U.S. Department of Commerce
U.S. Patent and Trademark Office

Privacy Impact Assessment
for the
Reed Technology and Information Services, Inc. (ReedTech®)
Patent Data Capture (PDCap)

Reviewed by: David Chiles, Bureau Chief Privacy Officer (Acting)

☑ Concurrence of Senior Agency Official for Privacy/DOC Chief Privacy Officer
☐ Non-concurrence of Senior Agency Official for Privacy/DOC Chief Privacy Officer

CATRINA PURVIS

Digitally signed by CATRINA PURVIS
DN: c=US, o=U.S. Government, ou=Department of Commerce,
ou=Office of the Secretary, cn=CATRINA PURVIS,
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09/14/2018

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Signature of Senior Agency Official for Privacy/DOC Chief Privacy Officer   Date

U.S. Department of Commerce Privacy Impact Assessment
USPTO RTIS Patent Data Capture (PDCap)

Unique Project Identifier: PTOC-013-00

Introduction: **System Description**

Provide a description of the system that addresses the following elements:
The response must be written in plain language and be as comprehensive as necessary to describe the system.

(a) a general description of the information in the system

Patent Data Capture (PDCap)
The Reed Tech Patent Data Capture (PDCap) system is designed to process, transmit and store data and images to support the data-capture and conversion requirements of the USPTO to support the USPTO patent application process. Patent applications are typically submitted to USPTO on paper (hard copy) and in electronic format. Under the Patent Data Capture contract, Reed Tech hosts and manages the PDCap system and is required to convert the paper applications into an electronic format, including all text, graphics, artwork, drawings, etc. Once converted to electronic data, each patent is composed and formatted to USPTO specifications for delivery back to USPTO.

When both hardcopy and electronic patent applications are initially received at the USPTO, the documents are scanned/uploaded respectively into the Image File Wrapper (IFW) system. Applications are electronically exported to the Reed Tech PDCap system via a USPTO-managed interconnection. Once received by Reed Tech PDCap, every application is then examined by a Reed Tech proprietary application which breaks down each page into separate sections, such as graphics and text. Each section is then sent to separate directories on the Reed Tech PDCap network for manipulation.

The sections of the application are processed by separate Reed Tech PDCap departments, with departments dedicated to text, headers, and complex work units, such as math and chemistry, and drawings. These departments use a combination of proprietary and commercial software to complete their work on each section. When all the sections have been completed, a queue reassembles the file and it is forwarded to the Composition Department. The Composition Department is responsible for the final formatting, layout, and any remaining error corrections before the file is delivered back to USPTO. There are several phases to the overall process: PreGrant Publication (PGPub), Initial Data Capture (IDC), File Maintenance (FM), and Final Data Capture (FDC).

Published Application Alert Service (PAAS)

The Reed Tech Published Application Alert Service (PAAS) is a service offered by the USPTO to allow the public to configure queries and alerts for key words in pre-grant published patent applications. A logged-in user creates a keyword search, which will be executed on a weekly basis against only the most recent pre-grant published patent applications. The queries will be executed at the date and time of the publication of the data by the USPTO. The data that will be used for searching will be copied out of the main PDCap system onto a file system on or attached to the backend server. The queries will be run against the data on that file share and not within the main PDCap file system. After the queries are executed, the data for that week's pre-grant published patent applications will be deleted from the file system on or attached to the backend server. After the queries are executed, an email alert will be sent to the user's email address, which will be part of the profile created during registration. Queries against patent applications older than the most recent publication date are not possible, as prior publication data is removed from the system after the weekly search is executed. Other features of the system include the functionality to allow a logged-in user to view the queries that have been created under their user name, and the ability for a user to test their queries against static data. The source of the static data is prior granted patents

(b) a description of a typical transaction conducted on the system

PDCap: As part of the typical transaction in the main part of the PDCap system, inventors are notified that their information will become public at the time the patent is published and they agree to this condition by signing a release form at the time of the patent application submission.

