ABSTRACT

Examiner interviews are one of the most powerful tools to help both inventors and examiners understand and overcome specific issues during prosecution. Direct discussions between an applicant and an examiner can help bridge the gap between misunderstandings of prior art, the invention or statements in the specification. When used correctly, examiner interviews can dramatically decrease the time in prosecution and help applicants quickly reach a final disposition. This study reviews approximately 1.1 million patent applications corresponding to every patent application with an examiner interview between 2007 to June 2020 to determine the effectiveness of examiner interviews. This study establishes that examiner interviews dramatically decrease the number of Office Actions needed to reach a final disposition (allowance or abandonment).

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1 Professor, West Virginia University College of Law. The data for this work was provided by PatentAdvisor.com. This work was funded in part by the generous support of the West Virginia University College of Law Hodges Research Fund.
INTRODUCTION

Dr. Anthony Letai is a physician and professor at the Harvard Medical School and Dana-Farber Cancer Institute who filed a patent application (U.S. 13/478,831) for a new method for identifying how sensitive a cancer cell is to a therapeutic agent by treating it with a host of chemicals then testing to see how the cell reacts. This application was assigned to Patent Examiner Aeder, who rejected the application based on prior art as well as based on non-statutory double patenting (NSDP) grounds. Dr. Letai addressed the prior art issues by amending the claims, arguing that the prior art does not teach or suggest each and every element of the claims, and that the examiner “misread” and “miscalculated” the claimed invention. The examiner was not persuaded by Dr. Letai’s arguments and retained the prior rejection and the NSDP rejection. The application then went back and forth three additional cycles, with the applicant amending claims and the examiner sustaining his rejection(s). All told, after four office actions and 757 days (2.10 years), Dr. Letai obtained a patent.

Robert Carraway is a physician at the University of Massachusetts Medical School who filed a patent application (U.S. 12/330,035) for a new method for identifying antioxidants by contacting a test compound to a cell then monitoring the level of a chemical within the cell. This application was also assigned to Patent Examiner Aeder, who rejected the application based on failure to comply with the written description requirement as well as an anticipatory prior art rejection and a NSDP rejection. Before responding to the examiner, the applicant conducted an

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3 See patent application 13/478,831 (filed May 23, 2012), where the application was first rejected on 35 U.S.C. §102(b), 103, and a non-statutory double patenting rejection.
4 See prosecution history 13/478,831, Applicant Arguments/Remarks Made on April 15, 2015, page 8.
5 Measured from the restriction requirement to the notice of allowance.
examiner interview where the applicant and examiner discussed the prior art rejections as well as the written description rejection. Furthermore, during this interview, the examiner suggested language and amendments that would help improve the claims. Dr. Carraway incorporated the suggestions made by the examiner, and in the next action, the examiner allowed the case. All told, after only after one office action and 269 days (0.73 years), Dr. Carraway obtained a patent.

In both of these cases, the technology was loosely similar, both claim priority to a parent application, the patent examiner was the same person and the prosecuting attorneys were of approximately the same experience level. Furthermore, the type of rejections faced in both cases were also similar. Both applications faced several prior art rejections as well as a NSDP rejection. One big difference during prosecution, however, was Dr. Carraway’s use of interview practice. The interview allowed both parties to get on the same page when it came to the substance of the rejections as well as allowed the examiner to suggest possible amendments to overcome those rejections. Once the proffered amendments were made, the application was allowed. In the absence of the examiner interview, it took three additional actions and over an additional year before Dr. Letai was able to receive his patent. Foregoing the use of an examiner interview could be one significant reason why it took longer for Dr. Letai to obtain a patent.

Examiner interviews are one of the most powerful tools to help both inventors and examiners understand specific issues during prosecution. Direct discussions between an applicant and an examiner can help bridge the gap between misunderstandings of prior art, the invention or statements in the specification. Additionally, once these misunderstandings are cleared up, interviews can be a chance for examiners to suggest claim amendments to traverse those rejections. Accordingly, when used correctly, examiner interviews can dramatically decrease the time in prosecution and help applicants quickly reach a final disposition.

Patent examination, at its heart, is a negotiation between the patent examiner and the applicant. One of the most powerful tools to help facilitate this negotiation is interview practice which allows both parties to sit down face-to-face and talk through specific issues that may be hindering progress towards a final disposition. This “face-to-face” conversation with the examiner is called an “Examiner Interview” (hereinafter “Interview”). Interviews can be completed in a number of ways, in person, telephonically, or via online visual conversations.

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9 Measured from the restriction requirement to the notice of allowance.
10 Both claims deal with a new identification method by adding a foreign substance a cell then measuring the outcome of that interaction.
11 The 13/478,831 application is a continuation application of 11/695,321 (later patent number 8,221,966) and the 12/330,035 application is a divisional application of 11/223,395 (later patent number 7,507,547).
12 Patent Examiner Aeder only had approximately four years of experience as an examiner in 2008 and eight years of experience in 2012. Previous studies have shown that more experienced examiners have a higher allowance rates. See Shine Tu, Luck / Unluck of the Draw: An Empirical Study of Examiner Allowance Rates, 2012 Stan. L. Rev. 10 (2012). Accordingly, this example shows that interviews may play an even more important role in reducing examination times.
16 The vast majority of interviews are conducted telephonically. Personal communication Michael Their, September 22, 2020.
No matter which venue that is chosen, examiner interviews can compact prosecution by helping both parties understand where they are coming from.

Speedy disposition of a patent application should be the goal for both applicants as well as the Patent and Trademark Office. Previous studies have shown that patent pendency is a crucial aspect of intellectual property rights and affects a firm’s ability to obtain start-up financing as well as increased sales and employment growth. Unfortunately, many applications languish in prosecution simply because the applicant does not correctly understand the issues and rejections raised by the examiner, and/or the examiner does not understand the arguments/amendments made by the applicant to traverse the rejections. Because of these misunderstandings, patent prosecution can be prolonged for months and in many cases years before reaching a final disposition (e.g., allowance or abandonment). This can become increasingly important for large patent filers since each response, on average, costs approximately $3,000. Examiner interviews serve to bridge the gap between the applicant and examiner and allow the applicant to better understand the examiner’s rejection and also to help the examiner better understand the applicant’s arguments.

