (PRV) and the United Kingdom (UKIPO).55 Additionally, in 2013 the PTO announced the implementation of Patent Prosecution Highway 2.0 program with the Nicaraguan Registry of intellectual Property (NRIP), Danish Patent and Trademark Office

⁵³ This cost concern is somewhat diminished by the "small entity" fees which cut costs for small entities for most filings by 50%.

⁵⁴ S. Tu et al., Squeezing More Patent Protection from a Small Budget Without Compromising Quality, 2 LANDSLIDE 37 (Nov. 2009).

⁵⁵ Patent Prosecution Highway (PPH) – Fast Track Examination of Applications, U.S. PATENT AND TRADEMARK OFFICE, http://www.uspto.gov/patents/init_events/pph/ (last visited Feb. 10, 2015).

(DKPTO).⁵⁶ Benefits of the PPH program include: (1) accelerated examination- examination within two to three months from grant of the PPH request, (2) greater efficiency- more than 90% of PPH cases are allowed, (3) decreased prosecution costs- fewer actions per disposal saves fees and time, (4) reduced pendency- applications can be filed in multiple jurisdictions to be fast tracked based on another Office's work product, and (5) no petition fee for PPH.⁵⁷

The USPTO has established several procedures by which an applicant can accelerate the examination procedure. First, an applicant can file a "Petition to Make Special under 37 C.F.R. 1.102 and MPEP 708.02. Petitions to Make Special are only available under specific Criteria include applicant's age or health, factual situations. manufacture, infringement, environmental quality, energy, recombinant DNA, superconductivity materials, HIV/AIDS, cancer, countering terrorism, and biotechnology applications filed by small entities. Second, an applicant can file a petition to make special under the Green Technology Pilot program, when the invention is directed to a clean technology. Third, an accelerated examination (AE) program that requires the USPTO to reach a final disposition within 12 months of the U.S. filing date. However, disadvantages of this program include the fact that the applicants must file a separate set of documents, which, among other things, requires strict disclosure and analysis of all relevant art. Many applicants are reluctant to use the program due to risks of inequitable conduct (failure to disclose relevant art) and prosecution

⁵⁶ U.S. applications must meet the following requirements to qualify for the PPH 2.0 program: (1) one of the other PPH 2.0 participating offices has determined that at least one claim is allowable/patentable, (2) the application before the PPH 2.0 office and the US application must have same priority/filing date, (3) all claims on file must sufficiently correspond to one or more claims indicated as allowable in the application filed in the PPH 2.0 participating office, (4) examination of the US application of the US application for which participation in the PPH 2.0 program is being requested has not yet begun, 95) the applicant has filed a request to participate in the PPH 2.0 program, (6) the applicant must submit a copy of the office action issued just prior to the "decision to grant a patent" for the application before the PPH 2.0 participating office, (7) the applicant must submit an information disclosure statement listing all documents cited in the office action of the PPH 2.0 participating office, and (8) all of the documents described above must be filed via the EFS-Web and indexed using the description "Petition to make special under Patent Pros Hwy." Requirements for the Patent Prosecution Highway (PPH) Program to Implement PPH 2.0 with the Nicaraguan Registry of Intellectual Property, U.S. PATENT AND TRADEMARK OFFICE, http://www.uspto.gov/web/patents/patog/week52/OG/TOCCN/item-180.htm (last visited Aug. 4, 2015).

⁵⁷ *PTO PPH Brochure*, *supra* note 55.

history estoppel (disclaiming what is in the prior art). Finally, the American Invents Act created a Track I prioritized examination (PE) procedure in September 2011, which attempts to provide final disposition within twelve months by paying a petition fee of \$4,800 (\$2,400 for small entities) in addition to the customary filing fees. There are significant differences between the AE and PE programs.⁵⁸ The PE program may be better for those applicants wishing to get started with prosecution early (skip to the front of the line, but then progress through regular prosecution). This is because the PE program allows the applicant to receive special status with fewer requirements than the current accelerated examination program and without having to perform a pre-examination search.⁵⁹ In contrast, the AE program may be better for those applicants wishing to obtain issued claims quickly (skip to the front of the line and progress through prosecution on a faster timetable).