PAAS: As part of the PAAS system, members of the public can create electronic profiles on the system which include their full names and email addresses for the purpose of creating queries for PreGrant Published patent applications. Retention of this data is subject to the LexisNexis Privacy Policy, which is prominently linked to on the PAAS website.

(c) any information sharing conducted by the system

PDCap: Any information gathered as part of the PDCap system is only shared with subcontractors. Subcontractors are contractually prohibited from sharing information provided to them as part of the PDCap contract. For select subcontractors, encrypted information is transferred to them via secure connections during the Grant phase of the patent application lifecycle. The data contained in the patent applications transferred to the subcontractors has already been made public by the USPTO during PreGrant Publication.

PAAS: The full name and email address information members of the public enter into the PAAS system to create profiles is not shared with the USPTO and is used so that the PAAS system can create unique accounts. This data is not shared with the USPTO or any other party, including subcontractors.

(d) a citation of the legal authority to collect PII and/or BII
refer to Reed Tech PDCap contract DOC50PAPT1500003 for requirements to collect minimum data necessary to provide contracted services

(e) the Federal Information Processing Standard (FIPS) 199 security impact category for the system
   Moderate

Section 1: Status of the Information System

1.1 Indicate whether the information system is a new or existing system.

☐ This is a new information system.

☐ This is an existing information system with changes that create new privacy risks. *(Check all that apply.)*

☒ This is an existing information system in which changes do not create new privacy risks. *Continue to answer questions, and complete certification.*

Changes That Create New Privacy Risks (CTCNPR)					
a. Conversions	☐	d. Significant Merging	☐	g. New Interagency Uses	☐
b. Anonymous to Non-Anonymous	☐	e. New Public Access	☐	h. Internal Flow or Collection	☐
c. Significant System Management Changes	☐	f. Commercial Sources	☐	i. Alteration in Character of Data	☐
j. Other changes that create new privacy risks (specify):					

Section 2: Information in the System

2.1 Indicate what personally identifiable information (PII)/business identifiable information (BII) is collected, maintained, or disseminated. *(Check all that apply.)*

Identifying Numbers (IN)					
a. Social Security*	☐	e. File/Case ID	☐	i. Credit Card	☐
b. Taxpayer ID	☐	f. Driver's License	☐	j. Financial Account	☐
c. Employer ID	☐	g. Passport	☐	k. Financial Transaction	☐
d. Employee ID	☐	h. Alien Registration	☐	l. Vehicle Identifier	☐
m. Other identifying numbers (specify): Neither PDCap nor PAAS collects, maintains or disseminates any identifying numbers, and only collects data as follows: PDCap: name and address of inventor; PAAS: name and email address of members of the public.					
*Explanation for the need to collect, maintain, or disseminate the Social Security number, including truncated form:					

*If SSNs are collected, stored, or processed by the system, please explain if there is a way to avoid such collection in the future and how this could be accomplished:	

General Personal Data (GPD)

a. Name	☒	g. Date of Birth	☐	m. Religion	☐
b. Maiden Name	☐	h. Place of Birth	☐	n. Financial Information	☐
c. Alias	☐	i. Home Address	☒	o. Medical Information	☐
d. Gender	☐	j. Telephone Number	☐	p. Military Service	☐
e. Age	☐	k. Email Address	☒	q. Physical Characteristics	☐
f. Race/Ethnicity	☐	l. Education	☐	r. Mother's Maiden Name	☐
s. Other general personal data (specify): Neither PDCap nor PAAS collects, maintains or disseminates any general personal data, and only collects data as follows: PDCap: name and address of inventor; PAAS: name and email address of members of the public.					

