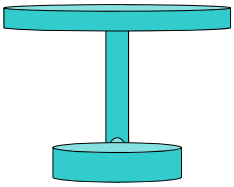
Patent Law

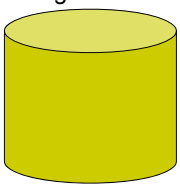
- Module D
- preAIA Novelty & Priority
  - With a few postAIA points along the way

A (hypothetical) Seating Marketplace

Competing Product



Existing Product



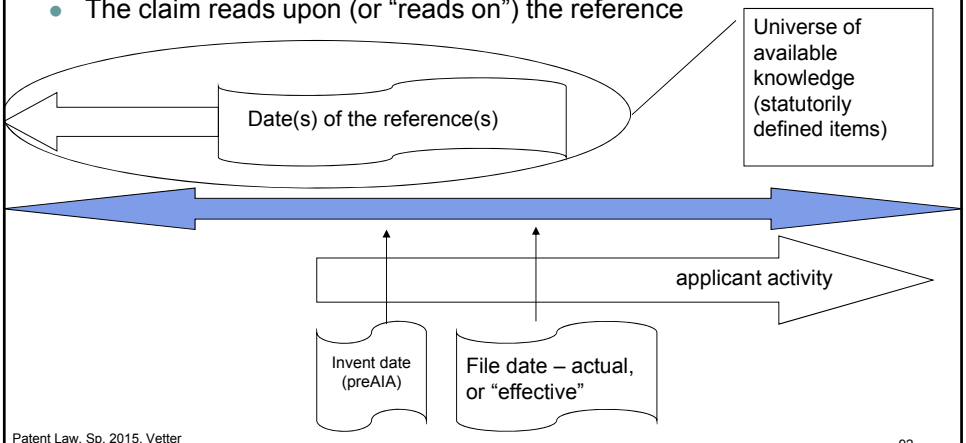
New Product

Novelty & Statutory Bars (patent defeating events) in preAIA §102

- Novelty
  - sections (a), (e) & (g)
  - the ***age*** of the reference is earlier
  - "keyed" to the date of invention (<u>but</u> note location of invention is usually relevant)
  - "first to invent" priority system
- Statutory Bars
  - sections (b) & (d)
    - §102(d) - US application not filed w/in 1 year of foreign application on the same invention, which foreign application ultimately ripens into a foreign patent right before the US filing date
      - In other words, if one files in a foreign jurisdiction, after 12 months pass, one is at risk of being barred in the US if one does not file in the US before the foreign patent right issues
  - if I delay I am ***b***arre***d***
  - "keyed" to the filing date
- Other patent-defeating events
  - abandonment - §102(c)
  - derivation - §102(f)

Prior Art References

- "anticipating" references are part of the analysis for both novelty and statutory bar patent defeating events
- What is an "anticipating" reference? (answered different ways that mean the same thing)
  - The reference "has" all the elements of the claim
  - The claim covers what is disclosed by the reference
  - The claim reads upon (or "reads on") the reference



preAIA §102(b)

102(b) – if the applicant does not file within one year of the date of the prior art reference or activity, then the patentee is barred from applying for the patent.		
	in public use or	No purposeful hiding of use. Experimental use exception.
	on sale	Commercial offer for sale and invention is ready for patenting
	patented or	same as 102(a).
	printed publication	same as 102(a).

"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 "

preAIA §102(a)

102(a) – if the prior art reference occurred prior to the date of invention of what is claimed, then the claim is not novel if that reference anticipates the claim (has all the limitations/elements of the claim).		
	***public*** knowledge or	"Public" is an implied requirement, relates to that segment of the public most interested in the technology, public if no deliberate attempts to keep it secret.
	used by others	One use is sufficient, even if private, remote or widely scattered, public if no deliberate attempts to keep it secret.
	patented or	A grant of exclusive rights, evaluated for what is claimed, accessible to public & not secret
	printed publication	Public accessibility – the document was made available to the extent persons interested and ordinarily skilled in the art, exercising due diligence, could locate it. The test for what is a "patent or printed publication" is the same under 102(a) & (b)).

