

UNITED STATES  
PATENT AND TRADEMARK OFFICE



# The examination process

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# Overview

# Production

- Production is a metric for the amount of work that an examiner performs in a specified amount of examining time, which is based on variables such as the Office action count value, expectancy of each application examined, and the examiner's position factor
- Office actions have an associated count value, which ranges between zero and two
- The expectancy of an application is based on the complexity of the subject matter found in the application and has a considerable range
- An examiner's position factor is based on the examiner's experience level, also referred to as general schedule (GS) level or grade

# Docket management

- Docket management provides an objective measure of the timeliness and flow of patent applications through the examination process in accordance with prescribed time periods that are set by USPTO policy
  - For the USPTO:
    - Completes examination of patent applications within statutory time periods
  - For the applicant:
    - Promotes compact prosecution



# Quality

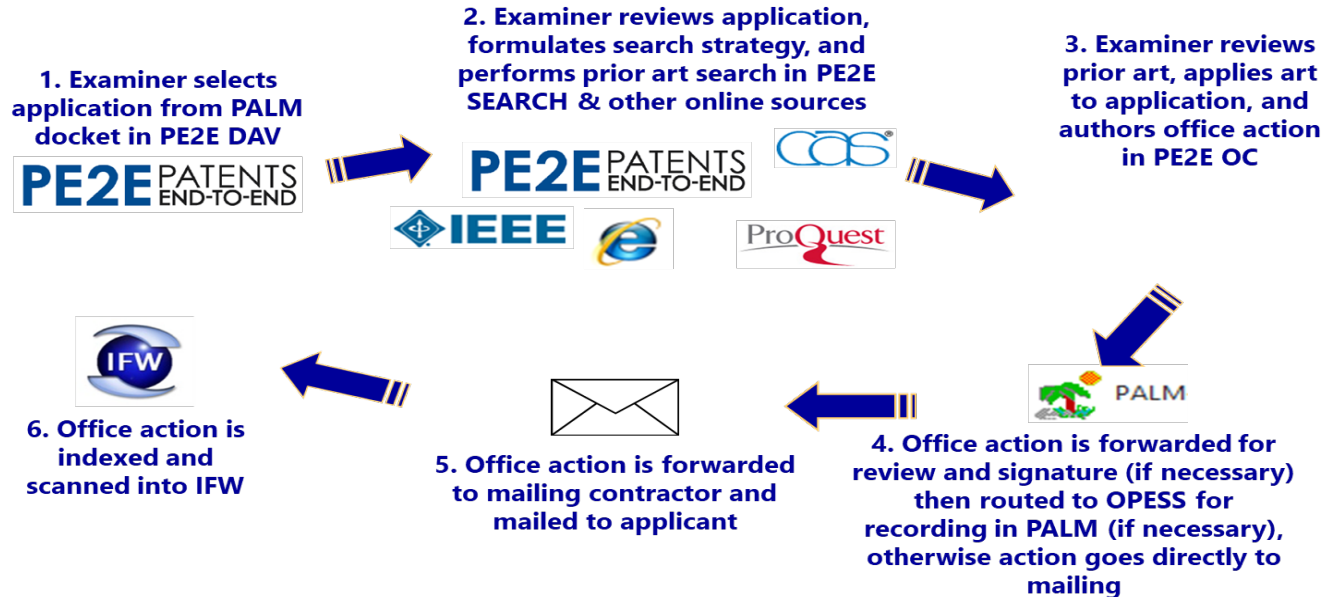
- Office action quality is evaluated based on the extent of compliance with:
  - Applicable statutes, rules, and case law
  - Search and prior art indicia
  - Clarity of the record indicia
  - Compact prosecution indicia

# Indicia

- **Search and prior art**
  - The examiner’s search and the prior art found encompass the inventive concept as defined in the disclosure for the examined invention. The examiner may demonstrate compliance with this indicia when Office actions, or prosecution histories taken as a whole, include some or all of the exemplary activities.
- **Clarity of the record**
  - The examiner’s written prosecution record promotes clarity of the record. The examiner may demonstrate compliance with this indicia when Office actions, or prosecution histories taken as a whole, include some or all of the exemplary activities.
- **Compact prosecution**
  - The examiner’s written prosecution record promotes compact prosecution. The examiner may demonstrate compliance with this indicia when Office actions, or prosecution histories taken as a whole, include some or all of the exemplary activities.



