June 30, 2014

MEMORANDUM FOR: Michelle K. Lee  
Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the U.S. Patent and Trademark Office

FROM: Ann C. Eilers  
Principal Assistant Inspector General for Audit and Evaluation

SUBJECT: Rapid Rise in the Request for Continued Examination Backlog Reveals Challenges in Timely Issuance of Patents
Final Report No. OIG-14-024-A

We are providing our final report for our review of the increase of the Request for Continued Examination (RCE) backlog and pendency. This audit was conducted to (1) assess why there has been an increase in average RCE pendency and the RCE backlog and (2) assess USPTO’s efforts to monitor and address the RCE backlog/pendency and review specific programs intended to resolve issues during the initial processing of patents.

We identified four areas of concern:

1. Structural and examiner-specific issues have increased the number of RCEs that USPTO needs to act upon.
2. The inclusion of new information from examiners is an ongoing concern for applicants.
3. USPTO was slow to act on rapid RCE growth and will face challenges making future adjustments.
4. Some USPTO initiatives that could reduce RCEs have low participation rates and a negligible effect on the RCE backlog.

In response to our draft report, the bureau agreed with all of our recommendations and noted that USPTO had begun to make progress on reducing the pendency and backlog of RCEs. USPTO submitted technical comments to the draft report. Where appropriate, we made changes to the final report based on these comments and suggestions.

USPTO’s final formal response is included in appendix D of the report. The final report will be posted on the OIG’s website pursuant to section 8M of the Inspector General Act as of 1978, as amended. In accordance with Department Administrative Order 213-3, within 60 days of the date of this memorandum please provide us with an action plan that responds to all of the report’s recommendations.
We thank USPTO personnel for the courtesies shown to us during this review. Please direct any questions about the report to Carol Rice, Division Director, at (202) 482-6020 or Melanie Caesar Danberg, Supervisor Program Analyst, at (202) 482-2710.

Attachment

cc: Margaret A. Focarino, Commissioner for Patents, USPTO
    Anthony P. Scardino, Chief Financial Officer, USPTO
    Welton Lloyd, Audit Liaison, USPTO
Background

As the sole authority for issuing patents in the United States, the U.S. Patent and Trademark Office (USPTO) establishes policies and metrics to ensure the timely review of patents to protect new investments and ideas, while fostering innovation.

Since fiscal year (FY) 2010, USPTO has made progress in reducing the amount of time that an applicant waits to have a new patent application reviewed. During that time, however, there was a concurrent decline in the USPTO’s performance in issuing timely determinations on another type of filing in an application, the Request for Continued Examination (RCE). RCEs are patent applications resubmitted for consideration after an examiner has previously closed the review, such as by making a second and final rejection of the inventor’s claims.

Why We Did This Review

As USPTO put incentives in place in FY 2010 to encourage the review of new patent applications, the RCE backlog increased from 17,700 in October 2009 to 111,300 in March 2013. This backlog in processing RCEs delays intellectual property protection to some patent holders. It also affects all patent applicants with rejected applications, since the RCE backlog made it more difficult for applicants to determine which appeal option to pursue. USPTO’s worsening performance also affects industry competitors, since by law USPTO must provide a patent term adjustment for an issued patent when it takes the agency more than four months to issue an action subject to limitations.

U.S. PATENT AND TRADEMARK OFFICE

Rapid Rise in the Request for Continued Examination Backlog Reveals Challenges in Timely Issuance of Patents

OIG-14-024-A

WHAT WE FOUND

Our audit identified several factors that have contributed to the recent increase in the RCE backlog at USPTO. Specific findings include:

1. Structural and examiner-specific issues have increased the number of RCEs that USPTO needs to act upon:
   • There are more rejected applications, and applicants are more willing to pursue an RCE after a final rejection than in the past.
   • Applications reviewed by lower-grade examiners are more likely to lead to RCEs.
   • Rates of RCE filing vary by office.

2. The inclusion of new information from examiners is an ongoing concern for applicants:
   • Although examiners are including new information in final rejections, they only introduced new prior art in response to amended claims, as allowed by the patent process.
   • USPTO’s quality assurance checks do not target some applications where new prior art is most likely being introduced in final rejections.

3. USPTO was slow to act on rapid RCE growth, and will face challenges making future adjustments:
   • Policies incentivized examiners to focus on new applications rather than RCEs.
   • USPTO was slow to implement changes to curb RCE backlog growth and risks remain.

4. Some USPTO incentives that could reduce RCEs have low applicant participation rates and a negligible effect of the RCE backlog:
   • Low applicant participation dampens the potential benefit of initiatives.
   • Once initiated, USPTO’s outreach has been vigorous, but engaging stakeholders requires a sustained effort.

WHAT WE RECOMMEND

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office:

1. Mitigate the impact of RCE structural issues and examiner-specific issues and take corrective action where necessary by (a) researching the reasons for the variance in after-final amendment approval rates and the decline in after-final amendment filings; (b) assessing why applications handled by lower- and higher-grade examiners have different RCE filing rates; and (c) assessing the reasons for variance among art units, identifying best practices that promote efficiency, and then developing strategies to minimize patent term adjustment.

2. Determine whether a stratified sample of patent applications targeting risk areas would enhance quality assurance tests and the overall determination of patent examiner quality.

3. Establish a risk management plan that ensures timely, situation-specific analysis and solutions are documented and implemented to minimize patent-term adjustments when rebalancing is needed to meet statutory requirements and public expectations for prompt processing.

4. Develop ways to increase participation in the compact prosecution initiatives.
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Introduction

As the sole authority for issuing patents, the United States Patent and Trademark Office (USPTO) establishes policies and metrics to ensure the timely review of patents to protect new investments and ideas while fostering innovation. Although USPTO made progress in reducing the time an applicant waits to have a new patent application reviewed (table 1) since FY 2010, there was a concurrent decline in the agency’s performance in issuing timely determinations on another type of filing in an application, the Request for Continued Examination (RCE). Prior to FY 2010, applicants usually received RCE preliminary determinations within two months.

Table 1. Average Waiting Time for a Preliminary Determination, FY 2009–2013

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>New Applications (Months)</th>
<th>RCE (Months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>25.8</td>
<td>2.0</td>
</tr>
<tr>
<td>2010</td>
<td>25.7</td>
<td>2.4</td>
</tr>
<tr>
<td>2011</td>
<td>28.0</td>
<td>4.0</td>
</tr>
<tr>
<td>2012</td>
<td>21.9</td>
<td>5.9</td>
</tr>
<tr>
<td>2013</td>
<td>18.2</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Source: USPTO

RCEs are patent applications resubmitted for consideration after an examiner has previously closed the review, such as by making a second and final rejection of the inventor’s claims, as shown in figure 1. Although there are some exceptions to the process shown in this figure, we found that in the past 5 years around 90% of RCEs are filed as responses to final rejections.

