## PTAAARMIGAN

PATENT AND TRADEMARK ATTORNEYS, AGENTS AND APPLICANTS FOR RESTORATION AND MAINTENANCE OF INTEGRITY IN GOVERNMENT

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October 15, 2023

Via DOC Hotline

Peg Gustafson Inspector General U.S. Department of Commerce 1401 Constitution Ave N.W. Washington, DC 20230

Re: Complaint against U.S. Patent and Trademark Office (USPTO) regarding waste, fraud, abuse, and gross mismanagement in software operations

Dear Inspector General Gustafson:

The U.S. Patent & Trademark Office (USPTO) is set on retiring working software in favor of buggy software on **November 8, 2023**. This letter presents new evidence suggesting that USPTO IT staff committed various patterns of misfeasance and malfeasance in the development of the new software (called Patent Center). Evidence suggests a pattern of lying by IT staff to senior management about current status and readiness, to cover up that misfeasance. Many of the problems you identified in report OIG-22-026-A<sup>1</sup> in July 2022 remain—the USPTO has not corrected the software process problems you identified in July 2022 (at least not sufficiently to change the externally-visible unreliability of the USPTO's software). These process defects yield buggy software. We request delay of the old, reliable software (EFS-Web and Private PAIR) until Patent Center is complete and stable, and that you investigate to determine why the USPTO has not implemented sound software engineering practices.

The attached letter was sent to the Office of Information and Regulatory Affairs in OMB to explain waste, abuse, and gross mismanagement by the as reflected in a violation of the Paperwork Reduction Act. The public (including the largest professional organization) has asked the USPTO to delay retirement of the stable and reliable old software. The USPTO has given no observable consideration to the public's view of the non-readiness and incorrectness of its new software.

The underlying facts in this letter significantly overlap with complaint number 23-0900 and your July 2022 report OIG-22-026-A. This letter raises three additional aspects: (a) how non-implementation of the recommendations of report OIG-22-026-A continue to affect USPTO operations, (b) the USPTO's inadequate *processes* that allowed the USPTO to consider requiring buggy software for public use, the *process* that makes the USPTO deaf to public evaluations, and (c) a *prima facie* appearance of possible fraud that warrants investigation.

 $<sup>^{1} \</sup>underline{\text{https://www.oig.doc.gov/Pages/USPTO-Needs-to-Improve-Its-Cost-Estimating,-Scheduling,-and-Agile-Practices-to-Timely-Retire-Legacy-Systems.aspx}$ 

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The **immediate** action we request is to require the USPTO to delay retirement of the reliable software, Private PAIR and EFS-Web, until the USPTO has an adequate process to ensure reliability of Patent Center. We anticipate that this delay will be about a year.

PTAAARMIGAN is a not-for-profit § 501(c)(3) social welfare organization, that educates and advocates on behalf of patent and trademark attorneys, agents, and applicants.

## 1. Details of Allegation

**The practical problem.** Report OIG-22-026 explains the background. The USPTO's 20-year-old software for patent applicants to check status of existing applications (Private PAIR) and for filing new applications and other papers (EFS-Web) has the less-than-desirable effects of age—but also has the crucial property, *reliability*. The USPTO proposes to retire the reliable-but-aging Private PAIR and EFS-Web and to require use of the buggy new Patent Center starting November 8, 2023.

The October 9 letter to OMB (attached) estimates the waste costs to the public of around \$150 million to \$450 million per year. This burden arises from having to diagnose bugs on the fly, find workarounds, and correct errors—all of which become immensely more difficult if the reliable fallback of the incumbent software is no longer available. The indirect economic costs in irretrievably lost patent rights will be many times larger.

In Report OIG-22-026-A, you recommended that the USPTO develop "comprehensive KPI's to deliver business value." If the USPTO revised its software processes and KPI's to deliver value to its customers, the effect of more reliable processes and performance metrics, better targeted to users' needs, is not visible to the public. To all appearances, the USPTO's design philosophy and KPI's for Patent Center are focused solely on delivering value for *itself*, and leaving users to fend for themselves.

