

Patent Law

Prof. Roger Ford

October 5, 2016

Class 9 – Novelty III: patent documents;
priority of invention and prior invention

Recap

Recap

- Novelty framework
- (AIA) § 102(a)(1) prior art con't:
 - “on sale”
 - “otherwise available to the public”
- The AIA grace period

Today's agenda

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- Novelty framework
- Patent documents
- Priority of invention
- ~~"abandoned, suppressed, or concealed" inventions~~
- ~~(pre-AIA) § 102(g) as prior art~~

**Novelty
framework**

Novelty framework

- Novelty as a four-step process:
- Which law applies? (Pre-AIA or post-AIA)
 - Does a reference qualify as prior art under a subsection of § 102?
 - What are the effective date of the prior-art reference and the critical date of the patent?
 - Does the information disclosed in the prior-art reference anticipate the patent claim(s)?

Novelty framework

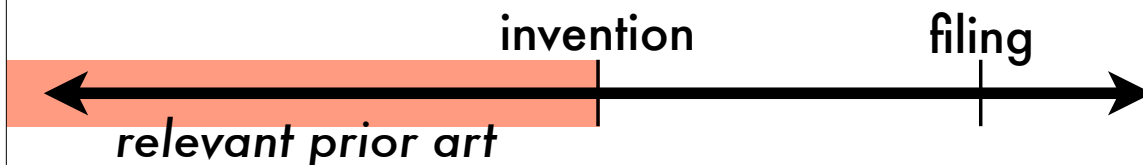
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Novelty framework

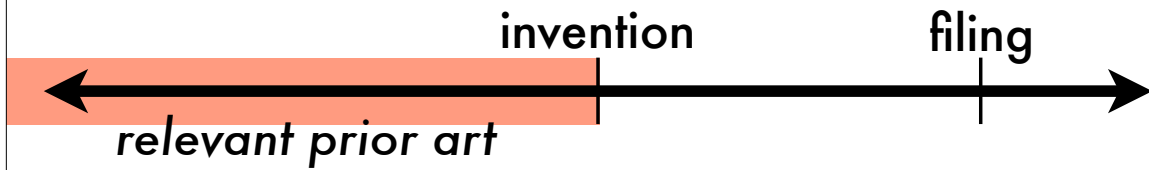
→ Novelty as a four-step process:

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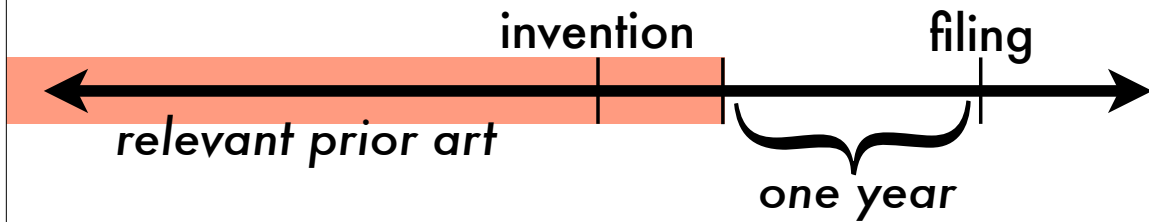
Pre-AIA novelty:



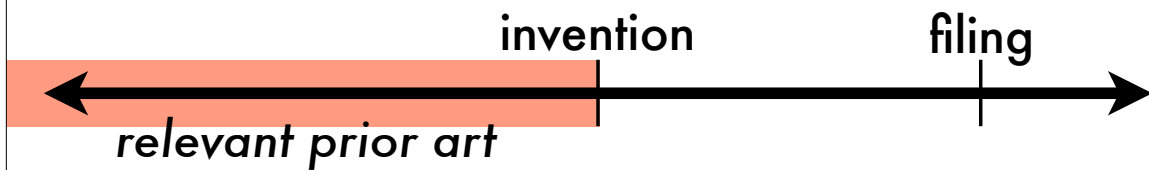
Pre-AIA novelty:



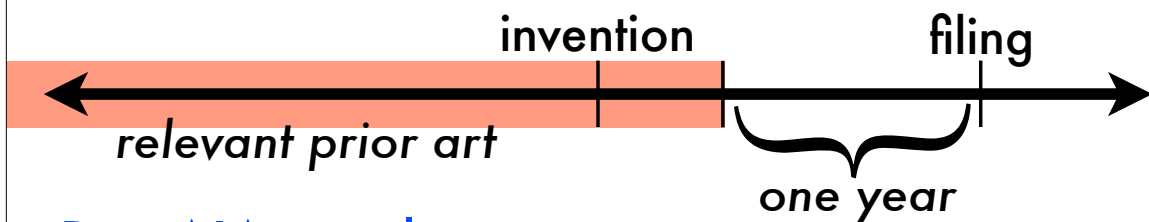
Pre-AIA statutory bars:



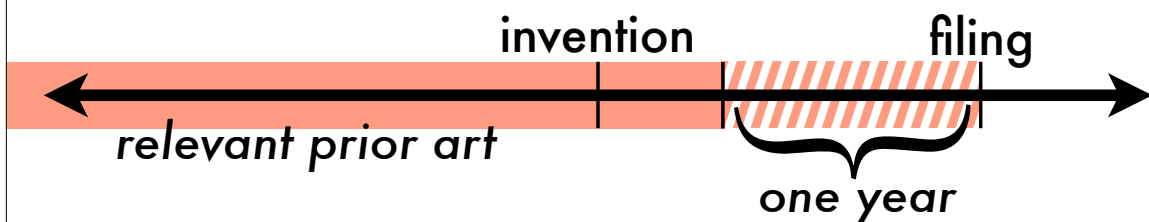
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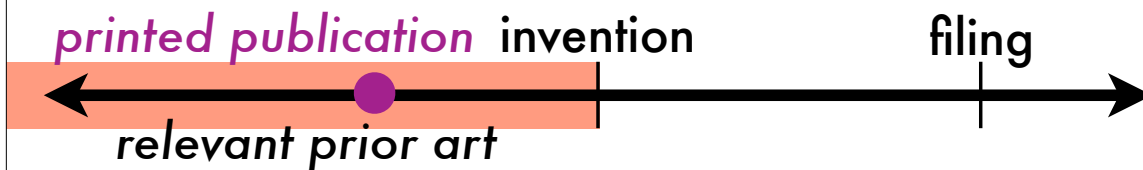
Post-AIA novelty:



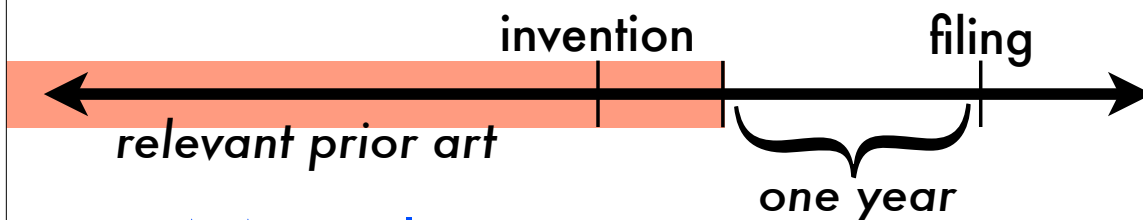
Novelty framework

- Most types of references have a single clear date:
 - “printed publication”
 - “public use”
 - “on sale”
 - “known or used by others in this country”
- Usually, when it is public

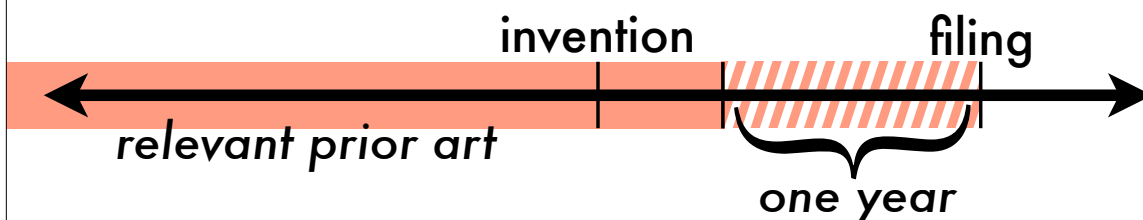
Pre-AIA novelty:



Pre-AIA statutory bars:



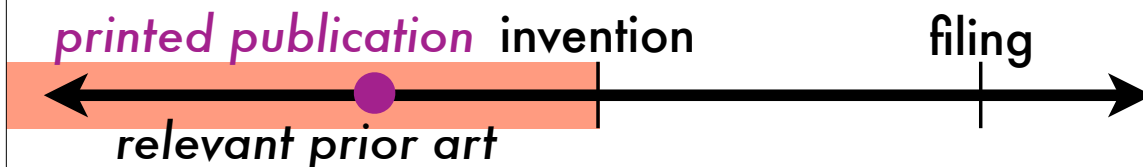
Post-AIA novelty:



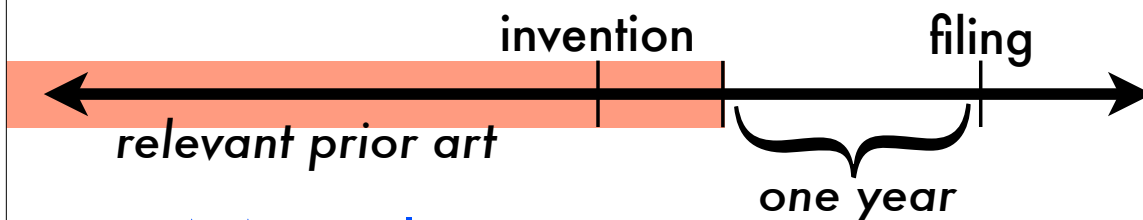
Novelty framework

- Some types of reference are effectively backdated:
 - patents
 - patent applications
- Both before and after the AIA

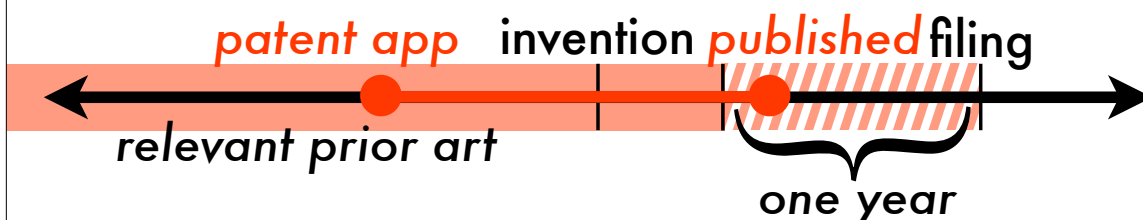
Pre-AIA novelty:



Pre-AIA statutory bars:



Post-AIA novelty:



(post-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty

(a) Novelty; Prior Art.— A person shall be entitled to a patent unless—

(1) 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

(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.**

(b) Exceptions.—

* * *

(pre-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty and loss of right to patent

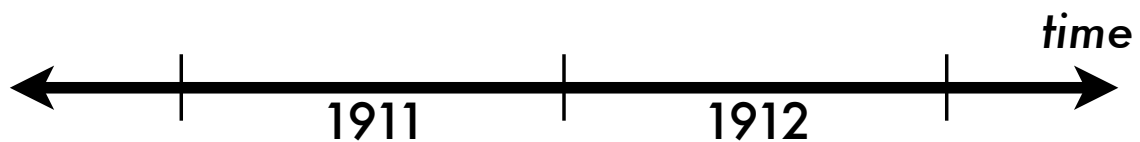
* * *

(e) the invention was described in — (1) an **application for patent, published under section 122(b),** by another **filed in the United States before the invention** by the applicant for patent or (2) a **patent granted on an application** for patent by another **filed in the United States before the invention** by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language; or