"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"

Atlas Powder v. Ireco (Fed. Cir. 1999)

Claim one of the reissue patent recites:

> 1. A blasting composition consisting essentially of 10 to 40% by weight of a greasy water-in-oil emulsion and 60 to 90% of a substantially undissolved particulate solid oxidizer salt constituent, wherein the emulsion comprises about 3 to 15% by weight of water, about 2 to 15% of oil, 70 to 90% of powerful oxidizer salt comprising ammonium nitrate which may include other powerful oxidizer salts, wherein the solid constituent comprises ammonium nitrate and *in which sufficient aeration is entrapped to enhance sensitivity to a substantial degree,* and wherein the emulsion component is emulsified by inclusion of 0.1 to 5% by weight, based on the total composition, of an [oil-in-water] water-in-oil emulsifier to hold the aqueous content in the disperse or internal phase.

(Emphasis added.)

	prior art		claim
Composition Contents	**Egly**	**Butterworth**	**Clay**
Water-in-oil Emulsion	20-67%	30-50%	10-40%
Solid Ammonium Nitrate	33-80%	50-70%	60-90%
Emulsion Contents			
Ammonium Nitrate	50-70%	65-85%	70-90%
Water	about 15-about 35%	7-27%	about 3-15%
Fuel Oil	about 5-about 20%	2-27%	about 2-15%
Emulsifier	about 1-5%	0.5-15%	0.1-5%

- Meaning of "anticipation"
- Claim limitations clearly met
- Claim limitations met via the doctrine of "inherency"
  - "sufficient aeration . . . entrapped to enhance sensitivity . . ."
- Inherency
  - "necessarily present"
  - but not needing to be "necessarily known" at the time of the prior art

Gayler v. Wilder (1850)

UNITED STATES PATENT OFFICE.

DANIEL FITZGERALD, OF NEW YORK, N. Y., ASSIGNOR TO ENOS WILDER.

IMPROVEMENT IN FIRE-PROOF CHESTS AND SAFES.

Specification forming part of Letters Patent No. 3,117, dated June 1, 1843.

To all whom it may concern:

Be it known that I, DANIEL FITZGERALD, of the city, county, and State of New York, and a citizen of the United States, have discovered and made an Improvement (new and useful) in the Construction of Iron Chests or Safes, intended to resist the action of fire and for the safe keeping and preserving books and papers and other valuables from destruction by fire, which I call a "Salamander" Safe or Chest.

The following is a full and exact description of the safe or chest with my improvement combined therewith.

I make two iron chests in the common and ordinary way of making iron chests, which is well known to those engaged in this branch of business, one smaller than the other, which, when the safe is to put together, forms the inner chest or inner part of the safe. The other chest is made about three inches larger than the inner one, and so as, when put together, it will form the outer part or crust of the safe and leave a space between the inner and outer chest of the safe of about three inches, which space may vary a little (more or less) when the chests are put together, but should be the same all round and in every direction. The inner and outer doors, where two doors are used, are prepared in the same way, leaving a space, as above, between the inner and outer crust of each door, which space is left for a like purpose with that left between the inner and outer chest of the safe. Where one door is used it should be made in the same manner, leaving a like space between the inner and outer crust or face of the door, and for a like purpose, and should be fitted to the chest or safe with great accuracy.

The edges and openings for the doors are to be neatly finished, as in other chests. I then take plaster-of-paris or gypsum, and having boiled it or baked it in an oven and calcined it and reduced it to a powder, I mix it with water till it is about the consistency of cream or thin paste, so fluid as that it may readily be poured into the space left as above to receive it, and I then fill all the space with the plaster-of-paris, putting in some sheets of mica between the inner and outer chest, to aid, if necessary, in checking the progress of the heat; but where pains are taken to have all the space left for the purpose properly filled with the plaster-of-paris as above, so that, when set, it will expand and adhere firmly to the surrounding parts and completely fill the whole space and all the cracks and joints, the mica may be dispensed with and every other substance, and the plaster may be used alone. It may also be reduced to a powder without being prepared as above and used in that state; but I have not found it as good. The inner case or chest may be made of wood instead of iron, as for a book-case, and the space left between that and the outer chest, filled in the manner and with the materials above named, will make a very durable safe, that will effectually resist the fire, as I have found by experiment; but the safe may not be so strong or durable, though somewhat cheaper.

