

Patent Law

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Review

Today's agenda

- Why patents?
- Claim drafting
- Disclosure doctrines
- Novelty (and pre-AIA statutory bars)
- Nonobviousness
- Utility
- Patentable subject matter
- Infringement
- Remedies
- Defenses
- Design Patents

- Why patents?
- Claim drafting
- Disclosure doctrines
- Novelty (and pre-AIA statutory bars)
- Nonobviousness
- Utility
- Patentable subject matter
- Infringement
- Remedies
- Defenses
- Design Patents

can you get
a patent?

- Why patents?
- Claim drafting
- Disclosure doctrines
- Novelty (and pre-AIA statutory bars)
- Nonobviousness
- Utility
- Patentable subject matter
- Infringement
- Remedies
- Defenses
- Design Patents

What happens once you have a patent?

Why patents?

→ There are a bunch of different justifications for private property:

- Natural rights / Locke: Someone who creates something is morally entitled to that thing
- Personhood / Hegel: A creation is a manifestation of its creator's personality and so belongs to him / her
- Human flourishing / Aristotle: Ownership furthers society's interest in human flourishing – people faring well and doing well
- Utilitarianism / law and economics: Property makes people better off by enabling market transactions and preventing market failures

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The Congress shall have Power

* * *

8. To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.

U.S. Const., Art. I, sec. 8, cl. 8

→ **The utilitarian case for patent law:**

- Inventing something is expensive; copying something is cheap
- Without patent law:
 - If someone invents something, someone else will copy, undercutting the inventor on price
 - Inventors are smart, so they won't invest in research and development
 - Society will get fewer inventions
- So we need to prevent this from happening
- Patent law is a good tool for this since it will let inventors charge higher (monopoly?) prices

- Under this theory, a patent represents a bargain between an inventor and society
- The inventor:
 - Gives society a valuable new invention
 - Gives society valuable new knowledge by advancing the state of the art and disclosing that advance to the public
 - In return, society grants a limited monopoly
 - Can charge higher prices
 - Recoup fixed costs of research and development

→ Problems with this story

- If it works, consumers pay higher prices
 - Requires a careful balance between innovation incentives and competition
 - Limited term, disclosure requirement, &c
- It doesn't always work: not all inventions are expensive to invent and cheap to copy
 - Explains pharmaceuticals well
 - Software less so
- There may be other ways to get the benefits
 - Prizes, research funding, tax benefits

→ **An alternative: prospect theory**

- Patents are like mineral rights in the old west
- Without patents:
 - Once an inventor invents something, different companies would compete to commercialize it, wasting effort
 - An inventor might decide not to invest in commercializing an invention
- Patents help channel inventor activity into post-invention development
- Ex post incentives, not ex ante incentives

Claim drafting

→ Elements of a claim:

- Preamble
- Transition
- Body / elements / limitations

→ Transitions:

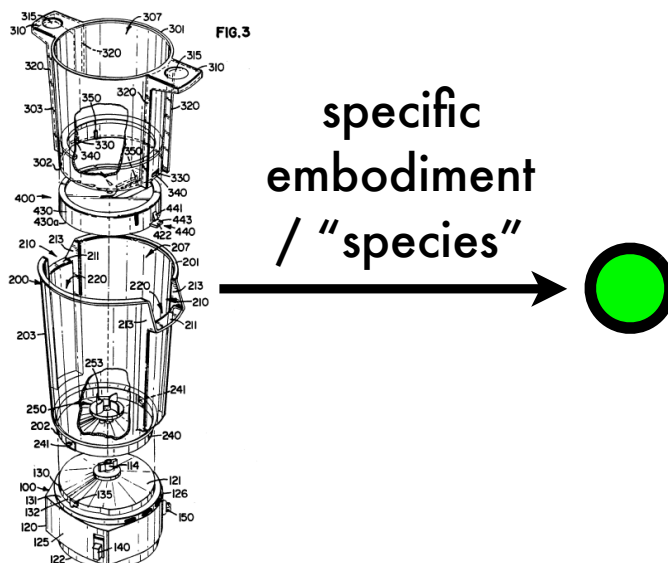
- Comprising: must include at least the listed elements
- Consisting of: must contain only the listed elements
- Consisting essentially of: must contain only the listed elements and others that do not substantially change the invention

→ Means-plus-function claim under § 112(f) / § 112 ¶ 6:

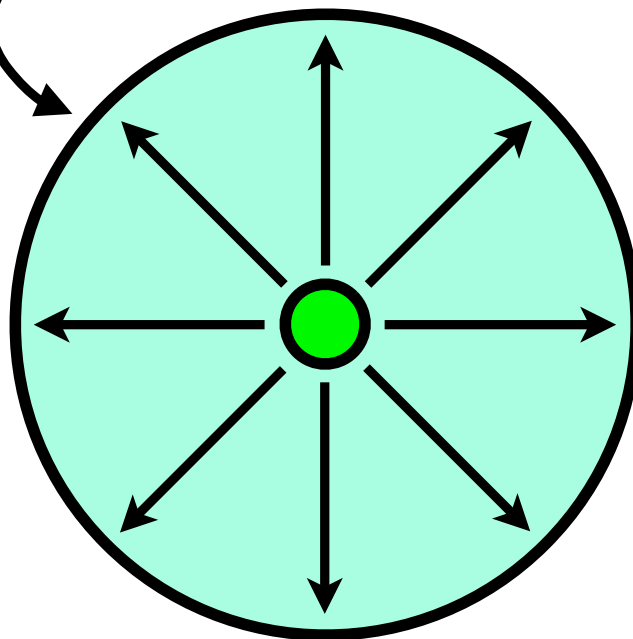
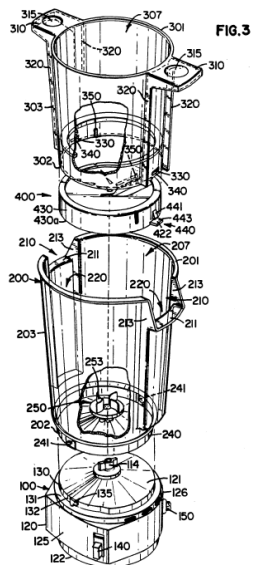
- A limitation can be expressed as a means for performing a function, not a structure, material, or specific act
 - “a means for rotating a vegetable retained within the retention compartment”
- Is construed to cover means described in spec, plus equivalents
- Almost always uses the word “means,” though that may change after *Williamson v. Citrix*

→ **Claim strategy:**

- To develop a comprehensive family of claims
 - Some very general
 - Some very specific
 - Some in between
- Different configurations of the invention
 - Cotton clothing
 - Shirt with pockets
 - Clothing dyed blue
 - &c



conceptual invention / "genus"



Disclosure
doctrines

→ **Four disclosure requirements:**

- Enablement
- Written description
- Definiteness
- Best mode – required but not an invalidity defense

→ **All four are required**

- § 112

(post-AIA) 35 U.S.C. § 112 — Specification

(a) In General.— The specification shall contain a **written description of the invention**, and of the **manner and process of making and using it**, in such full, clear, concise, and exact terms as to **enable any person skilled in the art** to which it pertains, or with which it is most nearly connected, **to make and use the same**, and shall set forth the **best mode** contemplated by the inventor or joint inventor of carrying out the invention.