# Simplified patent examination process





# Planning out the biweek

- Prioritize by making a list of applications that must be completed for the current biweek
  - Oldest new case, amended cases, special new cases, and expedited cased
- Other tasks that may be performed during the biweek
  - Training (i.e. legal, technical, interview practice)
  - Meeting with SPE/primary about cases (i.e. search strategy inquiry)
  - Calling applicants for restrictions, interviews, etc.



# Monday morning

- The examiner selects an application from their PALM docket in patents end-to-end (PE2E) Docket and Application Viewer (DAV)
- The examiner reviews the application and learns the invention



# Patents End to End Docket Application Viewer (PE2E-DAV)

- PE2E-DAV provides a single access point to manage examination activities, including viewing the examiner's docket and the contents of an application's file wrapper
- Examiners may access an application by various types of identifiers, including:
  - U.S. patent application number
  - U.S. patent number
  - Patent cooperation treaty (PCT) number
  - Pre-grant publications (PGPUB) number

# PE2E-DAV Demo

Active × Posted Not Credited × Rejected × Completed × Disposals ×

New 12 Amended 2 Special New 0 Returned 0 Expedited 1 All 15 Last Refresh 6/03 1:18:15 PM

Regular Oldest New Exp. Avg 28 Ceiling Days 55  
 RCE Oldest New Exp. Avg 28 Ceiling Days 55

Thumbnail	Title	APP. #	AIA...	Filing Date	DM-Elapsed Days	Days to Exp. Avg	Near Ceiling	D...	DM-Old...	Class/Su...	CPCF	CPC1	C★	Cla...	DM-...	Avl. Count	Adj. Expec...	Avl...
			Yes	04/25/2019	2	26	53		*1	701/446.0...	<a href="#">G01C 21/...</a>	<a href="#">G05T 7/7...</a>	<a href="#">G01C 21/...</a>	8 (1)	Regular	<a href="#">1/1.25/1.5/2/0...</a>	<a href="#">31.00 (CPC)...</a>	<a href="#">19.3</a>
			Yes	04/03/2018						700/245.0...	<a href="#">B25I 9/16...</a>	<a href="#">B25I 9/16...</a>	<a href="#">B25I 9/16...</a>	18 (5)	RCE	<a href="#">1/1.25/1.75/...</a>	<a href="#">30.80 (CPC)...</a>	<a href="#">15.4</a>
			Yes	05/10/2018						701/450.0...	<a href="#">G01C 21/...</a>	<a href="#">G05T 7/5...</a>	<a href="#">G01C 21/...</a>	20 (2)	RCE	<a href="#">1/1.25/1.75/...</a>	<a href="#">31.00 (CPC)...</a>	<a href="#">15.5</a>
			Yes	05/23/2018	2	26	53		*A	700/258.0...	<a href="#">B25I 9/16...</a>	<a href="#">B25I 9/16...</a>	<a href="#">B25I 9/16...</a>	11 (5)	RCE	<a href="#">1/1.25/1.75/...</a>	<a href="#">27.90 (CPC)...</a>	<a href="#">15.0</a>
			Yes	06/11/2018						701/418.0...	<a href="#">G01C 21/...</a>	<a href="#">A62B 99/...</a>	<a href="#">G01C 21/...</a>	17 (3)	RCE	<a href="#">1/1.25/1.75/...</a>	<a href="#">30.60 (CPC)...</a>	<a href="#">15.3</a>
			Yes	08/20/2018					Predicted...	700/255.0...	<a href="#">B25I 9/16...</a>		<a href="#">B25I 9/16...</a>	16 (3)	RCE	<a href="#">1/1.25/1.75/...</a>	<a href="#">31.00 (CPC)...</a>	<a href="#">15.3</a>

# Pre-examination considerations

- Has this application been properly classified and routed?
- Should this application be restricted?



