Privacy Impact Assessment

Patent Capture and Processing System-Initial Processing

(PCAPS-IP)

PTOP-006-00

July 10, 2015
This Privacy Impact Assessment (PIA) is a requirement of the Privacy Act of 1987 and OMB Memorandum 03-22, OMB Guidance for Implementing the Privacy Provisions of the E-Government Act of 2002. A PIA documents the due diligence and oversight placed upon information associated with the project or system in question. Written from the System Owner’s perspective for the American public, the PIA discloses what information is being collected, and how that information is protected. The intent is to build confidence that privacy information is secure, processes that utilize this information comply with Federal requirements, and more importantly, inform the privacy expectations of the American public.

The Privacy Threshold Analysis (PTA) is a separate artifact that must be completed prior to beginning this PIA. In many cases, the PTA will be the only required artifact to satisfy DOC privacy considerations.
The Patent Capture and Application Processing System - Initial Processing (PCAPS-IP) provides multiple applications that allow the submission, categorization, metadata capture, and Patent examiner assignment of Patent applications from internal and external customers of the USPTO. It supports the Patent Business Function of USPTO.

PCAPS-IP resides within the USPTO Data Center located on the third floor of Madison East Facility, 600 Dulany Street, Alexandria, Virginia, 22314.

The PCAPS-IP is a major Application (MA) that provides the following services or functions in support of USPTO mission:

**Application Routing Tool (ART)**

ART is an automated patent application processing support system that provides a suggested routing location for new patent applications that have been successfully scanned into the PASS Database. ART uses the Bibliographic Retrieval Service (BRS) Query by Example (QBE) technology to provide a recommended group art unit (GAU) location, class and subclass for routing pending patent applications that have been successfully scanned into the PASS database. For each application, ART searches the text of the background, summary of the invention, and abstract for certain keywords and compares the frequency of those keywords to already published patents. A score is generated, by classification, for how many times the keywords are found within an application that were also found in published patents. The classification with the highest number of hits is used to determine a tentative classification for routing.

<table>
<thead>
<tr>
<th>Customer Group(s)</th>
<th>User Information</th>
<th>Approximate Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>USPTO SPEs/Routers</td>
<td>USPTO employees</td>
<td>1000-1500</td>
</tr>
<tr>
<td>Office of Initial Patent Examination</td>
<td>USPTO employees</td>
<td>1-3</td>
</tr>
<tr>
<td>USPTO System Development/Maintenance</td>
<td>ART Project Team/Contractors</td>
<td>30</td>
</tr>
<tr>
<td>Managers, Developers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Checker**

The Checker system provides the United States Patent and Trademark Office (USPTO) with a state-of-the-art C++/Microsoft Foundation Classes (MFC) based software program that employs a logical and intuitive user interface.

The Checker application enables public users to check sequence listings before submission to the USPTO. The Checker system validates patent applications in compliance with 37 Code of Federal Regulations (CFR) 1.821 – 1.825 for both ‘old rules’ (October 1990) and ‘new rules’ (July 1998. The Checker system was designed for use by the general public and is not used internally by the United States Patent and Trademark Office (USPTO). The Checker installer can be downloaded from the public USPTO Web server and installed on personal computers running the Windows operating system. Checker does not facilitate the delivery of sequence listings to the USPTO, and Checker does not connect to USPTO computers in any form. The Checker executable runs locally on the user’s computer.
EAI Hub

The EAI Hub is a scalable, robust, and extensible system that enables the United States Patent and Trademark Office (USPTO) to model and automate business processes at the enterprise level. The EAI Hub supports the USPTO’s e-Government strategy and provides a framework for various loosely coupled AISs to share information and services across their heterogeneous environments with minimal or no changes to the existing applications.

The EAI Hub system supports the key functions of asynchronous message routing, data transformation, data types-transformation, message filtering and restructuring to fit the needs of various applications, and data format conversions such as Extensible Markup Language (XML), Portable Document Format (PDF, and Tagged Image File Format (TIFF).