The above composition or preparation of gypsum may be mixed with several other articles not contrary to its nature with a view to increase its efficacy in resisting the action of fire; but from my experience I doubt if they have much effect. The gypsum alone, when properly prepared and properly placed in the space left to receive it and made to fill it completely, is quite sufficient to resist for a long space of time the most intense heat. The chemical properties of this article are such that by the application of intense heat it imparts a vapor or gas or some other properties which effectually stay the progress of the fire and arrest the influence and effects of the heat. This I have ascertained by various experiments, and I believe I am the first man that discovered the utility and devised the method of applying gypsum or the plaster-of-paris to increase the safety of an iron chest.

I am not aware that this article was ever used for the purposes above set forth until I used it in manner above described.

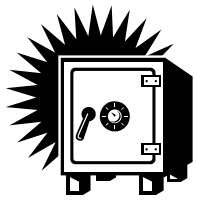
I therefore claim as my discovery and invention and improvement—

The application and use of plaster-of-paris or gypsum in its raw state, or prepared as above, either alone or with mica, in the construction of all iron chests or safes, in the manner above described or in any other manner substantially the same.

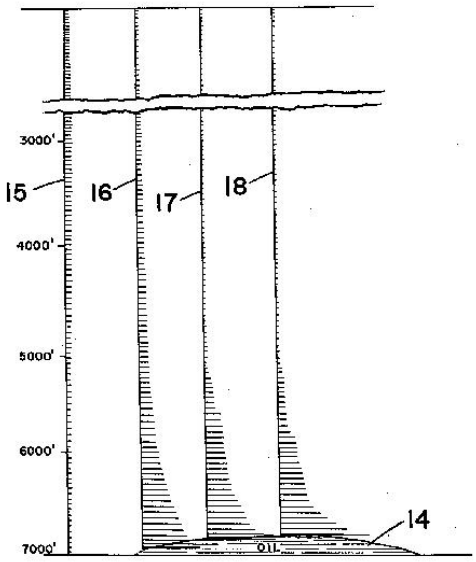
DANIEL FITZGERALD.

In presence of—
G. H. PATTERSON,
BEVERLY ROBINSON, Jr.

- Potential prior art reference
  - Conner's safe made with plaster of Paris
- Patent potentially invalidated by the asserted prior art reference
  - Fitzgerald
- Does the Conner safe anticipate?
- Is the Conner safe "known" or "used" in the sense of preAIA §102(a)?



Rosaire v. Baroid (5th 1955)



'085 Claim 1

Claim 1	Simplified expression	Id.
1. A method for logging a bore hole drilled for the production of petroleum which **comprises**		
securing samples of earth at selected points along the bore hole for a considerable portion of its length	sample along bore hole for most of its depth	A
including a substantial portion traversing non-petroleum producing formations,	but some of its depth runs through "dry" areas	B
quantitatively analyzing each sample for its content of at least one constituent significant of the proximity of a petroleum deposit,	analyze each sample for a ***at least one*** material indicating oil is nearby	C
the constituent determined being the same for all the samples &	same material	D
being one which is normally present in most of the formations traversed in minor amounts &	normally mostly present in minor amounts	E
which may be normally foreign to some of the formations traversed and correlating with depth and concentrations of the constituents so determined.	correlate to depth	F

Rosaire

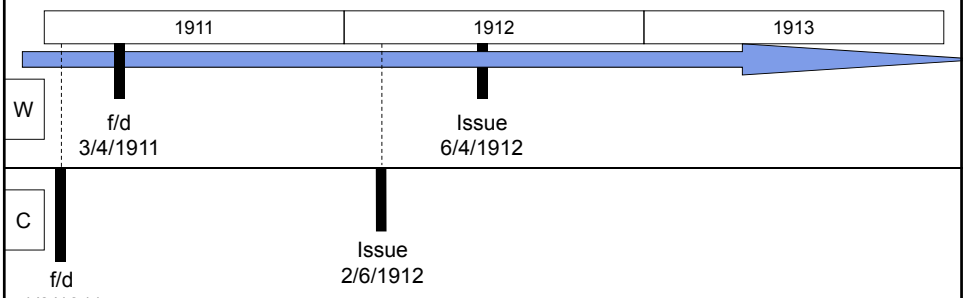
- Technology at issue?
- Trial court's opinion?
- Why affirmed?
  - Significance of stopping after Teplitz completed successful field trial?
  - Significance of open nature of the work?
  - Significance of "experimental"? Publication?
- Why the discussion of whether the Teplitz work was kept secret?

