

Patent Law

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Class 9 · September 27, 2017

Novelty and statutory bars:
pre-AIA § 102(e)/(g) prior art; the AIA grace period

Recap

Recap

- 'printed publication'
- 'patented'
- (pre-AIA) § 102(b) introduction
- 'on sale'

Today's agenda

Today's agenda

- 'in public use'
- 'otherwise available to the public'
- § 102(e) and patent filings
- § 102(g) and prior invention
- the AIA grace period
- § 102 problems

'in public use'

(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 —

(a) the invention was **known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof** by the applicant for patent, or

(b) the invention was **patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application** for patent in the United States, or

* * *

(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.—

* * *

Egbert v. Lippmann

- Jan.–May, 1855: Barnes invents improved corset spring and gives it to Cugier to wear
- 1858: Barnes makes another set and gives it to Cugier
- 1863: Barnes demonstrates improved corset spring to Sturgis
- **March 1864: Critical date for § 102(b)'s predecessor**
- Before 1866: Invention becomes “almost universally used” in the industry
- March 1866: Barnes applies for patent

Egbert v. Lippmann

- So was the invention “in public use” before 1864?
 - Court: Yes
 - Public use is use by any one person, other than the inventor, for its intended use, without an obligation of secrecy
 - This is basically the same as “used by others” for § 102(a)

Egbert v. Lippmann

→ Is it really reasonable to think this is a public use?

Egbert v. Lippmann

→ Is it really reasonable to think this is a public use?

- The public didn't really get the patent-bargain benefit of the invention!
- But, neither did the inventor disclose the invention to the public
- Big worry: that inventors can sit on their rights and then pull the rug out from under the industry

Egbert v. Lippmann

- Is it really reasonable to think this is a public use?
 - And there are lots of uses that aren't visible to the public – watch gears, e.g.

Motionless Keyboard

- Feb. 22, 1987: Gambaro develops Cherry Model 5
- 1987: Gambaro demonstrates device to Roberts (no NDA) and other potential investors (with NDAs)
- 1989: NDAs from 1987 expire
- June 6, 1990: Critical date for the '477 patent
- June 25, 1990 or July 25, 1990: Lanier conducts typing tests (with NDA)
- Jan. 11, 1992: Critical date for the '322 patent

Motionless Keyboard

- How is this different from *Egbert*?
 - Lanier used the keyboard, before the critical date, for typing – the principal purpose of a keyboard

Motionless Keyboard

- How is this different from *Egbert*?
 - Lanier used the keyboard, before the critical date, for typing – the principal purpose of a keyboard
 - But: It was confidential, subject to an NDA
 - And: It was for testing, not ordinary typing in the course of business

Motionless Keyboard

→ Why wasn't this "known ... by others" under § 102(a)?

Motionless Keyboard

→ Why wasn't this "known ... by others" under § 102(a)?

- This would probably count as knowledge by others
- But it wasn't before the invention date
- Critical asymmetry between § 102(a) and § 102(b)

**'otherwise available
to the public'**

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

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

* * *

'otherwise available to the public'

- A new category of prior art!
- Catch-all for other kinds of prior art
 - Oral presentations?
 - Others?
- Maybe, redefines "public use" and "on sale"?

'otherwise available to the public'

- Grammar: "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"

'otherwise available to the public'

- Question: If "in public use, on sale, or otherwise available to the public" is a grammatical clause, then is it a list of three things that are "available to the public"?
- In other words: Do public uses and sales now have to be available to the public?

