

USPTO Should Strengthen Its Planning and Oversight of Patent Data Capture Contracts to Manage Risks and Prevent Unnecessary Costs

FINAL REPORT NO. OIG-22-028-A

AUGUST 16, 2022



U.S. Department of Commerce
Office of Inspector General
Office of Audit and Evaluation



August 16, 2022

MEMORANDUM FOR: Kathi Vidal
Under Secretary of Commerce for Intellectual Property
and Director of the United States Patent and Trademark Office

A handwritten signature in black ink, appearing to read "Frederick J. Meny, Jr.".

FROM: Frederick J. Meny, Jr.
Assistant Inspector General for Audit and Evaluation

SUBJECT: *USPTO Should Strengthen Its Planning and Oversight of Patent Data Capture Contracts to Manage Risks and Prevent Unnecessary Costs*
Final Report No. OIG-22-028-A

Attached for your review is our final report on the audit of the United States Patent and Trademark Office's (USPTO's) oversight of Patent Data Capture (PaDaCap) contracts. Our audit objective was to determine whether USPTO awarded and administered PaDaCap contracts in compliance with applicable laws and federal regulations and U.S. Department of Commerce (Department) policies and procedures. To address this objective, we assessed the justification and approval of noncompetitive acquisitions, risk assessment and mitigation activities, and oversight of contractor performance.

Overall, we found that USPTO did not fully comply with relevant requirements when awarding and administering the PaDaCap contracts. Specifically, we found the following:

- I. Ineffective acquisition planning delayed the use of competition and achieving lower prices.
- II. USPTO inadequately managed contract risks.
- III. USPTO did not timely inspect contractor deliverables and track errors.
- IV. USPTO inadequately addressed contractor security issues.

On July 29, 2022, we received USPTO's response, including technical comments, to the draft report's findings and recommendations. In response to our draft report, USPTO concurred with all the recommendations and described actions it has taken, or will take, to address them. USPTO's formal response is included within the final report as appendix D.

Pursuant to Department Administrative Order 213-5, please submit to us an action plan that addresses the recommendations in this report within 60 calendar days. This final report will be posted on the Office of Inspector General's website pursuant to sections 4 and 8M of the Inspector General Act of 1978, as amended (5 U.S.C. App., §§ 4 & 8M).

We appreciate the cooperation and courtesies extended to us by your staff during this audit. If you have any questions or concerns about this report, please contact me at (202) 793-2938 or Amni Samson, Director for Audit and Evaluation, at (202) 793-3324.

Attachment

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Report in Brief

August 16, 2022

Background

In fiscal year 2021, the United States Patent and Trademark Office (USPTO) received more than 500,000 new patent applications, and issued more than 370,000 patents. USPTO also continues to accept supplemental filings from applicants with already-pending patent applications. These supplemental documents may change a variety of information in an already-filed application, including claims, drawings, or even inventors. USPTO maintains all application-related documents in electronic form.

USPTO must publish most patent applications at a particular time. USPTO also publishes every granted patent, as well as supplemental papers. To complete critical steps in the processing of these documents, USPTO contracts for data capture services. The contractor converts the information from the documents into USPTO-mandated formats, performs quality assurance and file maintenance steps, and returns the documents to USPTO. In March 2021, USPTO informed us about a security incident at a contractor facility, which potentially put sensitive data at risk. We have also received multiple complaints about USPTO's management of these contracts (the "PaDaCap Contracts"). We conducted this audit to address the risks and challenges USPTO faces in overseeing this group of PaDaCap Contracts.

Why We Did This Review

Our audit objective was to determine whether USPTO awarded and administered PaDaCap Contracts in compliance with applicable laws and federal regulations and U.S. Department of Commerce policies and procedures.

UNITED STATES PATENT AND TRADEMARK OFFICE

USPTO Should Strengthen Its Planning and Oversight of Patent Data Capture Contracts to Manage Risks and Prevent Unnecessary Costs

OIG-22-028-A

WHAT WE FOUND

Overall, we found that USPTO did not fully comply with one or more requirements or best practices in the Federal Acquisition Regulation, the *Commerce Acquisition Manual*, and USPTO policies and procedures applicable to awarding and administering the PaDaCap Contracts. Specifically, we found the following:

- I. Ineffective acquisition planning delayed the use of competition and achieving lower prices.
- II. USPTO inadequately managed contract risks.
- III. USPTO did not timely inspect contractor deliverables and track errors.
- IV. USPTO inadequately addressed contractor security issues.

WHAT WE RECOMMEND

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Procurement to do the following:

1. Develop controls to prevent unnecessary or unreasonable costs, such as the \$22,418,462 in questioned costs, by (a) developing procedures to define the structure, roles, and communication methods of the offices and individuals on an acquisitions team and (b) completing *Patent and Trademark Acquisition Manual* guidance on the reasonableness of noncompetitive acquisitions.
2. Develop procedures to assess, mitigate, and track risks to acquisitions, including the identification of responsible individuals and the establishment of timeframes for mitigation.

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Data Management to do the following:

3. Revise database inspection procedures to specify sampling procedures.
4. Revise box inspection procedures to specify (1) error communication and resolution procedures and (2) sampling procedures.

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Procurement to do the following:

5. Develop policies and procedures to monitor plan of action and milestones documents against timelines and communicate and escalate contractor security issues, including existing issues such as contractor background investigations. The procedures should clarify (a) communication of serious or persistent issues to the Contracting Officer for action and (b) available enforcement actions, including the reduction of payments.

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Cover: Herbert C. Hoover Building main entrance at 14th Street Northwest in Washington, DC. Completed in 1932, the building is named after the former Secretary of Commerce and 31st President of the United States.

Introduction

In fiscal year (FY) 2021, the United States Patent and Trademark Office (USPTO) received more than 500,000 new utility, plant, and design patent applications, and issued more than 370,000 patents.¹ In addition to these newly filed patent applications, USPTO also continues to accept supplemental filings from applicants with already-pending patent applications under examination. These supplemental documents may change a variety of information in an already-filed application, including claims, drawings, or even inventors, consistent with USPTO rules and procedures.² USPTO maintains all application-related documents in electronic form.

USPTO must publish most patent applications at a particular time, as defined by federal statute.³ USPTO also publishes every granted patent, as well as supplemental papers such as certificates of correction, reexamination certificates, and certificates reflecting the outcome of Patent Trial and Appeal Board proceedings. Each of these documents has a particular format, with the format for utility patents shown in figures 1 and 2. Figure 1 displays a sample front page of a patent application publication and figure 2 displays a sample description page from an issued patent. The front page shows information taken from several parts of an application file, and the description page shows arrangement of normal text into the two-column format of a patent.

¹ United States Patent and Trademark Office, November 2021. *United States Patent and Trademark Office Performance and Accountability Report, Fiscal Year 2021*. Alexandria, VA: USPTO, p. 201.

² USPTO rules and practices concerning the filing and prosecuting of patent applications are found in Title 37 of the Code of Federal Regulations and the *Manual of Patent Examining Procedure*, www.uspto.gov/web/offices/pac/mpep/index.html (including Appendix R, Patent Rules).

³ See 35 U.S.C. § 122(b).