The full first action interview program is still a pilot program and the USPTO is currently analyzing feedback from previous comments. The First Action Interview program was created to advance production and facilitate early interaction between the applicant and the examiner to resolve issues one-on-one with examiners early in prosecution to facility early allowance. There were approximately 2,100 requests to participate in the program, and over 35% were allowed in the first action.⁶⁰ According to the USPTO, participating applicants have experienced several benefits including:

(1) effectively advancing prosecution of an application before issuance of an Office action, (2) enhanced interaction between the applicant and the examiner before issuance of an Office action, (3) resolving patentability issues one-on-one with the examiner at the beginning of the prosecution process, rather than after a first Office action; and (4) expedited allowance of an application, relative to

⁵⁸ For a complete review of the differences between the AE and PE program, see Dennis Crouch, *Guest Post: Accelerated Examination and Prioritized Examination*, PATENTLYO (Oct. 2, 2011), http://patentlyo.com/patent/2011/10/guest-post-accelerated-examination-and-prioritized-examination.html.

⁵⁹ USPTO's Prioritized Patent Examination Program, U.S. PATENT AND TRADEMARK OFFICE, http://www.uspto.gov/patent/initiatives/usptos-prioritizedpatent-examination-program (last visited Mar. 24, 2015); see also Dennis Crouch, Expediting Prosecution: Comparing Track 1 Prioritized Examination, Accelerated Examination, the Patent Prosecution Highway, and Petitions to Make Special Based on Age, PATENTLYO (Dec. 27, 2012), http://patentlyo.com/patent/2012/12/expediting-prosecution.html. ⁶⁰ 77 Fed. Reg. 40, 342 (Jul. 9, 2012).

standard examination, due to the program's enhanced communication and shorter time periods for response.⁶¹

A final general solution is to simply hire more examiners. This is a poor solution because junior examiners (lower grade examiners), are more likely to force applicants to file more RCEs than applications reviewed by higher grade examiners.⁶² For example, applications reviewed by GS14-15 examiners only result in 55% RCE filing rates, while GS9-11 examiners have an almost 65% RCE filing rate.⁶³

B. USPTO Solutions Specifically Directed to Combating the RCE Backlog

In addition to the general backlog solutions, the USPTO has implemented two pilot programs designed to specifically address the RCE backlog: (1) an After Final Consideration Pilot Program 2.0 (AFCP 2.0)⁶⁴ and (2) the Quick Path Information Disclosure Statement (QPIDS).⁶⁵ The AFCP 2.0 program attempts to reduce the RCE backlog by facilitating discussion between the applicant and the examiner after a final office action. In contrast, the QPIDS program attempts to reduce the RCE backlog by allowing an examiner to consider an Information Disclosure Statement (IDS) after payment of the issue fee without the need to reopen prosecution. Finally, the USPTO is still considering information gathered during its RCE Outreach program.⁶⁶

The AFCP 2.0 program will run from May 19, 2013 until September 30, 2013. The goal of the AFCP 2.0 program is to "reduce pendency by reducing the number of Requests for Continued Examination and encouraging increased collaboration between the applicant and the examiner to effectively advance the prosecution of the application."⁶⁷ The original AFCP program authorized "extra time" for examiners to consider responses filed after a final rejection. However, no special request was required to invoke the program, and examiners

⁶¹ *Id.* at 40, 343.

⁶² USPTO, RCE BACKLOG FINAL REPORT NO. OIG-14-024A at 8, fig. 8 (June 30, 2014).

⁶³ Although the percentages between GS14-15 versus GS9-11 seems small, the absolute numbers are more dramatic because GS14-15 examiners are usually more experienced and have much larger number of cases in their docket. *See* Shine S. Tu, *Unluck/Luck of the Draw: An Empirical Analysis of Examiner Allowance Rates*, 2012 STAN. TECH. L. REV. 10, 22 tbl.1 (2012) (showing that, except for technology center 2800, the more experienced primary examiners issue the majority of the patents from their various technology centers).

⁶⁴ 78 Fed. Reg. 29, 117–19 (May 17, 2013).