'otherwise available to the public'

- Before, they do not:
 - *Metallizing*: A trade-secret use by the patent applicant (e.g., use of a trade-secret process make a product for sale to the public) CAN BE a public use for § 102(b)
 - *Pfaff and MDS Associates*: A trade-secret sale by the patent applicant IS a sale for § 102(b)

'otherwise available to the public'

- Argument that the AIA requires a public "public use" or "sale":
 - "available to the public" limits the meaning of "on sale"
- Argument that the AIA does not require a public sale:
 - There is no evidence Congress intended to change the substance of the on-sale bar

"As Chairman Smith most recently explained in his June 22 remarks, 'contrary to current precedent, **in order to trigger the bar in new 102(a) in our legislation, an action must make the patented subject matter "available to the public"** before the effective filing date.' ... When the committee included the words 'or otherwise available to the public' in section 102(a), **the word 'otherwise' made clear that the preceding items are things that are of the same quality or nature.** As a result, the preceding events and things are **limited to those that make the invention 'available to the public.'**"

Senator Jon Kyl, hearing on AIA (Sept. 8, 2011)

“The pre-AIA 35 U.S.C. 102(b) ‘on sale’ provision has been interpreted as including commercial activity even if the activity is secret. AIA 35 U.S.C. 102(a)(1) uses the same ‘on sale’ term as pre-AIA 35 U.S.C. 102(b). **The ‘or otherwise available to the public’ residual clause of AIA 35 U.S.C. 102(a)(1), however, indicates that AIA 35 U.S.C. 102(a)(1) does not cover secret sales or offers for sale.** For example, an activity (such as a sale, offer for sale, or other commercial activity) is secret (non-public) if it is among individuals having an obligation of confidentiality to the inventor.”

MPEP § 2152.02(d)

“The history of the drafting of the AIA suggests that it did not repeal *Metallizing*. **The original bill introduced in Congress in 2005 would have eliminated the categories of public use and on sale altogether,** defining ‘prior art’ as only things ‘patented, described in a printed publication, or otherwise publicly known.’ Senator Kyl expressly noted that the purpose of dropping public use and on sale in his bill was to **‘eliminat[e] confidential sales and other secret activities as grounds for invalidity.’**

“But that language was not the language Congress adopted. During the course of six years of Congressional debate, Congress added the terms ‘public use’ and ‘on sale’ back into the definition of prior art. ... To limit those terms only to uses and sales that were publicly known would render that decision a nullity—**the statute would have precisely the same effect as if the terms ‘public use’ and ‘on sale’ were excluded altogether.**”

Law-professor amicus brief in *Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc.*

“The district court’s reading of AIA § 102(a) **will cause all manner of mischief**. As just stated, it eliminates the disclosure/public disclosure distinction that is so central to AIA § 102(b) (1). It also attributes a quite radical intent and effect to the new prior art provision in the AIA: it would **sweep away scores of cases, accumulated over two centuries, defining in great detail each of the specific categories of prior art listed in AIA § 102(a)**. Opinions by giants in the patent field, from Joseph Story to Learned Hand to Giles Rich — gone, by virtue of one add-on phrase in the new statute.”

Law-professor amicus brief in *Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc.*

“A primary rationale of the on-sale bar is that **publicly offering a product for sale that embodies the claimed invention places it in the public domain**, regardless of when or whether actual delivery occurs. The patented product **need not be on-hand or even delivered** prior to the critical date to trigger the on-sale bar. And, as previously noted, **we have never required that a sale be consummated or an offer accepted** for the invention to be in the public domain and the on-sale bar to apply, nor have we distinguished sales from mere offers for sale. **We have also not required that members of the public be aware that the product sold actually embodies the claimed invention**. For instance, in *Abbott Laboratories v. Geneva Pharmaceuticals, Inc.*, at the time of the sale, neither party to the transaction knew whether the product sold embodied the claimed invention and had no easy way to determine what the product was.

“Thus, our prior cases have applied the on-sale bar **even when there is no delivery, when delivery is set after the critical date, or, even when, upon delivery, members of the public could not ascertain the claimed invention**. There is no indication in the floor statements that these members intended to overrule these cases. In stating that the invention must be available to the public they evidently meant that **the public sale itself would put the patented product in the hands of the public**.”