Figure I. Example Patent Application Publication Front Page



US 20220001500A1

(19) **United States**
 (12) **Patent Application Publication** (10) **Pub. No.: US 2022/0001500 A1**
RAHMAN et al. (43) **Pub. Date: Jan. 6, 2022**

(54) **METHOD OF REPAIRING A COMBUSTOR LINER OF A GAS TURBINE ENGINE**

(52) **U.S. CL.**
 CPC **B23P 6/005** (2013.01); **F01D 25/005** (2013.01); **B29C 73/26** (2013.01); **B29C 73/04** (2013.01)

(71) Applicant: **PRATT & WHITNEY CANADA CORP.**, Longueuil (CA)

(57) **ABSTRACT**

(72) Inventors: **Mizanur RAHMAN**, Longueuil (CA); **Clément DROUIN LABERGE**, Terrebonne (CA)

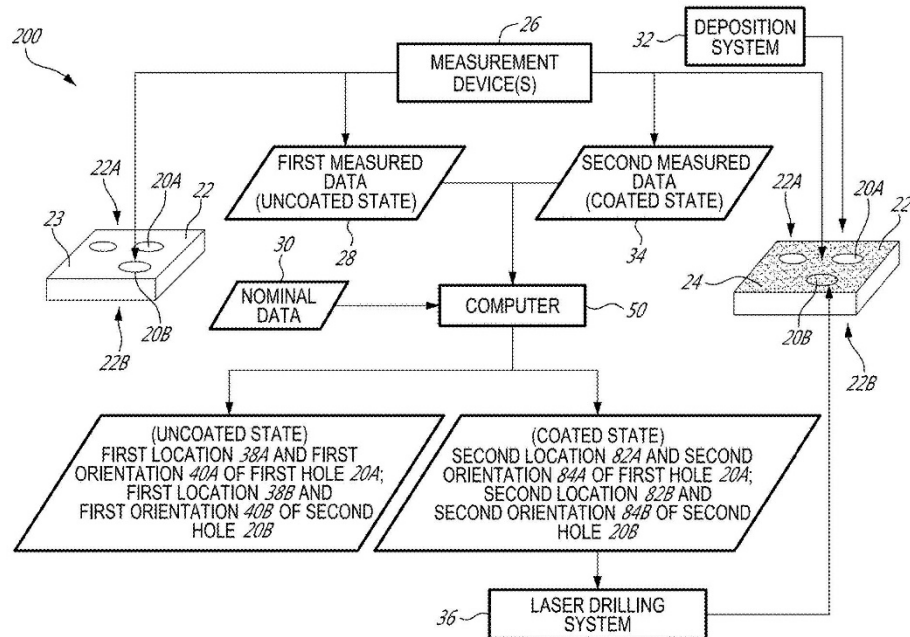
Methods and systems for characterizing holes in a combustor liner of a gas turbine engine, and associated repair methods are provided. One method comprises receiving first measured data of the combustor liner in an uncoated state. The method includes determining a first location and a first orientation of a first hole and a first location and a first orientation of a second hole in the combustor liner using the first measured data. The method includes receiving second measured data of the combustor liner in a coated state where the second hole is at least partially obstructed by a coating and the first hole is substantially unobstructed by the coating. The method includes inferring a second location of the second hole of the combustor liner in the coated state using a known spacing between the first location of the first hole and the first location of the second hole. The characterization of the holes may be used to re-drill the obstructed second hole.

(21) Appl. No.: **16/920,868**

(22) Filed: **Jul. 6, 2020**

Publication Classification

(51) **Int. Cl.**
B23P 6/00 (2006.01)
B29C 73/04 (2006.01)
B29C 73/26 (2006.01)



Source: USPTO Patent Application Full Text and Image Database

Figure 2. Example Patent Description Page

US 11,000,000 B2

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**REPOSITIONING WIRES AND METHODS
FOR REPOSITIONING PROSTHETIC
HEART VALVE DEVICES WITHIN A HEART
CHAMBER AND RELATED SYSTEMS,
DEVICES AND METHODS**

CROSS-REFERENCE TO RELATED
APPLICATIONS

This application claims the benefit of U.S. Provisional Application Ser. No. 62/731,230, filed Sep. 14, 2018 and entitled REPOSITIONING WIRES AND METHODS FOR REPOSITIONING PROSTHETIC HEART VALVE DEVICES WITHIN A HEART CHAMBER, the entire contents of which are incorporated herein by reference.

STATEMENT REGARDING FEDERALLY
SPONSORED RESEARCH OR DEVELOPMENT

Not Applicable

INCORPORATION BY REFERENCE

All references, including but not limited to publications, patent applications and patents mentioned in this specification are hereby incorporated by reference to the same extent and with the same effect as if each reference was specifically and individually indicated to be incorporated by reference.

FIELD OF THE INVENTION

The inventions described herein relate to delivery systems, devices and methods for delivering and/or positioning a cardiac valve.

BACKGROUND OF THE INVENTION

The human heart comprises four chambers and four heart valves that assist in the forward (antegrade) flow of blood through the heart. The chambers include the left atrium, left ventricle, right atrium and right ventricle. The four heart valves include the mitral valve, the tricuspid valve, the aortic valve and the pulmonary valve.

The mitral valve is located between the left atrium and left ventricle and helps control the flow of blood from the left atrium to the left ventricle by acting as a one-way valve to prevent backflow into the left atrium. Similarly, the tricuspid valve is located between the right atrium and the right ventricle, while the aortic valve and the pulmonary valve are semilunar valves located in arteries flowing blood away from the heart. The valves are all one-way valves, with leaflets that open to allow forward (antegrade) blood flow. The normally functioning valve leaflets close under the pressure exerted by reverse blood to prevent backflow (retrograde) of the blood into the chamber it just flowed out of.

Native heart valves may be, or become, dysfunctional for a variety of reasons and/or conditions including but not limited to disease, trauma, congenital malformations, and aging. These types of conditions may cause the valve structure to either fail to properly open (stenotic failure) and/or fail to close properly (regurgitant).

Mitral valve regurgitation is a specific problem resulting from a dysfunctional mitral valve. Mitral regurgitation results from the mitral valve allowing at least some retrograde blood flow back into the left atrium from the right atrium. This backflow of blood places a burden on the left

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ventricle with a volume load that may lead to a series of left ventricular compensatory adaptations and adjustments, including remodeling of the ventricular chamber size and shape, that vary considerably during the prolonged clinical course of mitral regurgitation.

Native heart valves generally, e.g., mitral valves, therefore, may require functional repair and/or assistance, including a partial or complete replacement. Such intervention may take several forms including open heart surgery and open heart implantation of a replacement heart valve. See e.g., U.S. Pat. No. 4,106,129 (Carpentier), for a procedure that is highly invasive, fraught with patient risks, and requiring not only an extended hospitalization but also a highly painful recovery period.

Less invasive methods and devices for replacing a dysfunctional heart valve are also known and involve percutaneous access and catheter-facilitated delivery of the replacement valve. Most of these solutions involve a replacement heart valve attached to a structural support such as a stent, commonly known in the art, or other form of wire network designed to expand upon release from a delivery catheter. See, e.g., U.S. Pat. No. 3,657,744 (Ersek); U.S. Pat. No. 5,411,552 (Andersen). The self-expansion variants of the supporting stent assist in positioning the valve, and holding the expanded device in position, within the subject heart chamber or vessel. This self-expanded form also presents problems when, as is often the case, the device is not properly positioned in the first positioning attempt and, therefore, must be recaptured and positionally adjusted. This recapturing process in the case of a fully, or even partially, expanded device requires re-collapsing the device to a point that allows the operator to retract the collapsed device back into a delivery sheath or catheter, adjust the inbound position for the device and then re-expand to the proper position by redeploying the positionally adjusted device distally out of the delivery sheath or catheter. Collapsing the already expanded device is difficult because the expanded stent or wire network is generally designed to achieve the expanded state which also resists contractive or collapsing forces.