Figure 1. Patent Application Approval Process

Source: OIG, based on USPTO documents
The increase in RCE processing times over the past five years most immediately affects applicants who filed RCEs. As shown in figure 2, usually between 20 percent and 30 percent of patent applications each year went through the RCE process before they were approved. This percentage decreased in calendar year (CY) 2012 in part because there were fewer RCEs reviewed. As noted by USPTO, “The longer it takes to review a patent application, the longer it takes for the benefit of the (intellectual property) IP protection to accrue.” Delays in processing RCEs thus delay IP protection to some patent holders.

Increased delays in processing RCEs also affect all applicants with rejected applications. Given that applicants can pursue different options if they would like USPTO to reconsider their application, an unexpected increase in the RCE backlog starting in FY 2010 made it more difficult for applicants to determine which option would be more advantageous.

A worsening in USPTO’s performance in issuing timely RCE determinations also affects industry competitors. By law, USPTO must provide a patent term adjustment for an issued patent when it takes USPTO more than 4 months to issue an action, such as a preliminary determination, following the submission of an RCE. A patent term adjustment means that USPTO is legally required to extend the 20-year patent term because of USPTO delays, subject to limitations. USPTO is also required to provide a patent term adjustment to issued patents if it fails to provide a preliminary decision on new applications within 14 months, respond to the filing of an appeal within 4 months, respond to a reply under section 132 within 4 months (such as responses after non-final rejections), and issue a patent within 4 months of the payment of the issue fee. In addition to these statutory requirements, USPTO provides an overall guarantee of 3-year application pendency, subject to limitations. The extension of the patent term affords the patentees additional time to have exclusive rights over their patents, but blocks competitors from utilizing the technology without a license. Although ensuring IP rights helps foster innovation, USPTO tries to avoid having to provide patent term adjustments. As noted by the World Intellectual Protection Organization (WIPO), patent systems must both foster

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1 USPTO FY 2014 President’s Budget Submission to Congress.
2 There are different options available to applicants who would like USPTO to reconsider a rejected application. For example, an applicant can appeal the examiner’s decision to the Patent Trial and Appeal Board. Furthermore, an applicant could file a continuation application. A continuation-in-part application repeats a substantial portion of the original application and adds additional matter. An applicant could also file a divisional application for an independent and distinct invention carved from the original application.
5 For example, delays by USPTO in examining an application after an RCE has been filed do not result in patent term adjustments under the 3-year pendency provision.
In addition to these concerns, the increase in RCE pendency and the RCE backlog highlights the challenges USPTO encountered because of its decision to prioritize the review of new applications. As USPTO put incentives in place in FY 2010 to encourage the review of new applications, the RCE backlog increased from 17,700 in October 2009 to 111,300 in March 2013 (see figure 3). Prior to FY 2010, USPTO had historically not had a large RCE backlog. When we spoke with USPTO staff, several individuals employed the analogy of “squeezing the balloon” to illustrate that examiners focused their attention on new applications at the expense of RCEs. USPTO implemented new policies to incentivize examiners to review RCEs in April 2013. The RCE backlog decreased to 84,500 in October 2013 (see figure 4), but it is too early to determine the impact on the new application backlog. The rapid rise in the RCE backlog in recent years can in part be attributed to an imbalance in incentives given to examiners to review new versus refiled applications. Analyzing the rapid increase in the RCE backlog is thus informative in what it reveals about the risks and vulnerabilities in USPTO’s ability to issue timely decisions on all types of patent applications.

Figure 3. Increase in the RCE Backlog, October 2009–October 2013

Source: USPTO

innovation and remain consistent with fair market rules. Limitations on the duration of patent right duration are cited by WIPO as a means of achieving this balance.\(^6\)

Objectives, Findings, and Recommendations

Our audit focused on two objectives: (1) assess why there has been an increase in average RCE pendency and the RCE backlog and (2) assess USPTO’s efforts to monitor and address the RCE backlog/pendency and review specific programs intended to resolve issues during the initial processing of the patent applications.

To answer these objectives, we employed a mix of quantitative and qualitative methodologies. Our quantitative analysis involved collecting data on all patent applications filed between FY 2004 and FY 2013. We identified trends in the applicants’ decisions to file RCEs and tested whether certain factors and events affected the likelihood that a new application would lead to an RCE. We also reviewed a sample of 50 patent applications to identify whether examiners inappropriately introduced new information at the final stages of the patent review. In addition, we also interviewed a selection of supervisory patent examiners, met with USPTO management, and reviewed USPTO documentation and analysis (see Appendix A for our methodology). In December 2012, USPTO solicited feedback from the public about the RCE practice. Our research focused on concerns raised by the public and the Patent Public Advisory Committee (PPAC) in response to USPTO’s RCE outreach efforts.

We were unable to research every frequently raised concern by the public and PPAC. For example, some commenters complained that applicants and examiners want RCEs to be part of the patent process, but we lacked a means to assess individuals’ motives. Additionally, we did not have technical expertise to explore a concern raised by USPTO supervisors that the applicants were not narrowing their claims throughout the patent process. We also could not provide an overall assessment of the quality of an examiner’s patent application review.

Listed in table 2 below is a summary of our audit findings as they relate to each audit objective.

<table>
<thead>
<tr>
<th>Objective</th>
<th>What We Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assess why there has been an increase in average RCE pendency and the RCE backlog</td>
<td>Over the past 10 years there have been structural changes that increased the overall number of RCEs.</td>
</tr>
<tr>
<td></td>
<td>The inclusion of new information from examiners is an ongoing concern for applicants.</td>
</tr>
<tr>
<td></td>
<td>The production credit and docket management policies USPTO put in place in FY 2010 increased the RCE backlog and pendency.</td>
</tr>
<tr>
<td>Assess USPTO’s efforts to monitor and address the RCE backlog/pendency and review specific programs intended to resolve issues during the initial processing of patent applications.</td>
<td>USPTO was slow to act on rapid RCE growth and will face challenges making future adjustments.</td>
</tr>
<tr>
<td></td>
<td>Some USPTO initiatives that could reduce RCEs have low participation rates and a negligible effect on the RCE backlog.</td>
</tr>
</tbody>
</table>

*USPTO refers to this as patent prosecution.*
I. Structural and Examiner-specific Issues Have Increased the Number of RCEs That USPTO Needs to Act Upon

A. There are more rejected applications, and applicants are more willing to pursue an RCE after a final rejection than in the past

Although USPTO increased the size of its workforce, the volume of RCEs has outpaced this growth. To decrease the patent backlog, USPTO almost doubled the number of patent examiners in its workforce between FY 2006 and FY 2012 from 4,200 to 8,000. Hiring additional examiners reduced the patent backlog and doubled the number of preliminary determinations, or first actions, on new patents, but the number of RCEs filed by applicants tripled during that same period (see figure 4). To investigate reasons for this growth, we analyzed final rejection and after-final amendment rejection rates and found that both increased over time (see figure 5).