(b) Conclusion.— The specification shall conclude with **one or more claims particularly pointing out and distinctly claiming** the subject matter which the inventor or a joint inventor regards as the invention.

* * *

→ Three basic questions

- Enablement:
 - Does the patent enable someone of ordinary skill in the art to know how to make and use the invention?
- Written description:
 - Does the patent make clear that the inventor had invented ("possessed") the invention?
- Definiteness:
 - Does the patent put the public on notice of what the patent covers?

→ Several basic purposes

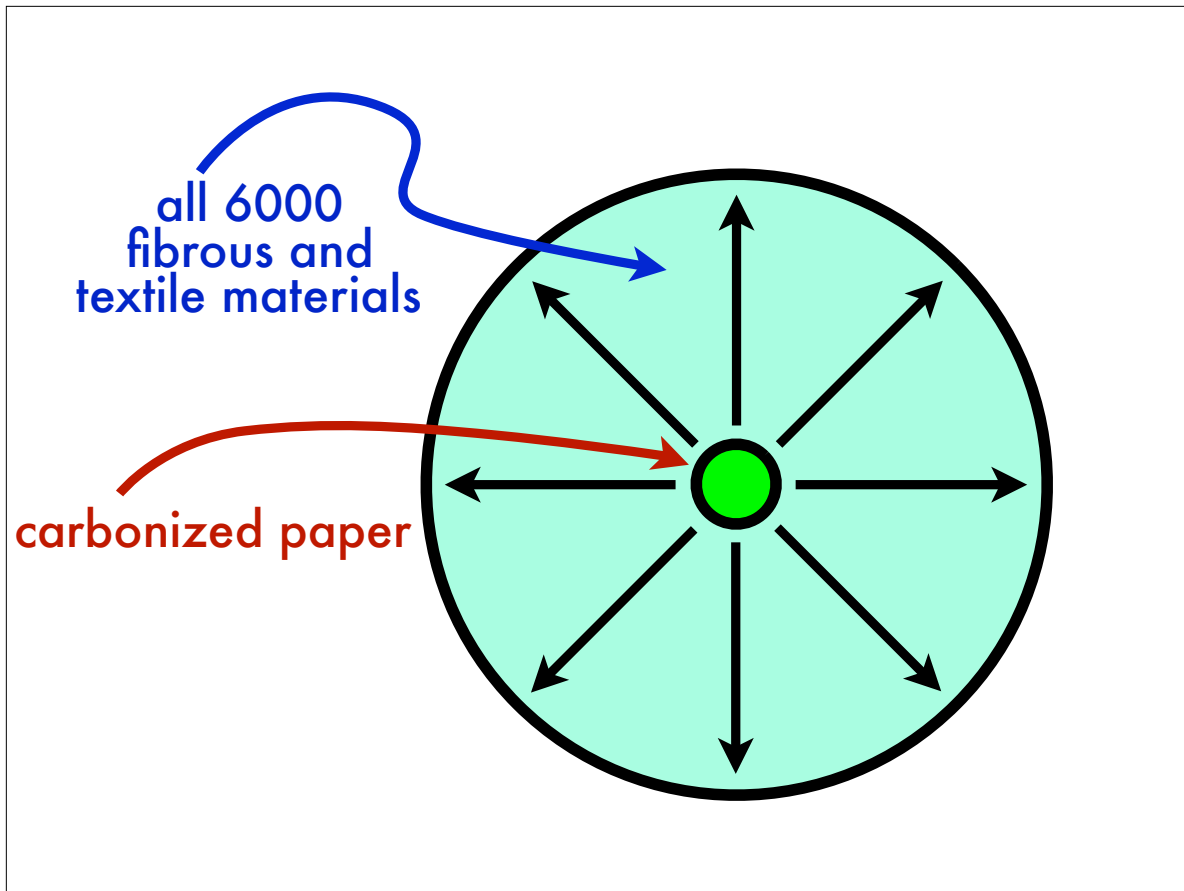
- Enablement:
 - Bargain: contribute knowledge to public
 - Timing: ensure invention is ready to patent
 - Scope: rights commensurate to contribution
- Written description:
 - Bargain: clarify contribution to knowledge
 - Timing: prevent someone from getting a patent for something they hadn't invented yet at the time of filing
 - Scope: rights commensurate to contribution

→ **Several basic purposes**

- **Definiteness:**
 - **Institutional:** make it easier to evaluate validity, infringement, &c
 - **Public notice:** Put the public on notice of a patent holder's exclusive rights
 - **Strategic:** Prevent patent holders from expanding or shifting patent rights over time with vague claims

→ **Enablement:**

- **Claim scope:** The full scope of the claim must be enabled without undue experimentation
 - **Sources of info:** the patent plus what someone of ordinary skill in the art would know as of the effective filing date
 - **Ex.: *Incandescent Lamp Patent*:** Patent claimed all plant materials, but only a few worked, and it wasn't clear which ones without undue experimentation
 - **Ex.: *Automotive Techs v. BMW*:** Enabled only one of two means for detecting crashes
 - **Undue experimentation:** *Wands* factors