⁶⁵ 77 Fed. Reg. 27, 443–44 (May 10, 2012).

⁶⁶ 77 Fed. Reg. 72, 830 (Dec. 6, 2012).

⁶⁷ 78 Fed. Reg. 29, 118 (May 17, 2013).

were supposed to use their professional judgment to decide whether to apply the program. Practitioners found that the original AFCP was unevenly employed. In order to address these issues, the USPTO implemented AFCP 2.0, which requires five requirements to be considered for the program:

(1) Transmittal form which includes a request for consideration under the pilot, (2) an amendment to at least one independent claim that does not broaden the scope of the claim in any aspect, (3) statement that the applicant is willing to participate in any interview initiated by the examiner, (4) fees must be paid, and (5) all documents must be failed via the USPTOS Electronic Filing System-Web (EFS-Web).

Once submitted, the examiner will first review the submission to ensure the formal requirements are met, and then review the amendment to "determine if an additional search and/or consideration would be required to determine whether the amendment would distinguish over the prior art, and if such search and/or consideration would be possible within the time allotted to them under the AFCP 2.0 program."⁶⁸ If the examiner determines that he can do the search and/or consideration within the allotted time, then the examiner can either (1) allow the case or (2) schedule an interview to discuss the amendment. Accordingly, even if the AFCP 2.0 program does not result in allowance, applicants avail themselves of an after-final interview that may help to move prosecution forward.

Examiners also benefit from this program, because they are given up to three hours of additional non-production time. Furthermore, this program may reduce the number of RCE filings, especially for those cases that are already close to allowance. The USPTO has reported that this pilot program has increased the allowance rate for applications after final rejection.⁶⁹

The QPIDS pilot program will run from May 16, 2012 and was extended to September 30, 2015. The goal of the QPIDS program is to compact prosecution and reduce pendency times by reducing the number of RCEs filed for consideration of an IDS after the issue fee is paid. Normally, the applicant could get an examiner to consider an IDS after payment of the issue fee only by filing an RCE and reopening prosecution. This was true even if the references in the IDS were only tangentially relevant. The QPIDS program allows an examiner to

^{68 78} Fed. Reg. 29, 118–19 (May 17, 2013).

⁶⁹ Press Release, USPTO Extends After Final Consideration Pilot to Sept. 30, 2012, UNITED STATES PATENT AND TRADEMARK OFFICE (June 20, 2012), http://www.uspto.gov/news/pr/2012/12-37.jsp.

consider an Information Disclosure Statement (IDS) after payment of the issue fee without the need to reopen prosecution.

To qualify for the program, the use must be a registered eFiler and have a valid US application number that is not abandoned with the issue fee paid for a non-provisional utility application. Additionally, the applicant must submit the IDS and an RCE, which will be treated as a "conditional" RCE. The examiner will then determine if the information contained in the IDS necessitates the reopening of prosecution. If reopening prosecution is not necessary, then the RCE will not be processed and the RCE fee returned. If the IDS necessitates reopening of prosecution, then the RCE will be processed and treated as an RCE under 37 C.F.R 1.114.

In a pro-practitioner response to the growing RCE backlog, the USPTO requested input from the public in an effort to better understand the full spectrum of factors that impact the decision to file an RCE. Comments were closed on February 4, 2013, and the USPTO is currently considering the many comments generated by intellectual property organizations, companies, academics, and individuals. Interestingly, in a recent review of the QPIDS and AFCP 2.0 programs, the USPTO showed that these two programs currently have a negligible effect on the RCE backlog because of low applicant participation rates.⁷⁰

III. ALTERNATIVE SOLUTIONS TO THE RCE BACKLOG PROBLEM

The USPTO has made great strides in recognizing and attempting to curtail the backlog of patent applications. Specifically, the USPTO has recognized the rapid growth in the RCE backlog. However, the AFCP 2.0 and QPIDS program alone may not be enough to stop the growing RCE backlog.

