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



Privacy Impact Assessment for the Flatirons Solutions Corporation Edge Patent Data and Document **Management System (FSC Edge)**

Reviewed by: Henry J. Holcombe, Bureau Chief Privacy Officer

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

Users, Holcombe, Henry Digitally signed by Users, Holcombe, Henry Date: 2023.08.18 14:08:53 -04'00'

U.S. Department of Commerce Privacy Impact Assessment USPTO Flatirons Solutions Corporation Edge Patent Data and Document Management System (FSC Edge)

Unique Project Identifier: PTOC-066-00

Introduction: System Description

Provide a brief description of the information system.

The Flatirons Solutions Corporation Edge Patent Data and Document Management System (FSC Edge) system is focused on processing, transmitting, and storing data and images supporting the data-capture and conversion requirements of the USPTO patent application process. FSC Edge hosts and manages the system and is required to process and deliver applications into an electronic format, including all text, graphics, artwork, drawings, etc., and composed and formatted to USPTO specifications for delivery back to USPTO. To accomplish the activities, FSC Edge uses software in the Jouve Patent Processing Solution (JPPS).

Address the following elements:

(a) Whether it is a general support system, major application, or other type of system FSC Edge is a cloud-based Infrastructure as a Service (IaaS) system.

(b) System location

The JPPS instances will reside in the Federal Risk and Authorization Management (FedRAMP)-authorized Amazon Web Services (AWS) East Region. Physical documentation will be processed and managed within the FSC Edge National Capital Region (NCR) facility in Landover, Maryland.

(c) Whether it is a standalone system or interconnects with other systems (identifying and describing any other systems to which it interconnects)

There is no direct connection with the USPTO systems. Operators will have two systems, a JPPS workstation and a Government Furnished Equipment (GFE) PTONet workstation, on physically separated networks. Connection is done through a virtual private network (VPN).

- (d) The way the system operates to achieve the purpose(s) identified in Section 4
 FSC Edge uses the JPPS system to ensure patent application publications are in accordance with USPTO Technical References required formats.
- (e) How information in the system is retrieved by the user

The user retrieves information in the system after the patent applications are electronically exported to the FSC Edge system via a USPTO-Axway Secure Transport. Every application is then examined by FSC Edge's proprietary system, which breaks down each page into separate sections, such as graphics and text. Each section is then sent to separate directories on the FSC Edge network for manipulation by the different departments dedicated to text, headers, and complex work units such as math, chemistry, and drawings.

- (f) How information is transmitted to and from the system
 Patent applications and application contents are sent to and from the FSC Edge system via
 USPTO-Axway Secure Transport.
- (g) Any information sharing Information gathered as part of the FSC Edge system is only shared with subcontractors to perform their responsibilities. Subcontractors are contractually prohibited from sharing information provided to them as part of the FSC Edge contract. For all ssubcontractors' encrypted information is transferred to them via a VPN.
- (h) The specific programmatic authorities (statutes or Executive Orders) for collecting, maintaining, using, and disseminating the information
 Leahy-Smith America Invents Act, E-Government Act, and Open Government Data Act are the programmatic authorities.
- (i) The Federal Information Processing Standards (FIPS) 199 security impact category for the system

 Moderate

Section 1: Status of the Information System

Indicate whether the inf	ormatic	on system is a new or ex	xistin	g system.	
☐ This is a new information	n systen	n.			
☐ This is an existing inform	nation s	ystem with changes tha	at cre	ate new privacy risks. (C	Check
all that apply.)					
Changes That Create New P	rivacy R	isks (CTCNPR)			
a. Conversions		d. Significant Merging		g. New Interagency Uses	
b. Anonymous to Non-		e. New Public Access		h. Internal Flow or	
Anonymous				Collection	
c. Significant System		f. Commercial Sources		i. Alteration in Character	
Management Changes				of Data	
j. Other changes that create n	ew priva	cy risks (specify):	-	•	-
		_			•

☐ This is an existing information system in which changes do not create new privacy risks,

and there is not a SAOP approved Privacy Impact Assessment.

⊠ This is an existing information system in which changes do not create new privacy risks, and there is a SAOP approved Privacy Impact Assessment.