→ **Enablement:**

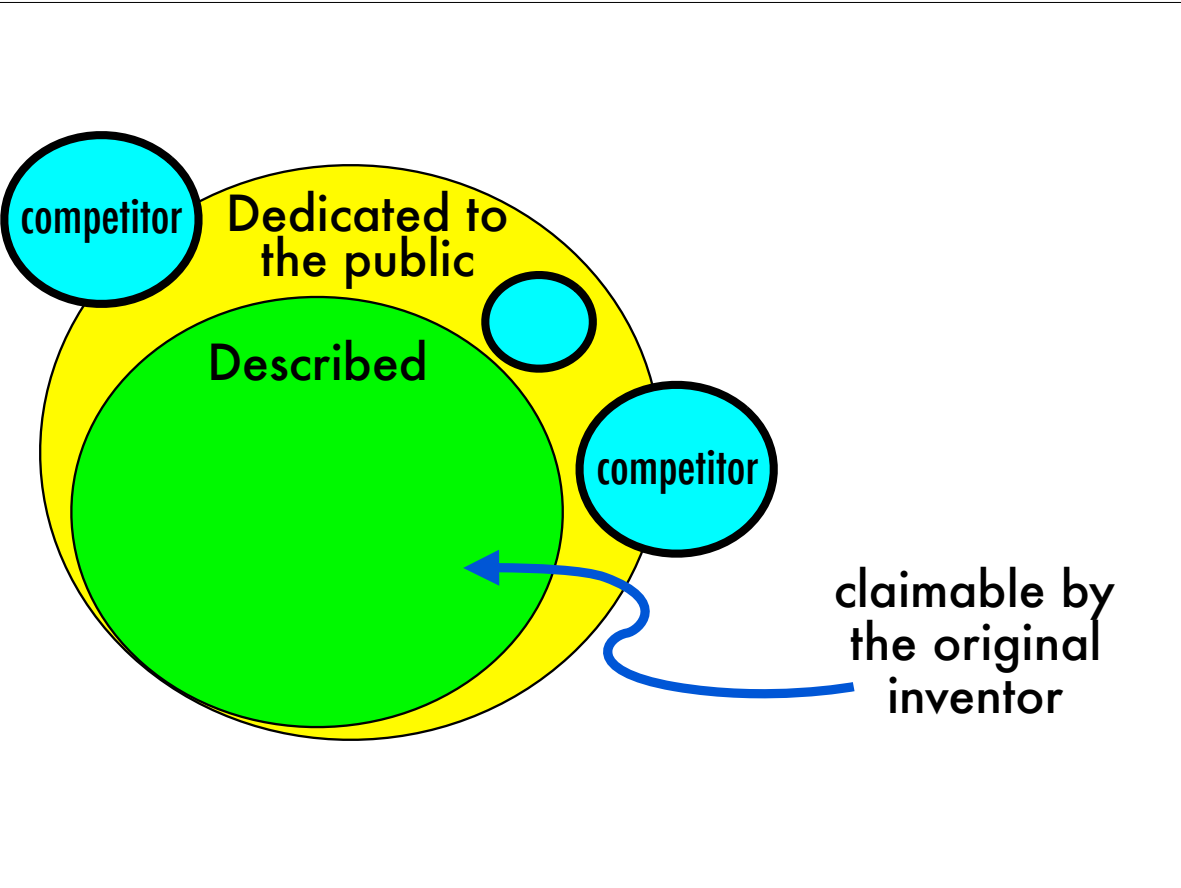
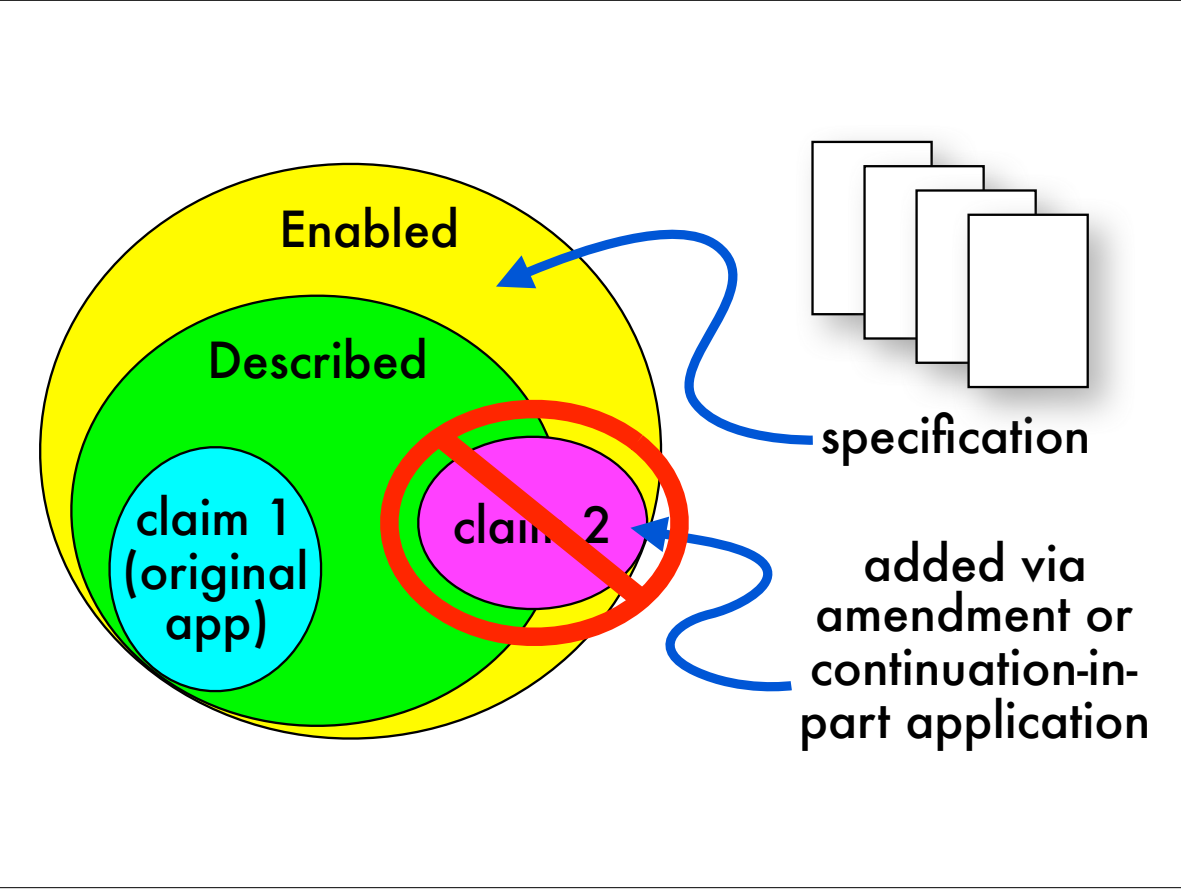
- Timing: The full scope of the claim must be enabled as of the effective filing date
 - No patents on incomplete inventions
 - Otherwise the wrong person might get the patent
 - Ex.: *Janssen v. Teva*: The spec basically stated a hypothesis (that galanthamine could treat Alzheimer's disease) without enough evidence

→ **Written description:**

- Separate and distinct from enablement:
 - *Ariad*: “We agree with Lilly and read the statute to give effect to its language that the specification ‘shall contain a written description of the invention’ and hold that § 112, first paragraph, contains two separate description requirements: a ‘written description [i] of the invention, and [ii] of the manner and process of making and using [the invention’].”