# Understanding the invention and determining claim scope

- An examiner should understand the invention based on the claims and the specification
  - An examiner cannot search effectively if they do not understand the inventive concept or the scope of the claims
  - It is frequently beneficial to take notes on the key concepts of the invention and/or diagram the claims
- At this stage, the examiner should check for claim interpretation issues
  - Determining the broadest reasonable interpretation in light of the specification
  - Ensuring the proper weight is given to claim limitations



# Monday afternoon

The search begins



# Manual of Patent Examining Procedure (MPEP) guidance on search

- A complete and thorough search enables an examiner to get the most pertinent art in each application as early as possible in the prosecution.
- It is rare that a text search alone will constitute a thorough search of patent documents. A combination of text search with other search criteria (e.g., classification) is expected in most technologies. (MPEP 904.02)
- The areas to be searched should be prioritized so that the most likely areas of finding relevant prior art are searched first. (MPEP 904.02(a))
- A proper field of search normally includes the classification locations in which the claimed subject matter of an application would be properly classified at the time of the application's classification or grant of a patent. (MPEP 904.02(a))

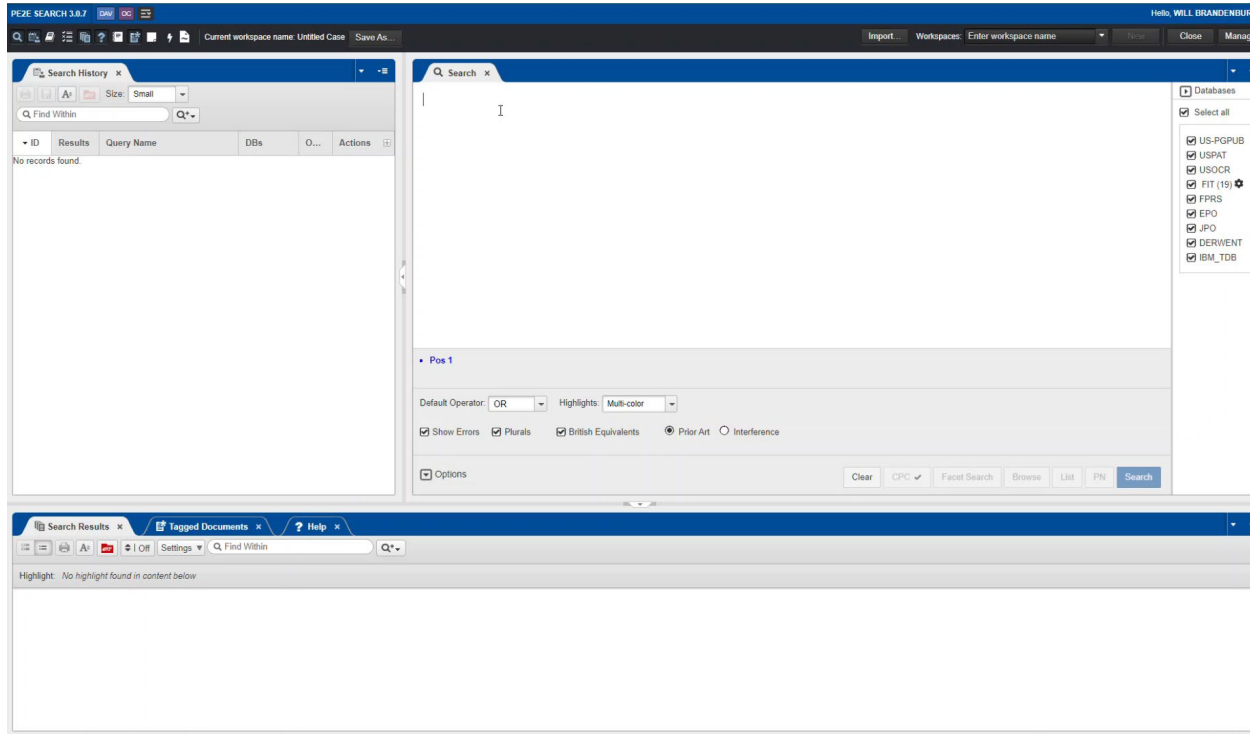


# Other recommended preliminary search activities

- Inventor name searching
- Assignee name searching
- Citation or patent family searching
  - Review the IDS for classification clues in cited references
  - See what art was applied, cited or filed in the United States or elsewhere
  - Look for foreign search reports
- Perform a product/press release search
- Note: The term “applicant” can be used to encompass terms inventor and assignee (See 37 CFR 1.42)



# Search tool demo



# Search tool demo

The screenshot displays the PEIR Search 3.6.7 interface. The top bar shows the user name 'Hello, WILL BHANDENBURG' and workspace information. The main interface is divided into several sections:

- Search History:** A table listing previous searches with columns for ID, Results, Query Name, DBs, and Actions. The current search is highlighted in blue.
- Search Criteria:** A central area showing the search query '1 AND 2 AND 3' and various options like 'Default Operator' (OR), 'Highlights' (Multi-color), and checkboxes for 'Show Errors', 'Plurals', 'British Equivalents', 'Prior Art', and 'Interference'.