One example—payment of the issue fee. After negotiation between the patent examiner and applicant reaches a satisfactory conclusion, the applicant must pay an issue fee (else the application goes abandoned). In the days of paper, this was Form PTOL-85B. Both EFS-Web (the old software) and Patent Center (the new) have electronic versions of this form to simplify the completion process with a few clicks and fill-in-the-blanks. This feature of EFS-Web has worked for a decade, but it does not work reliably in Patent Center. Many functions are not implemented, and others have bugs that make it unusable. Because of inadequate software quality and management processes, new bugs have been introduced in recent weeks:

• Patent Center's electronic 85B issue fee payment does not work at all for Hague treaty applications or for plant patents. EFS-Web permits these payments.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> <u>https://patentcenter-tickets.oppedahl.com/#CP49</u> The USPTO does not make its bug list publicly visible. This "patentcenter-tickets" page has been communicated to the USPTO on multiple

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- Often, the applicant needs to file a letter of "Comments on Reasons for Allowance" (37 C.F.R. § 1.104(e)), responding to remarks made by the examiner. For many attorneys, Comments on Reasons are filed in nearly 100% of issue fee payments. EFS-Web's version of the electronic 85B allows this as a "Post allowance communication." EFS-Web allows these letters to be filed in the ordinary way. Patent Center does not allow this document to be submitted with the 85B issue fee payment. If an applicant has such Comments, they have to be filed in a second and separate submission.<sup>3</sup>
- On the Form 85B, the filer provides the name of the entity that owns the patent, for printing on the face of the patent. Patent Center limits this name to 50 characters. This makes it difficult or impossible to accurately indicate ownership when a patent is jointly owned by two owners, and for prominent patent owners such as:<sup>4</sup>

The Board of Trustees of the Leland Stanford Junior University Max-Planck-Gesellschaft zur Förderung der Wissenschaften e. V. University of Connecticut, Office of the Vice President for Research President and Fellows of Harvard College, and Beth Israel Deaconess Medical Center, Inc.

- The electronic 85B form (in both EFS-Web and Patent Center) provides the user with an indication of the amount of the issue fee owed. However that amount is not always correct, and the human user has to change it. (Typically this is because the applicant was a small entity and has recently changed to a large entity, or vice-versa.) EFS-Web allows this correction. Patent Center does not. In these situations, there is no way to pay the correct fee in the Patent Center electronic 85B.<sup>5</sup>
- Patent Center's electronic 85B does not permit non-English accented or umlauted characters such as ü. This flaw has been known since April 2020, and has been communicated to the USPTO on multiple occasions. In three years, the USPTO has not fixed it. In some languages, these diacritical marks make *huge* differences. The correct information can be filed via a paper form or via a form edited with full Adobe Acrobat (not the free reader), but not within Patent Center.
- The normal workflow in a law firm does not work in Patent Center. In EFS-Web, a secretary or assistant fills out the forms, uses a hand-off feature (called "sponsorship") to

occasions, and we know the USPTO is well aware of it. Likewise, the public considers this list to be reliable, see the comments to the AIPLA survey in PDF pages 27-53 of the OMB October 9 letter.

<sup>&</sup>lt;sup>3</sup> https://patentcenter-tickets.oppedahl.com/#CP160

<sup>&</sup>lt;sup>4</sup> https://patentcenter-tickets.oppedahl.com/#CP168

<sup>&</sup>lt;sup>5</sup> https://patentcenter-tickets.oppedahl.com/#CP138

 $<sup>^6</sup>$  See <u>https://patentcenter-tickets.oppedahl.com/#CP24</u> and <u>https://usptoemod.ideascalegov.com/c/idea/55432</u> (reported July 2020)

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- allow the attorney to review and sign the paper, and then the attorney hands it back to the secretary or assistant for filing. That hand-off process does not work in Patent Center.<sup>7</sup>
- In EFS-Web, papers filed are visible immediately—one can *immediately* check the file, and *immediately* confirm that the USPTO's system received the papers as expected. In Patent Center, there can be a substantial time lag—hours. This is doubly problematic because Patent Center often changes its input (changing lower case to upper case, revising page numbers, etc.)—it is essential for the user to be able to check up on Patent Center's adulteration of its input, to verify accuracy. (As we note below, tampering with input is an unacceptable defect in Patent Center's overall design philosophy, grounded in inadequate initial gathering of functional needs of users.) EFS-Web accepts papers exactly as filed by the user, without changing them, and makes them visible immediately.
- For some users, Patent Center's electronic 85B does not work *at all* and never has—see the attached email. The USPTO's help desk, called the Electronic Business Center (EBC) knows that it does not work, and has asked the Patent Center developers to fix it or at least ameliorate the bug. But the developers have not done so. This is explained in the one-page email attachment.