→ **Written description:**

- Timing: You can't add or amend a claim in prosecution that's not supported by the original description
 - Ex.: *Gentry Gallery*: During prosecution, the inventor amended the claim to be broader and no longer require the control to be on the fixed console, which went beyond the invention described in the specification

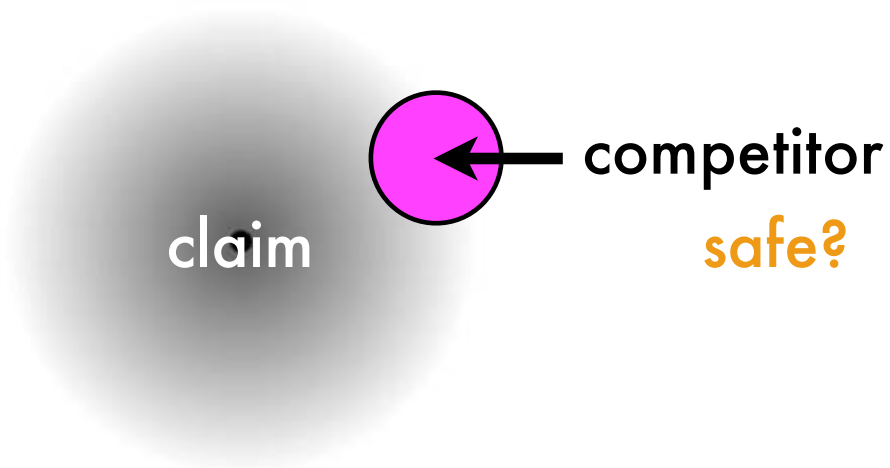
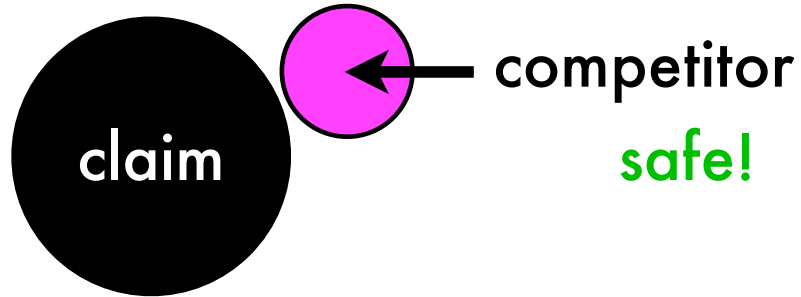


→ **Written description:**

- Claim scope: Inventor must describe full scope of invention
 - Ex.: *Ariad*: Spec must describe a representative number of species or common structural features so it's clear the inventor possessed the genus, not just the species
 - Fundamentally different technologies: Can't just describe one of them

→ **Definiteness:**

- Provide public with clear notice of the patent holder's exclusive rights
- Prevent inventor from strategic game-playing
 - ...with vague claims
 - ...with claims whose meaning changes over time





claim in year 0



industry
in year 3

claim in year 0

claim in year 4

claim in year 0

→ **Definiteness:**

- *Nautilus*: “a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty”
- What counts as indefinite?
 - Terms without meaning in the spec, claims, prosecution history, field
 - Hybrid (product / process) claims
- Terms of degree? (“unobtrusive manner”)
 - Definite if enough certainty for one of ordinary skill in the art given the spec

→ **Definiteness:**

- **Functional claiming: means-plus-function claim under § 112(f) / § 112 ¶ 6**
- **Functional claims are limited to the corresponding structure defined in the specification plus equivalents**
 - ▶ ...so there has to ***be*** such a corresponding structure
 - ▶ For software, must provide code or algorithm

Novelty (and statutory bars)

- The goal: Ensure the inventor contributed enough to society to deserve a patent
- Implementation:
 - Novelty (§ 102)
 - Statutory bars (pre-AIA § 102)
 - Nonobviousness (§ 103)
- Very important note:
 - The question is not “Is the invention new?”
 - Instead, it’s “Is there a particular piece of prior art that proves the invention is not new?”

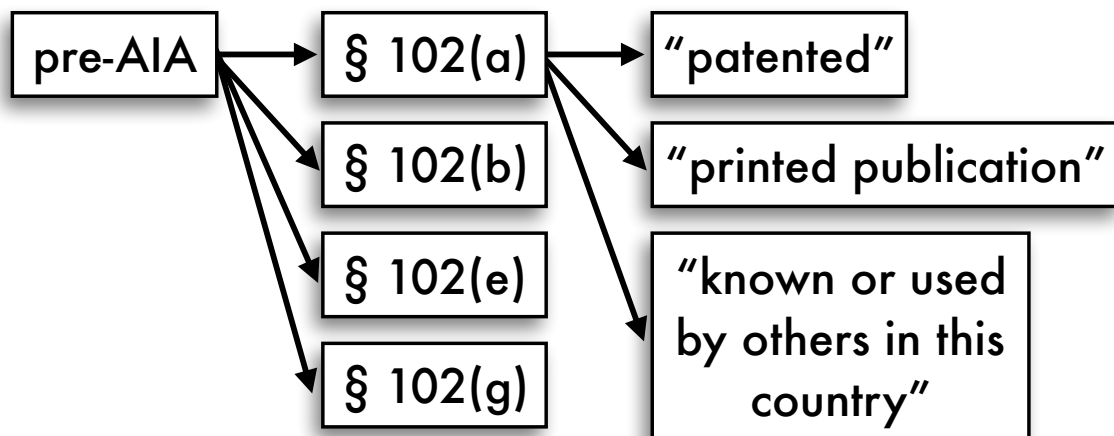
- Novelty and statutory bars require anticipation:
 - Every element in the patent claim must be present in a single prior-art reference
 - “That which would literally infringe if later in time anticipates if earlier.”
 - Ex.: *Schering* (Claritin case): Someone taking Claritin necessarily produced DCL, so patent on DCL is anticipated by Claritin patent
- Nonobviousness relaxes this requirement
 - Combining multiple references
 - Filling in the gaps

→ Novelty framework:

- 1. Which law applies? (Pre-AIA or post-AIA)
 - Post-AIA: effective filing date of any claim on or after March 16, 2013
- 2. Does a reference qualify as prior art under a subsection of § 102?
 - “patented”
 - “printed publication”
 - &c
- 3. What are the effective date of the prior-art reference and the critical date of the patent?
- 4. Does the information disclosed in the prior-art reference anticipate the patent claim(s)?

→ Novelty framework:

- This is a super-methodical inquiry!