* * *

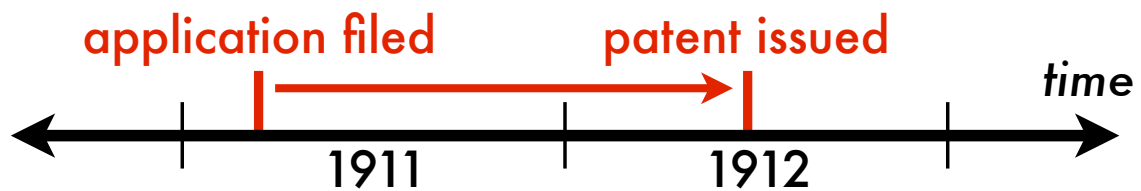
Disclosure in patent documents

Alexander Milburn Co.



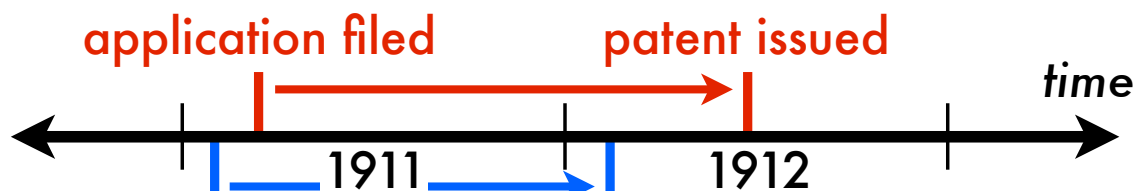
Alexander Milburn Co.

Whitford (plaintiff)



Alexander Milburn Co.

Whitford (plaintiff)



Clifford (prior art)

Clifford (prior art)

Alexander Milburn Co.

→ What's the argument for denying Whitford the patent?

Alexander Milburn Co.

→ What's the argument for denying Whitford the patent?

- He wasn't the first inventor! (But the Court acknowledges that if Clifford never disclosed, Whitford could get the patent)
- Also, the fact that the prior art wasn't in the public domain is the PTO's fault, not Clifford's

“We understand the Circuit Court of Appeals to admit that **if Whitford had not applied for his patent until after the issue to Clifford, the disclosure by the latter would have had the same effect as the publication of the same words in a periodical**, although not made the basis of a claim. The invention is made public property as much in the one case as in the other. But if this be true, as we think that it is, it seems to us that a sound distinction cannot be taken between that case and a patent applied for before but not granted until after a second patent is sought. **The delays of the patent office ought not to cut down the effect of what has been done.** The description shows that Whitford was not the first inventor. Clifford had done all that he could do to make his description public. He had taken steps that would make it public as soon at the Patent Office did its work....”

*Alexander Milburn Co. v. Davis-Bournonville Co.,
Merges & Duffy at 406.*

Alexander Milburn Co.

→ **What's the argument against?**

Alexander Milburn Co.

→ What's the argument against?

- He still disclosed the invention
- And we don't want to eliminate the incentive to innovate

Alexander Milburn Co.

→ This rule was later codified

- (post-AIA) § 102(a)(2)
- (pre-AIA) § 102(e)

(post-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty

(a) Novelty; Prior Art.— A person shall be entitled to a patent unless—

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(b) Exceptions.—

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(pre-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty and loss of right to patent

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(e) the invention was described in — (1) an **application for patent, published under section 122(b),** by another **filed in the United States before the invention** by the applicant for patent or (2) a **patent granted on an application** for patent by another **filed in the United States before the invention** by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language; or

* * *

Alexander Milburn Co.

- Patents and patent applications date back to the original filing date
 - Only if published – abandoned unpublished applications stay secret
 - (pre-AIA) Foreign applications date back to foreign filing date only if they are in English and designate the U.S. under the PCT

Alexander Milburn Co.

- Why not back date all prior art to the date it was invented, not just made public?

Alexander Milburn Co.

→ Why not back date all prior art to the date it was invented, not just made public?