Figure 4. RCEs Filed by Year, CY 2004–2012

Source: OIG analysis of USPTO data

Figure 5. Changes in Examiner and Applicant Behavior

Source: OIG, based on USPTO documents

8 After-final amendments are amendments filed by applicants after the examiner has issued a final rejection. Examiners may choose to approve applications following after-final amendments; however, they are not required to provide new determinations in response to after-final amendments if the amendment is not entered by the examiner. Once a final rejection that is not premature has been entered in an application, there is no right to unrestricted further prosecution.
The rate of patent applications approved by examiners early in the process (First Action or Final Determination) declined by 9 percentage points in the past decade (see figure 6). Patents that were reviewed for the first time in calendar year (CY) 2004 were approved by examiners approximately 50 percent of the time; that number dipped to 30 percent before eventually rebounding to nearly 40 percent for applications first reviewed in CY 2012. In addition, the percent of applications approved after an applicant filed an after-final amendment declined by 15 percentage points before gradually increasing (see figure 7). Over the same period, the percentage of applicants who filed amendments after receiving a final rejection fell from nearly 70 percent to 45 percent (see figure 7). In other words, relative to CY 2004, examiners are now more likely to reject applications and amendments, and applicants are less likely to file after-final amendments that could resolve issues and negate the need for filing an RCE.

Since, with a few exceptions, RCEs come from applications that were rejected by an examiner, rejecting more applications increases the pool of potential RCEs. Additionally, the decline in after-final amendment filing boosts the likelihood that a rejected application will ultimately become an RCE. In CY 2004, less than

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9 Patents are not examined immediately after USPTO receives them. Therefore, all our graphs are based upon the date patents are first reviewed by an examiner. If an examiner first reviewed an application in CY 2004 and later made a final rejection in CY 2007, the rejection will appear in our CY 2004 tallies. In contrast, USPTO calculates the percentage of approved patents based on when the final rejection or allowance was made. Thus, USPTO would reflect the rejection in its CY 2007 tallies. See Appendix B for additional details.
half of rejected applications led to RCEs; by CY 2011, that number reached 60 percent. In other words, there are more potential RCEs because there are more rejected applications, and rejected applicants are now more likely to file RCEs than they were in CY 2004.

After-final amendments are less expensive tools for reviewing rejected applications than RCEs (see table 3). Thus, USPTO should investigate the reasons for both the variance in after-final amendment approval rates and the precipitous decline in after-final amendment filings.

Table 3. Comparison of RCE and After-Final Amendments

<table>
<thead>
<tr>
<th></th>
<th>After-final Amendment</th>
<th>RCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost to the applicant</td>
<td>$0</td>
<td>$1,200 for large entities&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Number of hours examiners are</td>
<td>0–3 hours</td>
<td>~ 10–30 hours, depending on the technology</td>
</tr>
<tr>
<td>given to review the request</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: USPTO

<sup>a</sup> 78 Fed. Reg. 4212 (Jan. 18, 2013). The $1,200 fee is for the first RCE. Subsequent RCEs are $1,700.

B. Applications reviewed by lower-grade examiners are more likely to lead to RCEs

In response to USPTO’s RCE outreach efforts,<sup>10</sup> numerous public comments have argued that examiner quality is partly responsible for RCE growth. USPTO doubled its examiner workforce over the last decade, adding thousands of new examiners. Commenters suggested that applications reviewed by the less experienced examiners are more likely to result in RCEs. We lacked the expertise to test whether examiners erroneously rejected applications. However, we could test whether the applicant’s decision to file an RCE varied by the reviewing examiner’s seniority as measured by the examiner’s grade.<sup>11</sup>

To test the effect of examiner grade on RCE filing, we analyzed the universe of all patent applications from FY 2006 to FY 2013 that received a final rejection. We then used a logistic model to regress examiner grade on the likelihood of RCE filing. To isolate the effect of the examiner’s grade from other factors that could influence an applicant’s decision to file an RCE, we also controlled for the examiner’s technology center<sup>12</sup> and date of the first action.<sup>13</sup>

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<sup>10</sup> USPTO collected public feedback through various methods (see section IV for additional information.)

<sup>11</sup> Grade is not perfectly correlated with level of experience.

<sup>12</sup> The patent examiner corps is organizationally divided into nine disciplines called Technology Centers.

<sup>13</sup> We use the month and year of first action. Since many of the applications in our analysis dataset do not have RCEs, it would not be appropriate to control for the date of RCE filing.
We found that the applications reviewed by lower-grade examiners are more likely to result in RCEs than applications reviewed by higher-grade examiners (see figure 8). Applications reviewed by GS 9-11 examiners were nine percentage points more likely to result in RCEs than applications reviewed by GS 14-15 examiners.\textsuperscript{14} To make the regression interpretable, figure 8 shows the effect of changing examiner grade while holding the technology center and date constant. There are some limitations to our analysis because we cannot determine whether lower-grade examiners are performing lower-quality work than higher-grade examiners. However, given the difference in RCE rates by examiner grade, USPTO should ensure that new examiners are following standard procedures for patent examination.

C. Rates of RCE filing vary by office

While performing our analysis, we also found that RCE filing rates varied by technology center and art unit, teams with specific expertise that are housed within technology centers. We limited our universe to patent applications that received a final rejection. We found that, since FY 2004, RCE filing rates by technology center ranged from less than 50 percent to 65 percent (see figure 9). USPTO refers to technology centers by the four digit codes depicted in figure 12. Within art units, there are even starker contrasts: there are over 20 out of over 600 art units with RCE filing rates exceeding 70 percent and over 50 art units with RCE filing rates of under 40 percent. Additionally, in CY 2012 RCE pendency varied by technology center from as low as 107 days to more than 300 days. While RCE pendency only became a significant concern in the last few years, it has varied by art unit and technology center since FY 2004.

We are unable to assess whether these differences are caused by the complexity of the technology involved, a pattern of applicant behavior, or differences in examiner quality and procedures. The disparities in RCE filing rates suggest, at least, meaningful differences across art units; therefore, USPTO should assess

\textsuperscript{14} These results are statistically significant at \(p<.0001\). To interpret the results of the logistic regression model, we held all other variables at their mean values. We also found that applications worked by GS 12-13 examiners were six percentage points more likely to result in RCEs than applications worked by GS 14-15 examiners.
reasons for variance among art units, identify best practices that promote efficiency, and then develop separate RCE pendency targets by art unit.