- Pre-AIA and post-AIA law have completely different structures

→ **AIA novelty structure:**

- Much simpler than pre-AIA
- Timing rule:
 - All prior art pre-filing counts unless carved out by § 102(b) grace period

→ **AIA novelty structure:**

- Categories of prior art:
 - patented (§ 102(a)(1))
 - described in a printed publication (§ 102(a)(1))
 - in public use (§ 102(a)(1))
 - on sale (§ 102(a)(1))
 - otherwise available to the public (§ 102(a)(1))
 - described in a later-published patent or patent application (§ 102(a)(2))

→ **AIA novelty structure:**

- AIA grace period:
 - A disclosure doesn't count if it was within a year of filing and:
 - Was made by the inventor or someone who got it from the inventor (§ 102(b)(1)(A)); OR
 - The same subject matter had been previously made by the inventor or someone who got it from the inventor (§ 102(b)(1)(B))
 - Key unresolved issue: what counts as the same "subject matter"?

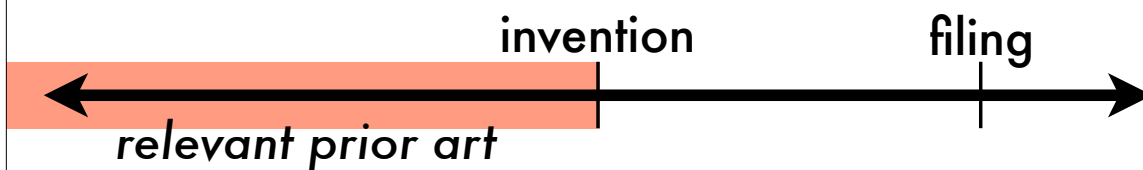
→ **Pre-AIA novelty structure:**

- Conceptually more complicated
 - Two fundamental timing rules:
 - Novelty: Any prior art that predates the applicant's invention counts
 - Statutory bars: Any prior art that comes more than a year before the effective filing date counts

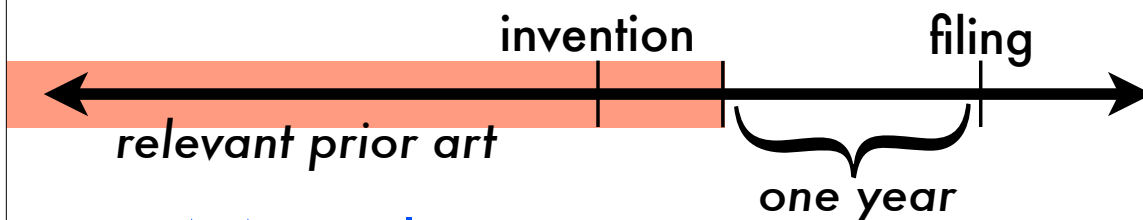
→ Pre-AIA novelty structure:

- Many similar categories of prior art:
 - patented (§ 102(a)/(b))
 - described in a printed publication (§ 102(a)/(b))
 - known or used by others in this country (§ 102(a))
 - in public use or on sale in this country (§ 102(b))
 - described in a later-published patent or patent application (§ 102(e))
 - invented by someone else in this country and not abandoned, suppressed, or concealed (§ 102(g)(2))

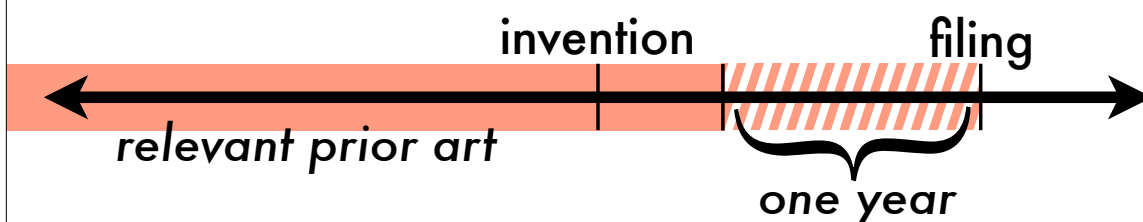
Pre-AIA novelty:

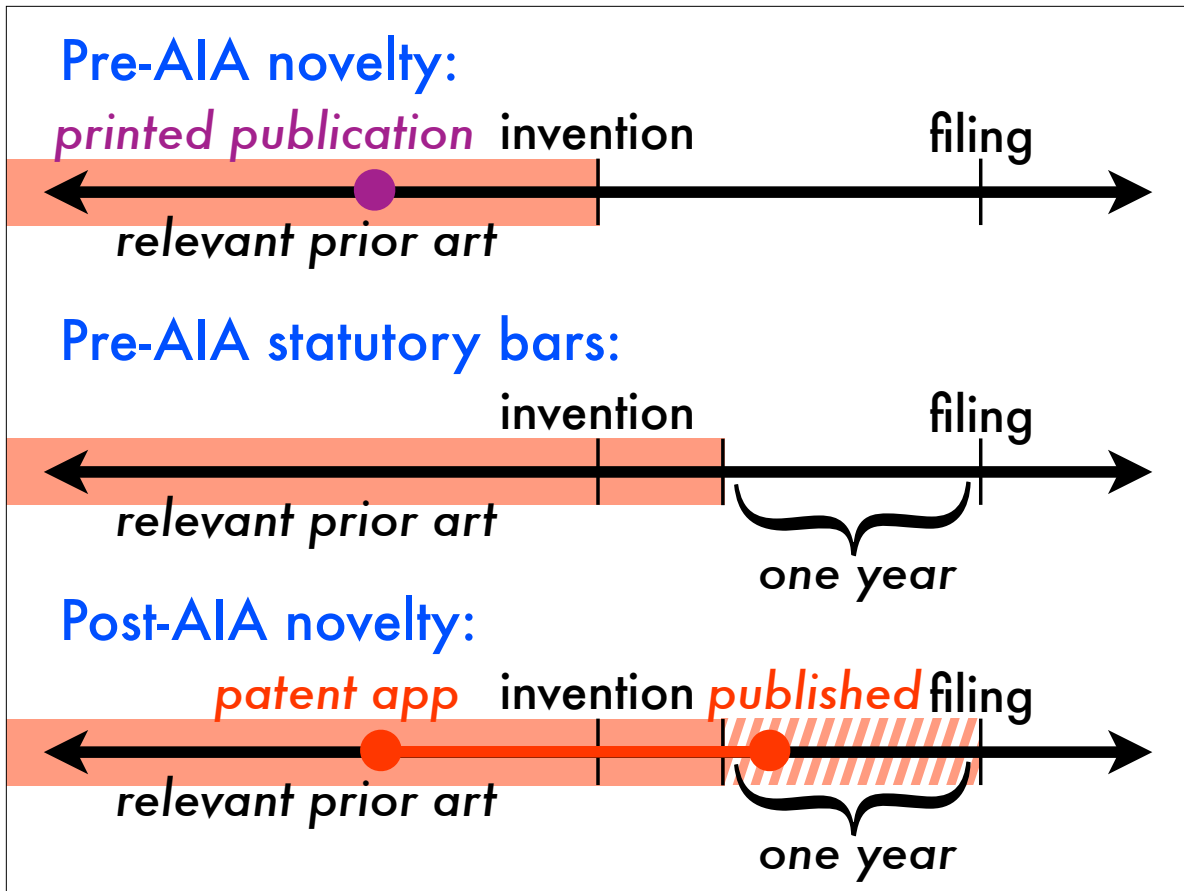


Pre-AIA statutory bars:



Post-AIA novelty:





→ Kinds of prior art:

- "patented"
 - Requires being covered by the claims of a patent in this or a foreign country
 - Usually irrelevant, since a patent is broader prior art as a printed publication

→ Kinds of prior art:

- “described in a printed publication”
 - Most common category of prior art
 - Does not have to be published!
 - Test: Is the info sufficiently available to the public interested in the art?
 - Time displayed
 - Expertise of audience
 - Ease of copying
 - Ex.: *Klopfenstein*: Academic presentation, with poster shown for a few days, is a printed publication

→ Kinds of prior art:

- “in public use” / “used by others”
 - Requires non-secret use that is not within the control of the inventor
 - Ex.: *Rosaire* (oil prospecting)
 - Key difficulty: Trade-secret uses
 - Trade-secret use by inventor to make a product sold to the public: does count as a public use
 - Otherwise: does not
 - Purely experimental uses don’t count
 - Ex.: *City of Elizabeth* (pavement)

→ Kinds of prior art:

- “on sale”
 - Requires two things:
 - Commercial offer to sell the invention
 - Invention that is ready for patenting (either already reduced to practice or there are enabling drawings or descriptions)
 - Ex.: *Pfaff* (sockets for TI): Offer to sell 30K sockets to TI was prior art
 - Key difficulty: Does sale need to be public?
 - Pre-AIA: no – this is secret prior art!
 - Post-AIA: maybe!

→ Kinds of prior art:

- “otherwise available to the public”
 - New catchall category of prior art
 - Oral presentations?
 - Might implicitly limit “public use” and “on sale”

→ Kinds of prior art:

- later-published patents and patent applications:
 - backdated to original filing date
 - only if they are eventually published
 - (pre-AIA) foreign applications date back to foreign filing date only if they are in English and designate the U.S. under the PCT

→ Priority of invention: (pre-AIA § 102(g))

- Two scenarios:
 - An interference (§ 102(g)(1))
 - Prior invention as prior art – this is rare (§ 102(g)(2))
 - Requires conception and reduction to practice
 - Requires invention in this country
 - More demanding than most forms of prior art

→ Priority of invention: (pre-AIA § 102(g))

- The question: Who invented first?
 - 1. The first to reduce to practice usually wins
 - 2. Filing a valid application counts as constructive reduction to practice
 - 3. The first to conceive may win 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's abandoned, suppressed, or concealed doesn't count
- This is also the rule for when something is invented for other § 102 purposes

→ Party-specific bars (pre-AIA):

- § 102(c): You lose if you abandon your patent rights
 - Today, largely irrelevant
 - Matters when inventor expressly abandons invention to the public or exploits it as a trade secret for less than a year

→ **Party-specific bars (pre-AIA):**

- § 102(d): Foreign filings
 - You lose if:
 - The foreign application covers the same invention by the same applicant;
 - The foreign patent issues before the U.S. application is filed; and
 - The foreign application is filed more than a year before the U.S. application is filed
 - To avoid problems, always file in the U.S. within a year of foreign filings

→ **Derivation (pre-AIA):**

- Pre-AIA § 102(f): You lose if you did not actually invent the invention
 - Stealing is bad, mokay?
- Post-AIA:
 - Administrative derivation proceeding (§ 291)
 - Civil cause of action (§ 135)
 - May be an implicit invalidity defense

Nonobviousness

→ **Nonobviousness:**

- § 103: No patent if differences between the invention and the prior art are such that the claimed invention would have been obvious to a person of ordinary skill in the art
- No significant differences pre- and post-AIA

→ **Why is this a thing?**

- Patent bargain: Obvious inventions don't contribute significantly to society
- Evidence: If an invention is obvious, there's a chance it was previously invented and we just don't have unambiguous prior art

→ **Counterargument: A lot of important innovation is cumulative**

→ **How do we tell if something is obvious?**

- Pre-KSR: the TSM test
 - Is there some teaching, suggestion, or motivation in the prior art to combine elements from different references?

→ How do we tell if something is obvious?

- *KSR*:
 - Combo patents need extra scrutiny
 - TSM test provides helpful insight, but is not mandatory
 - Look to common sense and market motivations to combine
 - Combos of familiar elements via known methods to yield predictable results are obvious
 - Criticism: Hindsight bias

→ How do we tell if something is obvious?

- Since *KSR*:
 - “Known methods” and “predictable results” have become key drivers of outcomes
 - Ex.: *Kubin*: Going from protein to DNA is, by standards of the field, predictable and therefore obvious
 - Ex.: *P&G v. Teva*: Shift in location of functional group in drug is unpredictable
 - Ex.: *Perfect Web*: Common sense is a label for knowledge so basic that those of ordinary skill undoubtedly have it

→ How do we tell if something is obvious?

- Objective indicia of nonobviousness
 - Commercial success
 - Failure of others
 - Professional skepticism
 - Unexpected results
 - Simultaneous invention
 - Ex.: *Transocean*: Commercial success, industry doubt, and a price premium suggest nonobviousness
 - Ex.: *Arkie Lures*: If everyone thought it would explode, probably not obvious

→ For novelty, all prior art in § 102 counts

→ What about for obviousness?