**Other examples.** Every phase of Patent Center has similar omissions and bugs. Many of these omissions and bugs are fatal—patents cannot be obtained, or papers cannot be filed (except as paper mail), or fees cannot be paid if the USPTO proceeds to shut down the old reliable Private PAIR and EFS-Web. Many are listed in:

- The October 9 letter to OMB at pages 6-14
- The comments to the AIPLA survey, October 9 letter Attachment 2 (pages 32-53)
- <a href="https://patentcenter-tickets.oppedahl.com">https://patentcenter-tickets.oppedahl.com</a>, a list that has been communicated to USPTO Patent Center staff on multiple occasions

If the USPTO claims not to be aware of these bugs in Patent Center, the Inspector General may take this as an admission of process failure: the bugs get reported by the public or through the USPTO's phone help desk, but the USPTO doesn't track them with diligence or precision, and reports them "resolved" when they are not. This precise issue was one of the key criticisms in report OIG-22-026-A at page 8:

## USPTO does not have clear processes or procedures to ensure all user feedback is captured

... Product teams depend on user feedback to define and reprioritize requirements to deliver quality products. ... If user feedback is not effectively captured for

<sup>&</sup>lt;sup>7</sup> See <a href="https://uspto-emod.ideascalegov.com/c/idea/68053">https://uspto-emod.ideascalegov.com/c/idea/68053</a> (the USPTO knew of this before September 20); <a href="https://uspto-emod.ideascalegov.com/c/idea/68621">https://uspto-emod.ideascalegov.com/c/idea/68621</a>. Sponsorship problems exist across multiple functions of Patent Center. *See*, e.g., <a href="https://patentcenter-tickets.oppedahl.com/#CP131">https://patentcenter-tickets.oppedahl.com/#CP131</a>

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consideration, there will be no historical record of proposed requirements or modifications for reference. ...

Product owners stated they also capture user feedback via telephone, instant message, and email. However, USPTO personnel did not ensure a subsequent ticket from these sources was created... Therefore, USPTO's user feedback process did not ensure all suggestions and recommendations for Patent Search were maintained for analytical and recordkeeping purposes. ...

For example, USPTO's PASM representatives closed multiple tickets that related to issues ... without a workaround or an acknowledgment of the request.

The PTO's externally-observable results suggest that there has been insufficient improvement in the PTO's bug capture and tracking, despite this recommendation.

Waste and abuse: As explained in the letter, waste and abuse arise because applicants constantly run into Patent Center bugs and have to diagnose them and figure out work-arounds. The consensus of the contributors to the letter was that the annual cost of the USPTO's software bugs will be \$150 million to \$450 million per year. Because the USPTO is adding new bugs to Patent Center nearly as quickly as they are fixing old bugs, there is no predictability as to what will work and what will break on a given day. The USPTO gives no notice to users when the USPTO updates Patent Center—so when something doesn't work, it takes time to figure out when something that used to work no longer does. The differential diagnosis of software error vs. something else, and then figuring out the work-around, is *very* time-consuming. Several anecdotes are explained in the attached letter (see "New bug 9," "New bug 10," and "New bug 11" at pages 11-14). One person wrote an email Friday morning:

I think the three biggest systemic problems that come to mind are:

- 1) not knowing what you're actually filing and not being able to access it immediately
- 2) failing silently / confusingly --> it's hard to hit one problem here, because they're so random from day to day. One big example that comes to mind is never knowing when the USPTO is going to choke *on its own uploadable ADS*. There is no indication *why* it can't handle the ADS (downloaded from the [USPTO's own form web site], filled out, and uploaded), just that we can't. This may be the single biggest problem -- failure is not predictable or avoidable, and you can't always know when you've failed ... and you don't know how to fix it ... and the deadline may be approaching in 1 hour...
- 3) search limits -- I don't know how many times I'm accessing client documents and we get some variation on maximum search limit reached. Often-times, it's the *very first document I've pulled for the day*. Other times, I'll have maybe pulled 5 or 10 documents because I'm prepping a case and evaluating prosecution history across multiple applications.
- ... I've had to set 'fake' bar dates regularly now to make sure we have at least 1 day to recover from Patent Center random failure, so we can always run to a fax machine or the Post Office... because I know that it's not *if* Patent Center fails unexpectedly / inexplicably, but *when* it fails.

