PATENT LAW OUTLINE – FALL 2007

OBTAINING THE PATENT GRANT
• Requirements of patentability – adequately disclosed, new, non-obvious, useful, w/in a statutory class of patentable subject matter
• Patents are not a Constitutional right – Congress is simply able to grant patents

DISCLOSURE REQUIREMENTS
• §112 ¶1 – written description, enablement, and best mode
• §112 ¶2 – definiteness requirement
• Enablement
  o Inventor must set forth a specification w/sufficient information to enable a person skilled in the relevant art to make and use the claimed invention w/o undue experimentation
  o In re Glass (CCPA 1974) pg 169 – sufficiency of disclosure should be judged at the time of the filing date
    ▪ Cannot use pending patents as evidence of enablement when those pending applications were not available to the public (note tension b/c those would count as prior art under §102(e))
  o Biological deposits – when microorganisms are not readily available; does not have to be released to the public until patent is issued
  o Patent does not have to teach what is already well known in the art
  o In re Hogan (CCPA 1977) pg 177 – PTO cannot use later art for §112 rejections; PTO cannot rely on later art to invalidate a patent for non-enablement b/c the patent did not sufficiently enable a later discovered entity that was covered by the earlier patent’s claims but not enabled by the written description
  o Wands factors for undue experimentation
• Best Mode
  o Most countries do not have a best mode requirement
  o 2 part test for determination compliance w/best mode requirement
    ▪ Whether at the time the inventor filed the patent application, he knew of a mode of practicing the claimed invention that he considered to be better than any other
    ▪ Whether the disclosure is adequate to enable one skilled in the art to practice the best mode, or has the inventor ‘concealed’ his preferred mode from the public
  o Glaxo v. Novopharm (Fed Cir 1995) pg 188 – knowledge of the patent agent’s or other employees of a best mode cannot be imputed to the inventor w/o other evidence – requirement only focuses on whether the inventor himself knows of a best mode
  o Best mode is evaluated at the time of filing – later discovered best modes need not be added by amendment after filing date
  o Adequate disclosure of best mode
    ▪ Great Northern Corp v. Henry Molded Products (Fed Cir 1996) pg 200 – best mode requirement only applies to practicing the
invention and not to ‘production details’ (commercial considerations such as equipment on hand or prior relationships w/suppliers and details which related to the quality or nature of the invention but which need not be disclosed b/c they are routine)

- First determine whether the detail in question was a production detail – then determine whether it was a routine detail known to those in the art so that a PHOSITA would still be enabled to practice the best mode
  - Best mode does not require the public to be fully enabled to duplicate exactly the patentee’s preferred implementation of the invention
  - Do not have to point out which is the best mode – can include many different modes as long as the best mode is included

- Written Description
  - **Vas-Cath v. Mahurkar** (Fed Cir 1991) pg 206 – written description must allow PHOSITA to recognize that the patentee had actually invented the claimed matter and was in possession of the invention at the filing date
  - A specification that is adequate to support a claim to specific subject matter may also be adequate to support a broader claim which encompasses that specific subject matter depending on whether the specification taken as a whole sets out that specific subject matter to be an essential element of the invention or whether the specification indicates that the invention is of a much narrower scope
  - Patent can enable more than it adequately describes (i.e. describes making a table w/four legs, but also enables one to make a table w/three legs)
  - **Fujikawa v. Wattanasin** (Fed Cir 1996) pg 226 – Fujikawa wanted the PTO to rule that Wattanasin did not support Fujikawa’s sub-genus so that when they filed, PTO could not use Wattanasin as prior art
    - Must enable people to identify the overall group but do not necessarily each individual member – however, if you identify the individual members, you must describe the distinction b/t members and non-members

- Definiteness
  - **Athletic Alternatives v. Prince** (Fed Cir 1996) pg 231 – where a broad and narrow reading of a claim are equally plausible and the disclosure at least enables the narrow reading, the notice function of §112 is best served by limiting the claim to the narrow reading
    - General policy to read the claim as narrow in order the save the claim from invalidation for indefiniteness

