1. This is an open book examination. You may refer to your casebook, your casebook statutory supplement, your class notes and any outlines to which you have made a significant contribution.

1. The examination consists of three sections. Every section must be completed.

   SECTION I: Answer ALL FIFTEEN QUESTIONS
   SECTION II: Answer THE SINGLE QUESTION
   SECTION III: Answer ANY ONE OF THREE QUESTIONS

2. 200 points are available in this examination. Those points are allocated among the sections as follows:

   Section I: 45 points
   Section II: 90 points
   Section III: 65 points

3. For your answers to Sections II and III, if you are handwriting the exam, write your answers in one or more bluebooks legibly in ink. Use only one side of each page in your bluebook (except for additional remarks made on the blank facing page, so long as you indicate where, on the opposite page, they fit).

   In your answers, support your analysis/argument, where possible, by referring to the relevant authorities in so far as they apply by analogy to the situation discussed. You will not be penalized for not remembering case names; if you cannot remember case names, refer to them by briefly describing their leading facts. If you need to know additional facts, tell me what they are, and why and how they would facilitate your analysis/argument.
4. Do not put your name on your exam; make sure you simply use your identification number.

5. Read carefully the instructions provided at the beginning of each section. Suggested times are listed at the beginning of each section.
Part I. (45 points). Choose the best answer to the questions below. **There is only one correct answer for each question.** You will be awarded 3 points for each correct answer. **No points are deducted for wrong answers.** Write the letter of the answer in your bluebook or type it into your computer document. In other words, **don’t circle the answer on this form,** or they will not be graded. (Recommended time: 50 minutes)

**Question 1.**

My patent law professor’s name is:
(a) I could say but would risk violating obscenity laws
(b) Tim Holbrook
(c) George “Duba” Bush
(d) An unpronounceable symbol – will use the term “the professor formerly known as Tim” for short.

OK. Now that you are warmed up and a little more relaxed….

**REAL Question 1.** Ken Griffey is the owner of a patent with the following claim: “A baseball bat consisting of (a) an outer core of wood (b) an inner core of cork.” Mark McGuire began making a bat after the Griffey patent issued that has an outer core of wood, an inner core of cork, and a layer of epoxy in between to hold the two layers together. Mr. Griffey sues Mr. McGuire for literal infringement. Does Mr. McGuire literally infringe?

(a) Yes, because his bat meets both of the claim limitations.
(b) No, because Mr. Griffey's bat is outside the scope of the claim.
(c) Yes, because Mr. McGuire’s bat is insubstantially different from the Griffey patent claim.
(d) No, because Mr. McGuire’s bat renders Mr. Griffey’s patent obvious.
**Question 2.** Liza Spud came up with the idea of her potato harvester on September 29, 1999. Getting caught up in that year’s harvest, she did absolutely nothing with the idea until January 14, 2000. After January 14, 2000, however, she works continuously and creates a working version of the harvester on January 30, 2000. Ore Ida came up with the same idea on June 23, 1999, but was distracted by summer fun and did nothing until September 16, 1999. On that date, she picks her idea back up and continually worked on the idea until February 4, 2000, when she files her patent application at the Patent Office. Who will be awarded priority of invention?

(a) Liza Spud, because she is the first to build a working version of the invention.
(b) Liza Spud, because Ore Ida abandoned her invention.
(c) Ore Ida, because Liza Spud was not diligent in reducing her invention to practice during the relevant time period.
(d) Ore Ida, because she was the first to conceive, second to reduce to practice, and diligent during the relevant time period.

**Question 3.** Equivalents under the doctrine of equivalents and under 35 U.S.C. § 112, ¶ 6 differ in that

(a) The tripartite “function-way-result” test plays no role in § 112, ¶ 6 equivalency.
(b) The prior art constrains the range of equivalency under the doctrine of equivalents alone.
(c) Arguments made in the prosecution history serve to narrow the range of equivalents under the doctrine of equivalents alone.
(d) Infringement under the doctrine of equivalents is considered literal infringement, unlike infringement under § 112, ¶6.

**Question 4.** The “All Elements Rule” requires that:

(a) The doctrine of equivalents must be applied on limitation-by-limitation basis.
(b) To anticipate a claim, a prior art reference must disclose each and every claim limitation.
(c) To invalidate a claim as non-obvious, the prior art must disclose each and every claim limitation.
(d) To obtain a preliminary injunction, the patentee must prove beyond a doubt that each and every claim limitation is infringed.
Question 5. You are prosecuting a patent application in the U.S. Patent and Trademark Office. You realize that you have some doubt as to whether the disclosure in the application is sufficient to satisfy the requirements of § 112, ¶ 1. What form of continuing application can you file to remedy your concern.

