Patent Law

Prof. Roger Ford
Class 10 · October 2, 2017
Novelty and statutory bars:
priority of invention

Recap

Recap

→ 'in public use'

→ 'otherwise available to the public'

→ § 102(e) and patent filings

→ § 102(g) and prior invention

→ the AIA grace period

→ § 102 problems

Today's agenda

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→ more § 102 problems

→ priority of invention

→ diligence and abandonment

→ ~~pre-AIA § 102(c), (d), & (f)~~

§ 102 problems

→ 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

→ Can Smith get a patent on Y?

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→ 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

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→ 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

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→ 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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→ 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

→ 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?
- Does the timing work? Or, 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)?

Priority of invention

→ Novelty as a four-step process:

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Priority of invention

→ For pre-AIA § 102(a), (e) & (g), the critical date is the date of invention

- § 102(g): decide who invented first
- § 102(a) & (e): decode whether your invention was effective before the prior-art reference's effective date

→ Mostly irrelevant under the AIA

(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 summary of § 102(g)'s priority rule:

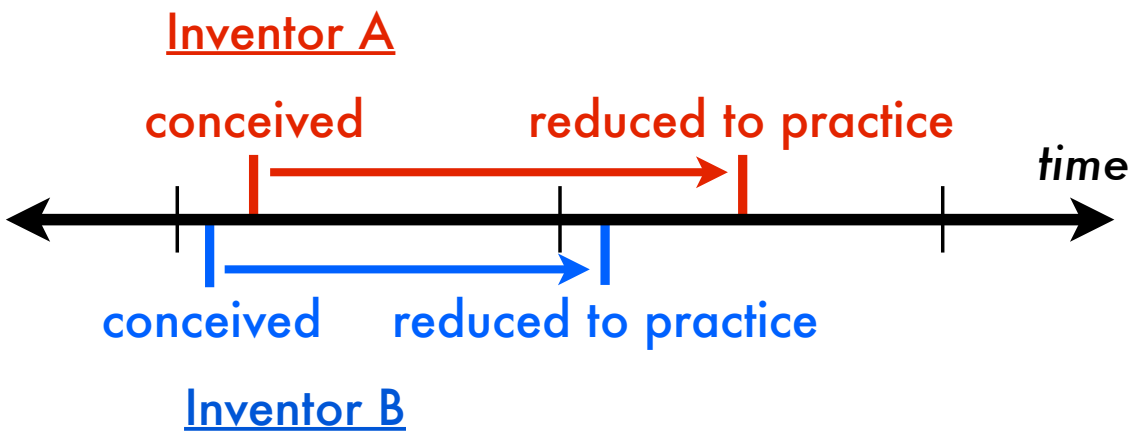
- 1. The first to reduce the invention to practice usually has priority.
- 2. Filing a valid application counts as constructive reduction to practice.
- 3. The first to conceive may prevail over the first to reduce to practice if the first to conceive was diligent from a time prior to the second conceiver's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

Priority of invention

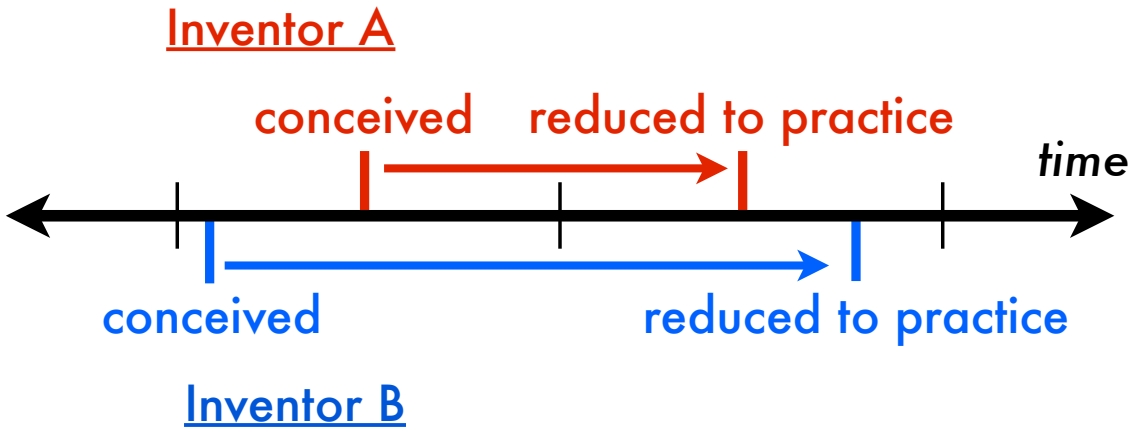
→ A summary of § 102(g)'s implicit application to § 102(a) & (e):

- 1. If the patent applicant both conceives and reduces to practice before the effective date of the prior-art reference, the applicant wins.
- 2. Filing a valid application counts as constructive reduction to practice.
- 3. If the applicant conceives before the effective date, but reduces to practice after, she may still prevail if she was diligent from a time prior to the effective date.
- 4. Any reduction to practice that is abandoned, suppressed, or concealed doesn't count.