- Complex Technologies – Biotechnology
  - **Amgen v. Chugai Pharmaceutical** (Fed Cir 1991) pg 289 – if the required starting cells can be prepared w/o undue experimentation from known materials, based on the description in the patent specification, a deposit is not required
  - Conception of the invention requires a mental pictures of the structure of the chemical or when the inventor is able to define it by its method of
preparation, its physical or chemical properties or whatever characteristics sufficiently distinguish it

- **Fiers v. Revel** (Fed Cir 1993) pg 301 – adequate written description of DNA requires more than the potential method for isolating it, must describe the DNA itself
- **Regents of U of CA v. Eli Lilly** (Fed Cir 1997) pg 306 – specification describing a method for producing human insulin cDNA and the amino acid sequence and which adequately described rat insulin cDNA was inadequate to describe human insulin cDNA

**NOVELTY AND LOSS OF RIGHT**
- Novelty bars - §102(a), (e), and (g) – focus on when the applicant actually invented the claimed invention
  - §102(a) – must be publicly accessible
  - §102(e) – 2 types of prior art
    - §102(e)(1) – published patent application, filed in the US
    - §102(e)(2) – unpublished patent applicants if the application disclosed the claimed subject matter and ultimately issues as a patent
  - §102(g) – basis for interference proceedings
    - §102(g)(1) – permits an applicant to use a foreign based inventive activity to obtain patent rights, but not defeat patent rights
    - §102(g)(2) – allows for patent defeating inventive activity that is not subject to an interference, but the activity must be in the US
- Statutory bars - §102(b) and (d) – focus on when the applicant filed the application
  - §102(b) – if inventor or a third party sells, offers for sale, publicly uses, patents, or describes in a printed publication, the claimed invention more than one year before the filing date of the application, the inventor is barred from obtaining a patent
    - Printed publications and patents can be from anywhere
    - On-sale and public use activity must be in US
  - §102(d)
- §102(f) – derivation provision

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- Timely Application – Loss of Right
  - Public Use - §102(b)
    - §102(b) – cannot obtain patent if invention was in public use for more than one year prior to filing date
    - *Egbert v. Lippman* (SCt 1882) pg 342 – private use of a corset barred application – public use does not depend on the number of people to whom the invention in known
    - *Metallizing Engineering Co v. Kenyon Bearing* (2nd Cir 1946) – use of a process to produce a product that was publicly sold more than one year prior to filing an application for the process acts as a statutory bar to the process
    - Private use – must be under the inventor’s control and not for commercial purposes
  - Experimental Use – defense to §102(b) statutory bar
    - *City of Elizabeth v. American Nicholson Pavement* (SCt 187) pg 350 – when inventor remains in constant control of the invention and does not abandon the intent to obtain a patent, §102(b) will not bar the patent
    - *Lough v. Brunswick* (Fed Cir 1996) pg 353 – where inventor did not keep any notes about prototypes, gave them to friends w/o soliciting comments about their use, did not keep secrecy agreements, and one prototype was eventually sold to a stranger, the use was public and not experimental
    - Experimental use ends when the invention is RTP
  - On-Sale Bar
- **Pfaff v. Wells Electronics** (SCt 1998) pg 363 – on sale bar is triggered when inventor provided potential customer with drawings sufficient to enable one to make the invention more than on year prior to filing even though a prototype had not been made at that point
  - 2 conditions for on sale bar to apply
    - Product must be subject of a commercial offer or sale
    - Invention must be ready for patenting (proof of RTP prior to critical date or proof that prior to critical date inventor had drawings that would sufficiently enable a PHOSITA to practice the invention)
- Assignment or license of invention or patent does not trigger the on-sale bar
- Conception alone is not sufficient to show that invention is ready for patenting
  - **Third-Party Activity**
    - When public or commercial use is w/o the consent of the inventor
      - **Lorenz v. Colgate-Palmolive** (3rd Cir 1948) pg 389 – patent is still invalid b/c of public use even when a third party uses the invention w/o consent of the inventor
      - **Baxter v. COBE Laboratories** (Fed Cir 1996) pg 392 – public testing before the critical date by a third party for his own unique purposes of an invention previously RTP and obtained from someone other than the patentee, when such testing is independent of and not controlled by the patentee, is an invalidating public use, not an experimental use
  - **Foreign Activity as a Statutory Bar**
    - §102(d) – bars a foreign patent applicant from obtaining a US patent if:
      - The foreign application is filed more than one year before US application AND
      - The foreign patent issues before the US patent is filed
- **Novelty**
  - **Proving Date of Invention**
    - **Mahurkar v. CR Bard** (Fed Cir 1996) pf 407 - §102(a) focuses on invention date, not filing date
      - First to conceive plus reasonable diligence to RTP = first to invent
      - Conception – must have formed a deliberate and permanent idea of the complete and operative invention as it was to be applied in practice (requires corroboration if conception is shown by oral testimony of inventor)
    - **RTP** – prima facie evidence of first invention
      - Rebuttable upon proof of first conception, reasonable diligence, and second RTP
• Constructive RTP – date of filing application regardless of whether anything physical in constructed
• Actual RTP – when invention is shown to be suitable for its intended purpose and there is contemporaneous appreciation of such