II. The Inclusion of New Information from Examiners Is an Ongoing Concern for Applicants

A. Examiners are including new information in final rejections in response to amended application claims

In response to USPTO outreach efforts initiated in late 2012, patent applicants complained that USPTO did not allow applicants the opportunity to respond to examiner concerns before rejecting patent applications. Applicants stated that patent examiners are providing references to new information, referred to as new prior art, during final rejections. Once an examiner issues a final rejection, he or she is not required to consider any further amendments submitted by applicants. Unable to respond to the new prior art introduced in the final rejection, applicants claim that they file RCEs so that their applications will be considered again by examiners (see figure 10).

Figure 10. Applicants’ Concerns about New Prior Art

![Diagram showing the process of patent application review and RCE filing]

Source: OIG, based on USPTO documents
See figure 1 for a full description of the patent review process.

15 The Manual of Patent Examining Procedure (MPEP) 707 and 37 C.F.R. § 1.104(a) state that when examining an application, “the examiner … shall make a thorough investigation of the available prior art relating to the subject matter of the claimed invention.” To be patentable, inventions must be “novel,” meaning the claimed invention must be different from what has already been “patented, described in a printed publication, or in public use, on sale, or otherwise available to the public” (referred to as “prior art”). 35 U.S.C. § 102; see 37 C.F.R. § 1.104(c)(2), MPEP 707.
When we discussed the applicants’ concern with a selection of 15 USPTO supervisory patent examiners drawn from different technology centers, we found that the supervisors expressed a different perception of the issue than the applicants. The supervisors commented that when new art is included in the final rejection, the decision to do so by an examiner is rarely incorrect. Specifically, they found that examiners include references to new prior art because applicants substantively amended their claims or because the amendments changed the scope of the claims.

We determined that examiners only introduced new prior art in response to amended claims, as allowed by the patent process. Based on a random sample of 50 USPTO final rejections, applicants were correct that examiners introduced new prior art. However, examiners followed USPTO policy by only including new references in response to amended claims. The purpose of our review was to determine if USPTO examiners had provided new prior art to claims that were not amended by applicants. We found no instances where this was the case.

Under current USPTO policy, as set forth in the Manual of Patent Examining Procedure (MPEP) 706.07(a), patent examiners are allowed to issue final rejections after an applicant responds to examiner comments and/or amends an application. However, examiners may only provide new prior art in a final rejection if an amendment necessitated citation of the new ground or if the new ground was cited in an information disclosure statement filed during the period. USPTO management also noted that examiners should not include references to new prior art to reject claims that were not substantively amended by the applicant. Although applicants may not prefer USPTO’s policies related to the introduction of new prior art during final rejections, we found that examiners complied with the rules.

B. **USPTO’s quality assurance checks do not target some applications where new prior art is most likely being introduced in final rejections**

Given applicants’ concern about examiners introducing any new prior art during final rejections, we reviewed USPTO’s procedures to detect errors in the application of new prior art. USPTO’s Office of Patent Quality Assurance (OPQA) checks several thousand applications each year to determine whether examiners followed USPTO procedures when rejecting or approving patent applications. Of the over 9,000 final rejections USPTO reviewed between October 1, 2006 and December 2013, only 1.8 percent of final rejections had an examiner error related to inappropriate introduction of new prior art.\(^{16}\) OPQA reviews a statistical sample from all final rejections and approved patent applications, to test whether examiners applied the proper prior art.\(^{17}\) However, OPQA does not know whether applications included in its tests will eventually result in

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\(^{16}\) The audit team could not verify the results of USPTO’s quality assurance tests. USPTO found that 1.8 percent of the final rejections were incorrect because either (1) the examiner applied new prior art in response to claims that had only been amended to address limitations or (2) the examiner applied new prior art in response to claims that had not been amended.

\(^{17}\) OPQA also looks at a sample of preliminary determinations made by examiners, but those tests do not directly apply to the concern of including new prior art during final rejections.
RCEs being filed by applicants because it stated that it tries to look at examiner determinations as soon as they are issued. RCEs could, therefore, be filed after OPQA performs its checks.

Additionally, USPTO does not target its tests to look at the subpopulation of applications where examiners have prepared and attached a form PTO-892 to an action indicating that they are citing existing and/or new prior art in their final rejections. Preparing this form is a risk indicator that an examiner may be introducing new prior art in his or her final rejection. By following its current quality assurance procedures, OPQA can produce a statistically robust estimate of how often examiners inappropriately introduce new prior art each year, but it is less likely to catch specific instances of examiners incorrectly providing new prior art. Thus, OPQA could determine whether a stratified sample of patent applications targeting applications with new prior art would enhance quality assurance tests and the overall determination of patent examiner quality.

III. USPTO Was Slow to Act on Rapid RCE Growth and Will Face Challenges Making Future Adjustments

A. Policies incentivized examiners to focus on new applications rather than RCEs

Historically, USPTO management has utilized two tools to influence examiner output. The first tool, production credit, is the credit given to an examiner to perform specific actions (e.g., work on a new application or an RCE). USPTO incentivizes certain actions by assigning a larger production credit to the examiner. The second tool, docket management, controls the order that applications are processed by examiners. Examiners are evaluated by the amount of production credit they earn each year and their compliance with docketing rules. Examiners who exceed USPTO’s production credit targets are also eligible for bonuses. USPTO management negotiates changes to the credit and docketing systems with the patent examiners’ union (the Patent Office Professional Association, or POPA). Table 4 (next page) outlines recent changes to production credit and docketing policies that lead to RCE backlog growth.

USPTO made these changes to production credit and docketing policies to encourage examiners to review new applications rather than RCEs. The production credit changes reduced the amount of credit an examiner received for reviewing an RCE, while the docket management changes removed strict time requirements for work on RCEs.

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18 When an examiner prepares form PTO-892, “Notice of References Cited,” the examiner is listing existing or new references he or she deems pertinent. See MPEP § 1302.12. In contrast, an examiner who does not cite new prior art in his or her final rejection would not need to prepare form PTO-892 when he or she issues the final determination. Thus, preparing the form PTO-892 with the final rejection is a strong indicator that the examiner is likely including new prior art in the final rejection.
Table 4. FY 2010 Production and Docket Management Policy Changes

<table>
<thead>
<tr>
<th></th>
<th>Before Changes</th>
<th>After Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Production Credit</strong></td>
<td>Examiners received the same production credit for reviewing new applications as RCEs.</td>
<td>Examiners receive more credit for reviewing new applications than for reviewing RCEs.</td>
</tr>
<tr>
<td><strong>Docket Management</strong></td>
<td>Examiners were expected respond to an RCE within 2 months.</td>
<td>The 2-month requirement was lifted. USPTO required examiners to review as few as 13 RCEs each year.</td>
</tr>
</tbody>
</table>

Source: USPTO

The blue line in figure 11 shows the percent of RCE-related actions produced by examiners compared with other work from CY 2004 to CY 2013. The first red line identifies when USPTO placed RCEs on a new docket and examiners no longer needed to act on RCEs within 2 months. The second red line shows when examiners received reduced credit for reviewing RCEs and more credit for reviewing new applications. After these policies were put in place, examiners completed fewer RCE actions relative to all other actions and focused on new applications rather than RCEs.