This study empirically assesses the benefits and costs of using an examiner interview during prosecution. This study reviews every patent application filed with an interview between 2014-2019 (over 1 million applications) and determines the average number of office actions that is required to obtain a final disposition. These data are then compared with the examiner’s average disposition rate. This study finds that there is a dramatic decrease in the amount of Office Actions necessary to get to a final disposition when an examiner interview is used compared to the examiner’s average disposition rate.

Part I of this article describes examiner interview practice, focusing on the different types of interviews as well as how applicant’s go about requesting interviews. Part II describes the dataset created to investigate examiner interviews and describes the results from this study. Part III gives suggestions on how to optimize and incentivize increased use of interview practice.

I. INTERVIEW PRACTICE

Interviews allow the applicant and examiner to clarify positions, resolve issues, and provide a better understanding of the application as well as the prior art to both parties. Interviews are conducted to help advance prosecution and identify patentable subject matter as well as help the applicant and examiner understand their corresponding rejections and traversal arguments. Additionally, the interview should be a collaborative effort between the applicant and examiners to help compact prosecution.

20 See Interview Best Practices at 5 stating “Examiners and applicants should not conduct interviews as adversaries, but rather, should conduct interviews with the objective of meeting the common goals of advancing prosecution and resolving issues.”
There are two major benefits for the applicant when using interviews. First, it allows for real time discussion with the examiner, and possibly their supervisor, to hash out substantive matters at issue in an application. Second, typically interviews do not create a detailed prosecution history. Although interviews are made of record, the record usually does not contain too much detail about what was discussed. Accordingly, applicants typically do not have issues with prosecution history estoppel when discussing prior art or the claimed inventions in an interview.

A. General Information About Interview Practice

Since 2008, the absolute number of interviews has dramatically increased. Specifically, in 2008 there were less than 80,000 hours spent on interview. However, in 2009, there were more than 260,000 hours recorded for interviews. Additionally, the number of hours spent per examiner on interviews has increased commensurately from less than 16 hours per examiner in 2008 to approximately 32 hours per examiner in 2019. Finally, in 2008 only about 20% of disposed cases had at least one interview, whereas in 2019 this number increased to more than 35%. Accordingly, an increasing number of examiners are spending time conducting interviews and more applications that have at least one interview are disposed (allowed, abandoned or appealed).

1. Interview Basics

The rules for examiner interviews are governed by MPEP 713. Examiner interview can occur in several different ways: in person, via telephone, video conference, electronic mail, or electronic instant message system using USPTO-based collaboration tools. The USPTO notes that internet email, instant messages or video conferences are not secure. Accordingly, the examiner is required to obtain either written or oral authorization from the applicant understanding that these communications are not secure.

Interviews are usually held during business hours (Monday through Friday 8:30-5:00 pm) but can be held outside these hours if agreed upon by all participants. Typically, examiner interviews last only about 30 minutes. Examiners receive 60 minutes of non-production time credit for interviews and typically spend 30 minutes preparing for the interview and 30 minutes conducting the interview.

Applicants may bring demonstrations, exhibits and models, however, these items will not be generally admitted as part of the record unless it complies with 37 CFR 1.91. Although an agenda is not required, the examiner will typically request that the applicant provide an agenda for the interview to facilitate a focused discussion on the issues. The agenda typically includes

21 See PTO Interview Policy Presentation “Partnering in Patents: Interview Practice” Tariq Hafiz, Director Technology Center 3600 (Slide 6).
22 See PTO Interview Policy Presentation “Partnering in Patents: Interview Practice” Tariq Hafiz, Director Technology Center 3600 (Slide 7).
23 See PTO Interview Policy Presentation “Partnering in Patents: Interview Practice” Tariq Hafiz, Director Technology Center 3600 (Slide 8).
24 See U.S. DEPT OF COMMERCE, PATENT & TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 713.01 (9th ed., Rev. 8, Jan. 2018) [hereinafter MPEP]; Authorization can be given by EFS WEB (SB/0439), central fax, us postal service, or a USPTO customer service window (email does not constitute authorization under current USPTO policy).
25 See MPEP § 713.01 stating that it is the “responsibility of all participants to see that the interview is not extended beyond a reasonable period, usually 30 minutes.”
26 See MPEP §§ 608.03 and 608.03(a)
information about references, claims and the specific rejections that the applicant wishes to discuss, as well as any proposed amendments or evidence that the applicant will be providing.

2. Timing of Interview

After the issuance of a first Office Action the patent examiner must grant an interview if requested by the applicant as a matter of right. Accordingly, most interviews occur after the first Office Action. This allows both parties to consider the current rejections as well as any prior art if there were anticipation and/or obviousness rejections. However, examiners are “encouraged to have an interview whenever the interview can resolve issues and help further prosecution.”

i. Routine Requests

An applicant can request an interview prior to the first Office action in continuing or substitute applications. In all other applications, the examiner has discretion to grant the interview if the examiner determines that an interview would advance prosecution of the application. Typically, an interview is schedule one to four weeks in advance.

Typically, after a final rejection the examiner has discretion to grant an interview and the applicant does not have the right to an interview. The examiner has the discretion to grant the interview if she believes it will move prosecution forward and if the interview serves to develop or clarify outstanding issues in an application. Accordingly, an examiner may not grant an interview if the applicant simply wants to make arguments found in a previous response. However, an examiner may be more predisposed to granting an interview that proposes new claim amendments along with new arguments that she believes will move prosecution forward.