- It's an incentive to disclose things earlier – § 102(a) rule
- No similar need to incentivize the PTO (or maybe it just wouldn't work)

Interferences versus § 102(e)

- Interference (pre-AIA): two inventors who both claim the invention
- § 102(e): the first inventor can claim, or just disclose
- More soon on interferences

Problems

- Jan. 1, 2014: I file, claiming X and disclosing Y
- July 1, 2014: Smith files, claiming Y
- Can Smith get a patent on Y?

Problems

- Jan. 1, 2014: I file, claiming X and disclosing Y
- July 1, 2014: Smith files, claiming Y
- Can Smith get a patent on Y?
 - Maybe, but only if (1) I abandon my application and it is never published, or (2) Smith disclosed Y before 2014

Problems

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Problems

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Problems

- Jan. 1, 2004: I file, claiming X and disclosing Y
- July 1, 2004: Smith files, claiming Y
- Will Smith and I get into an interference?

Problems

- Jan. 1, 2004: I file, claiming X and disclosing Y
- July 1, 2004: Smith files, claiming Y
- Will Smith and I get into an interference?
 - Only if I amend my application to claim Y or Smith amends to claim X

- Jan. 1, 2004: I file US application
- July 1, 2005: PTO publishes my application, claiming X / disclosing Y
- Dec. 1, 2005: My patent issues, claiming X and Y
- May 1, 2006: Smith files patent claiming Y
- Dec. 1, 2006: Courts invalidate my patent under enablement requirement
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- Dec. 1, 2006: Courts invalidate my patent under enablement requirement
- Can Smith get a patent on Y?
 - Invalidated patent is still § 102(e) prior art
 - So yes, but only if Smith proves she invented before Jan. 1, 2004

- Jan. 1, 2014: I file US application
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- May 1, 2016: Smith files patent claiming Y
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- Can Smith get a patent on Y?

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- Dec. 1, 2015: My patent issues, claiming X and Y
- May 1, 2016: Smith files patent claiming Y
- Dec. 1, 2016: Courts invalidate my patent under enablement requirement
- Can Smith get a patent on Y?
 - Invalidated patent is still § 102(a)(2) prior art
 - So nope. We no longer care about invention date, just filing date.

- Jan. 1, 2004: I file application in India
- July 1, 2005: Indian patent office publishes my application, claiming X / disclosing Y
- Dec. 1, 2005: My Indian patent issues, claiming X and Y
- May 1, 2006: Smith files patent claiming Y
- Dec. 1, 2006: Courts invalidate my Indian patent
- Can Smith get a patent on Y?

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- Dec. 1, 2005: My Indian patent issues, claiming X and Y
- May 1, 2006: Smith files patent claiming Y
- Dec. 1, 2006: Courts invalidate my Indian patent
- Can Smith get a patent on Y?
 - Indian application is § 102(a) prior art – nothing under § 102(e)
 - So yes, but only if Smith proves she invented before July 1, 2005

- Jan. 1, 2014: I file application in India
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- Dec. 1, 2015: My Indian patent issues, claiming X and Y
- May 1, 2016: Smith files patent claiming Y
- Dec. 1, 2016: Courts invalidate my Indian patent
- Can Smith get a patent on Y?
 - Indian application is § 102(a)(1) prior art (not § 102(a)(2) prior art)
 - So only if there was a prior grace-period disclosure.

Priority of invention

Priority of invention

- The goal: figure out who invented first
- No longer really relevant under the post-AIA first-to-file system

(pre-AIA) 35 U.S.C. § 102 — Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless —

* * *

(g)

(1) during the course of an **interference** conducted under section 135 or section 291, another inventor involved therein establishes, to the extent permitted in section 104, that before such person's invention thereof the invention was **made by such other inventor** and **not abandoned, suppressed, or concealed**, or

(2) before such person's invention thereof, the invention was **made in this country by another inventor** who had **not abandoned, suppressed, or concealed** it.