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Gross mismanagement—inadequate quality management: The October 9 letter to OMB explains a number of management failures: inadequate software quality management, inadequate collection of bug data, unsound analysis of the data that the USPTO has, inadequate testing to ensure that when a bug is fixed it stays fixed and doesn't come back, etc. A number of signatories of the October 9 letter were software engineers in their earlier careers and know what competent, quality-oriented software shops do to ensure quality. It is abundantly clear that the USPTO does not observe minimal software quality practices, let alone best practices for software that can create billion dollar losses with one bug at the wrong time.

In Report OIG-22-026-A, you recommended the USPTO to "establish processes and procedures to ensure **all** end-user feedback is properly captured, tracked, and timely communicated to the appropriate product teams during the product life cycle." A year later, the USPTO has no adequate bug collection system—the USPTO's existing system is *incredibly* hard to use, and captures too little information (we explain in detail in our October 9 letter at page 15, and Attachments 5 and 6). The USPTO's software management and quality staff don't take bugs seriously—bugs are marked "resolved" simply because a repair is planned for six months in the future (see Oct. 9 letter at pages 6-9).

The PTO's lack of care with bug reports goes beyond passive neglect. During alpha test in 2018 to spring 2020, the USPTO collected bug reports from testers in a system called Ideascale. Then the USPTO *archived* those bug reports, apparently actively taking them out of any further active consideration or management.<sup>8</sup>

The American Intellectual Property Law Association (AIPLA), the largest professional organization for intellectual property lawyers, surveyed its members. 89% of survey respondents opined that Patent Center is not ready for production use. Attachment 2 to the letter is AIPLA's report, at PDF pages 27-53. The free-text comments are especially enlightening. The USPTO dismisses the public's assessment as "perception," "nice to have's," or "training problems." The letter suggests that the problem is the USPTO's disregard of users' needs, and the USPTO's disregard of the Information Quality Act—the USPTO's decision-making is based on personal opinion and junk science, not objective assessment of those most impacted.

The October 9 letter explains other problems. Retirement of EFS-Web will place the USPTO in breach of a treaty obligation (see page 10) and in violation of the Paperwork Reduction Act (see page 5). The USPTO's decision-making violated the Information Quality Act (see pages 14-16). Minimally-adequate quality management would have identified these issues before decisions were made. Minimally-adequate management would change course as problems were brought to light. Minimally-adequate quality management would delay retirement of the reliable software when the lack of completeness and quality failures of the new software were shown.

<sup>&</sup>lt;sup>8</sup> https://blog.oppedahl.com/wp-content/uploads/2023/10/fernandez.pdf

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The public perception is that USPTO software management has a fixed and immovable commitment to disaster. Facts don't matter.

Gross mismanagement—inadequate initial design: Some design decisions were flawed from the get-go. The 50-character limit on the patent owner's name is a simple example. This choice was clearly made without looking at the existing database of patents. This is typical of the Patent Center "design" and implementation. The USPTO's design methodology did not gather real-world data or integrate it into the functional design. Patent Center's behavior suggests that the system was designed with inadequate consulting with actual end users, or with disregard of that user input. In multiple conversations with USPTO staff over the years, the most striking characteristic is a refusal to learn, adapt, reevaluate, or self-correct in response to feedback.

The systemic lack of error handling and meaningful error notifications (e.g., see the example given in the email above under "Waste and Abuse") is another example of gross mismanagement, inadequate attention to basic software design and quality management principles, and inadequate consultation with users:

- Every software engineer is trained to design so that any error will fail into a "safe state." Patent Center does not do so.
- Another elementary principle is to give meaningful error notifications so that (a) users can self-correct, and (b) debugging is facilitated. Patent Center has many error notifications that are meaningless to users—even sophisticated and experienced users. Even more alarming is the prevalence of no error notifications at all when an error occurs that will prevent future time-critical actions to preserve patent rights.
- Legal document software should not change its input (Federal Rule of Evidence 1002)—the Patent Center developers think they know better than the lawyers who prepared the papers, and their engineering judgment of legally-correct content is often wrong.

Together, these reveal a systematic failure to observe basic software design principles.