Generally, interviews are not permitted before the first office action or after submission of an appeal brief or after a notice of allowance. Interviews, however, may be permitted after the final rejection but before the notice of appeal. These interviews should help place the application for allowance or to resolve issues prior to appeal. Interviews during this period will not be granted if the applicant simply wants to restate the arguments of record or to discuss new limitations that would require “more than nominal reconsideration or [a] new search.”

Finally, after an application is sent to issue interviews are generally not permitted. This is because once an application is sent to issue, it is no longer under the jurisdiction of the primary examiner. Under extraordinary circumstances, however, an interview may be granted with specific approval of the Technology Center Director upon a showing of extraordinary circumstances.

27 MPEP § 713.02.
28 MPEP § 713.02.
29 MPEP § 713.09.
30 See Appendix 3 below (First Action Interview Pilot Program) for an exception to this general rule.
31 See MPEP § 713.10. However, interviews are allowed in these situations under “extraordinary circumstances” and should be granted only with specific approval of the Technology Center Director.
32 MPEP § 713.09.
33 MPEP § 713.09.
34 MPEP § 713.10.
35 37 CFR 1.132.
36 MPEP § 713.10.
ii. Special Requests

Although most interviews occur between a non-final and final rejection, there are a few programs that allow for interviews outside the norm. Specifically, programs such as: prioritized examination; the full first action interview pilot program; and the after final consideration pilot 2.0 programs all have mechanisms where the applicant can attain an interview outside of the normal time schedule.

There are two programs where the applicant can request an interview before the first Office action. Those applicants who seek prioritized examination can request an interview with the examiner prior to the first Office action. Additionally, those applicants that are participating in the “Full First Action Interview Pilot Program” are entitled to a first action interview prior to the first Office action on the merits.

If the applicant wishes to conduct an interview after a final rejection, the applicant could request to participate in the After Final Consideration Pilot 2.0 (AFCP 2.0). Under the AFCP 2.0 program the examiner will receive extra time to search and/or consider responses after a final rejection. Additionally, the examiner may conduct an interview to discuss the results of their search and any remaining issues the examiner may have with the claims.

3. Who Can Request An Interview

The PTO normally will not grant the interview unless the requesting party has the ability to bind the principal concerned. Similarly, if the application is being examined by a junior examiner without primary signatory authority, then the requesting party should always include an examiner who is familiar with the application and has signatory authority so that an authoritative agreement may be reached at the end of the interview.

There are two main types of interviews: applicant-initiated interviews and examiner-initiated interviews.

i. Applicant-Initiated Interviews

On the applicant side, generally, only the applicant or the attorney or agent of record can request an interview (applicant-initiated interview). A party with the mere power to inspect an application is not sufficient to grant an interview. Interviews may, however, be granted to

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37 MPEP § 708.02(b).
39 The AFCP 2.0 program is a pilot program that has been extended through September 30, 2021. The program aspires to compact prosecution and increase collaboration between examiners and stakeholders. To participate in the AFCP 2.0 program the applicant need only fill out Form PTO/SB/434 and an amendment to at least one independent claim that does not broaden the scope of the independent claim in any aspect. See 78 Fed. Reg. 29117.
40 MPEP § 713.05.
41 MPEP § 713.05.
42 See MPEP § 713.05.
registered attorneys or agents who are not of record if they are acting in a representative capacity for the applicant under 37 CFR 1.34.\textsuperscript{43}  

The applicant can request an interview as a matter of right if the request is made after the first office action.\textsuperscript{44}  An applicant can request an examiner interview by: (1) simply filling out a PTOL-413A form; (2) using the USPTO’s online Automated Interview Request (AIR) system; or (3) directly calling the examiner to request an interview.\textsuperscript{45}  Although the USPTO prefers applicants request interviews through the PTOL-413A form, applicants can request an interview through informal means such as simply calling the examiner to request an interview.\textsuperscript{46}  

\textit{ii. Examiner-Initiated Interviews}  

Conversely, examiners can also request the applicant for an interview (examiner-initiated interview). On the examiner side, only an examiner with a GS-12 or higher with negotiation authority has the ability to conduct an interview. Interestingly, an examiner usually only contacts the applicant for an interview when the application is close to allowance.\textsuperscript{47}  Examiner initiated interviews are usually requested to discuss proposed amendments that would lead to allowance. Accordingly, for most applications this study finds no more than one examiner-initiated interview per application, unlike applicant-initiated interviews which contain nearly twice as many interviews.  

\textit{4. Who Can Participate in An Interview}  

Interviews are mainly conducted by patent agents or patent attorneys who are registered to practice in front of the USPTO and represent the applicant. Interviews are typically not granted to a registered practitioner unless the applicant has granted the practitioner a power of attorney.\textsuperscript{48}  If the interview is conducted to discuss procedural or legal issues, then it may be appropriate for only the prosecuting attorney or agent to attend. 

Inventors / applicants can also participate in interviews with an examiner. Inventors / company representatives may be helpful if the interview is conducted to discuss complex technical issues and/or provide the examiner with a better understanding of the claimed invention or general technology. Sometimes it is helpful for the inventor/applicant to attend the interview because they are experts in the field and can help distinguish the invention over the prior art. However, many inventors / applicants are not familiar with patent law and should be cautioned against making unnecessary statements that could create estoppel issues. Similar to inventors / applicants, a pro-se applicant may conduct an interview even in the absence of a registered practitioner. 