○ Identity of Invention and Anticipatory Enablement
  ▪ For a prior art reference to anticipate an invention, the prior art reference must have an adequate written description and be sufficiently enabled
  ▪ *In re Paulsen* (Fed Cir 1994) pg 414 – for prior art to anticipate, it must disclose each and every element of the claim and be sufficiently enabled to place it in possession of a PHOSITA
  ▪ That which would literally infringe if later, anticipates if earlier

○ “Known or Used” provision of §102(a)
  ▪ Use must be in a manner that is accessible to the public for it to trigger the provision
  ▪ *Gayler v. Wilder* (SCt 1850) pg 420 – prior private use by an individual who created the later claimed invention does not trigger the ‘known or used’ provision
  ▪ *Rosaire v. Baroid Sales Division* (5th Cir 1955) pg 423 – prior use of the claimed methods by a competing company defeats a patent even when the use was not made part of a patent application and was not published or otherwise given explicitly to the public
  ▪ Actual public knowledge does not need to be shown in order to invalidate a subsequent patent

○ “Described in a Printed Publication”
  ▪ A hypothetical printed publication must be physically and logically available to a hypothetical member of the interested public
  ▪ *In re Hall* (Fed Cir 1986) pg 436 – a published thesis catalogued and held in a single library constitutes an available ‘printed publication’
    ▪ Must show that prior to the critical date the reference was sufficiently accessible, at least to the public interested in the art, so that such a one by examining the reference could make the claimed invention w/o further research or experimentation
  ▪ *In re Cronyn* (Fed Cir 1989) pg 439 – three undergraduate theses filed in a school library but not generally indexed or catalogued (cards listing on author and title, but author’s last name) were not publicly accessible
    ▪ Not indexed or catalogued in a meaningful way – need logical availability in addition to physical availability

○ “Patented”
  ▪ Mostly when dealing w/ foreign patents – provision is satisfied when patent is available to the public

○ “Secret’ Prior Art - §102(e)
- **Alexander Milburn v. Davis-Bournonville** (SCt 1926) pg 450 – patent filed before instant application and issued before it as well does count as prior art
  - **“Secret” Prior Art - §102(g)**
    - Can defeat novelty even though reference is virtually inaccessible – only has to not be abandoned, suppressed, or concealed
    - **Thomson SA v. Quixote Corp.** (Fed Cir 1999) pf 454 – corroboration of a non-party inventor’s testimony directed to establishing their invention as anticipating is only required when the inventor is asserting a claim of derivation or priority and is a named party or is in a position to gain by having their invention found to have priority over the claims at issue
  - **Using Foreign Priority for Prior Art Purposes under §102(e) and (g)**
    - Party filing for a patent in a Paris Convention member country can receive the benefit of an earlier filing in another member country if the later application was filed within 12 months of the first filing
    - **In re Hilmer** (CCPA 1966) pg 464 - §119 only offers protection to those seeking to obtain patents – cannot be used to get an earlier priority date to defeat another’s patent under §102(e)
    - **In re Hilmer II** (CCPA 1970) pf 470 - §119 cannot be used to get an earlier priority date to defeat another’s patent under §102(g)
  - **Derivation - §102(f)**
    - Named inventor must not have derived the claimed invention from another source
    - **Gambro Lundia v. Baxter Healthcare** (Fed Cir 1997) pg 474 – 2 prong test for derivation: (1) prior conception of the invention by another and; (2) communication of that conception to the patentee
  - **Priority - §102(g)**
    - Priority generally awarded to first RTP unless
      - Inventor was first to conceive but second to RTP but exercised reasonable diligence in RTP
      - First inventor abandoned, suppressed, or concealed the invention after RTP
    - **Conception**
      - **Fiers v. Revel** (Fed Cir 1993) pg 480 – conception of DNA only when one can define it by other than its biological activity or function – conception of process does not prove conception of product
      - **Burroughs Wellcome v. Barr** (Fed Cir 1994) pg 484 – test for conception – whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention; must prove conception w/corroborating evidence
    - **RTP**
      - **DSL v. Union Switch** (Fed Cir 1991) – tests performed outside the intended environment can show sufficient RTP
if the conditions are sufficiently similar to the intended environment

