

**UNITED STATES
PATENT AND TRADEMARK OFFICE**



Understanding Prior Art and its use in Determining Patentability

Office of Innovation Development
Fenn Mathew
Office of Patent Training

Email questions to:
inventorinfochat@uspto.gov

UNITED STATES
PATENT AND TRADEMARK OFFICE



Office of Innovation Development

- In Person Assistance (by appointment) for Pro Se Applicants
- Assistance Hotline 1-866-767-3848
- Patent Email Support innovationdevelopment@uspto.gov
- PTRC Partnership for Patent Education Courses
 - Virtual Assistance Pilot Program
- Inventor Outreach
 - Independent Inventor Conferences
 - Education for Inventor Organizations
- <http://www.uspto.gov/inventors>

Overview

- **Prior Art Rejections**
 - What are they?
 - Where do they fit in the examination process?
 - How is prior art determined?
 - What are the different types of prior art?
 - What are the statutory requirements?

Send your questions to: inventorinfochat@uspto.gov

What is Prior Art

- Prior art constitutes those references or documents which may be used to determine novelty and/or non-obviousness of claimed subject matter in a patent application

Common Types of Prior Art

- **References/Disclosures:**

- **Printed Documents**

- Patents and published patent application (domestic and foreign)
 - Non-Patent Literature: magazine articles, newspaper articles, electronic publications, on-line databases, websites, or Internet publications (MPEP 2126-2128)

Common Types of Prior Art Cont.

- **Applicant's Admissions of Prior Art (AAPA)**
 - Statements made by applicant that certain information was "prior art". May appear in the "background" section of the specification, in the drawings, or in applicant's remarks. See MPEP 2129.

Common Types of Prior Art (Cont.)

- **Public Use or On Sale**

- **The public use or sale (including offers to sell) must have occurred early enough to qualify as prior art**
 - **A document that does not have a prior art date may provide evidence of a public use or sale that qualifies as prior art**

Otherwise Available to the Public

- “Otherwise available to the public” is a new catch-all provision of 102(a)(1) that has no *explicit* counterpart in pre-AIA law. For example:
 - an oral presentation at a scientific meeting
 - a demonstration at a trade show
 - a lecture or speech
 - a statement made on a radio talk show
 - a YouTube video, website, or other on-line material (this type of disclosure may also qualify as a printed publication under AIA and pre-AIA law)

Email questions to:
inventorinfochat@uspto.gov



Determining Patentability

- Claimed inventions are presumed to be patentable until the examiner is able to establish a *prima facie* case that one of the patentability requirements is not met.
- A *prima facie* case is one that at first glance presents sufficient evidence to support your conclusion. An examiner's evidence is prior art, e.g., prior publications, patents, admissions of prior art, on-sale items, etc.
- Anticipation and obviousness are the most frequent reasons for rejecting a claim.

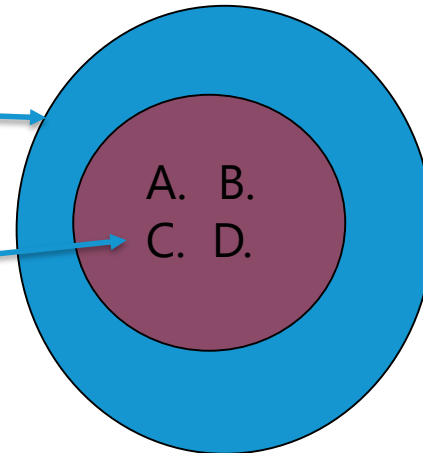


Determining Patentability

- Claimed inventions are presumed to be patentable, until...
 - The examiner establishes a *prima facie* case with sufficient evidence to support a conclusion of non-patentability
 - Anticipation and obviousness are the most often used reasons for determining non-patentability

Determining Patentability (Novelty/Anticipation)

- What is Anticipation? When a single prior art reference describes, either expressly or inherently, each and every limitation of a claim.
- Claim requires limitations
 - A, B, C, and D
- Single prior art reference describes all of the claim limitations



Prior Art Requirements: 35 USC § 102(a)(1)

- Novelty: A person shall be entitled to a patent unless -
- The [claimed invention](#) was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the [claimed invention](#); or

Prior Art Requirements: 35 USC § 102(a)(2)

- The [claimed invention](#) was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the [claimed invention](#)

102(a)(1) Types of Prior Art

1. "...patented, described in a printed publication,"
2. "or in public use, on sale,"
3. "or otherwise available to the public..."