\footnotesize{\textsuperscript{43} See MPEP § 402.04.  
\textsuperscript{44} Additionally, if the applicant files an RCE, after the first non-final office action, the applicant has the right to request another interview.  
\textsuperscript{45} See \url{www.uspto.gov/interviewpractice}.  
\textsuperscript{46} Registered practitioners who are acting in a representative capacity can show authorization to conduct an interview by completing, signing and filing an Applicant Initiated Interview Request Form (PTOL-413A). Alternatively, Form PTO/SB/84, “Authorization to Act in a Representative Capacity” may also be used to establish the authority to conduct an interview.  
\textsuperscript{47} Personal communication with Technology Center Interview Specialist, Examiner Michael Thier.  
\textsuperscript{48} Unregistered or suspended practitioners are barred from conducting interviews because examiners are forbidden to have either oral or written communications with an unregistered or suspended attorney or agent regarding an application (unless the application is one in which the attorney or agent is an inventor or the applicant). See MPEP § 105 and § 407.}

Electronic copy available at: https://ssrn.com/abstract=3725770
Finally, examiners and their supervisors will attend the interview. The direct “working” examiner who is responsible for application will participate in the interview. Additionally, if the examiner is a junior examiner (usually an examiner below a GS-12 who does not have negotiation authority), the applicant should request that the examiner’s supervisor, who is familiar with the application, to participate in the interview. This is important because a junior examiner who does not have negotiation authority does cannot reach an authoritative agreement at the time of the interview.

5. Interview Best Practices

Once an interview is granted, the examiner typically requests the applicant provide a detailed agenda along with any proposed amendments, arguments or evidence that the applicant wishes to discuss at the interview. This written agenda becomes part of the file history. The examiner then prepares for the interview by evaluating the claims and prior art to assist the applicant in identifying allowable subject matter. Additionally, both the examiner and applicant can propose claim amendments and fallback positions that could result in allowance. Finally, both the examiner and applicant should be prepared to explain the rationale for any positions taken in the interview.

During the interview both the examiner and applicant should look for opportunities to resolve as many outstanding issues as possible. Examiners should articulate why proposed amendments do not overcome a rejection of record. Similarly, applicants should explain why any examiner-suggested claim amendments are objectionable. Finally, if an agreement can be reached, both the examiner and applicant should be able to bind their respective parties at the end of the interview.

To conform with 37 C.F.R 1.2, the oral discussions between applicant and examiners during the interview are summarized in writing. A complete recordation of the substance of an interview should include: identification of the claims discussed; identification of the specific prior art discussed; and an indication of whether an agreement was reached and if so, a description of the general nature of the agreement. No agreements, promises, stipulations or understandings will be recognized that are not on the written record at the USPTO. After the interview the examiner and applicant must each draft an interview summary. However, this summary is, typically short, and many times does not describe the specific issues discussed during the interview.

Many times, the examiner’s interview summary is completed at the end of the interview with input from the applicant. Accordingly, the applicant usually requests the most general description of the interview, such as “prior art was discussed” or “anticipation and obviousness rejections and arguments were discussed.” If an agreement was reached many descriptions can be as simple as “amended claims overcome prior art issues.” Applicants, of course, would prefer a brief summary especially if the examiner was unpersuaded by the proposed amendments due to the specter of prosecution history estoppel. Similarly, if the proposed amendments lead to an

49 See MPEP § 713.04
50 The applicant is not, however, expected to write a separate summary of the interview if the examiner indicates in writing on the PTOL-413 form that a written summary of the interview by the applicant is not necessary. See Interview Best Practices at 8 ([https://www.uspto.gov/sites/default/files/patents/law/exam/interview_best_practices.pdf](https://www.uspto.gov/sites/default/files/patents/law/exam/interview_best_practices.pdf)) (visited October 19, 2020).
allowance, applicants will want to frame the interview in the most favorable light by minimizing the breadth of any estoppel issues.

Finally, even if an agreement is reached during the interview, the examiner will conduct a final update and interference search. This search could produce prior art that would negate the patentability agreement reached in the interview.  

B. **Streamlining Access to Interview Practice**

The PTO has created programs to help streamline access to interview practice. Two prominent programs are: (1) the Automated Interview Request tool and (2) the technology center interview specialists.

1. **Automated Interview Request (AIR) Tool**

The USPTO has created the Automated Interview Request (AIR) tool which allows the applicant to request an interview. This tool allows applicants to request an interview with the examiner and propose a date that is between five and thirty-five days after submission date. The applicant provides basic information including the application number, type of interview (in-person, telephonic, or video conference), and the registration number of the applicant’s representative. Additionally, the applicant will submit a proposed interview time and date along with two alternative dates. Finally, the applicant can optionally include an agenda or list topics for discussion. The AIR tool is especially useful when applicants are not able to get in touch with the examiner by phone.

2. **Technology Center Interview Specialists**

Each technology center has at least one interview specialist. These interview specialists are subject matter experts on interview practice and policy. They help assist in interviews and can facilitate and assist with technical issues that may arise. For example, interview specialists can help applicants with the WebEx application and any technical challenges that the applicant may face with the technology. Additionally, interview specialists train examiners in how to conduct an interview as well as train examiner’s on how to use the technology necessary to conduct a video interview.

C. **USPTO Incentives for Interview Practice**

USPTO recognizes that these interviews can help compact prosecution and help identify allowable subject matter earlier in the examination process. Accordingly, the USPTO

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51 MPEP § 719.05, 904 and 1302.08.
52 [https://www.uspto.gov/patent/laws-and-regulations/interview-practice/interview-specialist](https://www.uspto.gov/patent/laws-and-regulations/interview-practice/interview-specialist) (visited August 12, 2020) [TC1600, TC1700, TC2100, TC2900, and TC3600 each have three specialists; TC2400 has five specialists; TC2600 and TC3700 have four specialists; TC 2800 has six specialists; and TC 3900 has two specialists. Additionally, each of the USPTO satellite offices have at least one specialist.]  
53 For example, the video for WebEx is achieved through the user’s computer, however the audio is accomplished through the applicant’s phone.
incentivizes examiners to give interviews. The “count” system\(^\text{54}\) gives “non-production time” credit for substantive examiner-initiated interviews as well as applicant-initiated interviews. This includes time for preparing for the interview, conducting the interview and completing the post-interview documentation.