In determining priority of invention under this subsection, there shall be considered not only the respective dates of **conception** and **reduction to practice** of the invention, but also the **reasonable diligence** of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

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Priority of invention

→ § 102(g)(1):

- Two inventors in an interference
- First inventor in interference (and WTO country), who doesn't abandon/conceal/suppress, wins

→ § 102(g)(2):

- No interference
- First inventor in USA, who doesn't abandon/conceal/suppress, wins

Priority of invention

→ § 102(g) trailing sentence:

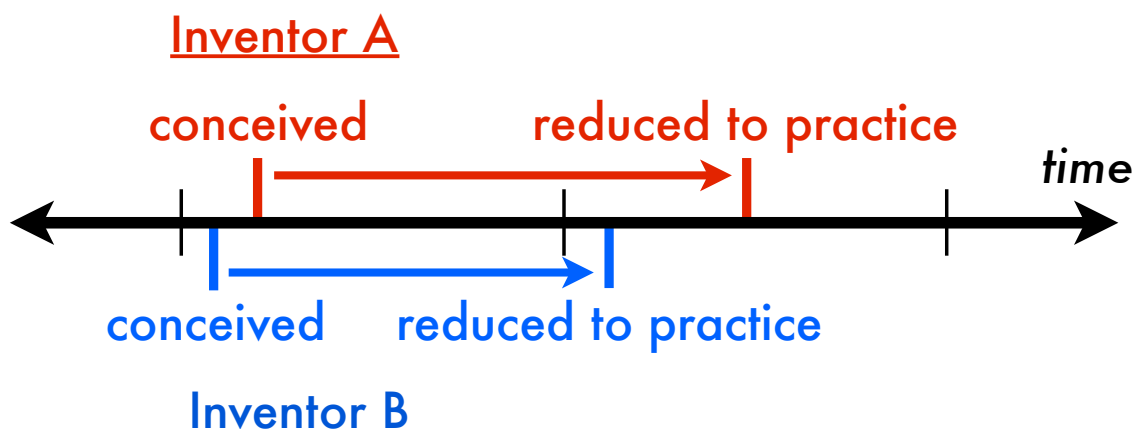
- Invention has two steps: conception and reduction to practice
- We consider both, plus reasonable diligence

Priority of invention

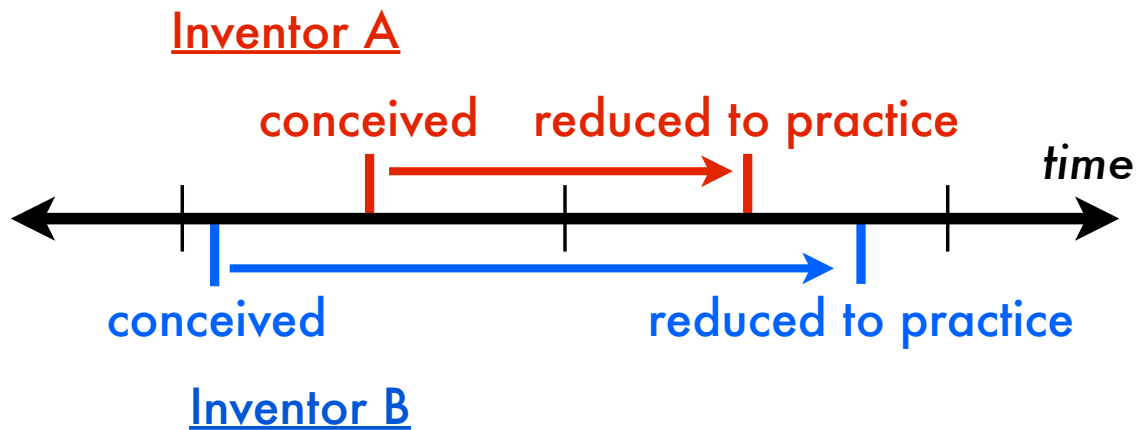
→ A four-part summary of this law:

- 1. The first to reduce the invention to practice usually has priority.
- 2. Filing a valid application counts as constructive reduction to practice.
- 3. The first to conceive may prevail over the first to reduce to practice if the first to conceive was diligent from a time prior to the second conceiver's conception.
- 4. Any reduction to practice that is abandoned, suppressed, or concealed doesn't count.