'085 Claim 1 HYPO

Claim 1	Simplified expression	
1. A method for logging a bore hole drilled for the production of petroleum which comprises		
securing samples of earth at selected points along the bore hole for a considerable portion of its length	sample along bore hole for most of its depth	A
including a substantial portion traversing non-petroleum producing formations,	but some of its depth runs through "dry" areas	B
quantitatively analyzing each sample for its content of at least one constituent significant of the proximity of a petroleum deposit,	analyze each sample for a ***at least one*** material indicating oil is nearby	C
the constituent determined being the same for all the samples &	same material	D
being one which is normally present in most of the formations traversed in minor amounts &	normally mostly present in minor amounts	E
which may be normally foreign to some of the formations traversed and correlating with depth and concentrations of the constituents so determined, AND	correlate to depth	F
WHICH CONSTITUENT, WHEN FOUND IN A SAMPLE, IS PRESENT IN A RANGE OF 0.1% TO 20% IN SAID MATERIAL		**G**

Alexander Milburn v. Bournonville (US 1926) (Holmes, J.)

- Whitford welding patent is being asserted
- D cites Clifford reference (but no W-type claims) as invalidating
- Holmes logic
  - If Whitford had filed after C issued, it is clear that C, as a printed pub, anticipates
  - So, "the delays of the patent office ought not to cut down the effect of what has been done."
  - C has done all he could to make his invention public – he took steps to make it public – and it will be public as soon as the patent office has done its work
- Later codified in 102(e)(2)
- This result is an exception to the inclination against "secret" Prior Art

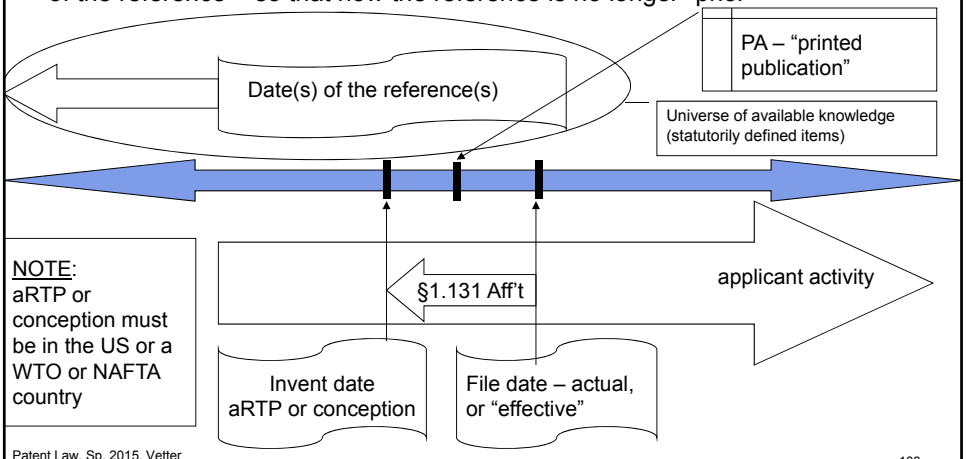


preAIA §102(e)