Electronic Filing System- Web (EFS-Web)

EFS-Web is a Web-Based application that provides a simple, safe and secure method for E-filers to file a patent application and submit documents as Portable Document Format (PDF) or text files to the USPTO over the internet.
**Patent Application Services and Security (PASS)**

The PASS system provides the capability to use electronic images of patent applications to support USPTO operations. The PASS system was previously identified as Patent Application Capture and Review (PACR). PASS supports two user groups: the Office of Initial Patent Examination (OIPE) and the Licensing and Review (L&R) Group. PASS provided OCR, data extraction and verification, security screening, and application viewing, DTSA CD generation, PGPub, Grant tape publication, and East Data Center (EDC) exports.

### PASS System Access Groups

<table>
<thead>
<tr>
<th>Customer Group(s)</th>
<th>User Information</th>
<th>Approximate Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent applicants</td>
<td>public</td>
<td>11000+</td>
</tr>
<tr>
<td>Office of Initial Patent Examination</td>
<td>N/A</td>
<td>100+</td>
</tr>
</tbody>
</table>

**PatentIn**

PatentIn is a self-contained downloadable application that allows patent applicants to generate nucleic and amino acid sequence listings. PatentIn provides automated validation and error checking mechanisms. This enables users to use a sequence editor to enter or import existing sequences manually, while configuring each sequence according to a specific feature attribute. The application fully complies with World Intellectual Property Organization (WIPO) Standard ST.25 Sequence Listing Requirements. The PatentIn system was designed for use by the general public and is not used internally by the USPTO. PatentIn is downloaded from the public USPTO Web server and installed on personal computers running the MS Windows OS. The user generates output files containing sequence listings that can be submitted with a patent application. PatentIn is a stand-alone application and does not facilitate the delivery of sequence listings to the USPTO. In addition, PatentIn does not connect to USPTO. The PatentIn application runs locally on the user’s personal computer.

### PatentIn System Access Groups

<table>
<thead>
<tr>
<th>Customer Group(s)</th>
<th>User Information</th>
<th>Approximate Number of Users</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patent Applicants</td>
<td>Public</td>
<td>Unlimited</td>
</tr>
</tbody>
</table>

**Patent Application Location Monitoring Pre-Examination (PALM Pre-Exam)**

The PALM Pre-Exam, as identified as PALM Pre-Ex, system supports the prosecution and related administrative functions of a patent application through its life cycle; and also tracks, monitors, and reports on the prosecution status of patent applications. PALM Pre-Exam supports the processing of over 350,000 applications each year. PALM serves the needs of over 5,000 Office of Patents staff, including over 3,700 members of the patent examining corps. The examining corps processes over twelve million transactions per month in addition to Web-based queries and batch processing.
### PALM Pre-Exam System Access Groups

<table>
<thead>
<tr>
<th>Customer Group(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>OIPE</td>
<td>USPTO Employees</td>
<td>150</td>
</tr>
<tr>
<td>Patent Examiners</td>
<td>USPTO Employees</td>
<td>100</td>
</tr>
<tr>
<td>PGPub Users</td>
<td>USPTO Employees</td>
<td>40</td>
</tr>
<tr>
<td>RTIS Contractors</td>
<td>Contractors</td>
<td>50</td>
</tr>
<tr>
<td>Pre-Exam Users</td>
<td>USPTO Employees</td>
<td>15</td>
</tr>
</tbody>
</table>


The PCT Ops also referred as PCT Operations Workflow and Electronic Review System (POWER), system is a USPTO Automated Information System (component) designed to support an automated, workflow-driven, client-server environment that support Patent Cooperation Treaty (PCT) patent application functions. PCT Ops works with an electronic application in an integrated desktop environment. The PCT Ops system minimizes the movement of paper through the United States Receiving Office (RO/US) processing stream and automates the application filing process under Chapter I and Chapter II of the PCT. The PCT Ops system supports the initial receipt of an application or later-submitted papers, review of the application by PCT personnel, generation of outgoing correspondence, and tracking of the application while it is being processed by RO/US. Case files ultimately provide information in an electronic medium that facilitates exchange with PCT Operations’ principal internal customer, the USPTO Examining Corps, as well as with the WIO, Trilateral Office partners, and the other international partners of USPTO.