Priority of invention



Priority of invention



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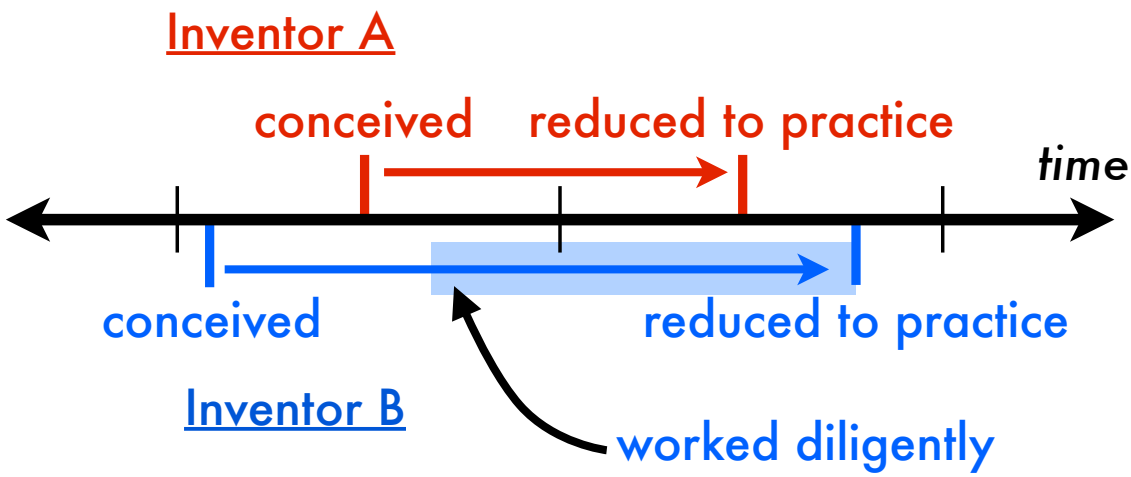

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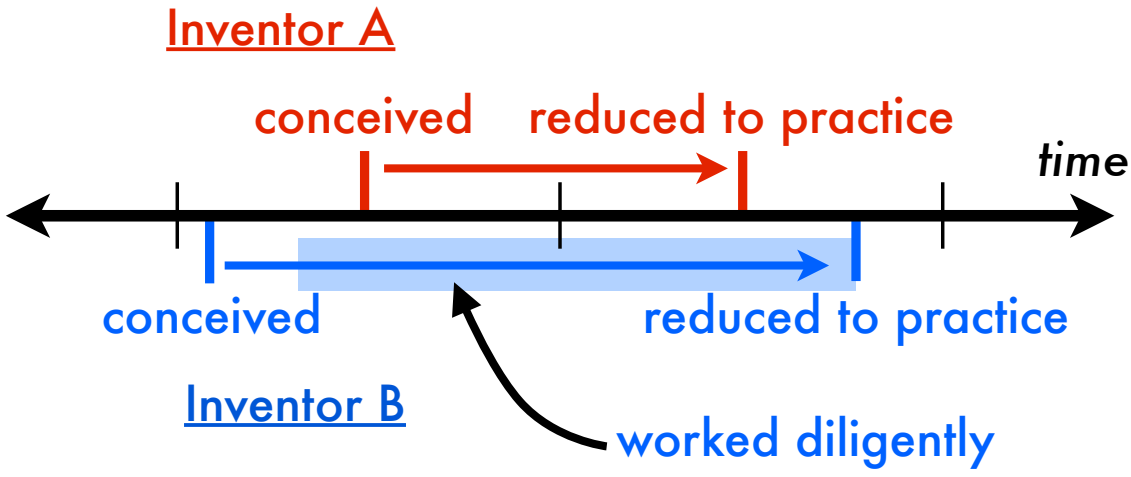

Mahurkar v. C.R. Bard

- → 1979: Mahurkar begins work on dual-lumen, flexible hemodialysis catheters
- → Late 1980 / early 1981: Mahurkar makes prototypes in his kitchen that demonstrate the utility of the invention
- → July 1983: Cook catalog – allegedly anticipating art
- → October 24, 1983: Mahurkar files patent application

Mahurkar v. C.R. Bard

- → When did Mahurkar conceive of the invention?

Mahurkar v. C.R. Bard

→ When did Mahurkar conceive of the invention?

- Requires a "definite and permanent idea of the complete and operative invention" that is enabling
- Certainly by 1981 – an operative prototype that "he knew … would become suitable for its intended purpose by simple substitution of a soft, biocompatible material"

Mahurkar v. C.R. Bard

→ When did Mahurkar reduce the invention to practice?

Mahurkar v. C.R. Bard

→ When did Mahurkar reduce the invention to practice?

- Requires demonstrating that the invention is "suitable for its intended purpose"
- Can require testing, if invention is complicated
- 1981: "Mahurkar adequately showed reduction to practice of his less complicated invention"

Mahurkar v. C.R. Bard

→ So Mahurkar demonstrated both conception and reduction to practice before the prior-art reference, and so wins

Mahurkar v. C.R. Bard

→ Would he win under the AIA rule?