There are several different strategies that the USPTO could use to improve patent quality while also decreasing the RCE backlog. These strategies include: (1) increasing counts for RCEs to incentivize examiners to review more RCEs, (2) creating a two-track examiner specialization schedule, (3) reforming the order in which cases are required to be taken up in the examiner's special new docket (or placing RCEs back onto the examiner's amended docket), (4) increase the number of non-final Office actions before a final Office action can be given, (5) require examiners to suggest claim amendments, (6) place

⁷⁰ USPTO, RAPID RISE IN THE REQUEST FOR CONTINUED EXAMINATION BACKLOG REVEALS CHALLENGES IN TIMELY ISSUANCE OF PATENTS. FINAL REPORT NO. OIG-14-024-A at 17–18 (June 30, 2014) (showing participation rate for QPIDS at 2,480 between May 2012-November 2013 and a participation rate of 16,598 for the AFCP 2.0 program between May 2013-November 2013).

RCEs back on the examiner's amended docket while giving 0 counts for RCEs (this solution would incentivize examiners to get rid of RCEs by either allowance or abandonment), (7) create a new request to reopen after final, (8) elimination of first action finals after an RCE, and (9) deferred examination.

A. Align Examiner and Applicant Incentives to Review RCEs

One way to increase the number of RCEs examined is to align the incentives for RCE review with the applicant's incentives. This is easily accomplished by increasing the number of counts associated with reviewing RCEs. Alternatively, the USPTO could remove the penalty associated with reviewing second and subsequent RCEs.

The PTO has recognized this problem, and as a temporary measure, the Commissioner of Patents Peggy Focarino announced:

[T]he RCE credit will be adjusted from 1.75 (or 1.5) to 2.0 until September 30, 2013...With this additional credit, I am asking each of you to help reduce the RCE backlog. With these changes it is anticipated that the RCE backlog will be reduced significantly by the end of this fiscal year.⁷¹

Thus, the count system will temporary revert to the old system that gave full credit for RCE work, but RCE's still remain on the examiner's "special" docket. However, this increase in counts without the change back to the amended docket, will most likely not diminish the backlog of RCEs. Examiners will still not be forced to review RCEs in a timely fashion.

B. Creation of a Two-Track Examiner Specialization Program

As mentioned in section I(A) above, one common problem is when examiners do not apply the best prior art in their initial search, but present the best prior art in the second or third office action but still make actions final, even though applicants have not had the opportunity to reply as a matter of right. One interesting solution may be to create a two-track specialization system for patent examiners.⁷² This solution

⁷¹ Dennis Crouch, USPTO Takes Action to Reduce RCE Backlog, UNITED STATES PATENT AND TRADEMARK OFFICE (Mar. 28, 2013), http://www.patentlyo.com/patent/2013/03/uspto-takes-action-to-reduce-rce-backlog.html.

⁷² Two-track specialization would allow the PTO to simulate the experience of one 10+ year examiner in a much shorter amount of time by division of labor. Previous studies have shown that examiners with 10+ years of experience issue patents at a much higher rate, and issue litigated patents at a much lower rate than expected. Shine S. Tu, *Patent Examiners and Litigation Outcomes* (unpublished manuscript) (on file with author). Accordingly, allowing

should not only reduce the backlog for RCEs, but also the general backlog population.

Specifically, the first track would be a prior art searching track and the second track would be an Office action generation track. Prior art searching examiners would specialize in, and have sole responsibility for, completing prior art searches. This would allow some examiners to deeply specialize in creating targeted keyword searches for a variety of different inventions within the same art unit or workgroup. The second track would consist of office action generation, based in large part on the results gathered from the prior art searchers. Office action generation examiners would specialize in understanding the relevant patent law and would have sole responsibility for composing complete office actions which correctly apply the law. This would allow for specialization the writing skills necessary to convey clear rejections.

Patent examiners (or their supervisors) would choose which track to go into when moving from a secondary examiner to a primary examiner. This would allow examiners to specialize in those skills that are best suited for the specific examiner, thus allowing for better rejections with clearly written office actions. This two-track system would combat the incomplete or piecemeal search by the examiner in the first action, with a more complete search in the "final" action. Patent quality should increase because relevant prior art would be determined in the first instance. Additionally, prosecution times would decrease because office actions would be written in a clear and coherent manner on relevant patent laws such that applicants could determine the real issue at hand. Applicants would be able to identify the precise point of disagreement so that the applicant could provide well-targeted arguments.