### PCT-Ops System Access Groups

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</tr>
</thead>
<tbody>
<tr>
<td>Patent Office (PCT Legal, PASS, Supervisors)</td>
<td>USPTO Employees</td>
<td>150</td>
</tr>
<tr>
<td>PCTBDE (User directly enters data-authenticated via LDAP)</td>
<td>USPTO Employees</td>
<td>20</td>
</tr>
<tr>
<td>Administrators</td>
<td>PCT Ops Admin</td>
<td>-</td>
</tr>
</tbody>
</table>

### Patent Application Location Monitoring - Reporting System (PRS)

The PRS produces many productivity and statistical reports that are crucial to the Patents Corps business operation. The PRS processes and delivers reports to Patents Corp, supporting various PALM subsystems and business areas, including: PALM-EXPO, Pre-Exam, File Ordering System (FOS), Infrastructure, and PCT Ops. These reports are available via the USPTO Intranet on-line and on-demand to over 5,000 Examiners, Directors, Supervisory Patent Examiners (SPEs), and Clerical staff. The reports are delivered via different means. Static
reports are made available electronically on the Web. Dynamic reports are accessible via the USPTO intranet (online) and allow real-time database access for most up-to-date information via the Web; and report distribution via email. PRS provides PALM users (over 7000 examiners, 500 managers, and over 100 other users) with access to PALM data via COTS reporting platform. Most of the reports obtain data from a daily snapshot of the PALM on-line system. The reports can be scheduled to run at a predefined time or display data instantaneously. The scheduled reports are archived. Access to archive and inputs for instantaneous reports are provided via a USPTO Intranet website.

### PRS System Access Groups

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<th>Customer Group(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Patent Examiners</td>
<td>USPTO Employees</td>
<td>7000</td>
</tr>
<tr>
<td>Special Patent Examiners</td>
<td>USPTO Employees</td>
<td>500</td>
</tr>
<tr>
<td>Directors and Analysts</td>
<td>USPTO Employees</td>
<td>70-100</td>
</tr>
</tbody>
</table>

### Infrastructure Code Table – (ICT)

The ICT system provides the validation of a given geographic region with a specified country, and provides a list of current countries and geographic regions. ICT provides the standard PTO country codes for patent applications. For ICT services, the users are AISs instead of real users. No traditional user interfaces are required in this release.
1. What information is collected (e.g., nature and source)?

Some patent applications collect Some Patents applications require Business or Individual Name, Address, Telephone number, Nationality and email address.

2. Why is this information being collected (e.g., to determine eligibility)?

To provide a comprehensive prior art search capability and the retrieval of patent and related information for dissemination to the public based on requirements stated in USC statutory code 35 U.S.C. Section 122.

3. What is the intended use of information (e.g., to verify existing data)?

To provide user access to search the USPTO Patent data repositories, which allows Patent Examiners and public users to search and retrieve application data and images, Patents examiners and applicants to identify individuals and organizations with intellectual property, pre-grant, and published applications.

4. With whom will the information be shared (e.g., another agency for a specified programmatic purpose)?

Data repositories allows information to be shared with internal stakeholders (e.g. patent examiners), and to the public.

5. What opportunities do individuals have to decline to provide information (i.e., where providing information is voluntary) or to consent to particular uses of the information (other than required or authorized uses), and how can individuals grant consent?

There is no opportunity to opt out or consent to particular user of information.