Section 2: Information in the System

Identifying Numbers (IN)

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

a. Social Security*		1. Driver's License		J. Financial Account	\boxtimes
b. TaxpayerID		g. Passport		k. Financial Transaction	
c. EmployerID		h. Alien Registration		l. Vehicle Identifier	
d. Employee ID		i. Credit Card	\boxtimes	m. MedicalRecord	
e. File/Case ID	\boxtimes				
n. Other identifying numbers	(specif	ŷ):			
*Explanation for the business truncated form:	needto	o collect, maintain, or disseminat	e the S	ocial Security number, including	2
General Personal Data (GPI					
a. Name	\boxtimes	h. Date of Birth		o. FinancialInformation	\boxtimes
b. Maiden Name		i. Place of Birth		p. MedicalInformation	
c. Alias		j. Home Address	\boxtimes	q. Military Service	
d. Gender	\boxtimes	k. Telephone Number	\boxtimes	r. CriminalRecord	
e. Age		l. Email Address	\boxtimes	s. MaritalStatus	
f. Race/Ethnicity		m. Education	\boxtimes	t. Mother's Maiden Name	
g. Citizenship	\boxtimes	n. Religion			
u. Other general personal dat	a (spec	eify):			
Work-Related Data (WRD)					
a. Occupation	\boxtimes	e. Work Email Address	\boxtimes	i. Business Associates	
b. Job Title	\boxtimes	f. Salary		j. Proprietary or Business Information	\boxtimes
c. Work Address	\boxtimes	g. Work History		k. Procurement/contracting records	
d. Work Telephone Number		h. Employment Performance Ratings or other Performance Information			
1. Other work-related data (s	pecify				

Distinguishing Features/Bio	metric	S(DFB)					
a. Fingerprints		f. Scars, Marks, Tattoos		k. Signatures	\boxtimes		
b. Palm Prints		g. HairColor		1. Va scular Scans			
c. Voice/Audio Recording		h. Eye Color		m. DNA Sample or Profile			
d. Video Recording		i. Height		n. Retina/Iris Scans			
e. Photographs		j. Weight		o. Dental Profile			
p. Other distinguishing features/biometrics (specify):							
System Administration/Aud	it Do to	(CAAD)					
a. User ID		c. Date/Time of Access	\boxtimes	e. IDFiles Accessed	\boxtimes		
b. IP Address		f. Queries Run		f. Contents of Files			
		`	\boxtimes	1. Contents of thes			
g. Other system a dministrati	om auc	in and (spoony).					
Directly from Individual about In Person Telephone		BII in the system. (Check nom the Information Pertains Hard Copy: Mail/Fax Email		at apply.) Online			
Directly from Individual about In Person Telephone Other(specify):		nom the Information Pertains Hard Copy: Mail/Fax					
Directly from Individual about In Person Telephone	out Wh	nom the Information Pertains Hard Copy: Mail/Fax		Online			
Directly from Individual about In Person Telephone Other (specify): Government Sources Within the Bureau		Hard Copy: Mail/Fax Email Other DOC Bureaus					
Directly from Individual about In Person Telephone Other(specify): Government Sources	out Wh	nom the Information Pertains Hard Copy: Mail/Fax Email		Online			
Directly from Individual about In Person Telephone Other (specify): Government Sources Within the Bureau State, Local, Tribal	out Wh	Hard Copy: Mail/Fax Email Other DOC Bureaus		Online			
Directly from Individual about In Person Telephone Other (specify): Government Sources Within the Bureau State, Local, Tribal	out Wh	Hard Copy: Mail/Fax Email Other DOC Bureaus		Online			
Directly from Individual about In Person Telephone Other(specify): Government Sources Within the Bureau State, Local, Tribal Other(specify):	out Wh	Hard Copy: Mail/Fax Email Other DOC Bureaus		Online			
Directly from Individual about In Person Telephone Other(specify): Government Sources Within the Bureau State, Local, Tribal Other(specify): Non-government Sources		Other DOC Bureaus Foreign		Online Other Federal Agencies			

2.3 Describe how the accuracy of the information in the system is ensured.

FSC Edge system allows patent applicants to update their PII/BII at any time by filing the appropriate forms with the USPTO. The USPTO, in turn, forwards the updated information to FSC Edge as part of standard business processes and the updated PII/BII information would be reflected in the next deliverable to the USPTO. Mandatory IT awareness and role-based training is required for staff who have access to the system and address how to handle, retain, and dispose of data. All access has role-based restrictions and individuals with privileges have undergone vetting and suitability screen to ensure the information is not corrupted and remains accurate. The USPTO maintains an audit trail and performs random, periodic reviews (quarterly) to identify unauthorized access and changes as part of verifying the integrity of administrative account holder data and roles. Inactive accounts will be deactivated, and roles will be deleted from the application. Which will assist in ensuring the information remains accurate by preventing corruption of the system from unauthorized