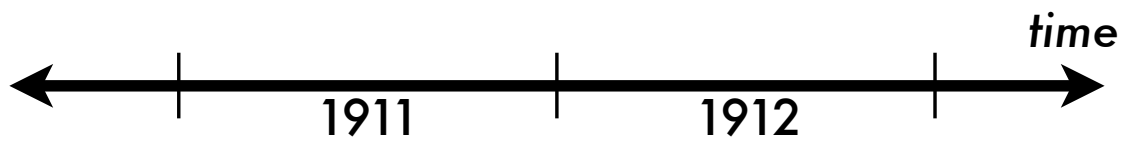
Helsinn Healthcare S.A. v. Teva Pharmaceuticals USA, Inc., Fed. Cir. (May 1, 2017)

'otherwise available to the public'

- District of New Jersey: the AIA changed the meaning of "on sale"
 - *Helsinn v. Dr. Reddy's Labs* (Mar. 3, 2016)
- Federal Circuit: actually, the AIA didn't change anything
 - *Helsinn v. Teva* (May 1, 2017)
 - *Helsinn* petition for en banc review (June 30, 2017)
- Stay tuned!

**§ 102(e) and
patent filings**

Alexander Milburn Co.



Alexander Milburn Co.

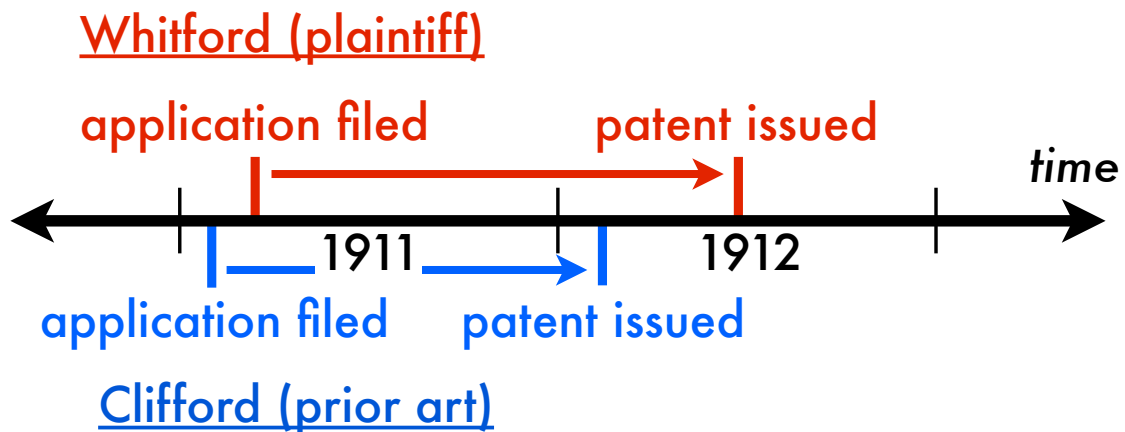
Whitford (plaintiff)

application filed

patent issued



Alexander Milburn Co.



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 as the Patent Office did its work....”

Alexander Milburn Co. v. Davis-Bournonville Co.,
Nard at 269.

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)

(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

* * *

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

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(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.—

* * *

Alexander Milburn Co.

→ Patents and patent applications date back to the original filing date

- Only if published — abandoned unpublished applications stay secret
- This is one of a few categories of back-dated or two-date art

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**

Hilmer I

- Pre-AIA rule: Foreign patent filing date didn't count for priority under § 102(e), only the US filing date
- AIA rule: Foreign applications date back to foreign filing date

§ 102(g) and prior invention

§ 102(g)

- Three points about § 102(g)
- § 102(g)(1) governs interferences
– when two inventors claim the same invention
 - § 102(g)(2) acts as another source of prior art
 - The trailing sentence governs priority and the date of invention

§ 102(g)

→ Three points about § 102(g)

- § 102(g)(1) governs interferences
– when two inventors claim the same invention
- § 102(g)(2) acts as another source of prior art
- The trailing sentence governs priority and the date of invention

(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.

Thomson v. Quixote

- Before August 1972: MCA Discovision develops anticipating laser videodisc
- August 25, 1972: Thomson invents claimed optical-drive technology

Thomson v. Quixote

- How public was MCA Discovision's invention?