(a) A continuation-in-part application  
(b) A continuation application  
(c) A provisional application  
(d) A divisional application

Question 6. On August 1, 1998, Gyula Horn files a patent application in the Hungarian patent office for a new machine to ground paprika. Mr. Horn is awarded the patent on September 13, 1999. Meanwhile, in the United States, John Doe files an application claiming the same subject matter as Horn’s patent. Mr. Doe files for his patent on October 3, 1999. What impact does the Horn patent have on the patentability of Doe’s application?

(a) The Hungarian patent invalidates because the Hungarian application was filed more than twelve months prior to Doe’s filing of his application, and the Hungarian patent issued prior to Doe filing his application.  
(b) No impact.  
(c) The Hungarian patent invalidates because Horn filed his patent application before Doe.  
(d) The Hungarian patent invalidates unless Doe can demonstrate that he invented his device prior to September 13, 1999.

Question 7. Couche P. Tator has a patent on a mechanism to recline a chair. In determining whether the patent is obvious, it is appropriate to:

(a) Use Tator’s patent as a roadmap to guide through the prior art.  
(b) Consider all references known regardless of the field of technology.  
(c) Consider the commercial success of the chair alone without regard to the reclining mechanism.  
(d) Consider the educational level of the inventor.

Question 8. Peter filed a patent application on February 17, 2000. Paul and Mary filed a patent application claiming the same subject matter on February 16, 2000. In the interference hearing, Peter files an affidavit stating that he conceived his invention on January 1, 2000 and reduced it to practice on February 15, 2000. That is the only evidence submitted by either party. Who receives priority?
(a) Peter, because he was first to conceive the invention and first to reduce it to practice.
(b) **Paul and Mary, because they filed before Peter.**
(c) Peter, because Paul and Mary failed to prove diligence in reducing their invention to practice.
(d) Paul and Mary, because they demonstrated that Peter abandoned his invention.

**Question 9.** Albert Einstein, after discovering relativity and thinking he is THE MAN, decided to devote his creative juices to making a better cappuccino maker. Al comes up with a brilliant new frothing mechanism, and designs three different versions of the mechanism, designs A, B, and C. Einstein personally believes that the most efficient and effective mechanism is design B, believes design A is faulty, and discloses design C in his patent. Maxwell House obtains a license from Al. Maxwell House’s engineers, although readily able to produce the mechanism from the patent, end up using design A, which proves to be the most effective in practice. Maxwell House produces design A commercially, and sues Folgers for patent infringement for their frothing device. Which of the following is correct?

(a) Einstein’s patent is invalid for violating the best mode by failing to disclose design A.
(b) Einstein’s **patent is invalid for violating the best mode by failing to disclose design B.**
(c) Under these facts, the patent is valid.
(d) Einstein’s patent is invalid for violating the enablement requirement.

**Question 10.** When construing a claim, which extrinsic evidence is considered the most relevant and probative.

(a) Inventor testimony
(b) Expert testimony
(c) **Prior art**
(d) None – extrinsic evidence is not permitted in claim construction.

**Question 11.** A patent claims an apparatus, and one of the limitations in the claims requires a nail. The accused device uses a screw instead. Infringement under the doctrine of equivalents will be precluded if:

(a) The screw is known in the prior art.
(b) **The entire apparatus with the screw is known in the prior art.**
(c) A hypothetical claim encompassing the use of a screw is neither anticipated nor rendered obvious by the prior art.
(d) The accused infringer knew of the patent and intentionally chose the screw to design around the patent.
**Question 12.** Patent attorney Phil E. Buster was prosecuting a patent. He has two references, U.S. patent 9,999,999 (the ‘999 patent) and U.S. patent 8,888,888 (the ‘888 patent). Buster believes that these two patents both teach the same information, so he only discloses the ‘888 patent to the Patent Office. Buster’s application subsequently issues as U.S. patent 10,000,001 (the ‘001 patent). In a later patent infringement litigation over the ‘001 patent, the district court concludes that the ‘999 patent was the most relevant and that its teachings were significantly broader than that of the ‘888 patent. Is there inequitable conduct?

(a) Only if the ‘999 patent anticipates or renders obvious the ‘001 patent.
(b) No, because there was no intent to deceive the Patent Office.
(c) Yes, because the ‘999 patent was material.
(d) No, there was no failure to disclose material information.

