

The Story of a Patent

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I. Introduction

In the realm of intellectual property, the path to securing a patent is often filled with challenges and complexities. This article navigates through the different phases of patent applications from the initial submission to the final decision by the United States Patent and Trademark Office (USPTO); it also illuminates the various hurdles that inventors face in pursuing a patent.

II. Patent Application Process

The journey to securing a patent is an arduous but structured process. It begins with the drafting and submission of a preliminary patent application to the USPTO. This initial step requires a comprehensive description of the invention, along with necessary drawings and specific claims that explain the scope of the patent protection sought.¹

Following this submission, the USPTO evaluates the patent application.² Upon evaluating the patent application, the USPTO issues a nonfinal office action.³ This involves a comprehensive assessment by a patent examiner. The assessment lists all objections and rejections to the claims in the patent application, specifically pointing out the areas where the application fails to meet the required patentability criteria, such as novelty or non-obviousness.⁴

In response to the nonfinal office action, the applicant is provided an opportunity to address the issues raised.⁵ This stage allows for corrections and adjustments to the patent application. Applicants can make claim amendments, add new claims, or present new arguments to bolster the patentability of their claims.⁶ Additionally, applicants can amend the application if it does not involve adding new matter.⁷ An applicant may also request an examiner's interview, providing a direct dialogue (i.e., telephone call) with the examiner to better understand and respond to the concerns raised.⁸

The response to the nonfinal office action is time-sensitive and typically requires submission within three months from the date of the office action's mail date.⁹ The USPTO offers some

¹ See James Yang, *What is a Final Office Action v. the Non-final Office Action?*, OC Patent Lawyer (Dec. 21, 2022), <https://ocpatentlawyer.com/what-is-the-difference-between-a-final-office-action-and-the-non-final-office-action/>.

² See *id.*

³ See *id.*

⁴ See *id.*

⁵ See *id.*

⁶ See *id.*

⁷ See *Expired Patents USPTO: Everything You Need to Know*, Upcounsel (Feb. 1, 2023), <https://www.upcounsel.com/expired-patents-uspto#:~:text=An%20abandoned%20patent%20occurs%20when,is%20key%20to%20fostering%20innovation.>

⁸ See Yang, *supra* note 1.

⁹ See *id.*

flexibility, allowing responses up to six months after the mail date, although this incurs progressively higher extension fees for delays beyond the initial three-month period.¹⁰

After the applicant's response, the USPTO proceeds to issue a final office action.¹¹ This stage signifies the conclusion of the examination process from the USPTO's perspective. At this point, the application is deemed to have been fully evaluated and the examiner is not obligated to consider any further claim amendments or arguments.¹² However, this "final" action is not necessarily the end of the process.

After the final office action, applicants have several options to continue to pursue a patent. These include filing a request for continued examination (RCE), submitting a continuation application, or initiating an appeal to the Patent and Trademark Appeal Board (PTAB).¹³ An RCE allows the applicant to make further amendments or arguments, while a continuation application offers a chance to pursue a different scope of the invention.¹⁴ An appeal to the PTAB, on the other hand, provides a platform to contest the examiner's decision.¹⁵

Importantly, at any point in the process, the applicant may choose to abandon the patent application. This occurs if the applicant fails to respond to the examiner's decisions within the stipulated deadlines (typical) or if the applicant expressly requests abandonment (rare).¹⁶

III. Patents Rejections by Numbers

a. Patentability Rates at Each Stage of the Patent Process

The Yale Journal of Law & Technology conducted a comprehensive study of utility patent applications from 1996 to 2005.¹⁷ Analyzing over 2.15 million applications, the study provides insights into the success rates and challenges faced by applicants at various stages.¹⁸

One of the more striking findings from the study is the overall attrition rate of patent applications. During the preliminary phase, before receiving the first nonfinal office action from the USPTO, 2.3% of applications were already abandoned.¹⁹ This early dropout rate highlights the challenges applicants face even in the initial stages of the patenting process, such as funding.

Upon the first office action, the USPTO allowed patents on only 11.4% of all applications, suggesting a relatively stringent screening process.²⁰ In contrast, a significant 86.4% of the

¹⁰ *See id.*

¹¹ *See id.*

¹² *See id.*

¹³ *See id.*

¹⁴ *See id.*

¹⁵ *See id.*

¹⁶ *See Expired Patents USPTO, supra note 7.*

¹⁷ *See Michael Carley et al., What is the Probability of Receiving a U.S. Patent?, 17 YALE J.L. & TECH. 203 (2015).*

¹⁸ *See id.*

¹⁹ *Id.* at 207.

²⁰ *Id.*

applications faced a non-final rejection at this stage.²¹ This high rejection rate underscores the USPTO's rigorous standards for patentability.

After receiving nonfinal rejections, 14.5% of applications were abandoned.²² This could indicate the applicants' perception of diminishing returns in pursuing a patent or the realization of needing substantial revisions. Despite this, after the final office action, an encouraging 36.1% of applications were eventually allowed.²³ Thus, including patents approved after the nonfinal action, the total percentage of patentable applications after standard proceedings was 47.5%.²⁴

Further, the study sheds light on the persistence of applicants in the face of final rejections. Remarkably, 9.3% of applications initially rejected at the final stage were eventually allowed following subsequent amendments.²⁵ Additionally, 1.2% of applications that received a final rejection were allowed after formal appeals.²⁶ These statistics demonstrate the dynamic nature of the patent process, where persistence and refinement can overturn initial decisions.

b. Patentability Trends

Overall, 58% of all applications were eventually allowed.²⁷ This figure rises to 71.2% when including allowances of continuation applications.²⁸ The study also uncovers a decreasing trend in allowances over time. In 1996, around 12% of patents were allowed after the nonfinal action, but by 2005, this dropped to under 10%.²⁹ Similarly, the overall allowance rate declined from roughly 70% in 1996 to below 50% in 2005.³⁰ These trends may reflect tightening standards at the USPTO or increasing complexity and competitiveness in patent applications.

IV. Conclusion

The journey to obtaining a patent not only requires an innovative idea but also navigating a complex legal landscape. The evolving standards of the USPTO and the high rates of patent application rejections underscore the need for resilience and strategic planning for patent applicants. Furthermore, the Yale Journal of Law & Technology's study of over 2.15 million patent applications reveals a significant trend: a decrease in patent approvals from 1996 to 2005, reflecting tighter USPTO patentability standards. In conclusion, securing a patent is more than just an innovation race; it's a testament to persistence, adaptability, and an understanding of the ever-changing patent law landscape.

²¹ *Id.*

²² *Id.*

²³ *Id.*

²⁴ *See id.*

²⁵ *Id.* at 209.

²⁶ *Id.* at 208.

²⁷ *Id.* at 209.

²⁸ *Id.* at 210.

²⁹ *Id.* at 211.

³⁰ *Id.*