Currently, the USPTO does not give additional counts for interview practice. However, the examiner is given one hour of non-production credit towards interview practice. Typically, the examiner will spend 30 minutes of time on the actual interview and 30 minutes or more preparing for the interview as well as documenting what occurred during the interview. As previously mentioned in Section I(A), the number of hours spent on interviews by examiners increased from 80,000 hours in 2008 to over 260,000 hours in 2019.\(^\text{55}\) Accordingly, the USPTO has invested tens of millions of dollars into giving examiners time during examination for interview practice.

II. THE DATASET AND RESULTS

This dataset focuses on all applications that contained an examiner interview during a five-year period from January 2007 to June 2020. This study hypothesizes that examiner interviews will help get the application to a final disposition in fewer office actions than those applications without an examiner interview. Accordingly, this dataset contains: (1) 1,008,989 applications that had at least one interview and were subsequently issued a patent, and (2) 146,851 applications that had at least one interview and were subsequently abandoned by the applicant. We compare these data with the allowance rate and abandonment rates associated with the paired examiners. These data were then segmented by technology center to determine if there were technology effects associated with interview practice.

The data was segmented by Technology Center. The dataset includes examiners from the following Technology Centers associated with the corresponding technology types:

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<th>Technology Center</th>
<th>Technology Type</th>
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<tr>
<td>Technology Center 1600</td>
<td>Biotechnology and Organic Chemistry</td>
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<tr>
<td>Technology Center 1700</td>
<td>Chemical and Materials Engineering</td>
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<tr>
<td>Technology Center 2100</td>
<td>Computer Architecture, Software, and Information Security</td>
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<tr>
<td>Technology Center 2400</td>
<td>Computer Networks, Multiplex Cable and Cryptography / Security</td>
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<tr>
<td>Technology Center 2600</td>
<td>Communications</td>
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<tr>
<td>Technology Center 2800</td>
<td>Semiconductors, Electrical and Optical Systems and Components</td>
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Examiners were given credit for examiner-initiated interviews as part of the count reform package implemented on November 9, 2009. See also Blatt, E.D. and Huang, L., *Do Heightened Quality Incentives Improve the Quality of Patentability Decisions? An Analysis of Trend Divergences During the Signatory Authority Program*, 46 AIPLA Quarterly Journal 161 (2018).

\(^{55}\) See PTO Interview Policy Presentation “Partnering in Patents: Interview Practice” Tariq Hafiz, Director Technology Center 3600 (Slide 6).
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<tr>
<th>Technology Center 3600</th>
<th>Transportation, Construction, Electronic Commerce, Construction, Agriculture, Licensing and Review</th>
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<tbody>
<tr>
<td>Technology Center 3700</td>
<td>Mechanical Engineering, Manufacturing and Products</td>
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The dataset excluded design patents (Technology Center 2900). Design patent examiners were removed from the dataset to focus on only utility patents.

Additionally, this study collected information about the party who initiated the interview. Specifically, information was gathered about interviews initiated by the applicant (by coding for those applicants who used a PTOL-413A form) and interviews initiated by the examiner (by coding for those examiners who used a PTOL-413B form). Those applicants who scheduled an interview but did not use a PTOL-413A form were captured in the “total interviews” number.56

The data from applicant and examiner-initiated interviews also contains the specific number of applicant or examiner-initiated interview. Accordingly, for each application, we know if there were one, two, three, or more applicant-initiated interviews, and likewise for the examiner-initiated interviews. Thus, unlike the total allowance data, the data pulled for applicant and examiner interviews, cases containing PTOL-413A and 413B forms respectively, track the exact number of interviews conducted before allowance or abandonment. Accordingly, this study determines on average how many applicant or examiner-initiated interviews are necessary before a final disposal (allowance or abandonment).

For each application with an interview that lead to an allowance, this study recorded: (1) the number of office actions it took before a notice of allowance for the instant case, (2) the number of non-final office actions for the instant case, and (3) the number of final office actions for the instant case. Additionally, this study coded the overall statistics for those same examiners. Specifically, this study recorded: (1) the total averaged Office Action to Grant Ratio (OGR) for the specific examiner, (2) the total averaged Office to Abandonment Ratio (OAR), (3) the allowance rate for the specific examiner, and (4) the abandonment rate for the specific examiner.

A. Office Action to Grant Ratio (OGR) / Office Action to Abandonment Ratio (OAR)

The Office Action to Grant Ratio (OGR) and Office Action to Abandonment Ratio (OAR) allows the reader to quickly understand how many Office actions it takes to reach a final disposition.57 Specifically, the average OGR score determines how many Office actions it takes before an examiner grants a patent. Similarly, the average OAR score determines how many Office actions it takes before an applicant abandons an application.

OGRs and OARs are better metrics for patent prosecution duration. This is because applicants typically have between three to six months to reply to an Office Action.58 Similarly, examiners have a variable time period in which they can respond to the applicant’s response. Accordingly, simply measuring the duration between the filing date and issue date can be misleading because

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56 The “total interviews” number is the sum of (1) applicant initiated interviews (interviews with a PTOL-413A form), (2) examiner initiated interviews (interviews with a PTOL-413B form) and (3) those interviews that did not have either a PTOL-413A or PTOL-413B form.

57 Shine Sean Tu, Three New Metrics for Patent Examiner Activity: Office Actions per Grant Ratio (OGR), Office Actions per Disposal Ratio (ODR) and Grant to Examiner Ration (GER), 100 J. Pat & Trademark Off. Soc’y 277 (2018).

58 35 U.S.C. § 133. See also MPEP § 710.
there can be significant variation in prosecution times created by delays on both the applicant and examiner sides. OGR and OAR measures the number of actions taken by the examiner, which is independent of the delays that might be created by either the applicant or examiner. This is especially important when it comes to cases with interviews because there may be selection bias created by cases that are interviewed. Specifically, those applications with interviews may contain complex technologies, problematic prior art, or have already gone through several rounds of RCEs.