Besides the open heart surgical approach discussed above, gaining access to the valve of interest is achieved percutaneously via one of at least the following known access routes: transapical; transfemoral; transatrial; and transseptal delivery techniques.

Generally, the art is focused on systems and methods that, using one of the above-described known access routes, allow a partial delivery of the collapsed valve device, wherein one end of the device is released from a delivery sheath or catheter and expanded for an initial positioning followed by full release and expansion when proper positioning is achieved. See, e.g., U.S. Pat. No. 8,852,271 (Murray, III); U.S. Pat. No. 8,747,459 (Nguyen); U.S. Pat. No. 8,814,931 (Wang); U.S. Pat. No. 9,402,720 (Richter); U.S. Pat. No. 8,986,372 (Murray, III); and U.S. Pat. No. 9,277,991 (Salahieh); and U.S. Pat. Nos. 2015/0272731 (Racchini); and 2016/0235531 (Ciobanu).

However, known delivery systems, devices and methods still suffer from significant flaws in delivery methodology including, inter alia, positioning, repositioning and/or recapture capability and efficiency.

Various embodiments of the several inventions disclosed herein address these, inter alia, issues.

BRIEF SUMMARY OF THE INVENTION

The invention provides methods, devices and systems for delivering, positioning and/or repositioning an expandable

Source: USPTO Patent Full-Text and Image Database

To complete critical steps in the processing of these documents, USPTO contracts for data capture services for incoming and outgoing documents entered into the USPTO official file. USPTO transfers the patent application documents to the data capture contractor, and that contractor converts the information from those documents into the USPTO-mandated formats. The contractor also performs quality assurance steps, file maintenance, and preparation of an electronic *Official Gazette*.⁴ The contractor then returns the formatted documents to USPTO for electronic publication of applications, patents, and certificates, as well as for preparation of printed patents.

One contractor—Reed Technology and Information Services (RTIS)—has provided USPTO with patent data capture services for more than 40 years. In 2005, RTIS was the sole awardee of a competitive Patent Data Capture (PaDaCap) contract (Original Contract) with a 10-year term, including all options.⁵ Following the Original Contract’s expiration, USPTO awarded RTIS a series of noncompetitive PaDaCap contracts (the Bridge Contract, Bridge Delivery Orders, and Sole Source Contract). In 2015, USPTO entered a 3-year bridge contract (Bridge Contract) with RTIS, which USPTO extended via a series of delivery orders⁶ (Bridge Delivery Orders) to the beginning of 2021.⁷ USPTO then awarded a sole source contract to RTIS (Sole Source Contract) in early 2021. (Hereafter, the Original Contract, the Bridge Contract, the Bridge Delivery Orders, and the Sole Source Contract are collectively referred to as the “PaDaCap Contracts” for the purposes of this report.) USPTO awarded the PaDaCap Contracts as it worked to compete a successor PaDaCap contract, named Patent Data and Document Management (PDDM). Altogether, USPTO operated under the noncompetitive PaDaCap Contracts for more than 6 years, which could be extended to more than 8 years (see figure 3 and appendix C for a timeline and additional information).⁸

In March 2021, USPTO informed us about a security incident at an RTIS facility, which potentially put sensitive data at risk. We have also received multiple complaints about USPTO’s management of the PaDaCap Contracts. We conducted this audit to address the risks and challenges USPTO faces in overseeing this group of PaDaCap Contracts.

⁴ The *Official Gazette*, published every Tuesday, is USPTO’s official journal. It includes bibliographic information and a representative drawing for each patent granted on that issue date. See USPTO. *Official Gazette* [online]. <https://www.uspto.gov/learning-and-resources/official-gazette> (accessed April 12, 2022).

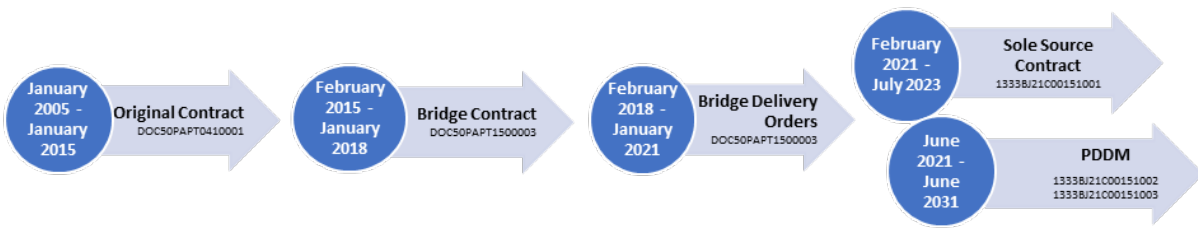
⁵ An *option* is a unilateral right in a contract by which, for a specified time, the government may elect to purchase additional supplies or services called for by the contract, or may elect to extend the term of the contract.

⁶ A *delivery order* is an order for supplies placed against an established contract or with government sources.

⁷ A *bridge contract* refers to a short-term contract awarded to an incumbent contractor to prevent a gap in services.

⁸ Although USPTO competitively awarded the PDDM contract in 2021, patent data capture services are continuing under the Sole Source Contract until production begins under PDDM.

Figure 3. Timeline of PaDaCap Contracts



Source: Office of Inspector General (OIG) analysis of PaDaCap and PDDM Contracts

Objective, Findings, and Recommendations

Our audit objective was to determine whether USPTO awarded and administered PaDaCap Contracts in compliance with applicable laws and federal regulations and Departmental policies and procedures. To address this objective, we used the Federal Acquisition Regulation (FAR), best practices in the *Commerce Acquisition Manual (CAM)*, and USPTO policies and procedures to assess the justification and approval of noncompetitive acquisitions, risk assessment and mitigation activities, and oversight of contractor performance. See appendix A for a more detailed description of our scope and methodology.

Overall, we found that USPTO did not fully comply with one or more requirements or best practices in the FAR, CAM, and USPTO policies and procedures applicable to awarding and administering the PaDaCap Contracts. Specifically, we found the following:

- I. Ineffective acquisition planning delayed the use of competition and achieving lower prices.
- II. USPTO inadequately managed contract risks.
- III. USPTO did not timely inspect contractor deliverables and track errors.
- IV. USPTO inadequately addressed contractor security issues.

Additionally, we found that USPTO's use of noncompetitive contracts resulted in at least \$22 million in questioned costs. See finding I and appendix C for more detail on these costs.

Due to the importance of these contracts to USPTO's operations and the introduction of a second contractor under the recently awarded PDDM, it is imperative that USPTO provide effective contract oversight. Despite USPTO recently awarding PDDM to succeed the noncompetitive PaDaCap contracts, we identified multiple actions USPTO should take to strengthen its procurement procedures. Without strengthened procedures, USPTO will be at risk of further unnecessary costs, ineffective oversight, and deficient contractor performance.