The RCE backlog grew from 14,000 in January 2010 to 112,000 in 2012 (see figure 3). When USPTO temporarily awarded examiners more production credit to review RCEs

Figure 11. Percent of RCE Actions vs. Other Actions, January 2004–October 2013

Source: OIG analysis of USPTO data
in April 2013\(^{19}\) (the third red line), the examiners acted on more RCEs relative to other patent actions.

Figure 12 illustrates the increased wait time (in days) for preliminary decisions on RCEs since the FY 2010 production credit and docket management change.

The average time an applicant waited to receive a preliminary decision on an RCE increased from 48 days to almost 210 days between January 2008 and January 2013. The orange horizontal line identifies the 4-month RCE response time required by law.\(^{20}\) If USPTO fails to respond within this time period, the patent term is extended, subject to limitations.\(^{21}\) As in figure 11, the third red line represents the April 2013 increase to production credit.

\begin{figure}
\centering
\includegraphics[width=\textwidth]{figure12.png}
\caption{Average Waiting Time for a Preliminary Decision on RCEs (in days), January 2004–October 2013}
\end{figure}

\textit{Source: OIG analysis of USPTO data}

Although USPTO successfully affected examiner behavior through production credit and docket management policies, it was less successful at deterring applicant demand for RCEs. USPTO stated that its FY 2010 policy changes were designed to “rebalance incentives both internally and externally to decrease rework,” but RCE filing rates have not declined. Additionally, USPTO subsidizes the cost of reviewing RCEs.\(^{22}\) When Congress granted USPTO across-the-board fee setting authority in 2011, USPTO

\(^{19}\) In April 2013, USPTO announced a temporary policy, known as the fire sale, where examiners received as much credit for completing RCEs as for new applications. The policy went into effect April 7, 2013, and ended on October 1, 2013.

\(^{20}\) The 4-month response requirement, established by 35 U.S.C. §154(b)(1), applies to every RCE and not just the average RCE.

\(^{21}\) If the applicant has engaged in delays, these delays are factored in to determine if there will be a patent term adjustment.

\(^{22}\) USPTO recovers the cost for processing patent applications through its maintenance fees on issued patents.
initially proposed setting the RCE fees at full cost recovery. The public and PPAC noted that the need to file an RCE was not due to the applicant, and thus USPTO decided not to set the RCE fee at the full cost-recovery level.

B. **USPTO was slow to implement changes to curb RCE backlog growth and risks remain**

Despite USPTO's monitoring of the rapid RCE growth, USPTO did not make major changes to production credit and docketing policy until April 2013 and again in October 2013. Internal documents show that USPTO was aware of negative public reaction to RCE growth as early as August 2010. USPTO management received periodic reports that cover a number of areas in patent operations, including reports to monitor the RCE pendency, inventory, and backlog, as well as reports on initiatives that could reduce RCEs during this period. However, the reports did not identify whether the backlog or pendency had reached a tipping point. This is because USPTO has not established strategic goals outlining what a manageable RCE inventory should consist of relative to the size of its examiner corps or thresholds for backlog or pendency fluctuations that would trigger management action. Additionally, USPTO management must factor in time to negotiate with the union to make changes to the credit and docketing policies as well as to implement these policy changes in the relevant information technology systems.

USPTO officials have stated that they delayed taking action until March 2013 for several reasons. Management indicated that they wanted to establish a clear trend of RCE growth and RCE filing behavior by applicants. Additionally, management officials indicated that they wanted to be sure they understood the problem better, and thus they initiated their “RCE Outreach” efforts with stakeholders in late 2012. These uncertainties, coupled with a lack of established thresholds that would trigger automatic management action, led USPTO to react slowly to the increased growth in the RCE backlog and pendency.

Once USPTO had established a clear trend of RCE growth and conducted outreach with stakeholders, policies were put in place in April 2013 (a short-term credit change known within USPTO as the “fire sale”) and October 2013 (a mix of credit and docketing policy changes referred to as the FY 2014 agreement) that incentivized examiners to work on RCEs again. The April 2013 policy reduced overall patent examiner production, and it is too soon to determine the impact of the FY 2014 agreement.

In April 2013, USPTO’s “fire sale” temporarily increased the production credit awarded to examiners for reviewing RCEs without decreasing credit awarded for other office actions or increasing examiners’ production targets (see table 5, next page).
Table 5. April 2013–September 2013 Production Credit Changes

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Examiners review both new applications and RCEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2013</td>
<td></td>
</tr>
<tr>
<td>Quarter 1–2</td>
<td>1.75</td>
</tr>
<tr>
<td>Quarter 3–4</td>
<td>2.0</td>
</tr>
<tr>
<td>RCE Credit</td>
<td></td>
</tr>
<tr>
<td>New Application Credit</td>
<td>2.0</td>
</tr>
<tr>
<td>Examiners’ Production Targets</td>
<td>no change, but varies by technology(a)</td>
</tr>
</tbody>
</table>

Source: OIG analysis of USPTO documents

‘Examiners’ expected production is dependent on the technology they examine and their grade. For example, a GS-12 examiner reviewing a business methods patent application in class 705, is expected to take 31.6 hours to receive 2 credits.

By increasing the amount of credit given for completing RCEs without a corresponding decrease in credit for other work products or change in overall production targets, USPTO reduced the total productivity of its organization. Our analysis found a similar result from the FY 2010 credit system changes.\(^{23}\) As a result of the additional time given to review new applications and RCEs, examiners who worked continuously for a full year before and after the credit system change performed 5 percent fewer office actions the year after the policy took effect.

Production credit and docketing policy changes that took effect under the FY 2014 agreement require some examiners to only review RCEs rather than new applications. Examiners who only review RCEs will once again receive inflated credit (see table 6, next page) because they will receive more credit for reviewing RCEs without a corresponding decrease in credit for other work products or change in overall production targets. Additionally, all examiners will receive inflated credit for the fourth and subsequent RCEs they review in the first quarter and inflated credit for the fifth and subsequent RCEs they review in each remaining quarters of FY 2014 (see table 6, next page). These policy changes expire at the end of the fiscal year, on September 30, 2014.

\(^{23}\)In the FY 2010 agreement, examiners were given 3 additional hours to review each new application and RCE. The amount of credit examiners received to review new applications remained unchanged, but examiners received fewer credits for reviewing RCEs.
Table 6. FY 2014 Agreement Production Credit Changes

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Examiners only review RCEsa</th>
<th>Examiners review both new applications and RCEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 2014</td>
<td>FY 2014</td>
<td>FY 2014 Quarter 1</td>
</tr>
<tr>
<td>RCE Credit</td>
<td>2.0</td>
<td>First 3 reviews = 1.75, then 2.0</td>
</tr>
<tr>
<td>New Application Credit</td>
<td>not applicable</td>
<td>2.0</td>
</tr>
<tr>
<td>Examiners’ Production Targets</td>
<td>No change, but varies by type of technology</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Source: OIG analysis of USPTO documents

aExaminers with inventories of more than 60 unexamined RCEs during the first half of FY 2014 will only review RCEs. They received 2.0 credits for each RCE they reviewed because management directed them to review RCEs. During the second half of FY 2014, the threshold lowers from 60 unexamined RCEs to 50 unexamined RCEs.