- ACS – Abandonment, Concealment, or Suppression
  - Fujikawa v. Wattanasin (Fed Cir 1996) pg 506 – 2 types of ACS: (1) deliberate suppression or concealment, or; (2) inference of ACS from long delay in filing
    - Look for evidence of spurring – first inventor is moved to disclose only b/c of second inventor’s activity

NON-OBJECTIVENESS

- Introduction
  - Claimed invention must be significantly different, but not necessarily better than the prior art to satisfy §103
  - Patentability shall not be negatived by the manner in which it was made

- The Graham Framework
  - Graham v. John Deere (SCt 1966) pg 537 – scope and content of the prior art are to be determined; differences b/t the prior art and the claims at issues are to be ascertained, and the level of ordinary skill in the pertinent art resolved – against this background, obviousness of the subject matter is determined, utilizing secondary considerations like commercial success, long felt but unsolved needs, failure of others
  - References used for obviousness objections must be analogous, include a teaching or motivation for them to be combined, and convey to a PHOSITA a reasonable expectation of success that the claimed invention would result from the combination

- The Scope of the Prior Art
  - Art is analogous if it is in the same field as the invention or in some other field but still relevant to the problem facing the inventor
  - In re Clay (Fed Cir 1992) pg 572 – 2 criteria for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed; (2) if the references are not w/in the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem w/which the inventor is involved
    - Reasonably pertinent – reference that which, b/c of the matter w/which it deals, logically would have commended itself to the inventor’s attention in considering his problem
  - In re Paulsen (Fed Cir 1994) pg 575 – hinged cover of a portable computer is obvious in light of other mechanical arts dealing w/similar problems even though not in the field of computers

- §102/103 Prior Art
  - §102(e)/103 Prior Art
    - Hazeltine Research v. Brenner (SCt 1965) pg 578 - §102(e) art is available under §103 b/c delays in the PTO should not affect what is patentable subject matter
  - §102(g)/103 Prior Art
• **In re Bass** (CCPA 1973) pg 581 - §102(g) prior art is available under §103
  - Does not require the inventor to have personal knowledge of the reference for it to qualify as prior art
    ▪ Patent Law Amendments - §102(e), (f), and (g) shall not preclude patentability if the subject matter and claimed invention are owned by the same person
    ▪ §102(f)/103 Prior Art
      • **OddzOn Products v. Just Toys** (Fed Cir 1997) pg 595 - §102(f) art is only excluded from §103 prior art when the claimed subject matter is co-owned with the prior art inventor

• **The Content of the Prior Art**
  - 2 part obviousness test – TSM and RES
  - **McGinley v. Franklin Sports** (Fed Cir 2001) pg 601 – presumption of validity once the patent has issued; stronger presumption of validity when the references being relied on where available to the PTO during prosecution
  - TSM may come from
    ▪ The references themselves
    ▪ Knowledge of those skilled in the art that certain references, or disclosures in the references, are known to be of special interest or importance in a particular field
    ▪ From the nature of the problem to be solved, leading inventors to look to references relating to possible solutions to that problem
  - Reasonable expectation of success
    ▪ Absolute predictability is not required
    ▪ Obvious to try is not always ‘obvious’