I. Ineffective Acquisition Planning Delayed the Use of Competition and Achieving Lower Prices

Effective acquisition planning helps federal agencies to timely acquire goods and services for the best possible value. It can also help reduce potential problems related to contract award and administration. For ongoing requirements, proper planning avoids gaps in service when contracts expire. In a previous audit,⁹ we identified weaknesses in USPTO's acquisition planning that led to the award and repeated extensions of a noncompetitive bridge contract. Competition in acquisitions can drive down costs; potentially heighten performance, innovation, and overall value; help curb fraud and waste; and promote innovation.

⁹ U.S. Department of Commerce Office of Inspector General, November 19, 2020. *USPTO Should Improve Acquisition Planning and Vendor Performance Management to Prevent Schedule Delays and Unnecessary Costs Related to the SDI-NG Contract*, OIG-21-010-A. Washington, DC: DOC OIG.

Competition also discourages favoritism by leveling the playing field for contract competitors.

Under the CAM, noncompetitive procedures are generally prohibited, and the CAM specifically notes that “lack of advance planning does not permit contracting without providing for full and open competition and this justification is not acceptable.”¹⁰ While USPTO has certain exemptions from the FAR competition requirements under its authorizing statute,¹¹ USPTO’s *Patent and Trademark Acquisition Guidelines (PTAG)* state that it “will endeavor to conduct its procurements on a competitive basis under the FAR when it is reasonable to do so.”¹² USPTO stated its intention to identify specific criteria for reasonableness in the *Patent and Trademark Acquisition Manual (PTAM)* in 2014.¹³ However, more than 7 years later USPTO has not yet added these criteria to the *PTAM*, leaving USPTO without a meaningful check on noncompetitive acquisitions.

To determine whether USPTO awarded the noncompetitive PaDaCap contracts in compliance with the CAM, we reviewed acquisition planning documentation and internal correspondence, and interviewed responsible officials. We were unable to make a determination for the Bridge Contract period from 2015 to 2018 because USPTO was unable to access complete acquisition planning documentation from stored files. The sole source justifications (SSJs)¹⁴ for the Bridge Delivery Orders and the Sole Source Contract stated that USPTO needed additional time to revise the contract requirements and to transition to the anticipated PDDM contract. However, the Sole Source Contract’s SSJ did not explain why USPTO had been unable to complete the recompetition while the Bridge Delivery Orders were in effect.

Contrary to USPTO’s stated justifications in the SSJs, we determined that the delays to the recompetition were primarily caused by USPTO’s inadequate management of the acquisition planning process. For example, the acquisition team did not communicate effectively about who was responsible for revising the contractor transition plan, which was part of the solicitation package. In addition, there was no consistent acquisition team structure. Instead, tasks and responsibilities were spread across several offices. USPTO formed multiple ad hoc groups during the recompetition effort, in recognition of communication issues and the

¹⁰ DOC, September 2020. *Commerce Acquisition Manual 1316.1, Selecting Contract Types*. Washington, DC: DOC, Section 3.2, p. 10. Available online at <https://www.commerce.gov/sites/default/files/2020-10/CAM%201316.1%20Contract%20Type%20%28RevSept2020%29-Final.pdf> (accessed April 7, 2022).

¹¹ Under its authorizing statute, USPTO has certain exemptions from the FAR, including the competition requirements of FAR Part 6. See 35 U.S.C. § 2(b)(4)(A).

¹² USPTO, March 10, 2003. *Patent and Trademark Acquisition Guidelines*, revised October 3, 2013. Alexandria, VA: USPTO, Section 5.0, p. 3. Available online at https://www.uspto.gov/sites/default/files/about/vendor_info/ptag.pdf (accessed April 7, 2022).

¹³ The *PTAG Desktop Guidebook*, which provides detailed guidance about the intent, purpose, and application of the *PTAG*, explains, “Reasonableness takes into account multiple gray areas such as the administrative cost to compete the requirement, expediency, and knowledge of the marketplace. Specific criteria for what constitutes ‘reasonableness’ will be provided in the *PTAM*.” See USPTO, January 2014. *PTAG Desktop Guidebook*. Alexandria, VA: USPTO, p. 10.

¹⁴ The SSJ is a form USPTO uses to document the justification and approval of the use of certain authorities to limit competition.

complexity of the contract. Most recently, USPTO formed a steering committee in 2020 to address issues with completing the recompetition, among other matters. However, USPTO did not fully document the steering committee's roles and responsibilities. As a result, USPTO officials did not review the multiple rounds of contract revisions or finalize the acquisition strategy in a timely manner. Despite these modifications, according to a manager in the Office of Patents, the contract's required processes are virtually the same as before the Bridge Contract.

Since the Bridge Delivery Orders and the Sole Source Contract resulted primarily from USPTO's poor acquisition planning, we concluded that these contract actions did not comply with best practices in the CAM. As a result of poor planning, USPTO wasted staff time and resources on repeated revisions and market research. Further, by extending the existing contract via the Bridge Delivery Orders instead of issuing a new contract, USPTO delayed necessary updates to an outdated cybersecurity contract clause by 3 years, potentially putting USPTO at greater risk of a data security breach.

USPTO could have saved money by recompeting the PaDaCap Contracts earlier, because RTIS lowered the prices in its PDDM bid as a result of competition. Since it was reasonable to expect USPTO to be able to re compete the contract by the expiration of the Bridge Contract in 2018, we question the invoiced amounts that exceed what USPTO could have paid if RTIS' PDDM prices had been in effect in early 2018. We calculated this amount to total at least \$22,418,462 (see appendix C). Without improvements to acquisition planning, including specific reasonableness criteria to restrict the use of noncompetitive contracts, USPTO is at risk of additional unnecessary costs as contracts expire.

Recommendation

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Procurement to do the following:

- I. Develop controls to prevent unnecessary or unreasonable costs, such as the \$22,418,462 in questioned costs, by (a) developing procedures to define the structure, roles, and communication methods of the offices and individuals on an acquisitions team and (b) completing *PTAM* guidance on the reasonableness of noncompetitive acquisitions.

II. USPTO Inadequately Managed Contract Risks

PaDaCap Contracts present a significant amount of risk that USPTO must manage because the contracts provide critical services for the patent examination process. As such, it is crucial that USPTO maintains an effective system of internal controls, including a risk identification, analysis, and response process.¹⁵ Furthermore, within the specific context of

¹⁵ U.S. Government Accountability Office, September 2014. *Standards for Internal Control in the Federal Government*, GAO-14-704G. Washington, DC: GAO, p. 37.

acquisitions, the *PTAG* requires an acquisition plan to include “[d]evelopment of the acquisition strategy (including risk assessments).”¹⁶

To determine whether USPTO adequately assessed and managed risks related to PaDaCap Contracts, we reviewed risk assessment documentation and interviewed USPTO officials. USPTO created multiple documents that identified potential risks related to PaDaCap Contracts, though not all documents were primarily intended to be risk assessments. For example, a study of the possibility of breaking PaDaCap into multiple contracts that USPTO prepared in 2014 identified pros and cons related to this strategy. Another document, a risk register that was developed by the Office of Procurement (OP) in 2019, more broadly identified risks related to PaDaCap Contracts and the planned recompetition. We compared these documents and found that both documents identified similar risks posed by managing multiple or new contractors. Notably, the risk register indicated that no progress had been made in mitigating these risks. Further, another OP document, dated October 2020, listed the needed actions for PaDaCap Contracts, including that USPTO needed to devote more procurement and program personnel for oversight of multiple contractors. In addition, a manager in the Office of Patents expressed concern to us that USPTO management scaled back hiring below the levels ODM recommended. Altogether, this information indicates to us that USPTO did not act in a timely manner to mitigate identified risks.