Thomson v. Quixote

- How public was MCA Discovision's invention?
- Not obviously very public – at least not in the § 102(a) sense
 - But we know it wasn't abandoned, suppressed, or concealed
 - Rule of thumb: Generally, trade secrets are "suppressed or concealed"

Thomson v. Quixote

- Why doesn't § 102(g)(2) cover all other kinds of prior art – 102(a), 102(e), and so forth?

Thomson v. Quixote

- Why doesn't § 102(g)(2) cover all other kinds of prior art – 102(a), 102(e), and so forth?
- § 102(g)(2) requires conception and reduction to practice – more limited than printed publications, &c
 - § 102(g)(2) is limited to invention in the United States

Thomson v. Quixote

- Why isn't § 102(g)(2) redundant?

Thomson v. Quixote

- Why isn't § 102(g)(2) redundant?
- Sometimes there isn't good evidence in a traditional reference
 - Also, invention by another inventor may be earlier in time than the reference documenting that invention

Thomson v. Quixote

- Bottom line:
- § 102(g)(2) is most important as another way of back-dating prior art that later becomes public
 - The invention must not be abandoned, suppressed, or concealed

AIA grace period

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

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(b) Exceptions.—

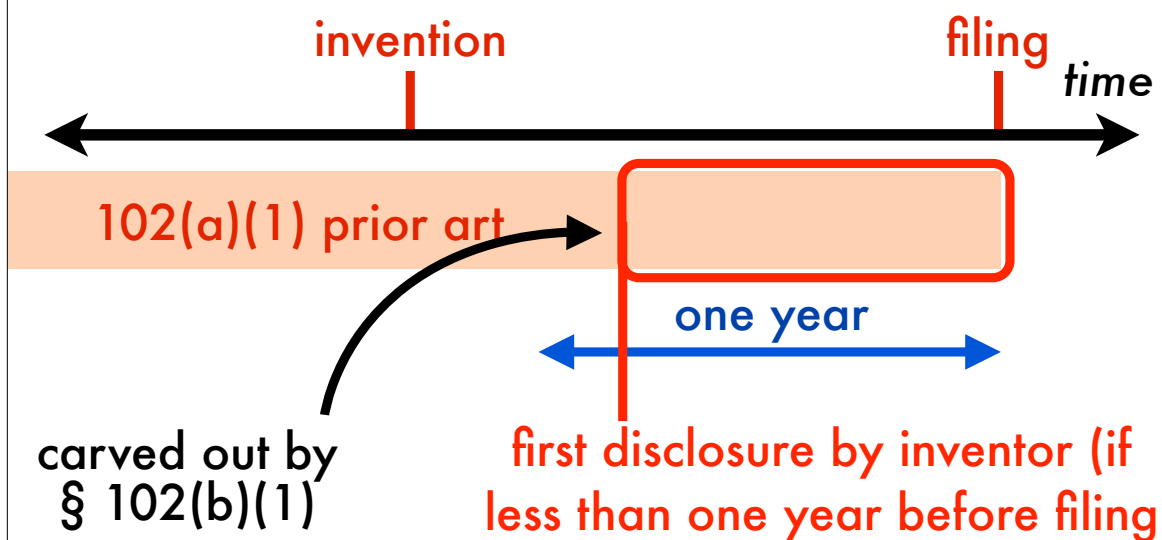
(1) Disclosures made 1 year or less before the effective filing date of the claimed invention.— A disclosure made **1 year or less before the effective filing date** of a claimed invention shall not be prior art to the claimed invention under subsection (a) (1) if—

(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.

* * *

AIA grace period



ALA grace period

- Scenario:
 - 1/1/15: Disclosure #1 by the applicant
 - 4/1/15: Disclosure #2 by someone else
 - 7/1/15: Patent application
- Question: How similar do disclosures #1 and #2 need to be for #2 to be carved out?