• **Who is the PHOSITA**
  - Factors to consider in determining the ordinary level of skill in the art
    ▪ Educational level of inventor
    ▪ Type of problems encountered in the art
    ▪ Prior art solutions to those problems
    ▪ Rapidity with which innovations are made
    ▪ Sophistication of the technology
    ▪ Educational level of the workers in the field
  - PHOSITA is assumed to have complete knowledge of all pertinent art
    ▪ Not assumed to have knowledge of non-analogous art

• **Secondary Considerations**
  - Commercial success
    ▪ **Pentec v. Graphic Controls** (Fed Cir 1985) pg 626 – in order for commercial success to be considered, there must be a nexus between the success and the merits of the claimed invention
    ▪ Raw sales data is insufficient to show the required nexus
    ▪ Kieff thinks this is an unhelpful test; immeasurable standard
  - Long-felt need and failure of others
If industry was aware of the need and failed in one respect, it would not be obvious to make another attempt based on a different principle.

Possible that failure of others was just a result of the complacency in the existing technology.

- Copying
  - Strongest argument where competitor first attempted to design around the patent but then copied directly.

- Licensing/Acquiescence
  - Acceptance of a license in evidence that competitor implicitly recognized the patent’s validity.
  - Doctrine of license estoppel (preventing a licensee from challenging the patent’s validity) is not recognized.

**UTILITY**

- Introduction
  - Invention must operate in accordance w/its intended purpose or a purpose discernable by a PHOSITA – more of a problem for biotech and chemical inventions b/c their utility is harder to encompass in a drawing or formula.

- Modern Approach to Utility
  - 2 step test for determining utility.
    - PTO has initial burden of challenging a presumptively correct assertion of utility in the disclosure.
    - Burden shifts to applicant to show utility only when PTO shows that a PHOSITA would reasonably doubt the utility.

  - In vitro testing of a claimed invention coupled w/in vivo testing of structurally similar compounds satisfy the utility requirement.

  - Proof a pharmaceutical compounds desirable properties in a standard experimental animal is sufficient to prove utility even if no value in human treatment.

  - Gene patents – need structure and sequence of gene, and gene must be expressed – structural homology not enough to predict function.

  - PTO utility guidelines – utility means that (1) a PHOSITA would immediately appreciate why the invention is useful based on the characteristics of the invention and (2) the utility is specific, substantial, and credible.

**STATUTORY SUBJECT MATTER**

- Introduction
  - §101 had four classes of statutory subject matter: processes, machines, manufactures, or compositions of matter.

  - Statutory classes include anything made by man under the sun, excluding laws of nature, physical phenomena and abstract ideas.

- Biotechnology-Related Inventions
Diamond v. Chakrabarty (SCt 1980) pg 776 – a genetically altered bacterium with different characteristics than that found in nature is patentable subject matter

- Genes are patentable in an isolated and purified state

**Computer Related Inventions and Business Methods**

- Gottschalk v. Benson (SCt 1972) pg 807 – method claim for converting binary coded decimal into pure binary numerals was not patentable

- Diamond v. Dehr (SCt 1981) pg 816 – process which included steps requiring the use of mathematical formula and programmed computer was patentable

- State Street Bank v. Signature Financial Group (Fed Cir 1998) pg 829 – system for implementing an investment structure was patentable
  - Mathematical subject matter may become patentable when reduced to a type of practical application – a useful, concrete, and tangible result

**INFRINGEMENT**

- **Introduction**

  - For applications filed after 11/29/00 – rights against infringers of a published application if third party has actual notice (remedy is reasonable royalty)

  - 5 basic rights of exclusion – making, using, selling, offering for sale, and importing

  - 2 types of patent infringement
    - Direct infringement – literal or under DOE
    - Indirect infringement – contributes or induces another’s infringement

  - 2 steps to determine literal infringement
    - Claim construction
    - Determination of infringement based on proper construction

- **Claim Interpretation**

  - Patentee can be own lexicographer

  - 2 main issues – who should construe the claim and what tools should be used in claim construction

  - Procedure: Judge, Jury, and Appellate Review
    - Markman v. Westview Instruments (SCt 1996) pg 872 – claim interpretation is a question of law and is entirely up to the court
    - Claim interpretation is subject to de novo review