B. Issued Patents

To determine the effect of interviews on prosecution times, this study compares the OGR rates for those cases with interviews versus the corresponding total OGR rates for those same examiners. Accordingly, the OGR value for each interviewed application is compared against the overall OGR rate for that same examiner. This pair-wise analysis prevents bias from incorporating data from those examiners who do not interview any applications.

Figure 1 shows that cases with interviews have approximately two Office actions before an allowance. In contrast, those same examiners normally have approximately 3.6 Office actions before issuing an allowance. The additional 1.6 Office actions is significant because this represents at least one Request for Continued Examination (RCE). Once RCE practice is utilized, the duration in prosecution can significantly increase.59

Figure 2 evaluates the issued application data by “applicant-initiated interviews” and Figure 3 reviews the issued application data by “examiner-initiated interviews.” Applicant initiated interviews and examiner-initiated interviews were determined by the presence of a PTOL-413A or PTOL-413B form within the prosecution history, respectively.

Figure 2

As shown in Figure 2, when reviewing the data by applicant-initiated interviews, the OGR increases from 2.8 to approximately 4.2. In contrast, as shown in Figure 3, when analyzing the data by examiner-initiated interviews, the OGR remains at around 2.1 for interviewed cases compared to an OGR of 3.8 for those same examiner’s total docket. Interestingly, approximately 1.5 fewer Office actions are needed to get to allowance when using of an interview (whether applicant or examiner-initiated).

Figure 4
Finally, Figure 4 segments the allowance data by technology center. These data show that interview practice reduces the number of office actions required to get to allowance regardless of technology type. Unsurprisingly, interview practice has a significant influence on granted patents in technology centers 3600, 1600 and 1700, which are technology centers that customarily have lower allowance rates. Conversely, there is a smaller effect of interview practice on technology center 2800, which has a high allowance rate.

Additionally, as shown in Appendix 1, the overall allowance rates for those applications that include interviews is not disproportionately greater than the overall allowance rates for the paired examiners, regardless of technology center. Accordingly, applications with interviews do not seem to have a significantly higher allowance rate than applications in general, but applications with interviews get to allowance much faster than applications without interviews. These data suggest that interviews may help bridge the gap between interpretation of the prior art and/or understanding the invention.

C. Abandoned Patents

In contrast to allowance, the alternative “final” disposition for an application is abandonment. Application abandonment is almost completely under the control of the applicant. This is because even if an applicant receives a “final” rejection she may continue prosecution by simply filing an RCE. Once an RCE is filed, generally the application can receive two additional office actions (typically one non-final action and one final action). This process can repeat itself again and again until either (1) the examiner allows the case or (2) the applicant decides to abandon the application.

If the examiner is unwilling to allow any claims in the application, it is better for the applicant to understand the examiner’s rationale and quickly abandon the application rather than to cycle through multiple RCEs. This cycle of RCEs can cost the applicant thousands of dollars and additional months (sometimes years) in prosecution. Accordingly, this study examines if applications that include interviews help applicants to abandon their applications faster.

To determine the effect of interviews on prosecution times, this study compares the OAR rates for those cases with interviews versus the corresponding total OAR rates for those same examiners. Accordingly, the OAR value for each interviewed application was compared against the OAR rate for that examiner. Similar to the OGR analysis in Section II(B), this pair-wise analysis prevents bias from incorporating data from examiners who do not interview any applications.

Figure 5 shows that cases with interviews that end up abandoned have approximately 2.5 Office actions before the applicant abandons the application. In contrast, those same examiners normally require approximately 5.9 Office actions before the applicant decides to abandon the application. The additional 3.4 Office actions is significant because this represents two RCEs. Once RCE practice is utilized, the time in prosecution can significantly increase.60

60 https://blog.juristat.com/2017/11/7/rejections-response-timings (stating that that “filing an RCE instead of an appeal following a first final rejection can significantly change the time to final disposition.”) (visited August 25, 2020).
Figure 6 reviews the abandoned application data by “applicant-initiated interviews” and Figure 7 segments the data by “examiner-initiated interviews.” As shown in Figure 6, when analyzing the data by applicant-initiated interviews, the OAR increases from 3.8 to approximately 7.0. In contrast, as shown in Figure 7, when segmenting the data by examiner-initiated interviews, the OAR increases from 3.0 to 5.8.
As shown in Figure 6, when reviewing the data by applicant-initiated interviews, the OAR increases from 3.8 to approximately 7.0. In contrast, as shown in Figure 7, when analyzing the data by examiner-initiated interviews, the OAR remains at around 3.0 for interviewed cases compared to an OAR of 5.8 for those same examiner’s total docket. Similar to the OGR dataset shown in Figures 2 and 3, the interview affects results in significantly fewer Office actions needed to get to abandonment (whether applicant or examiner-initiated). These data, however, show a more pronounced effect of interviews on the applicant’s decision to abandon compared to the examiner’s decision to allow the application.

Finally, Figure 8 segments the abandonment data by technology center. These data show that interview practice reduces the number of office actions required to get to abandonment regardless of technology type. Similar to the results found for the allowance data, interview practice has a profound influence on the abandonment rates in technology centers 3600, 1600 and 1700, which are technology centers that customarily have lower allowance rates. Without the benefit of an interview, applicants in these technology centers may have to cycle through 5-7 additional office actions before deciding to abandon the application.

The addition of 5 office actions likely results in at least two to three additional years in prosecution and thousands of dollars in prosecution fees as well as lost opportunity costs. These data also show that it is much more important for the applicant to request an interview to understand if the examiner will not allow the case (in contrast to interviews that help lead to allowance). This is because the number of Office Actions required to get the applicant understand that abandonment is the best option is much greater than the number of office actions necessary to get the examiner to allow the case. The main problem is that *ex ante*, it is difficult for the applicant to understand which road he will be traveling without an interview.