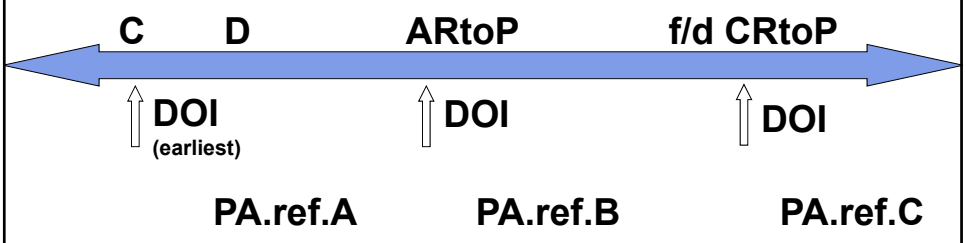
102	Statutory Language A person shall be entitled to a patent unless . . . [t]he invention was described in -	Notes
(e)		A 102(e) patent need "not necessarily claim" the matter in the "reference" patent. See In re Wertheim (CCPA 1981). However, if it does claim such matter, the inventor must resort to 102(g) and cannot swear behind based on Rule 131. See MPEP 715.
(e)(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	Effective date of an application, ***as a reference***, if the application is published under §122(b), is its effective US f/d, i.e., domestic priority applies [§119(e), §120] - "another" means a different inventive entity - §122(b) requires publication of applications (even if not yet issued) 18 months after earliest filing date. NOTE: under (e)(1) it does not matter if the published application never issues
(e)(2)	a ***patent granted*** on an application for patent by ***another filed in the United States before the invention by the applicant*** for patent	Effective date of a US patent ***as a reference*** is its US f/d - "another" means a different inventive entity - Foreign priority f/d does not apply [§119(a)] - Domestic priority f/d does apply [§119(e), §120]
(e)	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***	An application published by WIPO under the Patent Cooperation Treaty (PCT), if published in English and designating the US, is a reference as of its PCT filing (not publication) date (which is also its effective US f/d). This also means that a US patent issuing from an international application meeting these conditions will have a 102(e) prior art date corresponding to the international filing date

"Swearing behind" or "antedating a reference"

- With a §102 or §103 rejection, applicant can overcome §102(a) & §102(e) PA unless
  - (i) the rejection is based on a US Patent or application claiming the same invention, in which case there may be an interference under §102(g); or (ii) the rejection is a statutory bar, §102(b) & (d), in which case "swearing behind" does not work
- The declaration must set forth facts that the applicant had (i) actually reduced to practice (aRTP) or (ii) conception (C) and diligence (D) starting before the date of the reference – so that now the reference is no longer "prior"



Antedating reference – earlier C+D+ARtoP/CRtoP



- Prior art references A, B & C are patents or printed publications anywhere in the world (but < 1year before the f/d) or public knowledge or used by others in the US
- Which of A, B or C are legally sufficient to show lack of novelty?
  - Answer: None
  - Why?

Framework for §102(a) "known or used"

- Use three categories to sort the effect of the use of the invention:
  - whether it informs the public or others of the invention
  - whether it does not so inform, or
  - whether the use was explicitly the subject of efforts to keep it secret
- The table below is for the following question:
  - ***Is it a "known or used" under §102(a)?***

Actor	Informing Use	Non-informing Use	Secret Use
Third Party (TP)	Yes	Yes	No

Thomson, S.A. v. Quixote Corp. (Fed. Cir. 1999)

- Invalidity of Thomson patents under then-102(g) for lack of novelty {preAIA 102(g)(2): made in the U.S. and not abandoned, suppressed or concealed}
- Role of corroboration?

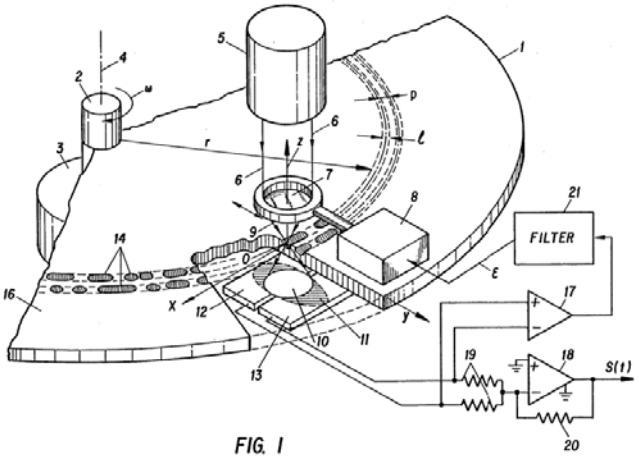


FIG. 1

§102(g)		
102		Notes
(g)(1)	during the ***course of an interference*** conducted under section 135 [PTO] or section 291 [court], ***another inventor*** involved therein ***establishes, to the extent permitted in section 104***, that ***before such person's [the applicant's] invention*** thereof the ***invention was made by such other inventor*** and ***not abandoned, suppressed, or concealed***, or	Underlined items show elements of this category of prior art, which is the basis for "interference" proceedings. - "limits" of §104 means by relying on acts of invention wherever and whenever permitted by §104 - Occurs for rejection based on a US Patent or application claiming the same invention