ALA grace period

- Invention: high-security electronic voting machine
 - Touch screen
 - Software, storage, &c
 - Security that causes a **visual indication** and shutdown when intrusion is detected

AlA grace period

- Disclosure #1 (applicant): Voting machine where screen changes color when an intrusion is detected
- Disclosure #2 (someone else): Voting machine where large "X" appears on screen when an intrusion is detected
- Claim: "visual indication"
- Is disclosure #2 prior art?

AlA grace period

- One possibility: They both must disclose the claim limitations
- Another possibility: They must disclose the same embodiment of the invention, regardless of claim language
- What does "subject matter" mean?

“The exception in [§] 102(b) (1) (B) applies if the ‘subject matter disclosed [in the intervening disclosure] had, before such [intervening] disclosure, been publicly disclosed by the inventor or a joint inventor (or another who obtained the subject matter directly or indirectly from the inventor or joint inventor).’ ... The exception in [§] 102(b) (1) (B) focuses on the ‘subject matter’ that had been publicly disclosed by the inventor.... There is no requirement under [§] 102(b) (1) (B) that the **mode of disclosure** by the inventor ... be the same as the mode of disclosure of the intervening grace period disclosure (e.g., patenting, publication, public use, sale activity). There is also no requirement that the disclosure by the inventor or a joint inventor be a **verbatim or ipsissimis verbis disclosure** of the intervening grace period disclosure. *See In re Kao*, 639 F.3d 1057, 1066 (Fed. Cir. 2011) (subject matter does not change as a function of how one chooses to describe it). **What is required for subject matter in an intervening grace period disclosure to be excepted under [§] 102(b)(1)(B) is that the subject matter of the disclosure to be disqualified as prior art must have been previously publicly disclosed by the inventor....”**

MPEP § 2153.02

“The subject matter of an intervening grace period disclosure that is not in the inventor or inventor-originated prior public disclosure is available as prior art under [§] 102(a) (1). For example, if the inventor ... **had publicly disclosed elements A, B, and C**, and a subsequent intervening grace period disclosure **discloses elements A, B, C, and D**, then only element D of the intervening grace period disclosure is available as prior art under [§] 102(a) (1).”

MPEP § 2153.02

“Likewise, **if the inventor ... had publicly disclosed a species**, and a subsequent intervening grace period disclosure **discloses an alternative species not also disclosed by the inventor...**, the intervening grace period disclosure of the alternative species would be available as prior art under [§] 102(a) (1).”

MPEP § 2153.02

“Finally, [§] 102(b) (1) (B) **does not discuss ‘the claimed invention’** with respect to either the subject matter disclosed by the inventor or a joint inventor, or the subject matter of the subsequent intervening grace period disclosure. **Any inquiry with respect to the claimed invention is whether or not the subject matter in the prior art disclosure being relied upon anticipates or renders obvious the claimed invention.** A determination of whether the exception in [§] 102(b) (1) (B) is applicable to subject matter in an intervening grace period disclosure **does not involve a comparison of the subject matter of the claimed invention to either the subject matter in the inventor or inventor-originated prior public disclosure, or to the subject matter of the subsequent intervening grace period disclosure.**”

MPEP § 2153.02

ALA grace period

- Advantage of a narrow grace period?
 - Only carves out disclosures by the inventor and disclosures that are basically identical
 - Incentive to file ASAP
 - Narrow patent rights

ALA grace period

- Advantage of a broad grace period?
 - Incentive to disclose ASAP and then develop patent application
 - Protects inventors and early disclosers
 - Harder to game

§ 102 problems

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

- Jan. 1, 2004: I file, claiming X and disclosing Y
- July 1, 2004: Smith files, claiming Y
- Can Smith get a patent on Y?

Problems

- Jan. 1, 2004: I file, claiming X and disclosing Y
- July 1, 2004: 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 proves she invented before January 1, 2004

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
- Can Smith get a patent on Y?

- 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?**
 - Invalidated patent is still § 102(e) prior art
 - So yes, but only if Smith proves she invented before Jan. 1, 2004

Next time

Next time

→ Yet more novelty and statutory bars