Effective internal controls also require USPTO to respond to changes and related risks.¹⁷ USPTO cited the risk register as support for the statement in the PDDM acquisition plan that USPTO had performed a risk assessment. However, USPTO made no updates to the risk register between December 2019 and June 2020, when the PDDM acquisition plan was signed. Further, key personnel—such as the contracting officer (CO) and contracting officer’s representatives (CORs) assigned to PaDaCap—were not even aware the risk register existed. USPTO included an analysis of alternative acquisition strategies with its PDDM risk assessment. However, spreading the work between two contractors—the strategy that USPTO ultimately adopted—was not one of the strategies in the analysis. Without timely updates and input from responsible officials, risk assessments will remain incomplete or inaccurate.

We concluded that USPTO does not have a formal process to assess, mitigate, or track acquisition-related risks. This has led to unaddressed risks, including the risks posed by multiple contractors, and the use of inaccurate or outdated risk information during acquisition planning. As a result, USPTO’s ability to exercise the necessary oversight of PaDaCap Contracts was impaired.

¹⁶ USPTO, *Patent and Trademark Acquisition Guidelines*, Section 2.1, p. 1.

¹⁷ GAO-14-704G, p. 43.

Recommendation

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Procurement to do the following:

2. Develop procedures to assess, mitigate, and track risks to acquisitions, including the identification of responsible individuals and the establishment of timeframes for mitigation.

III. USPTO Did Not Timely Inspect Contractor Deliverables and Track Errors

The FAR generally requires agencies to ensure that government contract quality assurance is conducted before contract acceptance¹⁸ and that nonconforming supplies or services are rejected.¹⁹ Consistent with this requirement, USPTO's Office of Data Management (ODM) conducts two key inspections for PaDaCap: database inspections and box inspections.

1. Database inspections – Every week, ODM samples issued patents and compares the contractor-formatted patents against source documents to identify errors such as omitted characters, improperly amended specifications, and incorrectly numbered claims. The contractor is required to reprocess the rejected issues and deliver corrections within 60 calendar days of notification. USPTO charges the contractor reinspection fees for these errors and also charges liquidated damages, as applicable.
2. Box inspections – ODM samples boxes of original documents to compare them to the quality of the contractor-scanned documents, inspecting for errors such as torn pages, excessively dark images, and incorrect dates or document codes. The contractor is required to correct any problems or deficiencies within 2 working days of receiving notification at no additional cost to USPTO.

A. ODM regularly missed database inspection delivery deadlines

We reviewed ODM documentation of database inspections—including error rates, sampling rates, and timeliness measures—to determine whether USPTO effectively monitored and remediated contractor issues. We found that ODM did not provide error reports to the contractor within 30 calendar days, which is necessary for USPTO to collect fees for errors, as specified in the contract.²⁰ Specifically, ODM missed its 30-day deadline for 31 percent (or 88 instances) of all inspection reports from FY 2016 to FY 2021 by up to 43 days.

¹⁸ FAR § 46.102(c).

¹⁹ FAR § 46.102(e).

²⁰ According to section E.4.3 of the Bridge Contract, “The USPTO shall have 30 calendar days from the initial date of delivery of the deliverable. . . to provide final acceptance of the deliverable.” Section E.4.4 states, “if acceptance notification is not provided by the USPTO within the specified time periods. . . the deliverable shall be deemed accepted for payment purposes only.” Inspection requirements were the same in the Sole Source Contract.

Furthermore, ODM has flexibility to sample as little as 2 percent²¹ of patents; however, in about half of the late reports in FY 2017 and FY 2019 to FY 2021,²² ODM selected a sample to review that was about 3.5 percent or higher. The higher sampling amount contributed to delays in reporting. The former COR attributed the higher sampling amount to a performance incentive awarded to inspectors for sampling at least 3.5 percent of issued patents, which is no longer in effect.

We found that ODM's procedures did not set out factors to be taken into account when determining the 2 to 6 percent sample selection, such as sample size, availability of staff, or anticipated timeliness of the sample completion. Because the procedures do not direct staff to sample with consideration of the 30-day deadline, USPTO undermines its ability to collect fees for unacceptable deliverables and timely correct errors.

B. USPTO did not effectively communicate or track errors it found during box inspections

We reviewed USPTO box inspection reports from FY 2015 to FY 2021 and related emails from FY 2017 to FY 2019 to determine whether USPTO effectively monitored and remediated contractor issues. We found that USPTO did not effectively communicate box inspection errors and track errors to resolution, and as a result we were unable to determine whether USPTO resolved the errors.

For example, each time ODM identified errors in FY 2018 and FY 2019,²³ internal emails showed disagreement on whether the inspectors or the CORs should be responsible for communicating errors and tracking error resolution. A lack of clear guidance and procedures may have contributed to this confusion and the lack of documentation of error resolution. Specifically, the ODM box inspection procedures that outline error processes direct the inspector to communicate errors to the contractor but do not reference the COR review and approval. However, the COR is responsible for performing final inspection and acceptance of all work required under the contract, including the review and approval of reports. The ODM procedures also do not outline certain steps to resolve errors, such as follow-up with the contractor and reinspection.

In addition, the box inspection reports we reviewed had inconsistencies, most notably extreme changes in the number of inspections ODM conducted. We found that ODM's box inspection procedures provide outdated instructions to inspectors and lack crucial sampling information, such as a threshold number of boxes to sample, sampling randomization, or a sampling target. Therefore, it is unclear how USPTO ensures that it is providing sufficient quality oversight of the contractor-scanned patents.

USPTO will be required to provide oversight of an additional contractor under PDDM. A senior USPTO inspection official stated that this new contractor will take time to learn the

²¹ According to section E.4.2 of the contract, "The USPTO will perform a 2 to 6 percent sample of each patent type on the tape, except for Design and Plant patents and Reexamination Certificates."

²² USPTO did not provide adequate sampling data for FY 2016 or FY 2018.

²³ USPTO paused formatted patent inspections in FY 2020 due to the coronavirus disease 2019 pandemic. USPTO resumed inspections in FY 2021.

process, which will likely result in more errors. This underscores the importance of clear procedures to identify, communicate, and track resolution of contractor errors in a timely manner.

Recommendations

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Data Management to do the following:

3. Revise database inspection procedures to specify sampling procedures.
4. Revise box inspection procedures to specify (1) error communication and resolution procedures and (2) sampling procedures.

IV. USPTO Inadequately Addressed Contractor Security Issues

USPTO's PaDaCap Contracts require its contractor to protect USPTO systems that it connects to or operates, including maintaining information technology security²⁴ and controlling physical access to its facilities.²⁵ When issues arise, USPTO security personnel use plan of action and milestones (POA&M) documents to identify vulnerabilities needing to be remediated, including resources, milestones, and completion dates. To ensure accountability for contractors, the FAR stipulates that the CO should discourage even minor nonconformances to the contract by appropriate action, such as rejecting deliverables and documenting the contractor's performance record.²⁶ In addition, for critical or major nonconformances, the CO must modify the contract to provide for an equitable price reduction or other consideration.²⁷

USPTO personnel regularly meet with the PaDaCap contractor to oversee its performance by discussing security scans, action items, key decisions, and POA&M documents. We reviewed (1) USPTO's meeting minutes from FY 2017 to FY 2021²⁸ as well as (2) site visit reports from FY 2019 and FY 2020 to determine whether USPTO effectively resolved contractor issues related to security. We found that USPTO's contractor regularly delayed cybersecurity updates, provided incomplete information, and failed to provide adequate physical security.