Another remarkably bad engineering decision is to use Microsoft Word DOCX as an input format, even though Microsoft itself states that DOCX offers no promises of reliability or stability. The public has urged the USPTO to use PDF, perhaps PDF/A. The USPTO adamantly refuses to correct a flawed engineering decision. Some of the public's letters are at <a href="https://www.reginfo.gov/public/do/PRAViewDocument?ref\_nbr=202309-0651-002">https://www.reginfo.gov/public/do/PRAViewDocument?ref\_nbr=202309-0651-002</a>

**Fraud:** The current state of affairs arises, and management cannot correct course, because someone at the USPTO is lying, lying knowingly, and lying repeatedly about software quality and readiness. In May 2023, the USPTO announced:

 Patent Center has 100% of the functionality of EFS-Web, Public and Private PAIR, and is available to all users for electronic filing and management of patent applications. PTAAARMIGAN Page 8 of 12

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This statement was false in May 2023. It remains false today—Patent Center omits many functions of EFS-Web and Private PAIR. The USPTO has known all along that this statement is false—the public has not been shy about telling the USPTO of the deficiencies and bugs in Patent Center (see AIPLA survey, October 9 letter at pages 3 and 27-53, and the bug list at <a href="https://patentcenter-tickets.oppedahl.com">https://patentcenter-tickets.oppedahl.com</a>). Even the USPTO's internal help desk is telling the developers about bugs (see the one-page attachment). Many of the omissions and bugs are crucial to getting work done and avoiding abandonment of patent applications.

To consider our example, while Patent Center nominally has a feature called "pay issue fee," that feature does not work for all cases, as we discussed above starting at page 2. One prominent blogger (Harvard law, a former Board Member of AIPLA, and a frequent lecturer for the U.N. agency that oversees the main international patent treaty) has a list of "pants-on-fire lies" that the USPTO has told about Patent Center <a href="https://blog.oppedahl.com/?s=pants-on-fire">https://blog.oppedahl.com/?s=pants-on-fire</a>.

In Report OIG-22-026-A (pages 8-9), you noted poor data collection about bugs, and poor feedback. The public's observation is that this is not passive neglect; IT midlevel staff actively disseminate disinformation. As the one-page email attachment shows, the USPTO's telephone help desk knows that the claim of "100% of the functionality" is materially false, impacts users' ability to get their work done, and that EFS-Web continues to be essential as a gap-fill for omissions and bugs in Patent Center. The help desk claims to have forwarded the information to the Patent Center developers. Yet the developers' management chain continues to claim that Patent Center has 100% of the necessary functionality.

USPTO senior management is fully aware of the public's concerns for basic truthfulness of the PTO's "100% of the functionality" claim—the falsehood was squarely brought to Director Vidal's attention in a well-supported letter from a credible reporter on June 9. 10 And yet management decision-making, apparently, continues to rely on the same suspect sources of information.

USPTO career staff are exempt from the caps on bonuses that apply throughout the rest of the executive branch, 35 U.S.C. § 3(b)(2)(B). We have no direct knowledge to know whether bonuses are implicated in the USPTO's Patent Center decision-making, but the coincidence with the end-of-year performance review dates and projected retirement dates raise questions. The IG's investigation should fully explore the relationship between compensation, falsification of reports of software quality and readiness, and the USPTO's decision to retire Private PAIR and EFS-Web.

<sup>&</sup>lt;sup>9</sup> This badge appeared multiple places on the USPTO's web site in May 2023. Today, the false statement appears at <a href="https://www.uspto.gov/patents/apply/patent-center">https://www.uspto.gov/patents/apply/patent-center</a>

<sup>10</sup> https://blog.oppedahl.com/wp-content/uploads/2023/09/20230609-to-vidal.pdf

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## 2. OIG Assist—delay of retirement of working software, and suggested parameters for investigation

The USPTO should be ordered to delay retirement of Private PAIR and EFS-Web until the Inspector General's investigation of Patent Center is complete.

The Inspector General should open an investigation concerning the USPTO's software processes. Report OIG-22-026-A notes that the original budget was \$130.2 million, with completion planned for FY 2013. As of 2020, total expenditure was \$734 million (a 5X overrun). It is now 2023.

One focus of the investigation should be whether the USPTO implemented the recommendations of Report OIG-22-026-A. (137 signatories of the October 9 letter suggest the USPTO did not.) Perhaps the USPTO has good reason to reject a recommendation—but it should do so honestly, with a reasoned explanation, not a "non-responsive" out-of-hand dismissal (Report OIG-22-026-A at page 11).