  - Procedure: Interpretive Approaches and Evidentiary Sources
    - Intrinsic evidence – anything in the patent document itself
    - Extrinsic evidence – expert testimony, dictionaries, treatises, etc.
    - Vitronics Corp. v. Conceptronics (Fed Cir 1996) pg 888 – if meaning of the disputed claim term is clearly defined by the specification, reliance on extrinsic evidence is improper
    - General rule – claims are interpreted in view of the specification, not by reference to the accused device
• Improper to read in a limitation from the specification
• Improper to read out a limitation to extent a patent to subject matter that was disclosed but not claimed
• If specification makes it clear that the claimed invention was narrower than the claim language implies, then it is proper to limit the claims as such

Courts can look at extrinsic evidence even if the intrinsic evidence is clear, but should not use the extrinsic evidence to contradict meanings discerned from the intrinsic evidence

• Claims should be construed to sustain their validity where possible
• Claim differentiation – presumption that there is a difference in scope among the claims; should not construe one claim to make another claim superfluous

2 step process for whether a process claim must be performed in order to be infringing
• Look to claim language to discern if as a matter of logic or grammar they must be performed in the same order
• If not, look to the rest of the specification to determine whether it directly or indirectly requires such a narrow construction

• Preamble may be limiting if the body of the claim sets out the complete invention – otherwise preamble would have no significance

The Doctrine of Equivalents and Prosecution History Estoppel
  - DOE – way to extend the scope of the patentee’s right to exclude beyond the literal language of the claims
  - Warner-Jenkinson v. Hilton Davis Chemical (SCt 1997) pg 915 – when an amendment is not related to avoiding the prior art but does introduce a new element, DOE infringement is not automatically precluded on the basis of that element
    • Patentee has burden to establish a reason for the amendment added during prosecution; if no reason is established, court should presume that the PTO had a substantial reason related to patentability for including it and PHE would bar application of DOE as to that element
    • Question of equivalency should be addressed based on the time of the infringement, not the time of issuance

3 restraints on DOE
• All-limitations rule – must be an equivalent for every limitation of the claim
• Public dedication rule – subject matter that is disclosed but not claimed is dedicated to the public and cannot be recaptured under DOE
• PHE

• Court may give pioneer patents broader scope under DOE
PHE – patentee may not later claim as equivalent that which was consciously disclaimed during prosecution

- Festo Corp. v. SKKK (SCt 2002) pg 938 – a narrowing amendment made for any reason to satisfy a requirement of the Patent Act may give rise to PHE (§112 amendments that are purely cosmetic do not narrow or give rise to PHE, but if the amendment is necessary and narrows the scope, then PHE applies)
  - A narrowing amendment does not bar DOE completely as to equivalents that were unforeseen at the time and beyond a fair interpretation of what was surrendered
  - Patentee must show that the amendment does not surrender the particular equivalent in question and that at the time of the amendment a PHOSITA could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent

- 3 ways to show that amendment did not surrender the equivalent in question
  - Equivalent may have been unforeseeable at the time of application (unforeseeability evaluated at time the amendment was made)
  - Rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question
  - Some other reason that patentee could not reasonably be expected to have described the insubstantial substitute in question

- PHE analysis framework
  - Whether amendment filed w/PTO has narrowed the literal scope of the claim
    - If no → PHE does not apply
  - Whether the reason for that amendment was a substantial one related to patentability
    - If no → PHE does not apply
    - If no reason in prosecution record, then presumption of a substantial reason related to patentability
  - What is the scope of the subject matter surrendered by the narrowing amendment
    - Presumption that all differences b/t original and amended claim have been surrendered
    - 3 possible rebuttal arguments
      - Equivalent was unforeseeable at the time of the amendment so not a fair interpretation of what was surrendered
        - Example – later developed technology
      - Rationale for the narrowing amendment is only tangentially related to the equivalent
Some other reason that patentee could not reasonably be expected to have described the insubstantial substitute in question