²⁴ For example, the Bridge Contract states in Section H.7 PTO-11: "The contractor shall be responsible for implementing sufficient Information Technology security to reasonably prevent the compromise of DOC/USPTO IT resources for all of the contractor's systems that are interconnected with a DOC/USPTO network or DOC/USPTO systems that are operated by the Contractor."

²⁵ For example, the Bridge Contract states in Section I.7 PTO-08: "Any items or services delivered under this contract shall comply with the Department of Commerce personal identity verification procedures that implement HSPD-12, FIPS PUB 201, and OMB Memorandum M-05-24."

²⁶ FAR § 46.407(e).

²⁷ FAR § 46.407(f).

²⁸ USPTO did not provide meeting minutes for FY 2019.

According to USPTO meeting minutes, USPTO's PaDaCap contractor delayed a software transition by about 6 months and firewall updates by at least 20 months, and USPTO allowed these delays. In addition, USPTO identified incomplete information about the boundary²⁹ of devices connected to USPTO systems at the contractor facility from FY 2017 to FY 2021 but did not penalize the contractor for these repeated inaccuracies. The contractor also displayed persistent physical security lapses related to USPTO systems and data dating back to FY 2018. Further, USPTO did not ensure the contractor provided complete information about contractor and subcontractor personnel. In a December 2018 site visit, USPTO discovered that about 1,000 personnel from the contractor and subcontractors with potential access to USPTO systems lacked current background investigations. Site visit documentation indicated the contractor was not following proper onboarding and renewal requirements to submit individuals to USPTO for background investigations. Despite creating a POA&M for this issue, USPTO found similar issues with at least 195 subcontractor employees again in its 2020 site visit. USPTO's COR told us that when USPTO raised security issues to the contractor, the contractor did not always take the problem seriously.

In response to the totality of incidents, USPTO took limited actions to hold the contractor accountable. These actions included leveraging conditional Authorizations to Operate,³⁰ modifying the contract to include a disincentives clause, and issuing a Show Cause Letter.³¹ However, USPTO did not use other measures to hold the contractor accountable, such as describing poor contractor security performance in the Contractor Performance Assessment Rating System³² or issuing cure notices.³³

USPTO staff noted multiple reasons for inaction. A USPTO cybersecurity expert attributed USPTO's hesitancy to take action, such as with a Stop Work Order, to the critical function of the contractor. According to the cybersecurity expert, a CO, and a former COR, communication and coordination breakdowns across their offices resulted in the contractor avoiding consequences for lapses in security. For example, the cybersecurity expert told us that some USPTO staff downplayed the severity of the background investigations issue for contract staff after it was discovered. OP staff also stated they lacked full awareness of security issues throughout the contract period. A former CO told us that procedures for resolution of issues would help provide consistency, but no USPTO policies or procedures exist to coordinate the resolution of contractor issues.

The identified vulnerabilities at the contractor site could pose serious risks to patent data, severely compromising data security. Any resulting disruption of patent services would

²⁹ A *boundary* is comprised of all information system components to be authorized for operation by an authorizing official. Boundaries exclude separately authorized systems to which the information system is connected.

³⁰ The management decision given by a senior organizational official to authorize operation of an information system and to explicitly accept the risk based on the implementation of an agreed-upon set of security controls.

³¹ The CO can notify the contractor of contractual liabilities if the contract is terminated for default and request the contractor to show cause why the contract should not be terminated for default.

³² The government-wide evaluation reporting tool for all past performance reports on contracts.

³³ A *cure notice* is issued by the government to inform the contractor that the government considers the contractor's failure a condition that is endangering the performance of the contract.

negatively affect USPTO's ability to meet its statutory requirements to grant patents, as well as greatly increase the cost of reestablishing services. Given the critical function of these contracts in managing the entire lifecycle of patent application processing, it is imperative that USPTO hold the contractor accountable and ensure the prompt remediation of security risks.

Recommendation

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Director of the Office of Procurement to do the following:

5. Develop policies and procedures to monitor POA&M documents against timelines and communicate and escalate contractor security issues, including existing issues such as contractor background investigations. The procedures should clarify
 - (a) communication of serious or persistent issues to the CO for action and
 - (b) available enforcement actions, including the reduction of payments.

Summary of Agency Response and OIG Comments

In response to our draft report, USPTO concurred with all recommendations and described actions it has taken, or will take, to address them. We have included USPTO's technical and formal comments in appendix D.

We are encouraged by USPTO's continuing efforts to address the management and oversight deficiencies of the patent data capture contracts and look forward to reviewing its action plan for implementing the recommendations.

Appendix A: Objective, Scope, and Methodology

The objective of our audit was to determine whether USPTO awarded and administered PaDaCap Contracts in compliance with applicable laws and federal regulations and Departmental policies and procedures. To address this objective, we assessed the justification and approval of noncompetitive acquisitions, risk assessment and mitigation activities, and oversight of contractor performance. Our audit scope encompassed the PaDaCap Contracts from 2015 to 2021. This included the Bridge Contract (February 2015 to January 2018), the Bridge Delivery Orders (February 2018 to January 2021), and the base period of the Sole Source Contract (February to July 2021). The PDDM contract was not within our scope, but we did include related planning activities that took place during our audit.

Specifically, to accomplish our objective, we performed the following actions:

- Reviewed the following documents and regulations:
 - The CAM
 - The FAR
 - *PTAG*, dated October 3, 2013; *PTAG Desktop Guidebook*, dated January 2014; and *PTAM*
 - *GAO, Standards for Internal Control in the Federal Government*, dated September 2014
 - USPTO procurement memorandums
 - Award documentation for PaDaCap Contracts
 - USPTO's PaDaCap inspections policies and procedures
- Obtained an understanding of USPTO's PaDaCap Contracts by interviewing USPTO personnel responsible for acquisitions and contractor oversight.
- Analyzed contract documentation related to acquisition planning, such as SSJs, contract solicitations, and risk assessments, as well as internal USPTO correspondence, to determine whether USPTO awarded PaDaCap Contracts in compliance with relevant requirements.
- Analyzed the completeness and timeliness of contract deliverables inspection reports, contractor site visit reports, and POA&M reports to determine whether USPTO administered PaDaCap Contracts in compliance with relevant requirements. This included determining the effectiveness of actions taken to address performance and security issues or vulnerabilities identified by USPTO.
- Analyzed relevant documentation and interviewed responsible USPTO officials to review complaints we received related to PaDaCap Contracts.

We encountered limitations in performing this work due to a lack of contract documentation and inspections data. Specifically, USPTO did not provide complete acquisition planning documentation for the Bridge Contract, complete database sampling data for FY 2016 and FY 2018, or complete box inspections sampling data for FYs 2015-2019. These limitations impacted our ability to (1) determine whether the Bridge Contract was awarded in compliance with applicable requirements and (2) fully analyze trends in inspection reports.

Further, we gained an understanding of internal control processes significant within the context of the audit objective by interviewing USPTO officials and reviewing documentation for evidence of internal control procedures. We identified weaknesses in the controls related to USPTO's management of risks to PaDaCap acquisitions. While we identified and reported on internal control deficiencies, our audit found no incidents of fraud, illegal acts, or abuse.