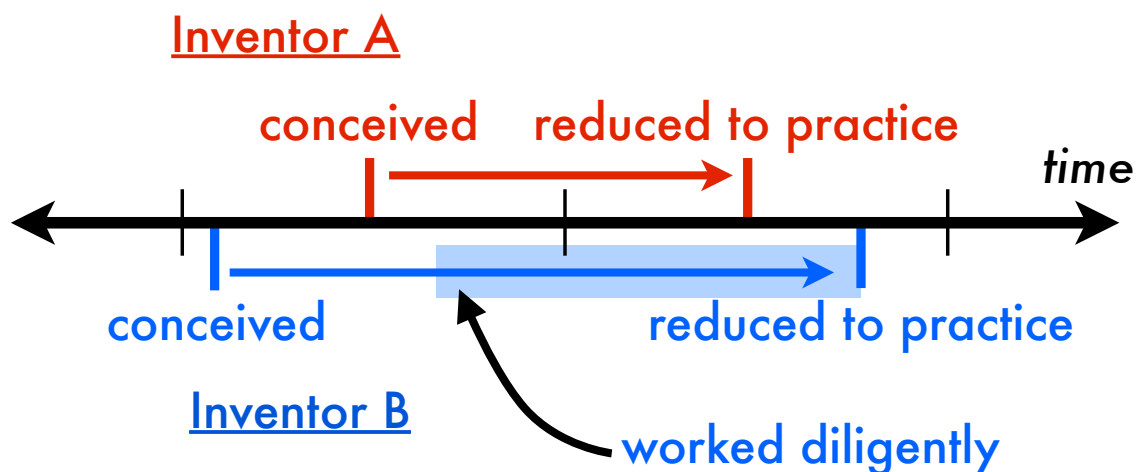
Priority of invention



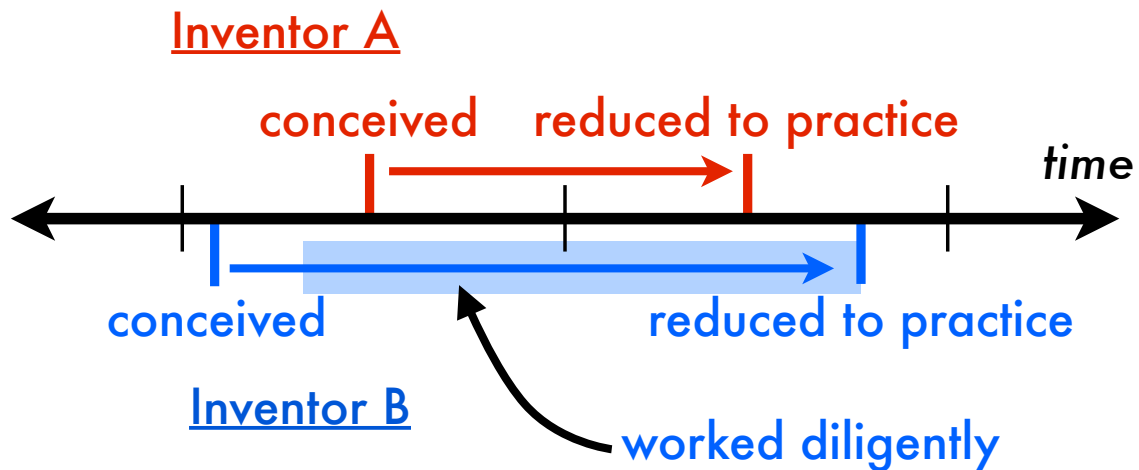
Priority of invention



Priority of invention



Priority of invention



Brown v. Barbacid

- So what counts as conception and reduction to practice?
- Barbacid reduction to practice: March 6, 1990
 - Brown experiment #1: Sept. 20, 1989
 - Brown experiment #2: Sept. 25, 1989

Brown v. Barbacid

→ What was wrong with Brown experiment #1?