- Analogy: Inventor's workshop with all the prior art on the walls
- Relevant art:
 - Same field of endeavor, or
 - Pertinent to the specific problem the inventor is trying to solve
 - Ex.: *Clay*: Field and problem are oil storage, not oil generally

→ Note: Timing also gets complicated

- Timing under § 103 is more complicated than it seems
- If the question is whether the invention would have been obvious, it should just be prior art that's publicly available as of the critical date
 - Court: Patent applications get backdated just like under § 102(e) / § 102(a)(2)
 - No court opinion yet, but: Prior art almost certainly gets carved out for § 103 under the AIA grace period

**Patentable
subject matter**

→ Patentable subject matter: the “nouns” of patent eligibility

- New, useful, and nonobvious
- And:
 - Process,
 - Machine,
 - Manufacture, or
 - Composition of matter

(Post-AIA) 35 U.S.C. § 101 — Inventions patentable

Whoever invents or discovers any **new** and **useful process, machine, manufacture, or composition of matter**, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

→ **Unified framework:**

- 1. Does a patent claim a process, machine, manufacture, or composition of matter?
 - No: Not patentable
 - Yes: Go to step 2
- 2. Does it set forth a law of nature, natural phenomenon, or abstract idea?
 - No: Patentable
 - Yes: Go to step 3
- 3. If so, do the other elements of the claim add an inventive concept?
 - No: Not patentable
 - Yes: Patentable

→ **Implicit exceptions to patentable subject matter:**

- Law of nature
- Natural phenomenon
- Abstract idea

→ **Courts don't expand the implicit exceptions:**

- *Diamond v. Chakrabarty*: Court rejects exception for living creatures (5-4)
- *Bilski v. Kappos*: Court rejects new exception for business methods (5-4)

→ **Why implicit exceptions?**

- Maybe not made by humans – preexisting truths
- Maybe would preempt too much research – basic building blocks of scientific inquiry
 - Not a good application of the patent bargain – cost too great?
- Maybe it would be impossible not to infringe

→ **Natural phenomena:**

- *Chakrabarty*: New bacteria is patentable because it is something that previously did not exist
- *Myriad*: Isolated natural DNA is not patentable because it is something that previously existed, plus a trivial transformation step
 - But cDNA is patentable because it does not exist in nature

→ Laws of nature:

- *Mayo*: Method of determining optimal dosage is not patentable because it is a law of nature plus an obvious application
 - Note: this was a very valuable discovery

→ Abstract ideas:

- *Alice*: Hedging method is not patentable because it is an abstract idea
 - “fundamental economic practice long prevalent in our system of commerce”
 - “building block of the modern economy”
 - not a “preexisting, fundamental truth that exists in principle apart from any human action”

→ Problems:

- What counts as “abstract”?
 - Things we can think of as algorithms?
 - Things with no physical manifestation?
 - Implementations of longstanding ideas?
 - Things that are too broadly claimed?
 - Ex.: *Ultramercial*: Ad-supported web video is abstract
 - Ex.: *DDR Holdings*: Solving a problem that specifically arises in computer technology isn’t abstract

→ **Problems:**

- What sort of transformation / application step is enough to make something patentable?
 - Purifying, separating, bundling, recreating?
 - Probably has to be independently patentable



Utility

- **Three kinds of utility:**
 - Operability – does it work?
 - Beneficial or moral utility – is it something we want to encourage?
 - Practical or specific utility – does it have a real-world use?
- **Basis: § 101's requirement that an invention be "useful"**

- **Operability: The invention has to work**
 - Not well
 - Not practically or economically
 - Just at all
 - Doesn't really come up unless, e.g., the invention appears to violate the laws of physics or be impossible
 - This is an anti-fraud provision

→ **Beneficial utility:** The invention has to be moral

- Largely dead
- Ex.: *Juicy Whip*: Drink dispenser that looks like a different kind of dispenser has utility – looking like one thing instead of another is a kind of utility
- Doctrine still applies:
 - To inventions that are illegal in entire United States
 - Maybe, to prevent consumer fraud

→ **Specific utility:** The invention has to have some use specific to the invention

- Research intermediaries &c might lack utility
 - Incomplete inventions
 - Similar to disclosure doctrines:
 - Ensure invention is complete
 - Ensure scope of patent is commensurate to contribution
- Ex.: *Brenner*: Method of making compound lacks utility when compound lacks utility
- Ex.: *Brana*: Showing anti-tumor activity in mice is enough to show utility

Infringement

→ Claim construction:

- Courts construe claims because applicants have incentives to write vague claims
- *Phillips*: Claims have their ordinary meaning, as understood by someone of ordinary skill in the art, in light of the patent as a whole and the prosecution history
 - Look first to intrinsic evidence: Claims, spec, prosecution history
 - And then maybe extrinsic evidence if necessary to resolve ambiguity
- But: Don't read spec limitations into claims
 - This can lead to uncertain outcomes

→ Kinds of infringement:

- § 271(a): direct infringement
 - Making, using, offering to sell, selling, or importing invention
- § 271(b): inducing infringement
- § 271(c): contributory infringement
 - Selling or offering to sell a component of a patented machine, with no other use and not a staple article of commerce
 - Selling or offering to sell a material made for use in practicing a patented process, with no other use and not a staple article of commerce

→ Kinds of infringement:

- Direct versus indirect infringement:
 - Direct: § 271(a)
 - Indirect: § 271(b)/(c)
- Literal versus equivalents infringement:
 - Literal: Literally contains every element of the patented claim
 - Equivalents: Contains every element, with at least one under the doctrine of equivalents
 - Ex.: Super Soaker case: Water chamber isn't within the elongated housing

→ **Infringement by equivalents:**

- The idea: There are products that don't meet all limitations of a claim, but are very close
 - Maybe due to strategic behavior (pH = 3.95 when the claim requires 4–6)
 - Maybe due to unforeseeable technology (Velcro® instead of mechanical fastener)
 - Maybe due to different design decisions
- Similar to nonobviousness

→ **Infringement by equivalents:**

- The structure of the rules:
 - Literal infringement: You must show that every element of the claim is literally met by the accused product
 - Except: Under the doctrine of equivalents, you can show that one or more elements are equivalents of the claim limitations (factual question)
 - Except: Under prosecution history estoppel (or another doctrine), the doctrine of equivalents may not be available (legal question)

→ The factual question: What is an equivalent?

- Function/way/result test:
 - Does the accused structure or step perform substantially the same function
 - in substantially the same way
 - to achieve substantially the same result?
- Ex.: *Winans v. Denmead*: Conical railway car is an equivalent to an octagonal railway car

→ The legal question: When are equivalents not available?