\boxtimes	Yes, the information is covered by the Paperwork Reduction Act.
	Provide the OMB control number and the a gency number for the collection.
	0651-0020, Patent Term Extension; 0651-0031, Patent Processing; 0651-0032, Initial Patent
	Applications; 0651-0059, Patent Petitions Related to Application and Reexamination Processing Fees;
	0651-0070, Fee Deficiency Submissions; 0651-0071, Matters Relating to First Inventor to File
	No, the information is not covered by the Paperwork Reduction Act.

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 co	ntain P	II/BII in ways that have not been previously deploy	ed.		

Section 3: System Supported Activities

 \boxtimes

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): Click or tap here to enter text.			
☐ There are not any IT system supported a ctiv	ities w	hich 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			
For a Computer Matching Program		For a dministering human resources programs	
For administrative matters	\boxtimes	To promote information sharing initiatives	\boxtimes
For litigation		For criminal law enforcement activities	
For civil enforcement activities		For intelligence activities	
To improve Federal services online	\boxtimes	For employee or customer satisfaction	\boxtimes
For web measurement and customization technologies (single-session)		For web measurement and customization technologies (multi-session)	
Other(specify):	-		

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).

The system includes information from DOC employees, contractors working on behalf of DOC, other federal government personnel, foreign nationals, private companies and members of the public.

PII/BII is collected and maintained in this system to facilitate the processing of patent applications. The PII/BII comes from persons applying for patents through the USPTO. The information is used to promote information sharing initiatives, administrative matters and improving federal services online by providing a means for information to be ingested and processed in an easily accessible format.

5.2 Describe any potential threats to privacy, such as insider threat, as a result of the bureau's/operating unit's use of the information, and controls that the bureau/operating unit has put into place to ensure that the information is handled, retained, and disposed appropriately. (For example: mandatory training for system users regarding appropriate handling of information, automatic purging of information in accordance with the retention schedule, etc.)

In the event of computer failure, insider threats, or attack against the system by adversarial or foreign entities, any potential PII data stored within the system could be exposed. To avoid a breach, the system has certain security controls in place to ensure that information is handled, retained, and disposed of appropriately. Access to individual's PII is controlled through the application, and all personnel who access the data must first authenticate to the system at which time an audit trail is generated when the database is accessed. These audit trails are based on application server out-of-the-box logging reports reviewed by the Information System Security Officer (ISSO) and System Auditor and any suspicious indicators such as browsing will be immediately investigated and appropriate action taken. Also, system users undergo annual mandatory training regarding appropriate handling of information. Controls listed in 6.3 will be added here.

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	Но	w Information will be S	hared
Recipient	Case-by-Case	Bulk Transfer	Direct Access
Within the bureau		\boxtimes	\boxtimes
DOC bureaus			
Federal a gencies			
State, local, tribal gov't agencies			
Public			
Private sector			
Foreign governments			
Foreign entities			
Other(specify):			

	☐ The PII/BII in the system will not be shared.
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6.2 Does the DOC bureau/operating unit place a limitation on re-dissemination of PII/BII shared with external agencies/entities?

	Yes, the external a gency/entity is require dissemination of PII/BII.	ed to verif	y with the DOC bureau/operating unit before re-	
	dissemination of PII/BII.		erify with the DOC bureau/operating unit before re-	
\boxtimes	No, the bureau/operating unit does not si	hare PH/B	II with external a gencies/entities.	
	Indicate whether the IT system consystems authorized to process PII a		th or receives information from any other?	ΙΤ
	process PII and/or BII.		mation from a nother IT system(s) a uthorized to e technical controls which prevent PII/BII lea kage:	
\boxtimes	No, this IT system does not connect with process PII and/or BII.	h or receiv	e information from a nother IT system(s) authorized	d to
	Identify the class of users who will all that apply.)	have ac	cess to the IT system and the PII/BII. (Che	eck
	ss of Users			
	era l Public		Government Employees	\boxtimes
	tractors	\boxtimes		
Othe	er(specify):			
7.1	disseminated by the system. (Chec	ck all tha		or
	discussed in Section 9.		ords notice published in the Federal Register and	
	discussed in Section 9.	t statemen	tand/or privacy policy. The Privacy Act statement	
	discussed in Section 9. Yes, notice is provided by a Privacy Act	t statemen	tand/orprivacy policy. The Privacy Act statement w.uspto.gov/privacy-policy	
\boxtimes	discussed in Section 9. Yes, notice is provided by a Privacy Act and/or privacy policy can be found at: h	t statemen	tand/orprivacy policy. The Privacy Act statement w.uspto.gov/privacy-policy	