Work-Related Data (WRD)

a. Occupation	☐	d. Telephone Number	☐	g. Salary	☐
b. Job Title	☐	e. Email Address	☐	h. Work History	☐
c. Work Address	☐	f. Business Associates	☐		
i. Other work-related data (specify):					

Distinguishing Features/Biometrics (DFB)

a. Fingerprints	☐	d. Photographs	☐	g. DNA Profiles	☐
b. Palm Prints	☐	e. Scars, Marks, Tattoos	☐	h. Retina/Iris Scans	☐
c. Voice Recording/Signatures	☐	f. Vascular Scan	☐	i. Dental Profile	☐
j. Other distinguishing features/biometrics (specify):					

System Administration/Audit Data (SAAD)

a. User ID	☒	c. Date/Time of Access	☐	e. ID Files Accessed	☐
b. IP Address	☐	d. Queries Run	☒	f. Contents of Files	☐
g. Other system administration/audit data (specify): PDCAP system does not collect system administration and audit data. PAAS: PAAS collects only user ID and queries run, which is not shared with any other party.					

Other Information (specify)

2.2   Indicate sources of the PII/BII in the system. *(Check all that apply.)*

Directly from Individual about Whom the Information Pertains

In Person	☒	Hard Copy: Mail/Fax	☒	Online	☒

Telephone	☐	Email	☐		
Other (specify): PDCap: Patent applicants can appear at the USPTO to file their patent application in hard copy form. Patent applicants may also file their patent applications online using the EFS (Electronic Filing System). During the application process, patent applicants must provide PII/BII information. PAAS: Users of the PAAS system register with the system online only. The users provide their PII/BII at the time of registration.					

Government Sources					
Within the Bureau	☒	Other DOC Bureaus	☐	Other Federal Agencies	☐
State, Local, Tribal	☐	Foreign	☐		
Other (specify):					

Non-government Sources					
Public Organizations	☐	Private Sector	☒	Commercial Data Brokers	☐
Third Party Website or Application			☐		
Other (specify): PDCap: Non-government sources of PII/BII include private sector sources, such as individuals and corporations and other businesses. PAAS: Non-government sources of PII/BII include private sector sources, such as individuals and corporations and other businesses.					

2.3 Indicate the technologies used that contain PII/BII in ways that have not been previously deployed. *(Check all that apply.)*

Technologies Used Containing PII/BII Not Previously Deployed (TUCPBNPD)			
Smart Cards	☐	Biometrics	☐
Caller-ID	☐	Personal Identity Verification (PIV) Cards	☐
Other (specify):			

☒	There are not any technologies used that contain PII/BII in ways that have not been previously deployed.

Section 3: System Supported Activities

3.1 Indicate IT system supported activities which raise privacy risks/concerns. *(Check all that apply.)*

Activities			
Audio recordings	☐	Building entry readers	☐
Video surveillance	☐	Electronic purchase transactions	☐
Other (specify):			

☒	There are not any IT system supported activities which raise privacy risks/concerns.

Section 4: Purpose of the System

4.1 Indicate why the PII/BII in the IT system is being collected, maintained, or disseminated. *(Check all that apply.)*

Purpose			
To determine eligibility	☐	For administering human resources programs	☐
For administrative matters	☐	To promote information sharing initiatives	☒
For litigation	☐	For criminal law enforcement activities	☐
For civil enforcement activities	☐	For intelligence activities	☐
To improve Federal services online	☒	For employee or customer satisfaction	☐
For web measurement and customization technologies (single-session)	☐	For web measurement and customization technologies (multi-session)	☐
Other (specify): PDCap: PII/BII is collected in this system to facilitate the processing of patents and trademarks, and to improve Federal services online. PAAS: PII/BII is collected in this system to promote information sharing initiatives by providing information on patent status to the users of the system.			

Section 5: Use of the Information

5.1 In the context of functional areas (business processes, missions, operations, etc.) supported by the IT system, describe how the PII/BII that is collected, maintained, or disseminated will be used. Indicate if the PII/BII identified in Section 2.1 of this document is in reference to a federal employee/contractor, member of the public, foreign national, visitor or other (specify).

PDCap: PII/BII is collected and maintained in this system to facilitate the processing of patents and trademarks. The data collected belongs to members of the public.