A list of bugs is at <a href="https://patentcenter-tickets.oppedahl.com">https://patentcenter-tickets.oppedahl.com</a> Is every bug in that list logged in the PTO's bug tracking system (and were they added timely, or were they added in the last few weeks as public outcry rose)? Is every bug phoned in to the PTO's help desk added to the bug tracking system? When a bug is reclassified as a "feature request" or is closed as "resolved," does that reflect a judgment of a knowledgeable person who understands the long-term implications of a software omission? To our knowledge, the USPTO does not make its list of bugs available to the public—the public has no way to know whether a reported bug makes it onto the list, whether the USPTO takes it seriously, whether it has been fixed (often the USPTO's "fix" only addresses part of the problem), whether it has been recharacterized as a "feature request," or has marked it "resolved" when it is not resolved. The USPTO's bug list should be visible to the public. To our knowledge, the USPTO does not seek input from individuals with real "skin in the game" when it marks bugs "resolved."

The investigation should explore whether the USPTO's internal quality evaluation and software management functions are adequate. The October 9 letter to OMB observes that (a) the USPTO's information gathering is insufficient to meet standards of the Information Quality Act and OMB's and USPTO's own Information Quality Guidelines (the same problem you diagnosed in Report OIG-22-026-A) and (b) the USPTO's decision-making and cost-weighing seem remarkably resistant to data regarding the public interest. Retirement of the legacy systems should be delayed until a review by the *public* (rather than by the USPTO's internal review team) concludes that Patent Center is ready to be the USPTO's sole production system. To all appearances, the USPTO's software management team does not conduct objective selfevaluation. USPTO staff have little to no experience with the factors that are important to patent applicants, and the pitfalls that must be avoided. (The USPTO is like a midwife—the USPTO participates in birth of a patent, but then involvement ends. The USPTO has no further involvement in the commercial life of a patent, and consequently has neither expertise nor sensitivity to the issues that must be addressed during the birthing process.) Does USPTO software management confer with individuals who can contribute sound knowledge of what's important and what implications follow from software decisions? We suggest that software

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readiness evaluation must rely almost entirely on reports and perceptions of the public—which is not the case today.

Does the USPTO have a consolidated architecture and design function and written specification? Is there an integrated understanding of important data structures and how they flow through the system? Is there a comprehensive understanding of common functions for uniform use throughout the system? As one simple example, it's clear that there is no uniform function for entry for application serial numbers and dates—every point that asks for a serial number or date wants a different format. If there are no unified functions for *those two*, we infer that the USPTO's architectural and design management is inadequate. The externally visible behavior suggests inadequate attention to object oriented design and similar principles.

Is the USPTO's quality management position well designed? Are the incentives and PAP metrics designed to incentivize quality, as an advocate for the public, even if it means slowing the USPTO's internal goals? Or are the incentives and PAP metrics designed to whitewash problems to satisfy internal agency goals and calendars? Was the incumbent (and, if the position recently changed hands, the incumbent in recent years) hired into the role because of a history of dedication to process and quality—even if that required resistance to internal pressures—or was the incumbent chosen because of a history of bending or waiving the rules to make the numbers? Does the quality officer have sufficient power to override other actors? A good quality person is like a good compliance officer—an advocate for the public interest even when adverse to the company. We see no evidence that the USPTO's quality officer acts as an advocate for users or the public.

We believe the two most relevant personnel are Greg Vidovich and Terrel Morris. Their LinkedIn profiles suggest that both have spent their entire careers at the USPTO, starting as examiners. The third relevant person is Richard Fernandez—whose LinkedIn profile shows time as a "help desk supervisor" and then the USPTO. LinkedIn shows no one in USPTO software management with private sector experience architecting, building, or managing a decade-long software project. Mr. Fernandez has been responsive in getting bugs fixed, but has no experience in architecture, design, or implementation of large software systems (at least none visible on LinkedIn). The IG should consider whether the USPTO hires the right skills for its software managers, and whether the USPTO's thin record of hiring external expertise may be a contributing factor to delays, nine-figure cost overruns, and process failures noted in Report OIG-22-026-A. The USPTO's deadline and production metrics for examiners incentivize shortcutting of precision and quality. Software is the opposite—a successful software project must start with extensive planning, and careful design of an architecture that will support 10 or 20 years of development, and then precision of execution. Likewise, private-sector patent practice calls for extreme precision—a patent's life is at least 26 years, and even small errors can have patent-killing consequences. The skills and mental disciplines that bring success in USPTO patent examination are essentially opposite those necessary for success in software design and engineering, especially for patents. The standards of quality that are acceptable for examination are entirely inadequate for a patent applicant or a software engineer. Of course skills and tastes in quality can be learned, but mental predispositions, work habits, and approaches that brought success early in one's career are stickier. Are the USPTO's hiring decisions sound? Can the