**Question 13.** Cooter, working in his garage in Hazard County, thinks up a new idea for improving car fuel-injection systems. He draws highly detailed diagrams and pictures on October 12, 1998. He shows the pictures to some of the customers in his garage and asks whether they would be interested in having him install his idea in their cars, once he builds the device. Because Cooter has yet to build the improvement and offers no sort of oversight or warranty, his customers decline. Cooter gives his diagrams to local patent agent Daisy Duke, who files an application on November 1, 1999. Included in the application are diagrams essentially identical to those Cooter drew. The patent issues on January 3, 2001. In the interim, Cooter gives his diagrams to Bo and Luke, who readily build the device based on the diagrams on August 1, 2000. Cooter makes his first sale of the device to a customer on December 12, 1999. Is Cooter’s patent invalid?

(a) No, because there was no actual sale of the device prior to the critical date.
(b) No, because the invention was not reduced to practice before the critical date.
(c) Yes, because before the critical date there was an enabling disclosure of the invention and an offer to sell the invention.
(d) Yes, because there was an actual sale prior to the issuance of the patent and a constructive reduction to practice by filing the patent application.
**Question 14.** Which of the following statements is true?

(a) A reasonable royalty is the cap on any award of damages available to a patent owner.
(b) Irreparable harm is always presumed for a patent owner when the patent owner is seeking a preliminary injunction.
(c) **Lost profits may be awarded in the absence of acceptable non-infringing substitutes.**
(d) A patentee is entitled to all damages for infringement during the term of the patent.

**Question 15.** Patent attorney Ally McBeal fears that a patent that she prosecuted and which has issued may actually not be properly enabled. Getting the OK from her client, Ally files for reissuance more than two years after the patent issued. She keeps the original claim, and also adds a second claim that is identical to the original claim with the exception that the new claim has an additional claim limitation. Ally’s client sues a competitor for patent infringement, who immediately ceases selling the device accused of infringing. At trial, the court concludes that the competitor infringes the original claim, but the original claim is also invalid for lack of enablement. The court concludes the second, added claim is enabled and is also infringed. No prior art was asserted against either claim, nor were there challenges under the other provisions of § 112. What should the remainder of the outcome be?

(a) The patent claim added in reissue is invalid because, as there was no substantially new question of patentability, the reissuance proceeding was improper.
(b) The reissuance patent is invalid because the patentee altered the scope of the claims more than two years after the patent originally issued.
(c) The claim added through reissue is valid, and liability is not precluded because the infringer infringed a claim found in the original patent.
(d) **The claim added through reissue is valid but there is no liability for infringement.**
Gertrude Garber, fresh from international fame for falling and not being able to get back up, decides to devote her considerable time while convalescing from her fall to designing a personal mobility device. She comes up with an idea for a motorized scooter, with a particularly unique design for the shape of the foot rests. So excited, she leaps from her bed, almost falls down again, and calls her grandson, who is a patent attorney. After taking down the detailed description of her idea, Grandson Tommy believes that she has a patent eligible device.

Tommy files the application on March 3, 1988. The claim of the application recites a foot rest that is in the shape of a quadrilateral (that is, the generic name for an item with four-sides). During prosecution of the application, the Patent Office identifies U.S. Patent No. 444,444,444, which discloses the exact same invention and particularly notes the use of quadrilateral foot rest. Not denying that all of the invention is disclosed by the ‘444 patent, Tommy proceeds to distinguish the ‘444 patent by changing his claim limitation to require a square foot rest. Tommy also argued that the square foot rest is better than generic quadrilateral foot rests, and that the teachings of the ‘444 are not adequate to teach the specific use of the square foot rest, noting that a square is a special version of a quadrilateral. The Patent Office agrees, and the patent issues on January 13, 1990 as U.S. Patent 5,555,555.

In the interim, Gertrude has been following the various trade journals on personal mobility devices, and on March 14, 1989, Gertrude sees a device being marketed, manufactured and sold by MobilityAssist. This device uses a foot rest that is rectangular, but otherwise is identical to that claimed in the ‘555 patent. MobilityAssist had devoted considerable economic resources towards producing its device, particularly in light of the forthcoming retirement of the Baby Boomer generation. Moreover, in October of 1996, a fire consumed a large number of MobilityAssist’s documents on its design efforts and sales figures. Gertrude mentions the MobilityAssist device to Tommy, but both forget about and do not follow up on it.

Gertrude and Tommy manage to find a partner for their device, and begin marketing and selling the device on June 15, 1990. Attached to the top of the floor panel was a the sign “pat. No. 5,555,555.” Sales started off slowly due to the significant competition in the market, but eventually the apparatus became a moderate commercial success. Of all the other competitors, only the MobilityAssist device was comparable to the ‘555 patent.

Gertrude and Tommy are reminded of the MobilityAssist device when they see an advertisement for it on television in February 1997. They bring suit against MobilityAssist on May 1, 1997.