PAAS: This PII/BII information is used solely to generate patent alerts, which is the purpose of the PAAS. Members of the public may create user profiles in the PDCap Published Application Alert Service (PAAS). These user profiles contain the full name and email address of the person creating the profile.

Section 6: Information Sharing and Access

6.1 Indicate with whom the bureau intends to share the PII/BII in the IT system and how the PII/BII will be shared. *(Check all that apply.)*

Recipient	How Information will be Shared		
	Case-by-Case	Bulk Transfer	Direct Access
Within the bureau	☐	☒	☒
DOC bureaus	☐	☒	☒
Federal agencies	☐	☐	☐
State, local, tribal gov't agencies	☐	☐	☐
Public	☒	☐	☐
Private sector	☒	☐	☐
Foreign governments	☐	☐	☐
Foreign entities	☐	☐	☐
Other (specify):The USPTO provides Reed Tech with a copy of the patent application data, and retains a copy within their systems. Reed Tech shares PII/BII data only with select PDCap subcontractors	☐	☒	☒

☐	The PII/BII in the system will not be shared.

6.2 Indicate whether the IT system connects with or receives information from any other IT systems authorized to process PII and/or BII.

☒	Yes, this IT system connects with or receives information from another IT system(s) authorized to process PII and/or BII. Provide the name of the IT system and describe the technical controls which prevent PII/BII leakage: PDCap: The PDCap system connects with USPTO NSI to exchange patent information (including PII/BII), which is provided from USPTO to Reed Tech initially. This information exchange is done over secure connections between the PDCap facilities and the USPTO facility. The descriptions of the technical controls protecting the information exchange are listed in the PDCap System Security Plan (SSP). These controls include, but are not limited to, encryption, authentication, access controls, etc. PAAS: The PAAS system does not connect with or receive information, including PII/BII, from any other IT systems.
☐	No, this IT system does not connect with or receive information from another IT system(s) authorized to process PII and/or BII.

6.3 Identify the class of users who will have access to the IT system and the PII/BII. *(Check all that apply.)*

Class of Users			
General Public	☒	Government Employees	☒
Contractors	☒		
Other (specify): PDCap: The PII/BII information on the PDCap system is only accessible to Contractors (Reed Tech employees and subcontractors) and Government Employees (only USPTO employees).			

> PAAS: The PII/BII information in the PAAS system is accessible on a case-by-case basis by the General Public. Users of the PAAS system will receive information on patent applications only related to the queries they establish when they register with the PAAS system.

Section 7: Notice and Consent

7.1   Indicate whether individuals will be notified if their PII/BII is collected, maintained, or disseminated by the system. *(Check all that apply.)*

☒	Yes, notice is provided pursuant to a system of records notice published in the Federal Register and discussed in Section 9.	
☒	Yes, notice is provided by a Privacy Act statement and/or privacy policy. The Privacy Act statement and/or privacy policy can be found at: https://www.uspatentappalerts.com	
☐	Yes, notice is provided by other means.	Specify how:
☐	No, notice is not provided.	Specify why not:

7.2   Indicate whether and how individuals have an opportunity to decline to provide PII/BII.

☒	Yes, individuals have an opportunity to decline to provide PII/BII.	Specify how: PDCap: Patent applicants are informed that their PII/BII information will become public as part of the patent process. The applicants have the opportunity to not submit their patent application if they decline to provide PII/BII data. PAAS: All users must read the terms and conditions and click to agree to them prior to registering to use the PAAS system. Not doing so constitutes opting out and declining to provide PII/BII.
☐	No, individuals do not have an opportunity to decline to provide PII/BII.	Specify why not:

7.3   Indicate whether and how individuals have an opportunity to consent to particular uses of their PII/BII.

☒	Yes, individuals have an opportunity to consent to particular uses of their PII/BII.	Specify how: PDCap: Patent applicants consent to the use of their PII/BII for the purposes of processing the patent application. There are no uses of the PII/BII beyond the processing of the patent application. PAAS: All users must read the terms and conditions and click to agree to them prior to registering to use the PAAS system. There are no uses of the PII/BII beyond basic system function.
☐	No, individuals do not have an opportunity to consent to particular uses of their PII/BII.	Specify why not:

7.4   Indicate whether and how individuals have an opportunity to review/update PII/BII pertaining to them.

☒	Yes, individuals have an opportunity to review/update PII/BII pertaining to them.	Specify how: PDCap: Patent applicants may update their PII/BII at any time by filing the appropriate forms with the USPTO. The USPTO, in turn, forwards the updated information to Reed Tech as part of standard business processes and the updated PII/BII information would be reflected in the next deliverable to the USPTO. PAAS: The PAAS terms of use state that individuals have the opportunity to review/update PII/BII pertaining to them. The PII/BII data is available to be reviewed/updated at any time on the user's profile page.
☐	No, individuals do not have an opportunity to review/update PII/BII pertaining to them.	Specify why not:

Section 8: Administrative and Technological Controls

8.1   Indicate the administrative and technological controls for the system. *(Check all that apply.)*

☒	All users signed a confidentiality agreement or non-disclosure agreement.
☒	All users are subject to a Code of Conduct that includes the requirement for confidentiality.
☒	Staff (employees and contractors) received training on privacy and confidentiality policies and practices.
☒	Access to the PII/BII is restricted to authorized personnel only.
☒	Access to the PII/BII is being monitored, tracked, or recorded. Explanation: Applicable to PDCap and PAAS: Reed Tech monitors, tracks and records access to the PII/BII through an automated logging solution.
☒	The information is secured in accordance with FISMA requirements. Provide date of most recent Assessment and Authorization (A&A): September 26, 2017_____ ☐ This is a new system. The A&A date will be provided when the A&A package is approved.

☒	The Federal Information Processing Standard (FIPS) 199 security impact category for this system is a moderate or higher.
☐	NIST Special Publication (SP) 800-122 and NIST SP 800-53 Revision 4 Appendix J recommended security controls for protecting PII/BII are in place and functioning as intended; or have an approved Plan of Action and Milestones (POAM).
☒	Contractors that have access to the system are subject to information security provisions in their contracts required by DOC policy.
☐	Contracts with customers establish ownership rights over data including PII/BII.
☒	Acceptance of liability for exposure of PII/BII is clearly defined in agreements with customers.
☐	Other (specify):

8.2   Provide a general description of the technologies used to protect PII/BII on the IT system.

PDCap: The PDCap system is protected through multiple layers of security controls. All hosts on the PDCap system are hardened according to CIS secure benchmarks. The system is also protected with next-generation firewalls, antivirus, intrusion detection systems, and spam filtering.

PAAS: The PAAS database is hardened according to CIS secure benchmarks. Access to the PAAS database is limited per user and host. The database is on a dedicated subnet, and is not accessible from the Internet. Passwords must meet complexity requirements and are encrypted. The login and registration pages are delivered over HTTPS. There is an automatic account lockout period after a defined period of inactivity.

- The PDCap and PAAS system and its facility are physically secured and closely monitored. Only individuals authorized by PDCap and PAAS to access USPTO data are granted logical access to the system.
- All patent information is encrypted when transferred between PDCap and USPTO and PAAS using secure electronic methods.
- Technical, operational, and management security controls are in place at PDCap and PAAS and are verified regularly.
- Quarterly security scans are conducted on the PDCap and PAAS system to help assure than any new security vulnerabilities are discovered and fixed.
- All PDCap and PAAS personnel are trained to securely handle patent information and to understand their responsibilities for protecting patents.

As part of system development and risk management framework, systems have been developed and security controls implemented taking into the consideration information types that are being processed and stored on the system. Information system usage is regularly monitored through system audit logs. Only authorized system users have access to PII information stored within the applications. All data transmitted is protected by using FIPS 140-2 complaint system encryption.