Figure 8

III. IMPROVING INTERVIEW PRACTICE

Similar to the allowance rate data, Appendix 2 shows that the overall abandonment rates for those applications that include interviews is not disproportionately greater than the overall abandonment rates for the paired examiners, regardless of technology center.
Interview practice can reduce the number of actions required to get to disposal. The three normative questions are: (1) why do interviews reduce the number of actions it takes to get to a disposal; (2) is it socially beneficial incentivize interview practice; and (3) should we / how do we incentivize interview practice?

A. Rationales for How Interviews Compact Prosecution

There are two non-exclusive rationales for why interview practice can compact prosecution. The first and most cited rationale is based on helping to bridge misunderstandings or miscommunications between the examiner and applicant. The second rationale is based on the signaling power of an interview.

1. Interviews Used to Bridge the Gap

The obvious explanation for reduction in disposal times when using interview practice is that interviews can be used to help the examiner understand the applicant arguments in a way that cannot be done in a paper response. If the applicant brings in a model of the invention, the examiner may be able to better understand the invention and the nuances of the invention that cannot be explained in an Office action response. Additionally, having the inventor or technical specialist come in to explain the inventive concept to the examiner may help shed a different light on the invention in a way that the examiner did not initially recognize.

2. Interviews as a Signal

A second explanation for the reduction in Office actions is that interviews act as a signal to the examiner that the application is especially valuable to the applicant. Specifically, examiners who have interviews where inventors are flown in from distant countries may recognize that this specific application might be important to the inventor/assignee. Accordingly, the examiner may be more willing to work with the applicant to reach a disposal.

This is especially important since only applicants control prosecution duration by forcing the examiner to review the case again and again by filing RCEs or continuation applications. The interview, therefore, may act as a signal to the examiner that the applicant may be willing to force the examiner to review the application until an agreement is reached.

Anecdotally, for important cases one firm would get a former PTO director to sit in on the interview. Although I do not know what was discussed during the interview, most cases were allowed shortly after those interviews. Simply having the former PTO director in the room may have signaled to the examiner that the application was particularly important.

B. Possible Improvements to Interview Practice

There are several relatively easy ways to improve interview practice. Specifically, the USPTO could require both applicants and examiners to come prepared with several different claim

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63 Personal communication from a former USPTO director.
amendments that could help move prosecution forward. Additionally, the USPTO could require a more detailed written record of what took place during the interview. To incentivize more interviews, the USPTO could require the examiner conduct a number of interviews before promotion to the next GS level. Finally, the USPTO could increase the non-prosecution time given to examiners from one hour to two hours to better reflect the amount of time needed to prepare for and conduct interviews.

1. **Require Proposed Claim Language from Both Applicants and Examiners**

In a survey conducted by the USPTO in 2018, both applicants and examiners were asked what was least satisfactory about interview practice. 84% of examiners and 75% of applicants were least satisfied with the discussion of “ways to overcome the rejection.” From this survey it seems as though both parties would like the other party to come up with solutions to resolve the issues conducted in the interview.

One way to help overcome this problem would be to require both the examiner and the applicant to bring concrete claim language to the interview. These claims could be used as a starting point for discussions as well as help guide the examiner and the applicant on the road to resolution. New claim language proffered by the applicant would help the examiner understand the inventive step or the important nuances in the claimed invention that may help distinguish the invention from the prior art. Additionally, newly tendered claim language from the examiner may help the applicant better understand how the examiner is interpreting the claimed invention or the prior art.

2. **Create a More Detailed Interview Summary**

Frequently, the interview summary drafted by the examiner is fairly brief and usually does not contain information that can be used for prosecution history estoppel. In fact, the interview summary can be written together by both the examiner and the applicant directly after the interview. Accordingly, the applicant usually suggests language that is broad and intentionally opaque. Some interview summaries contain language as simple as, “Discussed 102 and 103 rejections.”

One of major advantages for the applicant in using interview practice is the fact that they can move prosecution forward without generating a detailed prosecution history that could later be used against them in litigation. Although this lack of a detailed prosecution history can be advantageous to the patentee, is more likely problematic for the public and competitors. Statements made by the applicant usually become part of the prosecution history and those statements can later play a key role for courts in both claim interpretations as well as interpreting the prior art. When these statements are made verbally in interviews without a written or digital record, they do not appear in the prosecution history. Without these statements as part of the record, the applicant gets the benefit of overcoming the rejection while the public (and competitors) loses the benefit of statements to help delineate the boundaries of the claim. Accordingly claim interpretation becomes less accurate and less predictable, and the allowed claims may be interpreted more broadly than what was envisioned by both the examiner and the applicant.
Similarly, lack of a record could make claim interpretation the doctrine of equivalents more difficult. The doctrine of equivalents protect inventors from infringers who try to “evade liability for infringement by making only insubstantial changes to a patented invention” to avoid literal infringement.\(^{64}\) However, for example, a patentee is estopped from asserting infringement under the doctrine of equivalents if the applicant agrees to make a narrowing amendment to overcome a prior art rejection. If the rationale for the amendment is not present in the interview record, then applicants can argue that the amendment “bears no more than a tangential relation to the alleged equivalent” in question.\(^{65}\) Without a record describing the rationale for the amendment courts will not “speculate on the reasons for the cancellation” or amendments.\(^{66}\) Accordingly, without a record of what occurred during the interview, courts will not hypothesize on the rationales for claim amendments / cancellations that could help interpret the meaning and scope of the claim.

One way to quickly improve interview practice is to require examiners to create a more detailed summary of what occurred in the interview. This should be written independently by the examiner with little input from the applicant. The applicant, of course, should be able to respond to the examiner interview if the applicant believed the summary did not reflect the discussion at the interview. This could simply be done in the next office action response by the applicant or in a separate interview summary.