- Prosecution history estoppel (*Festo v. SKKK*):
If you give up claim scope in prosecution, you can't get it back through equivalents
 - Otherwise an end run around examination
 - But not a complete bar; still available if
 - Equivalent was unforeseeable or
 - Amendment was tangential to the equivalent you're trying to get
- Disclosure-dedication rule
- All-limitations rule
- Argument-based estoppel

→ **Indirect infringement:**

- AKA secondary liability
- Theory: You can't get away with infringement just by leaving out one component of the product for your customer to buy
- Ex.: *Wallace v. Holmes*: Oil-burning lamp minus commodity chimney

→ **Indirect infringement:**

- Induced infringement (§ 271(b)): Aiding and abetting (and possibly actively encouraging) infringement
- Contributory infringement (§ 271(c)): Sale of an article that's especially made to infringe and not a staple article of commerce
- Mental state: Both require actual knowledge of the patent and infringement (though willful blindness counts)
 - Belief of noninfringement is a defense
 - Belief of invalidity is not a defense
 - (This is stupid)

→ **Divided / joint infringement:**

- When steps of a method claim are performed by different parties
- No indirect infringement without underlying direct infringement
- Defendant must be responsible for every step:
 - Part of a joint enterprise, or
 - Exercises 'control or direction' over the entire process
 - Telling your customers how to perform a step counts

→ **Geographic scope of infringement:**

- § 271(a): Direct-infringement activity must occur in the United States
 - System patent: the use (or other verb) has to be in the United States, but the system can be distributed
 - Method patent: entire method must occur in the United States
 - Ex.: *NTP v. RIM*

→ **Geographic scope of infringement:**

- § 271(f): Supplying components or inducing combination outside the United States is infringement
 - *Microsoft v. AT&T*: physical components, not digital
- § 271(g): Importing product made by patented process is infringement
 - Product can't be materially changed after importation
 - Ex.: *Eli Lilly*: Four chemical-synthesis steps is a substantial change

Remedies

→ **Four kinds of remedies:**

- Injunctive relief
 - Permanent or preliminary
- Damages
 - Lost profits or reasonable royalty
- Attorney fees
- Increased damages for willfulness

→ **Preliminary injunctive relief:**

- Theory: Patent litigation is slow, so sometimes preliminary relief is appropriate
- Four-part balancing test:
 - Likelihood of success on the merits
 - Possibility of irreparable harm absent an injunction
 - Balance of hardships on both sides
 - Public interest
- “Likely” implies some flexibility
- Ex.: *Amazon.com*: Barnes & Noble had a promising – but uncertain – invalidity case

→ **Permanent injunctive relief:**

- Theory: Patents are property, and so come with a right to exclude
- But: The statute authorizes injunctions consistent with principles of equity
- eBay: Similar four-part balancing test
 - Irreparable harm
 - Inadequacy of money damages
 - Balance of the hardships
 - Public interest
- Economics: Injunctions make sense when parties are competitors; damages make sense when we're worried about hold-up or patent thickets

→ **Damages framework:**

- Damages are expectation damages – goal is to put plaintiff in the position it would have been in absent the infringement
- Two kinds:
 - Reasonable royalty – statutory minimum
 - Lost profits – if you can prove you lost profits due to the infringement
- So the big question often is whether you can prove you actually lost profits

→ Reasonable royalty:

- Makes sense when the defendant would have licensed the patent or switched to another technology
 - Ex.: *Lucent*: Didn't make a competing product, so no lost profits, and Microsoft would have licensed the patent or just changed the date picker
- Goal: Figure out what royalty the parties would have agreed to
 - Hypothetical negotiation
 - *Georgia-Pacific* factors
 - Ex.: Royalties under similar licenses

→ Lost profits:

- Makes sense when the plaintiff and defendant are competitors, so the plaintiff lost sales due to the infringement
 - Ex.: *Rite-Hite*: Only two companies selling devices to secure truck to loading dock
- Problem: How much additional profits would the plaintiff have made?
 - Maybe some customers would buy noninfringing alternatives
 - Maybe some wouldn't have bought at all

→ **Lost profits:**

- *Panduit* factors:
 - Demand for the patented product
 - Absence of noninfringing substitutes
 - Manufacturing / marketing capability
 - Profits that would have been made
- Ex.: *Rite-Hite*: Profits from a product that doesn't practice the invention were still lost
- Ex.: *Grain Processing*: Available process is a noninfringing alternative even if it isn't on the market at the moment
- Choose your expert wisely

→ **Attorney fees for exceptional cases (§ 285):**

- District courts have substantial discretion
- Exceptional case: one that stands out due to
 - Substantive strength of a party's litigating position or
 - Unreasonable manner in which the case was litigated
- Ex.: *Oplus*: Oplus ducked its own discovery obligations, wasted the court's time, and acted unethically

→ **Increased damages for willfulness
(§ 284):**

- District courts have substantial discretion
- Punitive damages up to triple damages for “egregious cases typified by willful misconduct”
- To avoid willfulness, get an attorney opinion letter
 - Federal Circuit: No adverse inferences from failure to obtain or produce (!!)
legal opinion

Defenses

→ Patent exhaustion

- Theory: Once you sell a patented product, you can't control what the buyer does with it downstream
 - Just a default rule; assumption is that this is what most buyers want
 - Ex.: *Keurig*: Buyers can use coffee makers to use patented process, even with knockoff pods
- Limits on what you can do with the product: repair/reconstruction doctrine
 - Ex.: *Jazz Photo*: Even fairly extensive refurbishing is just a "repair"

→ Inequitable conduct

- Theory: Patent prosecution is ex parte, and we can't rely on adversarial system to reveal facts, so we impose a duty of candor
- *Therasense*: Withheld information is only a problem if:
 - It's but-for material to patentability, and
 - Applicant had specific intent to mislead the examiner
- Clear and convincing evidence; heightened pleading burden
- AIA: can repair problems after the fact

→ Inventorship

- Inventors must contribute to conception, not reduction to practice
 - Ex.: *Hess*: Mr. Hess just provided information that you could look up
- Errors can be corrected by the PTO or a court
- Every inventor has full rights to the entire patent, which makes this a useful defense
 - Ex.: *Acromed*: Just buy off the possible inventor
 - Can be changed by contract

Design patents

→ Design patents

- Utility patents: New and useful process, machine, manufacture, or composition of matter (§ 101)
- Design patents: New, original and ornamental design for an article of manufacture (§ 171)
- Ornamentality: Design must be ornamental, not functional
 - This would be an end-run around utility-patent requirements
 - A forgiving rule – design can't be dictated by function
 - Ex.: *PHG*: Design of peel-off labels for hospital use was dictated by function

→ Novelty and nonobviousness

- Novelty (§ 102): Would an ordinary observer / consumer think the patent and prior art claim substantially the same design?
- Nonobviousness (§ 103): Would a designer of ordinary skill of the type of goods find the design obvious?
 - Requires primary reference and secondary references

→ Infringement

- Infringement (§ 271): Would an ordinary observer / consumer think the patent and accused product have substantially the same design?
 - A demanding test
 - Ex.: *High Point*: fine details of the slipper design

→ Remedies

- § 289: Available remedies include the normal remedies plus disgorgement of the infringer's profits
 - Giant verdicts!
 - *Samsung v. Apple*: The "article of manufacture" for which the court disgorges profits can be the end product or a component of that product

Next time

Next time

- There is no next time.
- Good luck on finals!
- Keep in touch! The best part of being a professor is seeing your students go on to do great things