My previous study has shown that the most experienced examiners allow "high quality" patents at a much higher rate.⁷³ A division of labor where one examiner specializes in prior art searching, while another examiner specializes in drafting office actions could mimic the specialization of one senior examiner in a much shorter timeframe. This solution would not only help the backlog of RCEs, but the general backlog of unexamined patent applications.

examiners to specialize in either prior art searching or office action generation may increase efficiency while increasing patent quality.

⁷³ Shine S. Tu, *Patent Examiners and Litigation Outcomes* fig. 6 (unpublished manuscript) (on file with author). Primary examiners with 10+ years of experience issue approximately 300 litigated patents per year. However, based on the number of patents issued per year, they are expected to issue over 800 litigated patents per year.

C. Reopen After Final

An alternative solution would be to create a new type of request such as a Request to Reopen After Final (RAF) petition. Using this type of request the applicant would be able to enter new amendments or new declarations after a final Office action. This type of request could be put on the examiners amended docket, but for PTA purposes would act in a similar fashion to filing an RCE. The main difference between this type of request and an RCE would be that no new arguments could be made, while allowing the examiner to consider new narrowing language on the claims or supporting arguments from new declarations.

This type of solution would create efficiencies because the examiner would have the applicant's arguments fresh on her mind because the RAF would be on the amended docket, and not the special docket. Furthermore, the RAF could be acted on quickly because no new arguments would be made, just new limits on claim language and/or new declarations to support previous arguments. Additionally, it would allow the examiner to update her search following an agreement after final on potentially allowable subject matter. Finally, the examiner would be allowed to make the next Office action a final Office action after the RAF because the claims would have been previously rejected at least one time.

In many ways, the AFCP 2.0 program emulates this type of solution. Specifically, the AFCP 2.0 gives the examiner time to either do an abbreviated search and/or schedule an interview with the applicant to discuss issues to move prosecution forward. The RAF solution differs slightly in that it would be driven by the applicant by filing this special type of request. Additionally, the RAF solution differs in that no new argument would be made, only narrowing amendments and supporting evidence.

D. RCE docket ordering

One way to curtail examiners from choosing a continuation application instead of a RCE is to simply require examiners to pick up RCE and continuation applications in the order that they are received. Additionally, the Office could increase the number of cases required to be reviewed from the special new docket per bi-week to count for their docket management score. Accordingly, this would require and / or incentivize examiners to review cases in their special new docket. Alternatively, the USPTO could simply revert back to the pre-November 9, 2009 system where RCEs were docketed on the examiner's amended docket.⁷⁴ Requiring examiners to take up RCEs in a timely fashion (two to three months in contrast to the current year long delay in some art units) may cut down on the overall examination time by leveraging the memory and prior interactions of examiners and applicants. Shorter reconsideration periods also cut down on the likelihood that the case will be transferred to a new examiner due to turnover at the USPTO.⁷⁵

Although this solution might help reduce the backlog of RCEs, it may simply shift the burden onto unexamined new applications. However, this shift might be acceptable given the efficiencies gained from prompt review of continuing cases versus learning and searching for new art for a new application. Specifically, by requiring RCEs to be picked up within two to three months, the examiner could better rely on his memory of the file history and/or interpretation of the prior art. In contrast, if RCEs are reviewed with a year or two year time lag, it would be more difficult for the examiner to rely on his memory of the specification and prior art.

E. Allow Two Non-Final Actions Before Issuing a Final Office Action

To maximize counts, examiners have an incentive to issue a final Office action directly after a non-final Office action. Thus, currently there is only one opportunity to amend claims in response to examineridentified art without filing at least one RCE. One simple solution would be to require examiners to issue at least two non-final actions prior to issuing a final Office action. This would allow applicants to not only get feedback for any claim amendments made in the first rejection, but to make second claim amendments to better place the claims in condition for allowance. If the counts remain the same for the first and second non-final rejection, examiner gamesmanship would remain unchanged.