AIA Prior Art Exceptions

35 USC § 102(b)(1)

(b) Exceptions.—

(1) Disclosures made 1 year or less before the effective filing date of the claimed invention. — A disclosure made 1 year or less before the effective filing date of a claimed invention shall not be prior art to the claimed invention under subsection (a)(1) if—

(A) the disclosure was made by the inventor or joint inventor or by another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(B) the subject matter disclosed had, before such disclosure, been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor.

102(a)(1) Prior Art Dates Before The Grace Period

- No exception applies to 102(a)(1) prior art disclosed before the grace period of the claimed invention began.
- AIA applicants can rely on perfected foreign priority claims for the effective filing date of their claimed invention.
 - This means an AIA applicant's one-year grace period can be based on the AIA applicant's foreign priority date.



102(a)(2) U.S. Patent Document Required

- Only a U.S. patent document can have a 102(a)(2) “effectively filed” prior art date.
- There are only 3 Types of U.S. patent documents:
 1. U.S. patents
 2. U.S. patent application publications (PGPubs)
 3. WIPO publications of PCT applications that designate the U.S.
 - No requirement that the WIPO publication was in English
 - No requirement that the WIPO published PCT application was filed on or after 11/29/00



102(a)(2) Definition of “Effectively Filed”

35 USC 102(d) defines prior art dates under 102(a)(2) as follows:

(d) Patents and Published Applications Effective as Prior Art. — For purposes of determining whether a patent or application for patent is prior art to a claimed invention under **subsection (a)(2)**, such patent or application shall be considered to have been effectively filed, with respect to any subject matter described in the patent or application—

(1) if paragraph (2) does not apply, as of the **actual filing date** of the patent or the application for patent; **or**

(2) if the patent or application for patent is entitled to claim a right of priority under section 119, 365(a), or 365(b), or to claim the benefit of an earlier filing date under section 120, 121, or 365(c), based upon 1 or more prior filed applications for patent, as of the **filing date of the earliest such application that describes the subject matter.**

(Emphasis added)



102(a)(2) Definition of “Effectively Filed”

- The “effective filing date” for a claimed invention in a patent or application for patent is the earlier of:
 - The actual filing date of the patent or application for patent containing the claimed invention
 - The filing date of the earliest priority application
 - Provisional, non-provisional, international, or foreign application



102(a)(2) “Effectively Filed” Prior Art Date

To rely on an effectively filed date that is earlier than the actual filing date of a potential 102(a)(2) reference:

- The U.S. patent document must claim priority to or benefit of the prior foreign or domestic application

AND

- The prior (foreign or domestic) application must describe the subject matter being relied upon.

The ability to use a U.S. patent document’s foreign priority date as the prior art date is a major difference between 102(a)(2) and pre-AIA 102(e).



AIA FITF Prior Art Exceptions

35 USC §102(b)(2)(A) and (B)

(2) Disclosures appearing in applications and patents. — A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

(A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;

(B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.



AIA FITF Prior Art Exceptions

35 USC §102(b)(2)(C)

(2) Disclosures appearing in applications and patents. — A disclosure shall not be prior art to a claimed invention under subsection (a)(2) if—

(A) the subject matter disclosed was obtained directly or indirectly from the inventor or a joint inventor;

(B) the subject matter disclosed had, before such subject matter was effectively filed under subsection (a)(2), been publicly disclosed by the inventor or a joint inventor or another who obtained the subject matter disclosed directly or indirectly from the inventor or a joint inventor; or

(C) the subject matter disclosed and the claimed invention, not later than the effective filing date of the claimed invention, were owned by the same person or subject to an obligation of assignment to the same person.



AIA FITF – Common Ownership

35 USC §102(c)

(c) Common Ownership Under Joint Research Agreements. — Subject matter disclosed and a claimed invention shall be deemed to have been owned by the same person or subject to an obligation of assignment to the same person in applying the provisions of subsection (b)(2)(C) if—

- (1)** the subject matter disclosed was developed and the claimed invention was made by, or on behalf of, 1 or more parties to a joint research agreement that was in effect on or before the effective filing date of the claimed invention;
- (2)** the claimed invention was made as a result of activities undertaken within the scope of the joint research agreement; and
- (3)** the application for patent for the claimed invention discloses or is amended to disclose the names of the parties to the joint research agreement.

Additional Novelty Considerations

- For 35 USC §102 rejections, prior art need not be analogous art to the claimed invention. See *MPEP 2131.05*.
- If a prior art reference discloses the claimed invention, the reference anticipates the claim even if the reference then disparages it. See *MPEP 2131.05*.
- A prior art reference anticipates a claimed invention that expressly excludes an element if the reference indicates that element to be optional. See *MPEP 2131*.