Although we could not independently verify the reliability of all the information we collected, we compared it with other available supporting documents to determine data consistency and reasonableness. Based on these efforts, we believe the information we obtained is sufficiently reliable for this report.

We conducted fieldwork from April 2021 through February 2022 under the authority of the Inspector General Act of 1978, as amended (5 U.S.C. App.), and Department Organization Order 10-13, as amended October 21, 2020. We performed our work solely at remote telework locations.

We conducted this performance audit in accordance with generally accepted government auditing standards. These standards require that we plan and perform our audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective.

Appendix B: USPTO Patent Data Capture Contracts

Table B-I. USPTO Patent Data Capture Contracts

Contract Number	Period of Performance	Value	Contract Type	Contractor
DOC50PAPT0410001 (Original Contract)	January 2005 to January 2015	\$1.36 billion	Competitive	RTIS
DOC50PAPT1500003 (Bridge Contract)	February 2015 to January 2018	\$519 million	Noncompetitive ^a	RTIS
DOC50PAPT1500003 (Bridge Delivery Orders)	February 2018 to January 2021	\$515 million	Noncompetitive ^b	RTIS
I333BJ21C00151001 (Sole Source Contract)	February 2021 to July 2023	\$450 million	Noncompetitive	RTIS
I333BJ21C00151002 I333BJ21C00151003 (PDDM)	June 2021 to June 2031	\$2.06 billion	Competitive	RTIS, Flatirons Solutions ^c

Source: OIG analysis of USPTO contract documentation

^a Sole source bridge contract awarded from previous competitive contract.

^b Sole source delivery orders awarded from expired bridge contract.

^c Two contractors were selected.

Appendix C: Potential Monetary Benefits

Finding and Recommendation	Questioned Costs	Unsupported Costs	Potential Funds to Be Put to Better Use
Finding I and Recommendation I	\$22,418,462	\$0	\$0

Source: OIG analysis of USPTO contract invoice and pricing data

Appendix D: Agency Response



UNITED STATES PATENT AND TRADEMARK OFFICE

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

July 29, 2022

MEMORANDUM FOR: Frederick J. Meny Jr.
Assistant Inspector General for Audit and Evaluation

FROM: Katherine K. Vidal Users, Vidal,
Katherine (Kathi) Digitally signed by Users, Vidal,
Katherine (Kathi)
Date: 2022.07.29 12:22:50 -0400
Under Secretary of Commerce for Intellectual Property and
Director of the United States Patent and Trademark Office

SUBJECT: Response to Draft Report, “USPTO Should Strengthen Its
Planning and Oversight of Patent Data Capture Contracts to
Manage Risks and Prevent Unnecessary Costs”

Executive Summary

We appreciate the effort you and your staff made in reviewing the United States Patent and Trademark Office’s (USPTO) Patent Data Capture (PaDaCap) contracts with Reed Technology and Information Services, Inc. (RTIS). We concur with the actions recommended in the report, some of which were already underway and will be further focused in view of your findings. Our response to each recommendation is discussed in detail below and in the accompanying USPTO technical comments. In addition, as Director, I will be issuing a formal memo to the USPTO’s Executive Committee outlining the necessary measures I have directed, and will direct, the Office of Procurement and the Office of Patents to take to address each of these recommendations.

For many decades, RTIS provided patent data and document services to the USPTO through a series of PaDaCap contracts as a single vendor with unique experience. Recognizing some of the limitations of the sole-source environment, in June 2022, the USPTO fully transitioned these services to two separate Patent Data and Document Management (PDDM) contracts, creating a competitive, multi-vendor environment with RTIS and a second vendor, Flatirons Solutions Corporation (FSC). As a result of the two new contracts, the USPTO is not using the PaDaCap contract for patent data and document services. By redefining how the contract requirements are managed and how quality assurance oversight will be performed, the USPTO has realized cost savings—an estimated \$150 million over the 10-year contracts—and expects innovative process improvements as the vendors continue to compete for production share. The multi-vendor environment will also eliminate the risk associated with a single point of failure for this mission-critical work.

P.O. Box 1450, Alexandria, Virginia 22313-1450 – www.uspto.gov

The USPTO has reviewed the audit findings regarding the PaDaCap contracts, and we will use the transition to PDDM as an opportunity to improve our contract management and oversight functions.

Response to Recommendations

IG recommendation that the Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office take the following action (1): Direct the Director of the Office of Procurement to develop controls to prevent unnecessary or unreasonable costs, such as the \$22,418,462 in questioned costs, by (a) developing procedures to define the structure, roles, and communication methods of the offices and individuals on an acquisitions team and (b) completing PTAM guidance on the reasonableness of noncompetitive acquisitions.

USPTO response:

The USPTO concurs with this recommendation to prevent unnecessary and unreasonable costs, and as noted above, the Director will issue a formal memo to the USPTO's Executive Committee outlining the necessary measures she has directed, and will direct, the Director of the Office of Procurement to take to address this recommendation. Within the Office of Procurement, dedicated acquisition teams have been developed to improve communication throughout the acquisition lifecycle and ensure timely decision-making. For example, for PDDM, the specific roles and responsibilities for each member of the acquisition team are outlined in a PDDM Program Management Office Roles and Responsibilities Chart for each stage of the acquisition process, including transition, budget formulation and reporting, and contract administration and oversight. Further, the Director of the Office of Procurement created a stand-alone PDDM Support Division to be responsible for the day-to-day management of the competitively-sourced PDDM contracts that have replaced the PaDaCap contract. In addition, the Office of Procurement Policy Division has prioritized revising the Patent and Trademark Office Acquisition Guidelines Desktop Guide to include guidance on the reasonableness of conducting noncompetitive procurements, along with training stakeholders on its use and application in the procurement process.

The USPTO recognizes the value of competition in acquisitions and made efforts to promote competition for the 2018 follow-on PaDaCap contract. Through a pilot program, the USPTO awarded an 11-month contract to FSC to assess whether FSC was capable of successfully performing the Pre-Grant Publication portion of the PaDaCap contract. FSC gained insight into the USPTO's quality and performance expectations and was able to submit a competitive proposal in response to the PDDM solicitation. The USPTO believes the pilot program was an important first step in finding a competitive replacement for the PaDaCap contract.

IG recommendation that the Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office take the following action (2): Direct the Director of the Office of Procurement to develop procedures to assess, mitigate, and track risks to acquisitions, including the identification of responsible individuals and the establishment of timeframes for mitigation.

USPTO response:

The USPTO concurs with this recommendation. As noted above, the Director will issue a formal memo to the USPTO's Executive Committee outlining the necessary measures she has directed, and will direct, the Director of the Office of Procurement to do to address this recommendation. The Director of the Office of Procurement continues to work with stakeholders to identify and manage risk events adversely affecting contract performance. For PDDM, the Office of Procurement is developing a Standard Operating Procedure for monthly Program Management Reviews (PMRs) to ensure consistent steps are taken by the acquisition team. Through these monthly PMRs, as well as weekly stakeholder status briefings, the PDDM acquisition team is promptly alerted to actual or perceived risks. In addition, in accordance with the USPTO's Plans of Action and Milestones (POA&Ms) Management Guide, POA&Ms are established by the Cybersecurity Division to track and resolve risks identified by acquisition team members in a timely manner. For example, because the PDDM contractors are both employed by foreign parent companies, the PDDM contractors develop, and the USPTO approves, risk mitigation plans at the beginning of each option period to safeguard all intellectual property. Background investigations of PDDM contractors are conducted using the same process that is used for the USPTO's patent examiners to minimize unauthorized access to material. As added safeguards, paper patent applications are handled by USPTO staff as a means of mitigating unauthorized access to information. The Office of Procurement, in coordination with Patents, has also negotiated terms and conditions for volume adjustments to address poor performance or cybersecurity noncompliance by the PDDM contractors should those issues arise.