- Search Results:** A table at the bottom showing the results of the search, filtered by Family ID (28 families). The table includes columns for Select, Res..., X, Viewed, Document ID, Date Published, Family ID, Pages, Title, and CP.

Select	Res...	X	Viewed	1	2	3	4	5	Document ID	Date Publish...	Family ID	Pages	Title	CP
<input checked="" type="checkbox"/>	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WO 2023091982 A1	2023-05-25		96	SYSTEMS AND METHODS FOR TRUSTWORTHY ELECTRONIC AUTHENTICATION USING A COMPUTING DEVICE	
<input type="checkbox"/>	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 20220272084 A1	2022-08-25	82901109	49	5G-WiFi inside secure iris biometrics' login	H04
<input type="checkbox"/>	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 20200380506 A1	2020-12-03	73549622	17	SYSTEMS AND METHODS FOR FINANCIAL AUTHENTICATION HOTSPOT	H04
<input type="checkbox"/>	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	US 20200351657 A1	2020-11-05	73017051	35	SYSTEMS AND METHODS FOR CRYPTOGRAPHIC AUTHORIZATION OF WIRELESS COMMUNICATIONS	H04
<input type="checkbox"/>	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	CN 111684412 A	2020-09-18	67395760	31	Safe block chain integrated circuit	H04



# Common patent examining decisions

- When to start searching?
- Where to search?
- When to stop searching?
- Whether to make this rejection?
- Is this claim allowable?

# When to start searching?

- Does the examiner understand the invention and the claim limitations?
- Does the examiner understand the broadest reasonable interpretation of the claims in light of the specification?

# Where to search?

- Craft search strategy by considering
  - Relevant CPC maingroups/subgroups
  - Relevant keywords/synonyms/phrases in the art
  - Related groups/keywords
  - The most active areas for the application (foreign art & NPL)



# When to stop searching?

- Did the examiner completely execute the search strategy?
- Has the examiner searched for all the claimed limitations and also any potential limitations that would be reasonably expected in applicant's response?
- Can the art be easily overcome by the applicant without amending the claims?
  - 35 U.S.C. 102(b)(1) & 102(b)(2) exceptions; same applicant
- Does the art read on just the words of the claims or also on the inventive concept?

# Overcoming roadblocks

Additional resources:

- Consult with other examiners
- Quality Enhancement Meetings (QEM)
- Scientific and Technical Information Center (STIC)
- Reach out to other technology areas





# Whether to make this rejection?

- Is it applied under the proper statute?
  - 35 U.S.C. §§ 101, 102, 103, 112
- Is it legally and technically proper?
- Will it clarify the record?
- Would an examiner's amendment place the claims in condition for allowance?