6. How will the information be secured (e.g., administrative and technological controls)?

Refer to the SSP for all NIST 800-53 controls in place

Management Controls:

1. The USPTO uses the Life Cycle review process to ensure that management controls are in place for the PCAPS-IP. During the enhancement of any component, the security controls are reviewed, re-evaluated, and updated in the Security Plan. The Security Plans specifically address the management, operational and technical controls that are in place, and planned, during the operation of the enhanced system. Additional management controls include performing national agency check on all personnel, including contractor staff.

2. The USPTO Personally Identifiable Data Extracts Policy

Operational Controls:

1. Automated operational controls include securing all hardware associated with the PCAPS-IP in the USPTO Data Center. The Data Center is controlled by access card entry, and is manned by a uniformed guard service to restrict access to the servers, their Operating Systems and databases. Contingency planning has been prepared for the data. Backups are performed on the processing
databases. Backups are stored on tape and are secured off-site. Additional operation controls include: (1) Logical edit checks to ensure proper sequence of actions; (2) Physical terminal identification; (3) Database User ID; (4) Restricted data display, as required; and (5) Restricted access.

2. Manual procedures shall be followed for handling extracted data containing sensitive PII which is physically transported outside of the USPTO premises. In order to remove data extracts containing sensitive PII from USPTO premises, users must:
   a. Maintain a centralized office log for extracted datasets that contain sensitive PII. This log must include the date the data was extracted and removed from the facilities, a description of the data extracted, the purpose of the extract, the expected date of disposal or return, and the actual date of return or deletion.
   b. Ensure that any extract which is no longer needed is returned to USPTO premises or securely erased, and that this activity is recorded on the log.
   c. Obtain management concurrence in the log, if an extract aged over 90 days is still required.
   d. Store all PII data extracts maintained on an USPTO laptop in the encrypted My Documents directory. This includes any sensitive PII data extracts downloaded via the USPTO Virtual Private network (VPN).
   e. Encrypt and password-protect all sensitive PII data extracts maintained on a portable storage device (such as CD, memory key, flash drive, etc.). Exceptions due to technical limitations must have the approval of the Office Director and alternative protective measures must be in place prior to removal from USPTO premises.

7. How will the data extract log and verify requirement be met?
   USPTO has not developed a centralized logging system for PII data extracts. Such a system would track the following categories of information:
   a. Who performed the extract,
   b. When extract was done,
   c. What was the extract,
   d. Where was the extract taken from,
   e. Has the extract been deleted and,
   f. If not deleted after 90 days, to monitor that it is still needed in 90 day intervals.

Until a system is implemented, USPTO is using the following compensating controls to protect PII data:
   a. No extracts of sensitive data may be copied on to portable media without a waiver approved by the DOC CIO. The request for a waiver must include specifics as to how the data and device are protected, how long the data will be maintained, and how the data on the device will be deleted when no longer required.
   b. All laptop computers allowed to store sensitive data must have full disk encryption.
   c. All remote access to public USPTO systems containing sensitive data must be encrypted. All remote access to internal USPTO systems containing sensitive data must fully comply with DoC Remote Access Policy requirements.
   d. All flexi place/telework agreements for working off site require that adequate data protection be in place.
8.  Is a system of records being created under the Privacy Act, 5 U.S.C. 552a?

   A system of records has been created for Patent Application Files and USPTO PKI Registration and Maintenance System.

   Source: http://www.uspto.gov/web/doc/privacy_sorn.htm


9.  Are these records covered by a record control schedule approved by the National Archives and Records Administration (NARA)?

   No.  GRC 20 allows agency determination that certain electronic records are authorized for erasure or deletion when they are no longer needed for administrative, legal, audit, or other operational purposes. Electronic records that represent hard copy records can be deleted after expiration of the retention period authorized for the hard copy records.
Agreed: William Stryjewski  
Information System Owner  

Agreed: John Pardun  
Senior Information Security Officer  

Agreed: John B. Owens II  
Co-Authorizing Official  

Agreed: Andrew I. Faile  
Co-Authorizing Official