- Infringement of Means Plus Functions Claims – 35 USC §112 ¶6
  - Al-Site Corp. v. VSI International (Fed Cir 1999) pg 957 – if the word ‘means’ is in the claim, then it is presumed to be a means plus function element (presumption overcome if claim itself recites sufficient structure or material for performing the claimed function); equivalency under §112 ¶6 is different than generally under DOE
    - Accused device must perform the identical function (vs. DOE where accused device must only perform a substantially similar function)
- Indirect Infringement
  - Active Inducement
    - §271(b) – active inducement is where one party encourages or aids another to directly infringe a patent by, for example, providing directions on how to practice a patented invention
      - Inducer must intend to induce direct infringement
      - Must prove actual infringement and intent to induce
    - Hewlett-Packard v. Bausch & Lomb (Fed Cir 1990) pg 969 – proof of actual intent to cause the direct infringement is required to find active inducement
  - Contributory Infringement
    - §271(c) – concerned w/sale of a component of a patented device or composition or the sale of a component for use in practicing a patented process
      - Component must be a non-staple item not suitable for substantial non-infringing use
      - Seller must have knowledge that the component is especially made or especially adapted for use in infringement of a patent
    - 2 safe harbors – need knowledge (not quite to level of intent though) and need to be dealing w/something that does not have a substantial non-infringing use
      - CR Bard v. Advanced Cardiovascular Systems (Fed Cir 1990) pg 975 – summary judgment not appropriate where component had potential for non-infringing use
- Geographic Scope of the Patent Grant and Foreign Activity
  - Foreign Activity and Export Control - §271(f)
    - Infringement liability to supply components of a patented invention or to cause components to be supplied that are to be combined outside the US
    - §271(f)(1) – must supply all or a substantial portion of the components in a manner than would infringe if it occurred in the US
§271(f)(2) – required that infringer intend that such component will be combined and that at no point does the statutory language require that infringer must actually combine the components – liability for supplying a non-staple item essential to patented product

- Foreign Activity and Import Control - §271(g)
  - Patent Process Amendments Act – allows patentee to exclude importation an unpatented product made by a patented process in a foreign country
  - Eli Lilly v. American Cyanamid (Fed Cir 1996) pg 984 – if the product of a patented process undergoes material changes before being imported, there is no liability

DEFENSES AND LIMITATIONS

- Inequitable Conduct
  - Inequitable conduct will invalidate the entire patent
  - 2 step analysis – (1) must have threshold levels of materiality and intent to deceive and (2) then balance them and determine as a matter of law whether the scales tilt to a conclusion that inequitable conduct occurred
  - Intent
    - Kingsdown Medical v. Hollister (Fed Cir 1988) pg 1067 – negligence does not reach the threshold level of intent for inequitable conduct against the PTO
  - Materiality
    - Critikon v. Becton Dickinson Vascular Access (Fed Cir 1997) pg 1076 – patent applicant should notify PTO of any litigation relating to the validity or fraud/inequitable conduct
    - Information is material when it is not cumulative to information already of record or being made of record AND it establishes, either by itself or in connection w/other information, a prima facie case of unpatentability OR it refutes or is inconsistent w/a position the applicants in opposing the PTO or asserting a patentability argument
    - Only look to whether the prior art was relevant to a determination of patentability, not whether it would have completely prevented patentability

- Misuse and §271(d)
  - Misuse makes entire patent unenforceable until the misuse ceases
    - Examples – tying and price fixing arrangements, grantback clauses
  - Dawson Chemical v. Rohm and Haas (SCt 1980) pg 1085 – patentee is allowed to exploit a patent in conjunction w/sale of an unpatented nonstaple good that is a material part of the invention

- Doctrines of First Sale, Implied License, and Repair/Reconstruction
  - First Sale
A patentee’s first sale of the patented article may be deemed to include an implied term giving buyer a license to use and sell the article

- **Implied License**
  - A patentee’s acquiescence or conduct, or the general equities of the circumstances, may permit a court to imply a license granting some or all of the patentee’s authority
  - 2 requirements for implied license based on sale of nonpatented equipment used to practice the patented invention
    - Equipment involved must have no non-infringing uses
    - Circumstances of sale must plainly indicate that the grant of a license should be inferred

- **Repair/Reconstruction**
  - Permits buyer to repair the patented article but not reconstruct it