IG recommendation that the Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office take the following action (3): Direct the Director of the Office of Data Management to revise database inspection procedures to specify sampling procedures.

USPTO response:

The USPTO concurs with this recommendation. As noted above, the Director will issue a formal memo to the USPTO's Executive Committee outlining the necessary measures she has directed, and will direct, the Director of the Office of Procurement to do to address this recommendation. The Director of the Office of Data Management (ODM) acknowledges that the 30-day deadline for inspections under the PaDaCap contract slipped on multiple occasions. However, it should be noted that none of the inspection results returned after the 30-day deadline contained errors. To address this concern, ODM developed an inspection plan that defines roles and responsibilities for the quality inspection process. The plan also includes training for all database inspection staff to raise awareness about the importance of the contractual obligation to provide results to the contractor within 30 days after the issue date, and to ensure staff are aware of procedural changes made through the plan to increase efficiency. Through these updated procedures, ODM has improved their sampling processes and reduced the average number of days to complete an inspection from 30 days to nine days as of the most recent inspection on June 7, 2022.

In addition, under PDDM, quality assurance oversight has been redefined. Rather than focusing on reviewing specific sample sizes, which under PaDaCap consumed significant USPTO resources and did not necessarily identify substantive errors, the PDDM contracts provide the USPTO the ability to review any work deemed necessary for quality assurance. This allows for

flexibility in sampling based on several variables, such as the type of patent and historical inspection quality.

IG recommendation that the Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office take the following action (4): Direct the Director of the Office of Data Management to revise box inspection procedures to specify (a) error communication and resolution procedures and (b) sampling procedures.

USPTO response:

While the USPTO concurs with this recommendation, it is now moot because box inspections are not required under the PDDM contracts. As of June 2022, paper scanning is now performed internally by USPTO staff. Since box inspections of contractor work are no longer needed, the USPTO believes it is not necessary to update the error resolution and sampling procedures. Now, errors are identified by internal scanning staff in real time. Managers, also federal employees, provide oversight to the new internal federal staff to ensure the scanning process is performed consistently. Furthermore, the USPTO now utilizes a communication tool so that patent examiners and other Agency personnel can quickly notify the scanning staff of any perceived errors in the scanning, resulting in prompt correction if necessary.

IG recommendation that the Under Secretary of Commerce for Intellectual Property and Director of the U.S. Patent and Trademark Office take the following action (5): Direct the Director of the Office of Procurement to develop policies and procedures to monitor POA&M documents against timelines and communicate and escalate contractor security issues, including existing issues such as contractor background investigations. The procedures should clarify (a) communication of serious or persistent issues to the CO for action and (b) available enforcement actions, including the reduction of payments.

USPTO response:

The USPTO concurs with this recommendation, and as noted above, the Director will issue a formal memo to the USPTO's Executive Committee outlining the necessary measures she has directed, and will direct, the Director of the Office of Procurement to take to address this recommendation. With the creation of dedicated acquisition teams, including for PDDM and the PDDM Support Division, the Director of the Office of Procurement has fostered an environment of accountability for managing POA&M documents and adjudicating issues involving contracts in a timely manner. By identifying the acquisition team members responsible for each task, the Office of Procurement can better serve the Agency's stakeholder and vendor communities. In accordance with Procurement Memorandum 2014-04, "USPTO Contracting Officer's Representative (COR), Task Order Manager (TOM), and Point of Contact (POC) Roles, Requirements, and Responsibilities," oversight of contracts is regularly conducted by designated CORs approved to serve in that capacity by the Office of Procurement, and the COR appointment memo outlines their responsibilities. Office of Procurement Division Directors schedule regular progress meetings with their customers to monitor performance and deliverables. For cybersecurity issues identified through oversight inspections by the acquisition team, POA&Ms are created and tracked by the Agency's Cybersecurity Division until they are deemed satisfactorily completed or managed. Office of Procurement Director's Notices are also issued to acquisition team members and posted in a reference repository to ensure compliance with established policies and procedures. The Office of Procurement's Policy Division is

regularly monitoring the effectiveness of current policies and is making timely revisions when needed to better serve the acquisition community.

For PDDM, the monthly PMRs implemented by the Office of Procurement include stakeholders from Cybersecurity, Patents, the Office of General Counsel, the Office of Security, and the Office of the Chief Financial Officer in order to escalate security issues as needed. Additional security measures to minimize contract risk include conducting contractor background investigations at the same level as those required for patent examiners. The USPTO has also negotiated terms and conditions for volume adjustments to address poor performance or cybersecurity noncompliance by the PDDM contractors should those issues arise. For example, the Office of Procurement introduced risk reduction techniques (e.g., disincentives and expanded terms) and substantively improved cybersecurity oversight, laying a foundation for future contracts in the Office. Furthermore, these techniques removed the single point of failure, and the Agency strengthened its negotiation position. Competing production split between the two contractors allows for further process improvements and lower costs that will benefit applicants and stakeholders.

Conclusion

The USPTO appreciates your work and thanks the Assistant Inspector General for Audit and Evaluation for providing us with this report. We continue our work to improve our acquisition processes and drive the best outcomes on behalf of our stakeholders. These findings will help the USPTO achieve those goals and create a work environment dedicated to excellence. The USPTO's Office of Procurement has made, and will continue to make, improvements to implement the report's recommendations, and we are confident in our abilities to satisfy these recommendations in a timely manner. The USPTO looks forward to working with your office in the future as we continue our efforts to improve our oversight of the acquisition and vendor performance planning processes.

If you need additional information, please contact:

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**USPTO Technical Comments to OIG Draft Report:
“USPTO Should Strengthen Its Planning and Oversight of Patent Data Capture Contracts
to Manage Risks and Prevent Unnecessary Costs”**

Page 8, Paragraph 4, Sentence 1:

“1. Develop controls to prevent unnecessary or unreasonable costs, such as the \$22,418,462 in questioned costs, by (a) developing procedures to define the structure, roles, and communication methods of the offices and individuals on an acquisitions team and (b) completing PTAM guidance on the reasonableness of noncompetitive acquisitions.” The Office of Procurement has collaborated with the Patents organization to develop revised contract requirements to replace those provided under the Patent Data Capture (PaDaCap) contract. The revised requirements defined under Patent Data and Dissemination Management (PDDM) resulted in multiple awards in 2021. The redefinition of requirements under PDDM resulted in a competitive environment and the successful award of multiple contracts. The Office of Procurement also established a Project Management Oversight (PMO) Division to improve contract management and oversight of the PDDM contracts. This PMO-designated division will be responsible for coordinating with the Patents organization. Jointly, the Office of Procurement’s PMO Division and Patents’ Office of Data Management will monitor contractor performance, improving contract oversight for this mission-critical organizational program.