Bureaucratic Backchannel: How r/PatentExaminer Navigates AI Governance

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Patent examiners play an underexplored role in the governance of artificial intelligence (AI), both as users of agency-deployed AI tools and evaluators of AI-related inventions. This paper investigates how examiners navigate these dual roles through a qualitative analysis of r/PatentExaminer, a Reddit community where U.S. Patent and Trademark Office (USPTO) employees discuss their work. Using a mixed-methods approach, we leverage large language models (LLMs) to identify Reddit threads for qualitative review and analyze 134 AI-related discussion threads from the past five years. Our findings reveal that examiners, through online peer discussions, reinterpret policy, troubleshoot examination challenges, and contest AI-driven changes to their workflows. We identify recurring concerns about the usability of AI search tools, difficulties in applying patentability standards to AI-related applications, and broader tensions between automation and examiner discretion. In taking an exploratory approach, we raise questions and suggest directions for future research on how online professional forums like r/PatentExaminer can offer insight into the evolving role of civil servants in AI governance.

CCS Concepts: • **Human-centered computing** → *Empirical studies in HCI*; • **Social and professional topics** → **Patents**; *Governmental regulations.*

Additional Key Words and Phrases: AI governance, patent examination, online communities

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1 Introduction

Social media and online forums have become spaces where U.S. federal civil servants share insights and frustrations. Could these bureaucratic backchannels reveal frictions between officials implementing artificial intelligence (AI) governance and their concerns about AI's role in public administration? This paper explores this idea by analyzing one group of government employees: patent examiners. As direct users of agency-funded AI tools and enforcers of AI patent policies, examiners are key stakeholders in the US Patent and Trademark Office (USPTO)'s AI governance plan.

We ask how patent examiners discuss two key issues: (1) the use of AI tools in patent examination and (2) the challenges of evaluating AI-related patent applications. To answer these questions, we conduct what is, to our knowledge, the first study of r/PatentExaminer, a Reddit community where USPTO employees gather. We adopt the mixed-methods QuaLLM framework [48] to find and analyze AI-related threads. We find that on the forum, examiners extend and question their institutional training, reinterpret policy, and collaboratively troubleshoot examination challenges. Rather than offering definitive conclusions, we surface discussion patterns and tensions that reflect institutional AI governance in practice and warrant further study.

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2 Motivation

For our study of sociotechnical governance, we focus on the concerns of patent examiners for two reasons: their significance when developing an "empirical understanding of stakeholders' needs and goals" [2] at the USPTO and their role as a synecdoche [19] for broader challenges government officials face: workplace automation and the application of legal standards to new technologies. To capture these perspectives, we turn to online discussions, where pseudonymity and informality foster candid, peer-to-peer exchanges. r/PatentExaminer is a professional learning space, much like a community of practice [34] or knowledge community [31] where individuals bound by a common practice generate knowledge and share expertise. As hubs of interaction between people, technology, and policy [30], online communities have been widely studied in HCI and Social Computing [33, 46]. Prior research highlights their roles in fostering social support [45], workplace solidarity [29], and skill-building [34]—all of which provide insight into the experiences of public officials engaged in AI governance.

3 Patent Examiner Decisionmaking

"Am I the only person who thinks doing AI is more difficult…?" [4] This question, posted on r/PatentExaminer, captures a recurring frustration among the USPTO's 8,877 patent examiners [1]. The agency's automated system assigns patent applications to specialized "Art Units," grouped by technology area [35]. Once assigned, examiners make complex judgments about whether an application meets the legal standards for patent eligibility [50]. The rapid rise of AI-related patent applications, now submitted to more than half of the USPTO's technical areas [44], has brought new considerations for examiners in fields where such claims were once uncommon, adding complexity to an already demanding job.

Patent law provides formal standards for making such judgments, but in practice, examiners exercise considerable discretion when approving, rejecting, delaying, or expediting applications, decisions that ultimately shape market prospects for emerging technologies in inconsistent ways. Previous research, largely quantitative, has shown how grant outcomes vary by patent examiners' *workplace dynamics* [21, 25]; *time* [20, 22, 24]; *institutional factors* [23]; and *personal factors* [37, 47]. But numbers alone do not capture the full picture. Setting a qualitative agenda for studying intellectual property, scholars like Shobita Parthasarathy [42] and Jessica Silbey [49] urge attention to participants within these systems—like examiners—asking how their professional cultures, legal traditions, and institutional practices shape decision-making.

Much ink has been spilled on how patent examiner mistakes undermine the patent system and raise concerns about fairness, equity, and innovation [37, 41]. The degree to which the USPTO controls these errors determines its effectiveness in sociotechnical governance. To assist examiners, the USPTO has responded many times with policy guidance and AI support tools. Since 2019, the agency has sought public comments, hosted listening sessions, and developed training materials to help examiners navigate AI-related claims [11]. In 2023, these efforts expanded when President Biden's Executive Order on AI (EO 14110) directed the USPTO to establish clearer standards [27]. In recent years, the office has also invested in AI-driven search tools for patent examination [36]; experimented with generative AI [11]; and banned external AI software, such as ChatGPT, due to concerns about their bias [26]. Most recently, in January 2025, the USPTO announced its AI Strategy to ensure consistent AI patent policy and responsible AI use [44]. But do these policy efforts speak to concerns voiced by the employees themselves? As outlined above, qualitative research on their experiences is scarce, which we seek to remedy.