The FY 2014 agreement will also have an unknown effect on USPTO's other inventories (new applications, divisional applications, continuing applications, and appeals). It is generally accepted by USPTO management that the FY 2014 agreement will result in a reduction in the RCE backlog because some examiners will be devoted to reviewing RCEs. Specifically, these examiners will not look at any applications in the new application backlog. The FY 2014 agreement requires that USPTO begin negotiations with the examiners' union in August 2014 to determine if the agreement is to be extended, amended, or terminated. If consensus is not reached, or if the FY 2014 agreement is terminated, the credit and docket system will return to FY 2009 levels.24

Creating policies to establish the appropriate mix of incentives to review RCEs and new applications has not been easy. We observed that in preparation for the FY 2014 agreement USPTO performed a great deal of analysis and worked expeditiously with the patent examiners' union. To prepare for upcoming negotiations required by the FY 2014 agreement, USPTO must plan for the increased size of the examiner workforce since FY 2010 in their patent forecasting models. Additionally, USPTO must contend with lags in data inherent in the patent process. For example, an applicant may wait several months before they file an RCE. Given these challenges, in the future there will be the risk of a potential loss of production efficiency and devaluation of work if repeated short-term agreements with the union are required to balance examiners' incentives to review new applications versus RCEs.

24 The FY 2009 levels were the policies in place prior to the FY 2010 production and docket management policy changes that incentivized the review of new rather than RCE applications (see figure 14).
Some USPTO Initiatives That Could Reduce RCEs Have Low Applicant Participation Rates and a Negligible Effect on the RCE Backlog

A. Low applicant participation dampens the potential benefit of initiatives

In addition to changes to the production credit and docket management system policies, USPTO has implemented several other initiatives that could reduce the number of RCEs (table 7): Quick Path Information Disclosure Statement (QPIDS), After Final Consideration Pilot 2.0 (AFCP 2.0), and First Action Interview Pilot (FAIP). Applicants must opt-in to participate in each program.

Although USPTO identified QPIDS, AFCP 2.0, and FAIP as initiatives that could reduce the RCE backlog, the initiatives' original goals were what USPTO calls compact prosecution. The focus of compact prosecution is to build quality determinations upfront in the process, thereby reducing the number of examiner reviews. By focusing on quality and resolving issues earlier in the patent review process, USPTO would expect fewer RCEs. We found that QPIDS, AFCP 2.0, and FAIP initiatives have low applicant participation rates (see table 8) and thus currently have a negligible effect on the RCE backlog. USPTO also recognizes that underutilization is a problem for the AFCP 2.0 program and communicated this in research they prepared for RCE Outreach events.

Table 7. Other Initiatives That Could Reduce RCE Backlog

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Description</th>
<th>Initiated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quick Path Information Disclosure Statement (QPIDS)</td>
<td>QPIDS is a pilot program to address a niche issue. QPIDS allows applicants to disclose prior art that may be relevant to the patent application to avoid an additional RCE review. To participate in QPIDS, applicants must pay a fee and file several forms, including a transmittal form that designates the request as a QPIDS submission.</td>
<td>May 2012</td>
</tr>
<tr>
<td>After Final Consideration Pilot 2.0 (AFCP 2.0)</td>
<td>AFCP 2.0 is a pilot program that is focused on obtaining agreement through after-final amendments. Applicants who opt into the program meet with the examiner with the hope that all disagreements between the examiner and applicant can be resolved through the after-final amendment process rather than RCEs. To opt into AFCP 2.0, applicants must file a request for consideration under the pilot program and amend at least one independent claim that does not broaden the scope of the claim.</td>
<td>May 2013*</td>
</tr>
<tr>
<td>First Action Interview Pilot (FAIP)</td>
<td>FAIP is a pilot program that focuses on increasing agreement early in the process by allowing the applicant and examiner to meet before the first action. To participate, an applicant must file a request at least one day before the first office action.</td>
<td>October 2009</td>
</tr>
</tbody>
</table>

Source: USPTO

* The original AFCP pilot program started in March 2012.
Table 8. Low Applicant Participation in Some Initiatives

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Number of Applicants</th>
<th>Time Period Tracked</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFCP 2.0</td>
<td>16,598</td>
<td>May 2013–November 2013(^a)</td>
</tr>
<tr>
<td>FAIP</td>
<td>4,169</td>
<td>October 2005–November 2013</td>
</tr>
<tr>
<td>QPIDS</td>
<td>2,480</td>
<td>May 2012–November 2013</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>23,247</strong>(^b)</td>
<td></td>
</tr>
</tbody>
</table>

Source: USPTO

\(^a\) USPTO did not track participation in the original AFCP pilot program that started in March 2012.

\(^b\) There were 590,070 patent applications in the backlog in November 2013. Twenty-three thousand applications equal 3.9 percent of the November new-application backlog. This backlog figure includes utility, plant, and reissue patent applications and does not include design applications. Design applications are not eligible for RCE.

Figure 13. Likelihood of RCE Filing

Although these programs have low applicant participation rates, we found that the FAIP and AFCP 2.0 programs reduce the likelihood that an application will result in an RCE.\(^{25}\) To illustrate the impact of programs, figure 13 shows the differences in the percent chance that an applicant would file an RCE after participating in the FAIP and AFCP 2.0 programs compared with applications that did not participate in the program.\(^{26}\) Holding other variables constant, participating in the AFCP 2.0 program lowers the likelihood that an applicant will file an RCE by almost 20 percentage points.\(^{27}\)

Participation in the FAIP program lowered the likelihood an applicant would file an RCE by seven percentage points. To test whether participation in these programs affected the likelihood of an RCE filing, we employed a logistic regression model and controlled for

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\(^{25}\) We could not perform a similar test on QPIDS participants because the comparison group of “no program” is not relevant. Participants in the QPIDS program would need to go through the RCE review process if they did not participate in the QPIDS program.

\(^{26}\) To interpret the results of the model, the baseline for the chart is composed of applications reviewed in Technology Center 2100 by a GS-12 examiner in January 2012.

\(^{27}\) These results are preliminary—most of the cases participating in AFCP 2.0 are not finalized patent applications. Restricting the universe to patents from the same time frame as the AFCP program participants shows similar results. Still, conducting an identical study of program participation effects in one year will provide more reliable results.
technology and date as we did in models described in section I. We also controlled for the grade of the examiner.