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USPTO succeed when it fails to hire software engineering and management experience, particularly from successful private sector shops?

Does USPTO software management have basic knowledge of the applicable law, and commitment to follow it? The PTO's IT function regularly imposes regulatory burden without observing the legal obligations of the Administrative Procedure Act, Regulatory Flexibility Act, Paperwork Reduction Act, OMB's and the USPTO's own *Information Quality Guidelines*, Executive Order 12866, OMB Circulars A-4, A-119, and A-130, and OMB's *Final Bulletin for Agency Good Guidance Practices*. Ironically, many of these laws are administered within the USPTO's Office of Chief Information Officer, yet compliance is not observable externally.

The investigation should consider whether the USPTO complied with its obligations under the Paperwork Reduction Act: the USPTO may not retire Private PAIR or EFS-Web (or in any other way revise the way it collects information) until it has conducted the review required by 44 U.S.C. § 3507 and 5 C.F.R. Part 1320. The Paperwork Reduction Act requires notice and comment to gather the public's view on whether the agency's proposed revision to its paperwork collection can be cost-benefit justified. To all appearances, the USPTO has adamantly refused to gather the public's views on its software, let alone allow the public's views to influence decision-making.

The old software is reasonably reliable, and it would cost the USPTO little to continue to make it available for perhaps another year until the new software is robust. Many users have tried Patent Center and have concluded that it is just too buggy to get work done reliably and efficiently, so many users (perhaps about half) currently avoid Patent Center and use the old Private PAIR and EFS-Web. The USPTO should be required to present a cost-benefit analysis that *includes cost to the public*, not just savings to itself. The USPTO is subject to the implementing regulations under the Paperwork Reduction Act, 5 C.F.R. § 1320.5(d)(10(iii), "The agency shall also seek to minimize the cost to itself of collecting, processing, and using the information, but shall not do so by means of shifting disproportionate costs or burdens onto the public," and should demonstrate compliance.

In Report OIG-22-026-A, the IG gave a list of the data that was gathered and considered (page 12). Notably absent from this list is any input from the users that are impacted by the USPTO's software management decision-making. The USPTO designs its software quality processes to *discourage* user input (See our October 9 letter to OMB at page 15, and Attachments 5 and 6.) The IG should not allow its investigative hands to be tied by the USPTO's inadequate information collection and software management practices.

The USPTO took one point very seriously: report OIG-22-026-A only required the USPTO to "communicate" bug information internally. The report did not require the USPTO to fix the bugs that impact reliability and user productivity, or to delay retirement of the old reliable software until the *public* thinks the new software is ready. The USPTO fully implemented that silence. The IG should expressly and unequivocally require the USPTO to collect bugs in a way that is easy for the public, to reliably and transparently communicate bugs to the developers, and to track them until they are fixed. Management processes must ensure that bugs get *fixed*, not

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Complaint against U.S. Patent and Trademark Office (USPTO) regarding waste, fraud, abuse, and gross mismanagement in software operations

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archived or artificially and prematurely marked "resolved." Working, reasonably-reliable legacy software should not be retired until the bugs are *fixed*, not just "communicated."

Waste, fraud, abuse, and gross mismanagement may reach the highest levels of the USPTO's career staff. Asking the USPTO to investigate itself may not be realistic.

**Point of contact.** A single point of contact can refer specific issues to specific authors of various sections of this letter. Please route any questions or further inquiries to <a href="https://exarmigan@Ptaaarmigan.org">Ptaaarmigan.org</a> and David Boundy, <a href="mailto:DBoundy@PotomacLaw.com">DBoundy@PotomacLaw.com</a>, (646) 472-9737.

Very truly yours,

**PTAAARMIGAN**