MobilityAssist has discovered, however, a new reference – the Trapezoidal Rider. In the sales brochures surrounding this device, published in 1985, it is evident that this device uses trapezoidal (that is, a four sided item, of which two sides are parallel) foot
rests. The brochure noted that “square foot rests could be used, but aesthetically they are not nearly as dynamic looking as the trapezoidal rests. Moreover, square foot rests may not provide adequate surface area for the foot to reside upon, risking that the riders foot may slip off and risk burns from the engine or perhaps ensnaring clothing in the wheels.”

In a pretrial conference, the parties stipulate that the market in which the companies participate is highly competitive, with plenty of alternatives not covered by the ‘555 patent. As such, lost profits are not available.

During the litigation, Gertrude and Tommy offer the expert testimony of Dr. Geo Metry, who notes that “it is axiomatic that a square is a rectangle, but a rectangle is not necessarily a square. Thus, the two are generally inconsequentially different. In the particular circumstances of these foot rests, though, the shape itself is inconsequential. A circular, quadrilateral generally, or even trapezoidal specifically, pentagonal, hexagonal – any shape would suffice and would be interchangeable. I’m not certain why that sales brochure took such issue with the square foot rests.”

_Identifier all the potential patent law and patent law related issues involved with this case, including liability, complete defenses, and partial defenses (i.e. those that limit the scope of liability and/or damages). Do not concern yourself with preliminary injunctions nor with the appropriate method of calculating damages._

**Issues**

1. **Obviousness/motivation to combine.** “square foot rests could be used, but aesthetically they are not nearly as dynamic looking as the trapezoidal rests. Moreover, square foot rests may not provide adequate surface area for the foot to reside upon, risking that the riders foot may slip off and risk burns from the engine or perhaps ensnaring clothing in the wheels.”
   - Does this teach away, towards, and is it sufficient that obviousness be eliminated
   - Is obviousness because prior art cited in prosecution provides the remaining teachings.

2. **All Elements Rule.** “Shape not matter” = vitiate the claim limitation, precluding infringement under the doctrine of equivalents.

3. **Claim Construction.** (Evidentiary hierarchy – ignore expert testimony of intrinsic evidence is clear)

4. **Laches.** Waited more than 6 years to bring suit, so presumed. No evidence to rebut.

5. **Statutory bar on damages.** More than 6 years away.

6. **Prosecution history estoppel.** Amended claim to avoid quadrilateral prior art. Narrowed to a square. Does that preclude a rectangle? Probably not.

7. **Insubstantial differences.** Is a square insubstantially different from a rectangle.

8. **Reissue.** New prior art = could file for reexamination because substantial new question of patentability.
Part III. (65 points) Answer one of the following three questions. Be sure to identify which question you are answering.

A. A variety of governmental actors in the patent system could impact the decision as to what constitutes eligible subject matter for a patent and what is considered to have “utility.” Discuss the various actors, the pros and cons of these actors in making such decisions, and how the actors may relate to each other in ways relevant to the patent system. In your view, which is the best actor. Explain why.

1. Patent Office (20 points)
   - Strictly an agency; subject to capture
   - No accountability to public; not representative
   - In theory are “experts”; specialization

2. Courts (25 points)
   - Courts note this is a policy decision, not judicial
   - Not familiar with technology
   - Not representative
   - Not accountable to public
   - Could be viewed as simple statutory construction, properly the purview of the courts
   - Limited as to who can actually bring a challenge – standing!

3. Congress (20 points)
   - Accountability is there
   - Interest may lie outside of science
   - Majoritarian concerns – special interest capture for non-legit reasons; religious-based/moral decisions;
   - Constitutional limits; free speech concerns

B. Discuss the role of expert testimony with respect to claim construction, explaining the reasoning underlying the use by courts of expert testimony, and any positive or negative consequences of this approach.

1. Educate judge
2. Although credibility may be a factor, generally subsumed in entire claim construction process
3. May not be used to contradict the intrinsic evidence
4. Improper to consider if intrinsic evidence is unambiguous
5. Court regardless gets de novo review
6. Pros: focus on the intrinsic record gives primacy to the public record/public notice functions
7. Cons: courts are not “one of ordinary skill in the art,” and risk taking the expert insight away; inconsistent with other areas of law where skill in the art is a fact question; judicial fiction and grants Fed. Cir. with a lot of power
C. In *Bonito Boats*, the Supreme Court held that federal patent law preempted Florida’s statutory scheme to protect boat hull designs, but in *Kewanee Oil*, had determined that state trade secret law was not so preempted. Discuss the purposes of the patent system, and how those purposes are either served or undermined by trade secret law and state schemes such as the boat hull protection legislation. Why are the two situations distinct – why should growing crystals (in *Kewanee*) be deemed protectable by state law but not boat hulls?