4 Dataset and Methods

With over 11,000 members, r/PatentExaminer is "a forum for discussing patent examination, patent policy, tips, and related topics" [18]. To our knowledge, this forum is the only public venue where patent examiners consistently share workplace concerns. We gather submissions and comments posted to /r/PatentExaminer between 2011-2025 through the Arctic Shift archive, a project which makes Reddit data available to researchers [28]. We process each submission and its child comments into threads. The resulting dataset, after filtering out threads with minimal textual content, contains 4,034 threads from 2011-2025.

Following QuaLLM [48], we employ an open coding-like method that leverages LLMs to surface qualitative insights from online discussions. We use GPT-4o mini to process our dataset in three steps: (1) generate a summary of each thread's main concern, (2) extract a representative quotation, and (3) classify whether threads relate to AI. After this automated classification, we conduct a human review of all AI-labeled threads, arriving at 134 threads from 2019-2025.[1] We use the model-generated summaries to support our "computationally guided deep reading" [39]—allowing us to analyze threads inductively and check our interpretations against the thematically classified text. We arrive at the following themes for further study, citing select representative threads.

Our study has several limitations. First, not all Reddit users on r/PatentExaminer are current or former USPTO employees, and those that are may be unrepresentative of typical examiners. Second, our sampling may have false negatives, such as discussions about USPTO's AI-driven tools that are not described by their AI capabilities. Finally, as with any study of online discourse, our findings reflect what examiners *say* rather than what they *do* [32]. Although r/PatentExaminer provides valuable insight into how examiners discuss AI-related challenges, future research should examine how these sentiments translate into actual examination practices.

5 Concerns with AI Tools in Patent Examination

Evaluation of USPTO AI Tools and Procurement [7, 13, 14, 16] Examiners voice frustration with existing AI tools, particularly similarity search tools, which they describe as unreliable for finding relevant prior art. Due to poor results, some report that they rarely use these tools in their workflow. Alongside these concerns, examiners frequently discuss IT infrastructure issues, such as missing content on web servers, slow support response times, and system outages that disrupt their work. In one thread, for example, users discuss whether USPTO should prioritize infrastructure over AI innovation; in another, users recommend increasing IT tickets to bring attention issues to management.

Where the USPTO uses AI systems not accessible to examiners, speculation arises. For example, multiple threads debate whether AI-based routing systems for applications [43] have increased or reduced their workloads, offering algorithmic folk theories [51] of its functionality. For newly proposed AI tools, examiners demonstrate deep knowledge of patent systems and raise areas where data quality issues may arise (e.g., optical character recognition processing). Some worry that procurement processes occur slowly, rendering AI tools obsolete by the time they are implemented.

Automation anxieties [6, 15] AI discussions frequently appear in threads on job security. Most recently, examiners raised concerns in reaction to broader federal workforce reductions during the Trump administration, mirroring responses from other subreddits for federal workers [38].

LLM Ban Compliance [5] Before the USPTO banned external LLM tools, some attempted LLM-assisted prior art searches but found the results misleading or fabricated; others found tools like ChatGPT useful for crafting better search

[1] We define a valid label as any thread containing one or more comments that reference AI in relation to the thread's main topic. In our review, we did not find instances of misclassification. In future work, we plan to implement additional evaluation steps to identify false negatives.

queries. After the ban, examiners who suggest using these tools again are often rejoined by examiners adamant about official policy.

AI Tool Recommendations [9, 12] Across multiple threads, users make innovative suggestions that go beyond current AI tools offered at the USPTO. These generally include tools to assist with bureaucratic tasks (e.g., AI-assisted transcription for calls or formatting for drafts). More ambitious proposals include a sandbox where examiners could experiment with AI tools and a public-facing database in which applicants can cite internal materials. In one example, a user expressed frustration with top-down AI implementation, arguing that AI tools should be developed with examiner input.

6 Concerns with AI-Related Patent Applications.

Workload and expertise [8, 10] Across threads relating to burnout, production quotas, and hiring, examiners raise concerns that the influx of AI-related applications contributing to the complexity of legal analysis required of them, adding to their workloads. Junior examiners report finding AI terminology overwhelming, and other users discourage new hires from joining AI-related Art Units due to their complexity. Examiners describe an increasing need for interdisciplinary knowledge; some Art Units cover a broad range of technologies, making it difficult for examiners to develop the skills required to evaluate AI claims.

Mutual support [3, 17] Examiners share tricks of the trade for navigating law and policy. For example, examiners across Art Units discuss reasoning and bureaucratic strategies for applying rejections to AI patents. This mutual support can come alongside skepticism toward USPTO's guidance, as users debate which directives hold real weight and which can be disregarded. Users identify internal disagreements with and among supervisors over how to interpret AI patentability rules, reflecting broader uncertainty in the patent regime.

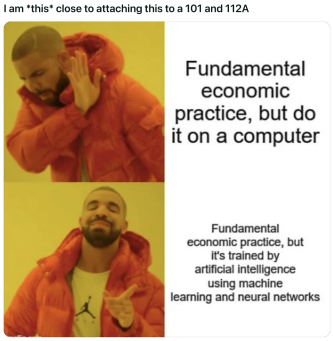

Fig. 1. A meme posted in December 2021 humorously conveys frustration with AI in patent examinations. In response, examiners commiserate, with one commenting, "Anytime I see a neural network in a spec on my docket, I spend the next few hours curled up in the fetal position and crying." The discussion continues with a suggestion to meet on USPTO's Teams chat for further discussion. [3]

6.1 Future Directions

How can examiner discussions be leveraged to support governance? These Reddit discussions expose gaps between policy and practice, potentially offering early signals for refining AI governance. Future work could explore whether HCI governance innovations—like NYU's Peer-to-Patent, which connected experts with examiners [40]— or creative pairings of quantitative and qualitative study of patent examiners could support examiners and the USPTO's AI policies.

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