Mahurkar v. C.R. Bard

→ Would he win under the AIA rule?

- Probably not
- Cook catalog predates filing and so is § 102(a)(1) prior art
- Mahurkar would need to demonstrate a pre-Cook-catalog disclosure from himself
- Best evidence: showing prototypes to people in 1981 – but more than a year before filing

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
- Treats big and small inventors equally

→ Downsides?

- Expensive to administer, especially when there are close calls
- Doesn't incentivize filing earlier

Priority of invention

→ Do we really need such a complex priority rule?

Priority of invention

→ Do we really need such a complex priority rule?

- Can't just rely on conception – incentive to delay reduction to practice
- Can't just rely on reduction to practice – different inventors will work at different speeds

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

Diligence and abandonment

Diligence and abandonment

→ Diligence: relevant before the reduction to practice

→ Abandoned / suppressed / concealed: relevant between the reduction to practice and the filing

Diligence and abandonment

→ Suppressed / concealed: trade secrets are the classic example

→ Abandoned: egregious filing delays

- Much harder

Griffith v. Kanamaru

→ June 30, 1981: Griffith conception

→ Nov. 18, 1982: Kanamaru application

- (Didn't prove earlier invention date in the US)

→ June–Sept., 1983: Griffith inactivity

→ Jan. 11, 1984: Griffith reduction to practice

Griffith v. Kanamaru

→ When did Kanamaru reduce to practice?

Griffith v. Kanamaru

→ When did Kanamaru reduce to practice?

- We don't know
- But the filing date is a constructive reduction to practice
- Kanamaru's inventive activity was likely in Japan, and so didn't count for priority

Griffith v. Kanamaru

→ Why did Griffith lose?

Griffith v. Kanamaru

→ Why did Griffith lose?

- Needed to demonstrate diligence from before November 18, 1982 to January 11, 1984
- But there was a three-month gap
- And his excuse wasn't good enough

Griffith v. Kanamaru

→ Excuse #1: Griffith was seeking external funding for this project

- Seeking funding to do research can sometimes be a good excuse
- But here, Cornell had plenty of money
- But its funding model (like most of academia!) relies on outside funding

Griffith v. Kanamaru

→ Excuse #2: Griffith was waiting for a grad student to start

- But Griffith had plenty of grad students, and this one had no special qualifications
- If a university is going to prioritize things other than invention, then it might sometimes lose invention disputes

Griffith v. Kanamaru

→ Who gets the patent?

Griffith v. Kanamaru

→ Who gets the patent?

- Kanamaru!
- Even though he maybe wasn't the first inventor!
- Is that reasonable?

Fujikawa v. Wattanasin

→ 1979: Sandoz begins looking for drugs to inhibit synthesis of cholesterol

→ 1982: Wattanasin is assigned to Sandoz project

→ 1984–85: Wattanasin synthesizes three compounds within patent claims, all of which show *in vitro* inhibiting activity

→ 1985–87: Sandoz project is shelved

→ January 1987: Wattanasin returns to project and synthesizes four more compounds

→ August 20, 1987: Fujikawa application

→ October 1987: Second-wave compounds are tested *in vitro*

→ December 1987: Most promising compounds are tested *in vivo*

→ January 1988: Sandoz patent committee approves patent application

→ January–May 1988: Patent information gathering

→ August–November 1988: Geisser prepares patent application

→ March 1989: Sandoz files patent application

Fujikawa v. Wattanasin

→ When was the invention reduced to practice?

Fujikawa v. Wattanasin

→ When was the invention reduced to practice?

- 1984–85: *in vitro* testing?
- October 1987: more *in vitro* testing?
- December 1987: *in vivo* testing?

Fujikawa v. Wattanasin

→ When was the invention conceived?

Fujikawa v. Wattanasin

→ When was the invention conceived?

- Before those – probably in 1984–85, but it doesn't actually matter

Fujikawa v. Wattanasin

→ Did Wattanasin abandon, suppress, or conceal the invention?

Fujikawa v. Wattanasin

→ Did Wattanasin abandon, suppress, or conceal the invention?

- No intentional suppression
- No evidence of an unreasonable delay
- Three months of unexplained delay isn't enough to raise an inference of abandonment, suppression, or concealment

Fujikawa v. Wattanasin

→ Note that the same delay before and after reduction to practice can have strikingly different effects

- *Griffith:* Three months is lack of diligence
- *Fujikawa:* Three months is not abandonment

Fujikawa v. Wattanasin

→ What is Wattanasin's effective date of invention here?

Fujikawa v. Wattanasin

→ What is Wattanasin's effective date of invention here?

- January 1987 – the date he returned to the project and from which he was diligent

Fujikawa v. Wattanasin

→ Note how many dates can count as the invention date under US law:

- Constructive reduction to practice (filing)
- Actual reduction to practice
- Conception, if inventor was continuously diligent up to reduction to practice
- Date of renewed diligence that resulted in reduction to practice

Next time

Next time

→ Wrapping up novelty and statutory bars