# Is this claim allowable?

- Has the examiner completed all relevant searches?
- Has the examiner ensured that there are no claim limitations characterized in the specification as known or conventional which would otherwise make the pending claim(s) not allowable?
- Has the examiner compared their reasons for allowance and their strongest rejection?
- Has the examiner consulted their supervisor and/or trainer?

# Tuesday morning

- Decisions, decisions, decisions
- Putting pen to paper



# Evidence and findings of fact

- Evidence is the collection of information that is intended to convince one of a fact
- A fact is a truth, event, circumstance or actuality
- Generally, providing documentary evidence is needed to support findings of fact
- Patent examiners are the “fact finders”



# Formation of an Office action

- Does the claimed invention meet the statutory requirements of 35 U.S.C. 101?
- Does the claimed invention find support in the specification in the manner required by paragraph (a) of 35 U.S.C. 112?
- Do the claims meet the requirements of paragraph (b) of 35 U.S.C. 112?
- Do the claims meet the patentability requirements set forth in 35 U.S.C. 102?
- Do the claims meet the patentability requirements set forth in 35 U.S.C. 103?



# Writing Office actions

- “It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply.” MPEP 2142
- Does the office action anticipate the applicant’s questions and answer them?
- Is the office action clear and concise?

# Posting an Office action

- Once a junior examiner completes their Office action, they will post the Office action to either a primary patent examiner or a supervisory patent examiner for review
- The reviewing examiner will review the work and if necessary request changes or make recommendations
  - Iterative process
- Examiners have various level of authority based on their grade level

# Non-examining time

- **Interviews**
  - Examiners average 1 interview per biweek
- **Attending training**
  - Examiners spend an average of 17 hours per fiscal year on training
  - 25 hours of available training time in addition to mandatory training
- **Staff meetings**



# Useful information

# Timeline for patent applications

- Applicants can use the USPTO's "First Office Action Estimator" to estimate the time that it will take for a patent examiner to issue the first Office action for a specific application.
- In fiscal year 2021, the USPTO moved to a new methodology for assigning patent applications to patent examiners based on Cooperative Patent Classification (CPC). The estimator has been updated to account for this new methodology.



# First office action estimator

<https://www.uspto.gov/learning-and-resources/statistics/first-office-action-estimator>

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## First Office Action Estimator

In fiscal year 2021, the United States Patent and Trademark Office (USPTO) moved to a new methodology for assigning patent applications to patent examiners based on Cooperative Patent Classification (CPC). The First Office Action Estimator has been updated to account for this new methodology. You can estimate how long it will take for a first Office action to be issued on a specific patent application by entering its serial number.

**i** Enter an application number as '99/999,999' or '99999999'

Application serial number:

Alternatively, if you have your application serial number, you can also log in to [Private PAIR](#) or [Patent Center](#) to check estimates on how long it will take for a first Office action to be issued in that application.

Note: A first Office action estimation will not be available for an application if the application has not yet been classified. Most applications should receive classification within three months from filing. If you have questions about applications that have not yet received classification after three months, please contact the Patents Ombudsman at 571-272-5555 or 855-559-8589.

The estimates provided by the First Office Action Estimator are not guaranteed by the USPTO.



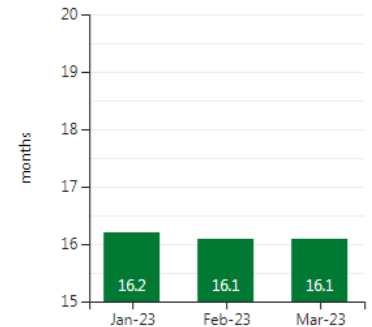
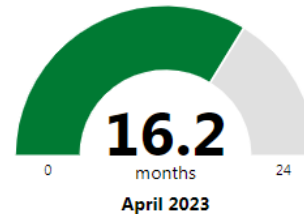
# Patents data at a glance

In response to public comment, the USPTO redesigned the Patents Data Visualization Center.

<https://www.uspto.gov/dashboard/patents/>

## Patents Pendency Data April 2023

### First Office Action Pendency



# Questions?