Brown v. Barbacid

- What was wrong with Brown experiment #1?
- Didn't include every limitation of the claim
 - September 25: added peptide inhibitor

Brown v. Barbacid

→ What was wrong with Brown experiment #2?

Brown v. Barbacid

→ What was wrong with Brown experiment #2?

- No (corroborated!) evidence that Dr. Reiss immediately understood what was going on
- Need both (1) an embodiment that encompasses all elements of the invention, and (2) appreciating that the embodiment works for the intended purpose

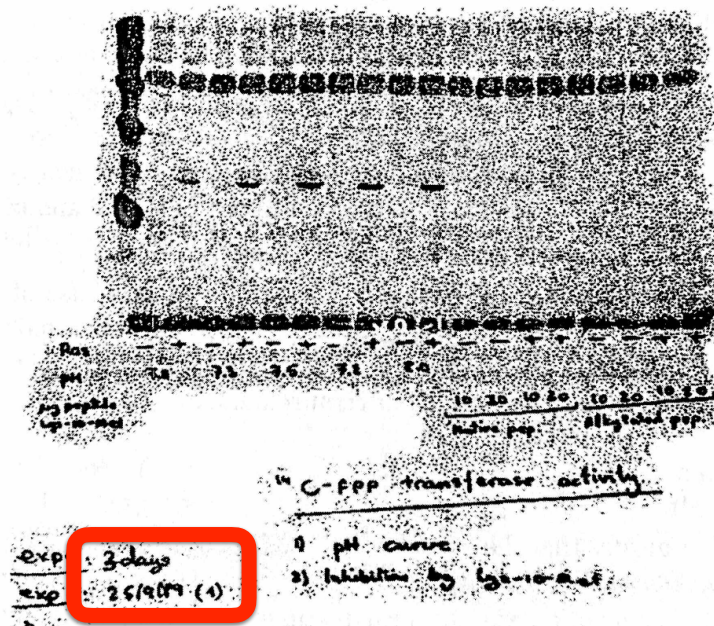
Brown v. Barbacid

- Working embodiment: Sept. 25, 1989
- Appreciation: by at least Nov. 1989
 - Testimony of Dr. Casey
- November 1989 is before March 6, 1990, so Brown wins

Brown v. Barbacid

- Brown experiment #2: September 25, 1989
- Brown understanding: November 1989
- Barbacid reduction to practice: March 6, 1990
- Barbacid application: May 8, 1990
- Brown application: December 22, 1992

Brown v. Barbacid



Priority of invention

→ Conception:

- A definite and permanent idea of the complete and operative invention
- Enough to enable
- But uncertainty about whether it will work is okay

Priority of invention

- Reduction to practice:
 - Practicing an embodiment of the invention encompassing all elements (or an enabling patent application), AND
 - Appreciating that the invention worked for its intended purpose

Priority of invention

- Diligence
 - Small gaps are okay
 - Larger gaps need a good excuse: maybe poverty, regular employment, or vacations
 - Bad excuses: attempts to commercialize, work on other projects, doubts about the invention

Priority of invention

- Benefits of a first-to-invent system?
- Downsides?

Priority of invention

- Benefits of a first-to-invent system?
 - Incentive to invent earlier
- Downsides?
 - Expensive to administer, especially when there are close calls
 - Doesn't incentivize filing earlier

Priority of invention

- Constructive reduction to practice:
Why does a patent application count?

Priority of invention

- Constructive reduction to practice:
Why does a patent application count?
 - In theory, it is fully enabling, just like an actual reduction to practice
 - Also, encourages early filing

Priority of invention

→ After the AIA:

- Conception and reduction to practice no longer determine priority – filing date does
- Possibly still relevant to inventorship, when an invention is “on sale,” and other issues



Next time

Next time

→ *More novelty!*