Reference Requirements

- In order to be used in an art rejection under 35 USC § 102 or § 103, the date of a reference must qualify under 35 USC § 102.
- For 35 USC § 102(a)(1), the publication date of the reference must precede the applicant's effective filing date; for 35 USC § 102(a)(2) the effectively filed date of the reference must precede the applicant's effective filing date

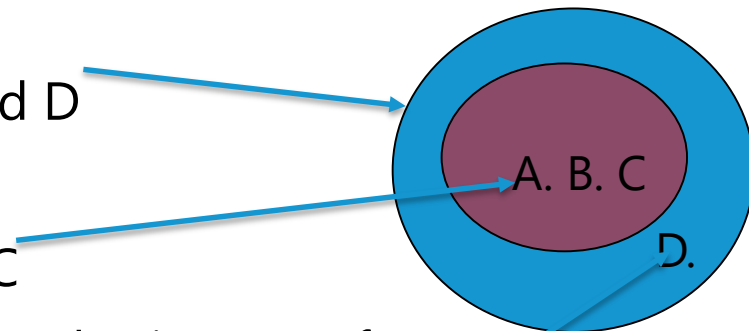


35 USC §103 AIA Obviousness

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Prima Facie(Obviousness)

- What is obviousness?
 - Obviousness – that which could readily be deduced from publicly available material or U.S. Patent Documents by a person having ordinary skill in the pertinent field of endeavor
- Claim requires at least A, B, C, and D
- First prior art reference describes
 - Limitations A, B, and C
- 1. Limitation D is taught by a second prior art reference
 - Would it have been obvious to one of ordinary skill in the art to modify the first prior art reference to include limitation D to teach the claimed invention as a whole?



Additional Obviousness Considerations

- To show obviousness, each and every element of the claim must be addressed.
- Furthermore, to establish obviousness, the rejection must consider the claimed invention as a whole.

Additional Obviousness Considerations (cont.)

- In order to rely on a prior art reference under 35 USC §103, it “must be analogous prior art to the claimed invention”:
 - (1) from the same field of endeavor as the claimed invention (even if it addresses a different problem); or,
 - (2) reasonably pertinent to the problem faced by the inventor (even if from a different field of endeavor).
- See MPEP 2141.01(a)

How Prior Art is Used for Obviousness

- **To show obviousness, the combined prior art references, or the modified single reference,**
 - must teach or suggest all claim limitations and it would have been obvious to a Person Having Ordinary Skill In The Art (PHOSITA) to combine or modify the art in such a manner.
- **The question is not whether the differences themselves between the prior art and the claimed invention would have been obvious, but whether the claimed invention as a whole would have been obvious to a PHOSITA at the time of applicant's invention for pre-AIA and at the time of applicant's filing for AIA.**

Forming A Basis For A Prior Art Obviousness Rejection

Graham v. John Deere Four Factual Inquiries:

- Determine the scope and contents of the prior art
- Determine the differences between the prior art and the claims
- Determine the level of ordinary skill in the pertinent art
- Evaluate evidence of secondary considerations, if any, such as commercial success, long felt but unsolved needs, or failure of others.



Elements For 35 USC §103 Rejection Using Secondary Reference(s)

- 1) A description of what the primary reference teaches relative to the claimed invention
 - 2) An identification of what the differences are between the claimed invention and the primary reference
 - 3) An indication of what the secondary reference(s) teach(es) relative to the differences
 - 4) An explanation of how the primary reference is to be modified by each secondary reference to arrive at the claimed invention and the rationale for making each modification
- 1) An examiner must explain why each modification or combination of prior art teachings would have been obvious to PHOSITA in order to support the legal conclusion



Conclusion

- An examiner bears the initial burden of establishing a *prima facie* case of unpatentability based on either anticipation or obviousness. Prior art is used in rejections under 35 USC §102 (anticipation) and 35 USC §103 (obviousness).
- Prior art rejections are an essential part of the overall patent examination process

Summary

You should now be more familiar with the following concepts as they relate to prior art:

- What are they?
- Where do they fit in the examination process?
- How do we determine what is prior art?
- What are the different types of prior art?
- What are the statutory requirements?

Upcoming OI Events

- June 21– Inventor Info Chat: Application Data Sheet (ADS) Part II: Questions and Answers
- August 17-18, 2018 – Invention Con-Alexandria, VA
- For more information or to register for any of the above events contact us at oidevents@uspto.gov

<https://www.uspto.gov/patents-application-process/inventor-info-chat>





UNITED STATES
PATENT AND TRADEMARK OFFICE

Thank You!

Send your questions to:

inventorinfochat@uspto.gov

To inquire about OID services please contact us at:

InnovationDevelopment@uspto.gov

1.866.767.3848



Email questions to:
inventorinfochat@uspto.gov