- **Mallinckrodt v. Medipart** (Fed Cir 1992) pg 1162 – parties are free to contract for sale conditions of a patented item as long as those conditions do not violate some other law or policy (i.e. contract for single use of patented article)

- **Preemption as a Limitation on Patentees**
  - **Basics of Preemption**
    - **Cover v. Sea Gull Lighting** (Fed Cir 1996) pg 1171 – federal law preempts state law only where simultaneous compliance is impossible or would frustrate the purpose of the federal law
    - Federal Circuit does not have jurisdiction where patent claim only arises in a counterclaim

- **Unfair Competition Law**
  - **Bonito Boats v. Thunder Craft Boats** (SCt 1989) pg 1185 – states may not offer patent like protection to items which would otherwise not qualify for federal patent protection

- **Trade Secret Law**
  - **Kewanee Oil Co. v. Bicron** (SCt 1974) pg 1199 – state trade secret law is not preempted by federal patent law

- **Other Limitations on Contractual Provisions**
  - **Licensee Estoppel**
    - **Lear v. Adkins** (SCt 1969) pg 1212 – licensee estoppel, which would prevent a licensee from challenging the patent, is not longer allowed
  - **Post-Expiration Royalties and Restraints**
    - **Brulotte v. Thys** (SCt 1964) pg 1222 – patent royalties cannot be collected once the patent has expired – basically an extension of the patent term (when later payment is not just a deferred payment for use during the valid patent term)
    - **Aronson v. Quick Point Pencil** (SCt 1979) pg 1228 – contract requiring a party to pay royalties for an invention even if the patent is not granted is still valid – freedom to contract

- **Inventorship and Ownership**
• **Ethicon v. US Surgical** (Fed Cir 1998) pf 1236 – inventors do not need to contribute equally to invention to be considered co-inventors; contribution to one claim is sufficient to grant co-inventorship over entire patent; one co-inventor can grant a license w/o consent of other inventors but cannot grant a retroactive license

• **Experimental Use §271(e)**
  - Possible that use of a patented product for non-commercial, experimental purposes may not be an act of infringement
  - §271(e) – exempted uses of a patented invention that are reasonably related to the development and submission of info to the FDA

• **Governmental Immunity**

**REMEDIES**

• **Remedies that Compensate for Past Infringement: Money and Interest**
  - **Money Damages**
    - **Lost Profits**
      - Awarded when patentee and infringer compete in the same market
      - 2 questions: (1) if no infringement, what would infringer’s customers have done and (2) if there was infringement, what could the patent owner have done
      - *Panduit* factors: to obtain lost profits, patentee must prove: (1) demand for the patented product; (2) absence of acceptable noninfringing substitutes; (3) manufacturing and marketing capabilities to exploit demand; (4) amount of profit he would have made
    - **Reasonable Royalty**
      - 3 possibilities to determine royalty: (1) compare to an existing royalty; (2) 15 *Georgia Pacific* factors; (3) analytical approach
      - Foreseeability requirement – infringer is not liable for some damages that are too remote to be compensable
      - Six year rule – no recovery for infringement committed more than 6 years prior to filing of complaint
      - Laches – P must be reasonably prudent in pursuing claim
      - Notice – ability to collect damages depends on marking patented items
  - **Interest**

• **Remedies that Prevent of Deter Future Infringement: Injunctions, Punitive Damages and Attorney’s Fees**
  - **Injunctions**
    - Generally, a permanent injunction will follow a finding of infringement unless there is a sound reason for denying the injunction (i.e. where infringer produces product while patent owner does not)
- Preliminary injunctions – reasonable likelihood of success on merits, irreparable harm if no injunction, balance of hardships, impact on public interest
  - Punitive Damages
    - §284 allows court to increase damages up to three times the amount found or assessed
    - Willful infringement can justify raising damages
    - Lack of an opinion of counsel does not require a finding of willfulness
  - Attorney’s Fees
    - §285 – court can award attorney’s fees in exceptional cases
    - 3 requirements – (1) exceptional case (i.e. willful infringement or inequitable conduct; (2) fees must be reasonable; (3) fees may only be awarded to a prevailing party