Although this solution seems logical from the applicant's perspective, this solution may create greater problems. Specifically, it may incentivize examiners to be even more inefficient and less meticulous in the first Office action so as to garner more counts by generating a second non-final office action. One solution may be to set only one count for the first two office actions, thus incentivizing the examiner to be as complete as possible in the first action. However, this

⁷⁴ The PPAC recommends that RCEs be returned to the amended docket because they are actually amended applications, not new applications. USPTO, PATENT PUB. ADVISORY COMM., 2014 ANNUAL REPORT 29 (Nov. 3, 2014).

⁷⁵ Pierre Picard & Bruno van Pottelsberghe de la Potterie, Discussion Paper, *Patent Office Governance and Patent System Quality*, CTR. FOR OPERATIONS RESEARCH AND ECON. 13–14 (2011) (showing that the USPTO examiner turnover rate was approximately 25-33%).

243

solution may not address those examiners that maximize their counts by forcing applicant's to file RCEs⁷⁶.

F. After Final Interviews and Examiner Claim Suggestions

The cornerstone of compact prosecution is for both the examiner and the applicant to understand the science and the legal issues that are the basis for rejection. According to the Intellectual Property section of the American Bar Association, Examiners and art groups that have lower RCE filings tend to complete their prior art searches in the first office action, explain the basis for rejections while applying the law correctly, and suggest allowable subject matter and/or amendments.⁷⁷ A better understanding of where the examiner stands on patentability helps the applicant determine if an RCE, appeal or abandonment strategy should be pursued. For example, if an examiner is close to allowance, the applicant may be more willing to file an RCE type strategy. In contrast, if an examiner is far from allowance, the applicant may need to pursue an abandonment or appeal type strategy.

Examiners could be required to give claim amendment suggestions that would lead to allowable subject matter. Additionally, examiners could be required to explain why they are unable to suggest allowable subject matter. Minimally, examiners clearly identify the type of claim amendments that would require an additional search and those that would not require an additional search. Identification of amendments that would not require a new search would allow applicants to narrow the claims and use arguments to move prosecution forward without fear of a new rejection based on new art.

Applicants could also help in this process by including multiple dependent claims and variations in claim language to ensure full consideration of all aspects of the invention. Additionally, use of clear and relatively easy to understand terminology that is consistent throughout the specification and claims can help the examiner understand the invention and perform a better prior art search.⁷⁸ These narrower / clearer dependent claims could also help the examiner find and/or suggest claim language that contains allowable subject matter.

Interview practice is an effective tool for moving prosecution forward. The USPTO has shown that applications with an interview

⁷⁶ See infra section III(G).

⁷⁷ Letter from Intellectual Property Law Section, American Bar Association, to the PTO (February 1, 2013) (in response to "Request for Comments on Request for Continued Examination (RCE) practice").

⁷⁸ Jason Rantanen, *Peripheral Disclosure*, 74 UNIV. OF PITT. L. REV. 1 (2012).

prior to final reduces improper allowances and rejections by 40%.⁷⁹ To facilitate this communication, programs such as the first action interview pilot program contributes significantly to reduce the number of RCEs. Similarly, the USPTO could require the grant of an after final interview, if requested by the applicant.

G. Count Reform Coupled with Docket Reform

One argument against increasing counts associated with RCEs is that Examiners are then incentivized to force the applicant to file an RCE so as to maximize the examiner's counts. Thus, increasing the amount of credit an examiner may receive for an RCE response may actually create the perverse incentive for the examiner to force applicants to file more RCEs. Under this theory, the increase in counts given to examiners⁸⁰ will actually increase the number of RCEs filed.

If increasing counts associated with RCEs actually increases the number of RCEs filed, then Examiner counts could be altered such that credit is only given for a first action on the merits of an initial application and for the grant of a patent or the final abandonment of an application. To accomplish this, the USPTO would need to make two concurrent changes: (1) no credit should be given for RCEs and (2) RCEs should be put on the examiners' amended docket. Examiners would then be forced to deal with RCEs on a 3 month basis, and would not get credit until the final disposition of the case. This may align the incentives between examiner and applicant, such that examiners could only remove an application from her docket by allowance or abandonment. Accordingly, examiners would be incentivized to either work out more narrow claims with the applicant or convince the applicant to abandon the application.