§102(g)		
102		Notes
(g)(2)	before such person's invention thereof ***[i.e., before the applicant's DOI]***, the ***[claimed] invention*** was ***made*** in ***this country*** by ***another*** inventor who had ***not abandoned, suppressed, or concealed*** it.	Underlined items show elements of this category of prior art (D identifies a TP who allegedly invented first). - "making" the invention may be in secret, but if it is A/S/or/C at the time just prior to the priority date of the second invention, then it loses its status as PA . - §104 does not apply to "in this country" [§104 allows an applicant to show conception and diligence outside the US in NAFTA or WTO countries]

§102(g)

102		Notes
(g)	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***.	- The sentence defines a narrow condition where even if an inventor was not the first to "make" he or she may win a priority "race"

Conception

- Five-element test that must be met for the ultimately claimed invention – mapped to the two-element test
  - Formation
  - in the Inventor's Mind
  - of a Definite and Permanent Idea
    - In sufficient detail
  - of the Complete and Operative Invention
  - as it is thereafter applied in Practice

"the directing conception"

means for carrying out

Actual Reduction to Practice (aRTP)

- Elements
  - Physically building or performing
  - Testing sufficient to demonstrate
    - whether the invention works (is suitable) for its intended purpose
      - Occurs when the last test needed to show operability is completed & the inventor understood the test to be successful
    - Sufficiency of testing is evaluated on a continuum
      - Less stringent for “simple” inventions and more stringent for “complex” inventions
  - aRTP must be corroborated
    - Inventor’s oral testimony alone is insufficient

Corroboration

- Inventor may make use of C, D or aRTP – only if corroborated
- Courts tend to be strict in requiring corroborating evidence
- Corroboration of oral evidence of prior invention is the general rule in patent disputes
  - 8 factors in assessing corroboration – “rule of reason” analysis
    - (1) the relationship between the corroborating witness and the alleged prior user,
    - (2) the time period between the event and trial,
    - (3) the interest of the corroborating witness in the subject matter in suit,
    - (4) contradiction or impeachment of the witness' testimony,
    - (5) the extent and details of the corroborating testimony,
    - (6) the witness' familiarity with the subject matter of the patented invention and the prior use,
    - (7) probability that a prior use could occur considering the state of the art at the time,
    - (8) impact of the invention on the industry, and the commercial value of its practice.

Corroboration

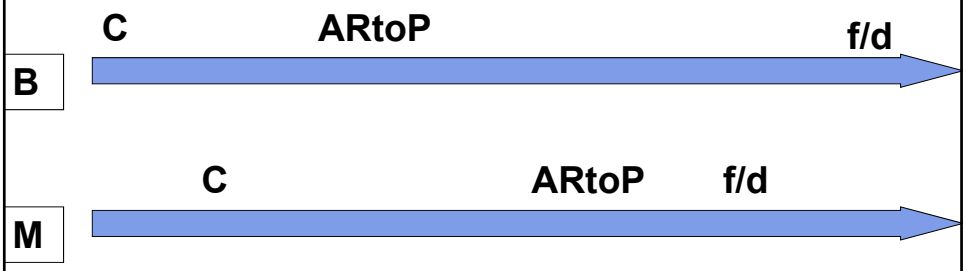
- Two example fact patterns where evidence was not sufficient to overcome the corroboration standard required to invalidate a patent
  - Barbed Wire Patent Case – on patent issued in 1874, 24 people testified that they saw/experienced the barbed wire at a county fair in 1858
    - Lower court said that it is unlikely all 24 were lying, invalidated the patent
    - US Supreme Court reversed
      - Witnesses whose memories are prodded by the eagerness of interested parties to elicit testimony favorable to themselves are not usually to be depended upon for accurate information
  - Woodland – district court invalidated a patent on method to protect foliage from freezing on the basis of testimony by 4 individuals that the defendant used the method for 10 years 30 years prior to the plaintiff's invention
    - Federal Circuit reversed, rejecting the district court's logic that it was unlikely that all 4 witnesses for defendant were perjurers
    - Uncorroborated oral testimony, of interested persons of events long past, does not meet corroboration standard