Section 9: Privacy Act

9.1   Indicate whether a system of records is being created under the Privacy Act, 5 U.S.C.
§ 552a. *(A new system of records notice (SORN) is required if the system is not covered by an existing SORN).*
As per the Privacy Act of 1974, "the term 'system of records' means a group of any records under the control of any agency from which information is retrieved by the name of the individual or by some identifying number, symbol, or other identifying particular assigned to the individual."

☒	Yes, this system is covered by an existing system of records notice (SORN). Provide the SORN name and number *(list all that apply)*: Since this is not a system of records, the record control schedule identified under the COMMERCE/PAT-TM-7 Patent Application Files Systems of Records would apply. http://www.uspto.gov/sites/default/files/sorn/uspto-pasorn-07.pdf
☐	Yes, a SORN has been submitted to the Department for approval on (date).
☐	No, a SORN is not being created.

Section 10: Retention of Information

10.1 Indicate whether these records are covered by an approved records control schedule and monitored for compliance. *(Check all that apply.)*

☐	There is an approved record control schedule. Provide the name of the record control schedule:
☒	No, there is not an approved record control schedule. Provide the stage in which the project is in developing and submitting a records control schedule:
☐	Yes, retention is monitored for compliance to the schedule.
☒	No, retention is not monitored for compliance to the schedule. Provide explanation: This is not required per the contract

10.2 Indicate the disposal method of the PII/BII. *(Check all that apply.)*

Disposal			
Shredding	☒	Overwriting	☒
Degaussing	☐	Deleting	☒
Other (specify): **PDCap**: Any hard copy that is received as part of the patent application process and is to be disposed of by Reed Tech is shredded. Electronic data is deleted or overwritten depending on the point in the information lifecycle that the data is being disposed. **PAAS**: Data is deleted or overwritten depending on the point in the information lifecycle that the data is being disposed.			

Section 11: NIST Special Publication 800-122 PII Confidentiality Impact Levels

11.1 Indicate the potential impact that could result to the subject individuals and/or the organization if PII were inappropriately accessed, used, or disclosed.

☐	Low – the loss of confidentiality, integrity, or availability could be expected to have a limited adverse effect on organizational operations, organizational assets, or individuals.
☒	Moderate – the loss of confidentiality, integrity, or availability could be expected to have a serious adverse effect on organizational operations, organizational assets, or individuals.

	High – the loss of confidentiality, integrity, or availability could be expected to have a severe or catastrophic adverse effect on organizational operations, organizational assets, or individuals.
☐	

11.2   Indicate which factors were used to determine the above PII confidentiality impact levels. *(Check all that apply.)*

☐	Identifiability	Provide explanation:
☐	Quantity of PII	Provide explanation:
☒	Data Field Sensitivity	Provide explanation: PDCap: The PDCap system contains PII/BII data that is individually traceable. PAAS: This is not applicable to PAAS, since the PII/BII data collected in that system is not individually traceable.
☐	Context of Use	Provide explanation:
☒	Obligation to Protect Confidentiality	Provide explanation: For PDCap and PAAS: Reed Tech is contractually obligated to protect the confidentiality of the data.
☒	Access to and Location of PII	Provide explanation: PDCap: The PII/BII data collected by the USPTO is transferred to Reed Tech. While it is at Reed Tech, that data is accessible by individuals not directly employed by the USPTO. PAAS: This is not applicable to PAAS, since the PII/BII data collected in that system is not individually traceable.
☐	Other:	Provide explanation:

Section 12: Analysis

12.1   Indicate whether the conduct of this PIA results in any required business process changes.

☐	Yes, the conduct of this PIA results in required business process changes. Explanation:
☒	No, the conduct of this PIA does not result in any required business process changes.

12.2   Indicate whether the conduct of this PIA results in any required technology changes.

☐	Yes, the conduct of this PIA results in required technology changes. Explanation:
☒	No, the conduct of this PIA does not result in any required technology changes.