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:
No, individuals do not have an opportunity to decline to provide PII/BII.	Specify why not: Applicants could only decline to provide PII/BII by declining to continue with the application process. Patent applicants are informed that their PII/BII information will become public as part of the patent process. This notification is provided to the patent applicant by the USPTO upon filing/submission of patent application. This process is established via other frontend systems that supply information to FSC Edge system.

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: Patentapplicants are informed that their PII/BII information will become public as part of the patent process. The applicants have the opportunity to consent to the uses of their PII/BII by accepting to through with the application process. This process is established via other front-end systems that supply information to FSC Edge system.
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.

\boxtimes	Yes, individuals have an opportunity to	Specify how:
	review/update PII/BII pertaining to	Patent applicants may update their PII/BII at any time by filing
	them.	the appropriate forms with the USPTO. The USPTO, in turn,
		forwards the updated information to FSC Edge as part of
		standard business processes and the updated PII/BII
		information would be reflected in the next deliverable to the
		USPTO.
	No, individuals do not have an	Specify why not:
	opportunity to review/update PII/BII	
	pertaining to them.	

Section 8: Administrative and Technological Controls

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

\boxtimes	All users signed a confidentiality a greement or non-disclosure agreement.
	All users are subject to a Code of Conduct that includes the requirement for confidentiality.
\boxtimes	Staff (employees and contractors) received training on privacy and confidentiality policies and practices.
\boxtimes	Access to the PII/BII is restricted to a uthorized personnel only.

\boxtimes	Access to the PII/BII is being monitored, tracked, or recorded.
	Explanation: Access to specific documents is controlled via AWS Role Based Access Control (RBAC), Identity and Access Management (IAM) and uses Multifactor Authentication (MFA).
	7.00055 With hage mont (17.101) and asses with the out 7.14th encounter (1011.71).
\boxtimes	The information is secured in a ccordance with the Federal Information Security Modernization Act (FISMA) requirements.
	Provide date of most recent Assessment and Authorization (A&A): 6/13/2023
	☐ This is a new system. The A&A date will be provided when the A&A package is approved.
\boxtimes	The Federal Information Processing Standard (FIPS) 199 security impact category for this system is a moderate or higher.
\boxtimes	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 (POA&M).
\boxtimes	A security assessment report has been reviewed for the information system and it has been determined that there are no additional privacy risks.
\boxtimes	Contractors that have a ccess to the system are subject to information security provisions in their contracts required by DOC policy.
	Contracts with customers establish DOC ownership rights over data including PII/BII.
\boxtimes	Acceptance of lia bility for exposure of PII/BII is clearly defined in a greements with customers.
	Other(specify):

8.2 Provide a general description of the technologies used to protect PII/BII on the IT system. (Include data encryption in transit and/or at rest, if applicable).

PII within FSC Edge system is secured using appropriate management, operational, and technical safeguards in accordance with NIST requirements. Such management controls include the life cycle review process to ensure that management controls are in place and documented in the System Security Privacy Plan (SSPP). The SSPP specifically addresses the management, operational, and technical controls that are in place and planned during the operation of the system. Operational safeguards include restricting access to PII/BII data to a small subset of FSC Edge users. All access has role-based restrictions and individuals with access privileges have undergone vetting and suitability screening. Data is maintained in areas accessible only to authorize personnel. FSC Edge system maintains an audit trail and the appropriate personnel is alerted when there is suspicious activity. Data is encrypted in transit and at rest.

Section 9: Privacy Act

9.1	Is the PII/BII searchable by a personal identifier (e.g, name or Social Security number)		
	\boxtimes	Yes, the PII/BII is searchable by a personal identifier.	
		No, the PII/BII is not searchable by a personal identifier.	