Alternatively, an audio or video recording of the interview could be made part of the prosecution record. Since most interviews are conducted telephonically, a simple audio recording of the interview that is included in the image file wrapper could help courts, competitors and the public determine the metes and bounds of the claimed invention. Furthermore, the audio from face-to-face interviews conducted via the USPTO’s WebEx application or in person interviews should also be easily recordable.

### 3. Tie Interview Practice to Examiner Promotion

To incentivize competency in interview practice as well as incentivize interviews, the USPTO could require a specific number of interviews before allowing promotion to the next GS level. If the USPTO believes that interview practice helps to compact prosecution, then

### 4. Increase the Examiner Time Allotted for Interview Practice

One way to easily incentivize examiner interviews is to increase the amount of non-production time that the examiner can count towards interview practice. Currently examiners can only claim one hour towards examiner interviews. Non-production time currently goes up in one-hour increments. Accordingly, under the current system, examiners would get two hours of non-production time for conducting an interview.

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Increasing the amount of time to two hours would allow examiners to better review the applicant’s arguments and/or review the prior art and the claimed invention. Additionally, increasing examiner time dedicated to interview practice could be used in combination with other suggestions such as creating a more detailed examiner interview summary or drafting claims that could overcome specific rejections. Specifically, if the USPTO required the examiner to draft an interview summary that is at least 500 words and draft at least one claim that could address a rejection, then the examiner should be credited an additional hour of non-production time.
Appendix 1

Allowance Rate of Issued Patents

Appendix 2

Abandonment Rate of Applications
Appendix 3

Full First Action Interview Pilot Program (FAIPP)

The USPTO recognizes the importance of interview practice. Accordingly, the USPTO created a pilot program to determine if interviews prior to the first Office action reduces prosecution times. Specifically, the program is intended to “expedite disposition of an application by enhancing communication between an applicant and an examiner at the beginning of the examination process.” Currently, the FAIPP is open to all technology areas and filing dates.68

To enroll in this pilot program there are six requirements: (1) the application cannot be a reissue or provisional or national stage of an international application, (2) the application must contain three or fewer independent claims and no more than twenty total claims, (3) the application cannot contain any multiple dependent claims, (4) the application must be directed to a single invention, and the applicant agrees to make an election without traverse if the Office determines that the claims are not obviously directed to a single invention, (5) the request for a first action interview must be filed electronically and must be filed at least one day before a first Office action on the merits appears in the Patent Application Information Retrieval (PAIR) system, and (6) the applicant agrees not to request a refund of the search fees and any excess claim fee paid in the application after the mailing or notification of the pre-interview communication made by the examiner.

Under this program, applicants first receive the examiner’s search results and a condensed pre-interview communication. The communication contains relevant prior art and identify proposed rejections and/or objections. Within 30 days of receipt of the communication the applicant schedules an interview and submits proposed amendments and/or arguments.

The parties then conduct an interview with the examiner prior to the first Office action. The interview should focus on three things: (1) to help the examiner better understand the invention; (2) to establish the state of the art at the time of the effective filing date, including the prior art references cited by both the applicant and examiner, and/or (3) to help the examiner understand the features of the claimed subject matter which make the invention patentable, including any proposed amendments to the claims.69 The substance of the interview must be made of record and a complete written statement with the substance of the interview with regard to the merits of the application is made of record.70

The PTO outline three possible outcomes from the First Action Interview. The first outcome is the best-case scenario for the applicant. An agreement is reached and all claims are in condition for allowance. The examiner will complete an Interview Summary (PTOL-413), enter and attach any necessary amendments or arguments, and the completed forms will be made of record with a Notice of Allowance and Fees Due.

67 77 Federal Register 40342 (2012).
68 Originally, the “Enhance First Action Interview Pilot Program” was limited by technology area and filing date. See also https://www.uspto.gov/patent/initiatives/first-action-interview/full-first-action-interview-pilot-program (visited August 4, 2020).
69 80 Federal Register 39758, section IX(A) (2015).
70 MPEP § 713.04.
A second possible outcome is that an agreement as to allowability is not reached. If this is the case, the examiner will set forth any unresolved, maintained or new requirements, objections, and/or rejections in the First Action Interview Office Action. The examiner will then complete an Interview Summary “highlighting the basis for any unresolved, maintained, or new requirements, objections and rejections as well as resolution of any issues that occurred during the interview.” This First Action Interview Office Action will be considered the first Office action on the merits. The applicant, then must respond within two months (or sixty days, whichever is longer), which can be extended for up to two additional months.

Finally, the third possible outcome is that an agreement as to allowability is not reached, and the applicant converts the previously submitted proposed amendment into a reply under 37 CFR 1.111(b) and waives receipt of a First Action Interview Office Action. If the examiner agrees to enter the amendment as the reply, then the First Action Interview Office Action will not be provided to the applicant. The Pre-Interview Communication and the interview will be deemed the first Office action on the merits. The examiner will enter the proposed amendment, and/or arguments, and consider it as the reply under 37 CFR 1.111, and provide an Office action in response to that reply.

Although many applicants do not avail themselves of this program, it works surprisingly well for those applicants who do use the program. The results from the Original and Enhanced First Action Interview Pilot in April 26, 2011, showed that the first action allowance rate was 33.5%. Similarly, the current FAIPP shows a 29% first action allowance rate compared to a 14% first action allowance rate for new, non-continuing application. Additionally, the rate of an allowance in the next action increases to 36%. Gilles found that of the approximately 8800 FAIPP applications filed between 2010 and 2018, 94% were allowed. In contrast, the overall allowance rate for applications was 76%.

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71 80 Federal Register 39758, section IX(B) (2015).
72 80 Federal Register 39758, section IX(B) (2015).
73 80 Federal Register 39758, section IX(B) (2015).
74 80 Federal Register 39758, section IX(B) (2015).