These findings echo themes that arose in our interviews\(^{28}\) with 15 supervisory patent examiners from different Technology Centers:\(^{29}\)

- Seven of the supervisors we interviewed thought that the AFCP 2.0 is a good program because it allows examiners time to interview applicants and resolve issues that could lead to an approved patent.

- Two supervisors were not very enthusiastic about AFCP 2.0 because they thought applicants were not sufficiently narrowing their claims and because examiners didn’t think they had enough time to review after-final amendments. If an examiner does not think he/she has enough time to consider the new information presented in the after-final amendment, he/she is not required to issue a new determination.

Thus, although some of these initiatives appear to reduce the likelihood an applicant would later file an RCE, USPTO supervisors also identified limitations within the programs.

**B. Once initiated, USPTO’s outreach has been vigorous, but engaging stakeholders requires a sustained effort**

USPTO initiated a concerted RCE Outreach effort in December 2012 and early 2013 after 3 years of steady increases in the RCE backlog. As part of the RCE Outreach initiative, USPTO used various means, such as roundtables, town halls, blog postings, and mass emails, to let stakeholders know about the QPIDS, AFCP 2.0, and FAIP programs. USPTO announced the availability of various resources and used Federal Register notices to solicit feedback on RCE programs and issues. USPTO management noted that feedback received from these outreach efforts helped them design new production credit and docket management policies implemented in FY 2013 and FY 2014.

Externally, applicants have criticized USPTO’s outreach efforts. Feedback from an August 2013 Patent Public Advisory Committee (PPAC) meeting included a comment that Federal Register notices may not be the best way to advertise a federal program to the public. Although USPTO has done more than rely on the Federal Register to communicate with the public (see figure 14), the comment highlights the challenges USPTO faces in engaging stakeholders. The Government Accountability Office states that internal controls should include effective communications internally and in addition, “management should ensure there are adequate means of communicating with and obtaining information from external stakeholders that may have a significant impact on

\(^{28}\) AFCP 2.0 did not arise as a topic in six of our interviews.
\(^{29}\) This is not a statistically representative sample of the total population.
the agency achieving its goals.” USPTO has made a concerted effort to engage stakeholders on the RCE issue since December 2012. Continuing to engage all stakeholders on this issue will need to be a sustained effort.

Figure 14. Components of RCE Outreach

Source: USPTO

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Recommendations

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office:

1. Mitigate the impact of RCE structural issues and examiner-specific issues and take corrective action where necessary by:
   a. researching the reasons for the variance in after-final amendment approval rates and the precipitous decline in after-final amendment filings;
   b. assessing why applications handled by lower- and higher-grade examiners have different RCE filing rates; and
   c. assessing the reasons for variance among art units, identifying best practices that promote efficiency, and then developing strategies to minimize patent term adjustment.

2. Determine whether a stratified sample of patent applications targeting risk areas, such as applications with new prior art applied in a final rejection, would enhance quality assurance tests and the overall determination of patent examiner quality.

3. Establish a risk management plan that ensures timely, situation-specific analysis and solutions are documented and implemented to minimize patent-term adjustments when rebalancing is needed to meet statutory requirements and public expectations for prompt processing.

4. Develop ways to increase participation in the compact prosecution initiatives, especially AFCP 2.0, and continue efforts to engage all stakeholders.
Summary of Agency Response and OIG Comments

In response to our draft report, the Deputy Director of the United States Patent and Trademark Office agreed with all of our recommendations and noted that the bureau had begun to make progress on reducing the pendency and backlog of RCEs. USPTO submitted technical comments to the draft report. We made changes to the final report based on these comments and suggestions.

We look forward to receiving USPTO’s action plan within 60 calendar days of the date of this report.
Appendix A: Objectives, Scope, and Methodology

The objective of our audit was to determine the reasons why there was a recent increase in the RCE backlog and RCE pendency as well as to review USPTO’s monitoring and management response to the increase. As part of reviewing USPTO management’s response, we examined USPTO initiatives intended to resolve issues during the initial review of a patent application.

To accomplish our objectives we:

- Reviewed comments submitted by the public to USPTO concerning the agency’s RCE practice.
- Reviewed patent laws and regulations and the Manual of Patent Examining Procedure to determine the policies and procedures applicable to examiner actions during patent processing.
- Collected data on all patent application actions and patents between January 2004 and September 2013, including approval, rejections, and RCE filings. We also tested the reliability of the data through electronic testing and matched the electronic records with a sample of 50 patent applications.
- Analyzed the patent application data to calculate approval rates, rejection rates, RCE filing rates, amendment filing rates, and amendment allowance rates over time and ran various regressions on the patent application action data. As part of this analysis, we assessed the impact of USPTO policy changes on RCEs.
- Conducted a random sample of 50 USPTO final rejections leading to RCEs being filed, to determine if USPTO introduced new prior art in response to amended claims in compliance with regulations. We did not project the results to the population due to the sample size. We also met with the OPQA to gain an understanding of what quality reviews it conducts during the patent application process.
- Interviewed and requested documentation from USPTO management and union officials to create a timeline of USPTO actions that may have affected RCE inventory and pendency.
- Interviewed 15 supervisory patent examiners drawn from different Technology Centers with high, medium, and low amounts of RCE applications to determine if there are common themes or significant issues related to the RCE practice.

Further, we gained an understanding of the internal controls related to the supervision of patent examiner determinations and interviewed 15 patent examiner supervisors. However, we did not perform specific tests on the internal controls given the context of our...
objectives. During the audit, we identified no incident of fraud, illegal acts, violations, or abuse. For our quantitative analysis, we relied on computer-generated data. We found the data sufficiently reliable for assessing trends and creating statistical models.

We conducted our audit fieldwork at USPTO headquarters in Alexandria, Virginia, between June 2013 and January 2014, and we conducted this audit in accordance with generally accepted government auditing standards. We complied with those standards that require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We performed our work under the authority of the Inspector General Act of 1978, as amended, and Department Organizational Order 10-13, dated August 31, 2006, as amended.
Appendix B: Calculating Application Approval Rates

USPTO calculates the monthly approval rates for patent applications by dividing the number of applications approved in the preceding month by the total number of applications “disposed of” in that month. An application is disposed of when it is either approved, abandoned by the applicant, or when the applicant files an RCE. In this report, we calculated the approval rates for patent applications differently than USPTO because we had different analytical needs for our statistical models. First, we grouped patent applications by the year they were first reviewed so that we could control for this time period in our models. If an applicant received a preliminary determination (first action) in FY 2004 and a final rejection in FY 2007, our analysis would record the rejection in FY 2004. In contrast, USPTO would record this rejection in FY 2007. Additionally, our analysis looked at the rate at which USPTO approved or allowed patent applications prior to the filing of the RCE. Thus the denominator in our approval rates is a subset of applications included in USPTO’s approval rate calculations. To avoid confusion on this issue, the two graphs in figure B-1 show the difference between how USPTO calculates approval rates and how we calculated approval rates in this report. Both graphs come from the same set of data.