9.2 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."

\boxtimes	Yes, this system is covered by an existing system of records notice (SORN). Provide the SORN name, number, and link. (list all that apply):	
	COMMERCE/PAT-TM-7, Patent Application Files	
	COMMERCE/PAT-TM-10, Deposit Accounts and Electronic Funds Transfer Profiles	
	Yes, a SORN has been submitted to the Department for approval on (date).	
	No, this system is not a system of records and a SORN is not applicable.	
Section	<u>n 10</u> : Retention of Information	
10.1 I	In digate whather these records are covered by an approved records central schedule of	nd
	Indicate whether these records are covered by an approved records control schedule as monitored for compliance. (Check all that apply.)	na
1	momored for comphance. (Check an mai apply.)	
\boxtimes	There is an approved record control schedule.	
	Provide the name of the record control schedule:	
	 GRS 5.1, item 020: Non-Recordkeeping Copies of Electronic Records N1-241-10-1:4.4, Patent Administrative Feeder Records 	
	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:	
\boxtimes	Yes, retention is monitored for compliance to the schedule.	
	No, retention is not monitored for compliance to the schedule. Provide explanation:	
10.2 I	Indicate the disposal method of the PII/BII. (Check all that apply.)	
Dispo Shree		\boxtimes
	ussing Deleting	\boxtimes
_	r(specify):	

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

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. (The PII Confidentiality Impact Level is not the same, and does not have to be the same, as the Federal Information Processing Standards (FIPS) 199 security impact category.)

	Low – the loss of confidentiality, integrity, or a vailability could be expected to have a limited adverse
	effect on organizational operations, organizational assets, or individuals.
\boxtimes	Moderate – the loss of confidentiality, integrity, or a vailability could be expected to have a serious
	a dverse effect on organizational operations, organizational a ssets, or individuals.
	High – the loss of confidentiality, integrity, or a vailability 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 level. (Check all that apply.)

	I dontificability	Duarvida avulanation.
\boxtimes	Identifiability	Provide explanation:
		Name, Home Address, Email Address and User Id can easily
		identify a particular individual.
\boxtimes	Quantity of PII	Provide explanation:
		These number may vary based on how many applications are
		received but is in the thousands.
\boxtimes	Data Field Sensitivity	Provide explanation:
	-	FSC Edge: The combination of the information within the data
		fields could make the data fields more sensitive.
\boxtimes	Context of Use	Provide explanation:
		The system helps to package patent applications into an electronic
		format, including all text, graphics, artwork, drawings, etc., that
		are composed and formatted to USPTO specifications for delivery
		back to USPTO
\boxtimes	Obligation to Protect Confidentiality	Provide explanation:
		FSC Edge is contractually obligated to protect the confidentiality
		of the data. This system is governed by The Privacy Act of 1974,
		which prohibits the disclosure of information from a system of
		records absent the written consent of the subject individual unless
		a statutory exception applies.
\boxtimes	Access to and Location of PII	Provide explanation:
		The PII/BII data collected by the USPTO is transferred to FSC
		Edge. While it is at FSC Edge, that data is accessible by
		individuals not directly employed by the USPTO.
	Other:	Provide explanation:
		1

Section 12: Analysis

12.1 Identify and evaluate any potential threats to privacy that exist in light of the information collected or the sources from which the information is collected. Also, describe the choices that the bureau/operating unit made with regard to the type or quantity of information collected and the sources providing the information in order to prevent or mitigate threats to privacy. (For example: If a decision was made to collect less data,

include a discussion of this decision; if it is necessary to obtain information from sources other than the individual, explain why.)

The PII in this system pose a risk if exposed. System users undergo annual mandatory training regarding appropriate handling of information. Physical access to servers is restricted to only a few authorized individuals. The servers storing the potential PII are located in a highly sensitive zones within the cloud and logical access is segregated with network firewalls and switches through an Access Control list that limits access to only a few approved and authorized accounts. USPTO monitors, in real-time, all activities and events within the servers storing the potential PII data and personnel review audit logs received on a regular basis and alert the appropriate personnel when inappropriate or unusual activity is identified.

10.0	Taelini i a		
12.2	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:		
\boxtimes	No, the conduct of this PIA does not result in any required business process changes.		
12.3	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:		
\boxtimes	No, the conduct of this PIA does not result in any required technology changes.		