In re Klopfenstein (Fed. Cir. 2004)

- Printed publication: "conference" cases and "library" cases (dissemination; indexing for public accessibility)
- Points of precedent: Cronyn, Hall, MIT, Wyer
- Factors for this type of case

§102(g) Exercises

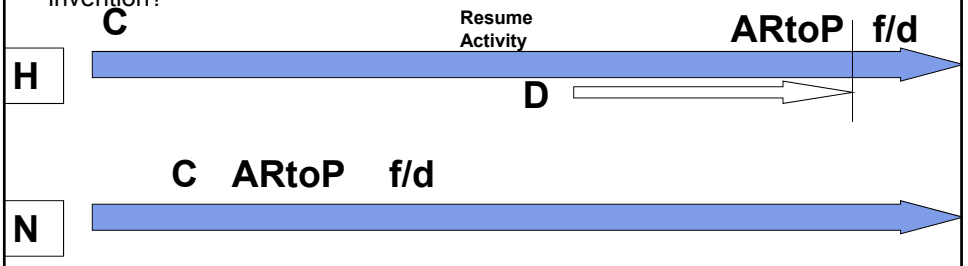
- Blackstone conceives of an improved can opener on January 1, 1990; reduces the invention to practice on June 1, 1990; and files a patent application claiming the can opener on February 1, 1991. Maitland conceives of the same can opener on March 1, 1990; reduces it to practice on August 1, 1990; and files a patent application directed towards the can opener on December 1, 1990. Which party is entitled to priority of invention?



- ANSWER:
  - As the first to RtoP, B obtains priority of invention over M
  - This is the most common resolution of 102(g) situations

§102(g) Exercises

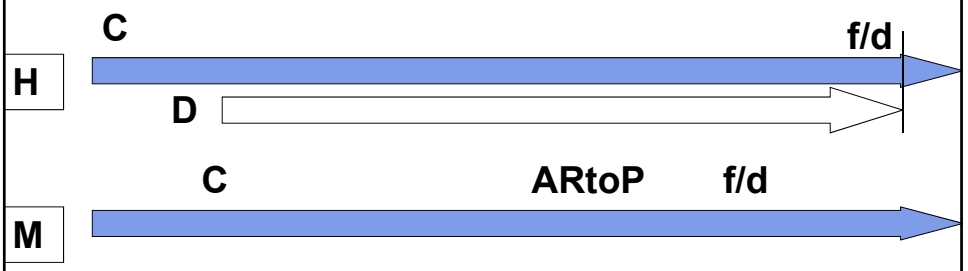
- On July 4, 1995, Hector conceives of a novel clock recovery circuit for use in fiber optic receivers. He sets the project aside until November 25, 1995, and after several weeks of continuous experimenting ultimately reduces the invention to practice on December 25, 1995. Hector then files a patent application with three independent claims directed towards the circuit on January 1, 1996. Nestor conceives of the same circuit on August 1, 1995; reduces it to practice on September 1, 1995; and files a patent application claiming the circuit on October 1, 1995. Which party is entitled to priority of invention?



- ANSWER:
  - Nestor obtains priority of invention as the first to RtoP
  - Hector does not fulfill the “exception” language of 102(g) because he was not diligent soon enough

§102(g) Exercises

- Hotspur conceives of a new optical recording media on March 21, 1993. He never builds a working model of the media, but does diligently file a patent application claiming the recording media on December 1, 1993. Margaret conceives of the identical recording media on April 1, 1993, diligently works on the invention until finally reducing it to practice on May 1, 1993, and files a patent application claiming the recording media on August 15, 1993. Which party is entitled to priority of invention?



- ANSWER:
  - Hotspur obtains priority because he fulfills the “exception” condition of 102(g)
  - Hotspur’s filing date is a constructive reduction to practice
  - Whether Margaret was diligent or not is not relevant