![Figure B-1. Comparison of OIG and USPTO Methods for Calculating Approval Rates, FY 2004–2012](image)

Note: The chart on the left shows how USPTO measures the patent approval rate. The chart on the right shows how OIG measured the patent approval rate.

Source: OIG analysis of USPTO data

31 Within the agency and in its reports, USPTO refers to patent application approval rates as “allowance rates.”
Appendix C: Glossary of Terminology

**After-final Amendment** — After-final amendments are amendments filed by applicants after the examiner has issued a final rejection. Examiners may choose to approve applications following after-final amendments; however, they are not required to provide new determinations in response to after-final amendments if the amendment is not entered by the examiner. Once a final rejection that is not premature has been entered in an application, there is no right to unrestricted further prosecution.

**After-Final Consideration Program 2.0 (AFCP 2.0)** — AFCP 2.0 is a pilot program that is focused on obtaining agreement through after-final amendments. Applicants who opt into the program meet with the examiner with the hope that all disagreements between the examineer and applicant can be resolved through the after-final amendment process rather than through RCEs.

**Art Unit** — Teams with specific expertise in a particular technology that are housed within Technology Centers.

**Docket** — The examiner’s docket lists the patent applications awaiting action.

**First Action** — The preliminary determination made by the examiner about whether to approve a patent application. The applicant, to avoid abandonment, must reply to the determination with or without amendments and request that the examiner reconsider the determination.

**First Action Interview Pilot (FAIP)** — FAIP is a pilot program focused on increasing agreement early in the process by allowing the applicant and examiner to meet before the first action.

**Final Rejection** — The final rejection is the process by which the examiner rejects the patent application. After the examiner issues a final rejection, the applicant may appeal the examiner’s decision to the Patent Trial and Appeal Board, file a continuation application, file an after-final amendment, file a divisional application, or file an RCE.

**Patent Term Adjustment** — A patent term adjustment is a statutory increase in the patent term that accrues when USPTO delays in taking certain actions within statutorily set time periods.

**Prior Art** — Prior art includes published patents and other disclosures in the public domain.

**Production Credit** — The credit given to an examiner to perform specific actions (e.g., work on a new application, RCEs, etc.)

**Quick Path Information Disclosure Statement (QPIDS)** — QPIDS is a pilot program that allows applicants to disclose prior art that may be relevant to the patent application without filing an RCE.
Request for Continued Examination (RCE) — Patent applications resubmitted for consideration after an examiner has finally rejected the inventor’s claims or otherwise closed prosecution.

Technology Center — The patent examiner corps is organizationally divided into nine disciplines called Technology Centers.
Appendix D: Agency Response

MEMORANDUM FOR: Ann C. Eilers
Principal Assistant Inspector General for Audit and Evaluation

FROM: Michelle K. Lee
Deputy Under Secretary of Commerce for Intellectual Property and Deputy Director of the United States Patent and Trademark Office


Executive Summary

We appreciate the effort you and your staff have made in reviewing the reasons for the increase in our Request for Continued Examination (RCE) backlog and pendency and our efforts to monitor and address this matter. We have carefully considered the four recommendations made in the subject draft report.

The USPTO is proud of the progress it has made in reducing the RCE backlog since February 2013 when it reached a high of over 111,000 RCE applications compared to our current RCE backlog of under 71,000. With the implementation of many programs and initiatives, we have helped decrease the backlog and pendency of RCE applications so that American companies, innovators, and entrepreneurs can focus on innovation and job creation.

Our response to each recommendation is discussed in detail below.

Response to Recommendations

IG Recommendation that the Under Secretary of Commerce for Intellectual Property and Director of United States Patent and Trademark Office (USPTO) (1): Mitigate the impact of RCE structural issues and examiner-specific issues and take corrective action where necessary by:

a. Researching the reasons for the variance in after-final amendment approval rates and the precipitous decline in after-final amendment filings;

b. Assessing why applications handled by lower- and higher-grade examiners have different RCE filing rates; and

c. Assessing the reasons for variance among art units, identify best practices that promote efficiency, and then develop strategies to minimize patent term adjustment.
USPTO Response:
The USPTO concurs with this recommendation. The USPTO will study whether there are any variances in after-final amendment approval rates within the patent examining corps and if there has been a precipitous decline in after-final amendment filings; the USPTO also will assess whether applications handled by lower- and higher-grade examiners have different RCE filing rates; and finally the USPTO will assess any variances among art units regarding RCE practices. Based on the results of these studies and assessments, the USPTO then will determine the best path forward, such as the development of best practices that promote efficiency within the examination process and consistency across technology centers. The USPTO also will develop strategies to minimize patent term adjustment.

IG Recommendation that the Under Secretary of Commerce for Intellectual Property and Director of USPTO (2): Determine whether a stratified sample of patent applications targeting risk areas, such as applications with new prior art, would enhance quality assurance tests and the overall determination of patent examiner quality.

USPTO Response:
The USPTO concurs with this recommendation. The USPTO will evaluate whether there is a need to conduct enhanced reviews of applications where the examiner cited new prior art in a final rejection. Based on the results of the evaluation, the USPTO will determine the best path forward for performing such reviews if a need to do so is identified. In general, the USPTO’s Office of Patent Quality Assurance (OPQA) feels that studies of targeted risk areas are often better addressed by designing and conducting studies independent of its current compliance rate program. Increasing sample sizes under the current program may not adequately capture data points necessary for root cause analysis or data-driven quality initiatives due to the one-size-fits-all review form.

IG Recommendation that the Under Secretary of Commerce for Intellectual Property and Director of USPTO (3): Establish a risk management plan that ensures timely, situation-specific analysis and solutions are documented and implemented to minimize patent term adjustments when rebalancing is needed to meet statutory requirements and public expectations for prompt processing.

USPTO Response:
The USPTO concurs with this recommendation and will develop a risk management plan as noted.

IG Recommendation that the Under Secretary of Commerce for Intellectual Property and Director of USPTO (4): Develop ways to increase participation in the compact prosecution initiatives, especially AFCP 2.0, and continue efforts to engage all stakeholders.

USPTO Response:
The USPTO concurs with this recommendation. The USPTO will develop plans to increase participation in our compact prosecution initiatives, such as AFCP 2.0. The plans will be focused on engaging and educating stakeholders regarding the available programs in order to increase participation in these programs.
Conclusion

In closing, we thank the Principal Assistant Inspector General for Audit and Evaluation for providing us with this report. We are confident in our abilities to meet the recommendations concurred with above in a timely manner and look forward to working with your office in the future in our efforts to reduce RCB backlog and pendency.