This solution may dramatically shift the power in negotiations to the applicant side. Specifically, applicants who wish to "brow-beat" the examiner into submission may "hold-up" the examiners docket by filing multiple RCEs where the examiner gets no credit. Accordingly, the examiner would be spending valuable examination time on applications that should be abandoned. However, examiners may be able to quickly rebuff applicants who attempt to pursue this strategy without filing substantive claim amendments or significant scientific arguments. Additionally, this solution may be difficult to implement with the Patent Office Professional Association (POPA) since it would be removing a large source of counts for many examiners.

⁷⁹ Interviews and Patent Quality, UNITED STATES PATENT AND TRADEMARK OFFICE: DIRECTOR'S FORUM: A BLOG FROM USPTO'S LEADERSHIP (Jan. 15, 2013), http://www.uspto.gov/blog/director/entry/interviews_and_patent_quality. ⁸⁰ See supra section III(A).

H. Eliminate First Action Finals

MPEP §706.07(b) allows the examiner (under many circumstances) to make the first office action after an RCE another final Office action.⁸¹ This submission of a first action final by the examiner necessitates filing at least one additional RCE. Elimination of MPEP §706.07(b) would eliminate first action final practice, thus forcing the examiners to consider at least one additional applicant response to any subsequent issues or concerns that the examiner may have. Additionally, it would require that the examiner grant at least one additional examiner interview, upon applicant's request.

This solution suffers from the same problems as issuing two nonfinal office actions before a final office action can be issued.⁸² Specifically, this solution may simply delay the applicant's need to file an RCE, especially if the examiner is simply maximizing counts by forcing continued examination.

I. Deferred Examination

The USPTO could reduce the general backlog of applications by allowing applicants to defer prosecution in non-provisional applications. This solution does not focus on RCE problem specifically, but the backlog of unexamined applications in general.

Deferring examination would allow examiners to focus their attention on those applications that are currently most valuable to inventors. Additionally, as long as there is no new matter, deferred examination would allow applicants to gather more data to support their application. Furthermore, it would allow applicants to determine if their invention is commercially viable and whether it is cost effective to even pursue a patent. Accordingly, some applicants would abandon their cases before examination simply because the investment is no longer commercially viable. Similarly, some applicants would abandon their cases based on new data gathered during the deferment period. This would most likely remove a significant number of applications from the examiner's docket. Similar deferral procedures are used in other countries. For example, Japan allows three years deferral before a request for examination must be filed before abandonment of the application.

CONCLUSION

It is clear that the backlog problem is one of the greatest challenges currently facing our patent system. The RCE backlog is a

⁸¹ See also supra Introduction (3)(B).

⁸² See also supra section III(E).

[Vol. 13

large contributor to the great delay inventors experience during prosecution of their applications. Two USPTO practices are creating this large RCE backlog: (1) the examiner incentive framework and (2) the way the USPTO dockets RCEs.

This study suggests that the RCE problem may be worse for some art units compared to others. Specifically, the RCE problem is unevenly distributed between certain art units with technology center 1600 (biotechnology and organic chemistry) suffering the most from unexamined RCEs, while technology center 2800 (semiconductors, electrical and optical systems and components) remain unaffected. Additionally, certain art units within a larger technology center may be suffering from a greater RCE backlog. For example, in general, technology center 2600 (communications) does not suffer from a large RCE backlog, however, art units 2617 (telecommunications) and 2629 (computer graphics processing and selective visual display systems) have a large backlog of RCEs.

Finally, there are many different solutions that the USPTO could employ to reduce the backlog of RCEs. Some of these solutions, however, may only shift burden of examination away from RCEs onto the non-continuing application population. This movement towards placing RCEs first in the examination queue (as opposed to new applications) may be acceptable if there are efficiencies gained by prompt examination of RCEs. For example, the overall backlog of applications may decrease if prompt examination of RCEs force the applicant to accept either narrow claims or abandon the application.