

Patent Law  
Fall 2009 – Michael Risch  
Final Exam

This is a take-home exam. You have eight (8) hours to complete the exam and upload it from the time you download it. If you experience technical difficulties, you may email or turn in a paper copy to my secretary, Karen Feather (karen.feather@mail.wvu.edu), who will note the time you turned it in (make sure to tell her your exam number), though that is not the preferred method. I recommend that you do not download the exam at a time when the due time will be outside of business hours of the law school.

**You may use any written materials you desire for the exam (open book, open note), but you may not receive help from any person. Note that the exam will be distributed over a one-week period. You must be careful not to disclose any details of the exam to your classmates, or discuss any aspect of the exam (or your answer!) until after December 13. Page two of this exam is a confirmation that you understand this – please print, sign, and turn in to Karen Feather in Room 117 at some point before December 14.**

Please be sure to remove all personal information from your document properties (file -> properties in Word). Also make sure that your exam number appears on each page, which is most easily done with a header or footer.

This exam includes a strict word limit of 4300 words, which is approximately 14-16 pages of a proportional spaced font, or many fewer pages with smaller margins. Do not rely on page limits; you should count words using your word processor's "word count" tool. You may divide the word limit however you wish, **but I will stop reading when the word limit is reached.** NOTE: You do not have to use all of the words available – the questions can be answered in fewer words than allowed.

Your exam must be typed, with double spacing on 8.5 x 11 paper size and reasonable font and margin size. Please begin the answer to each question at the top of a new page.

The questions are weighted as follows: Question 1, 57 points; Question 2, 24 points; Question 3, 7 points; Question 4, 5 points.

Patent Law final exam, Fall 2009.

I \_\_\_\_\_, confirm that I have obeyed and will obey the WVU Student Code with respect to the above exam, and that I have not discussed and until midnight on December 13, 2008, will not discuss any part of the exam, its contents, or my answer with any of my classmates.

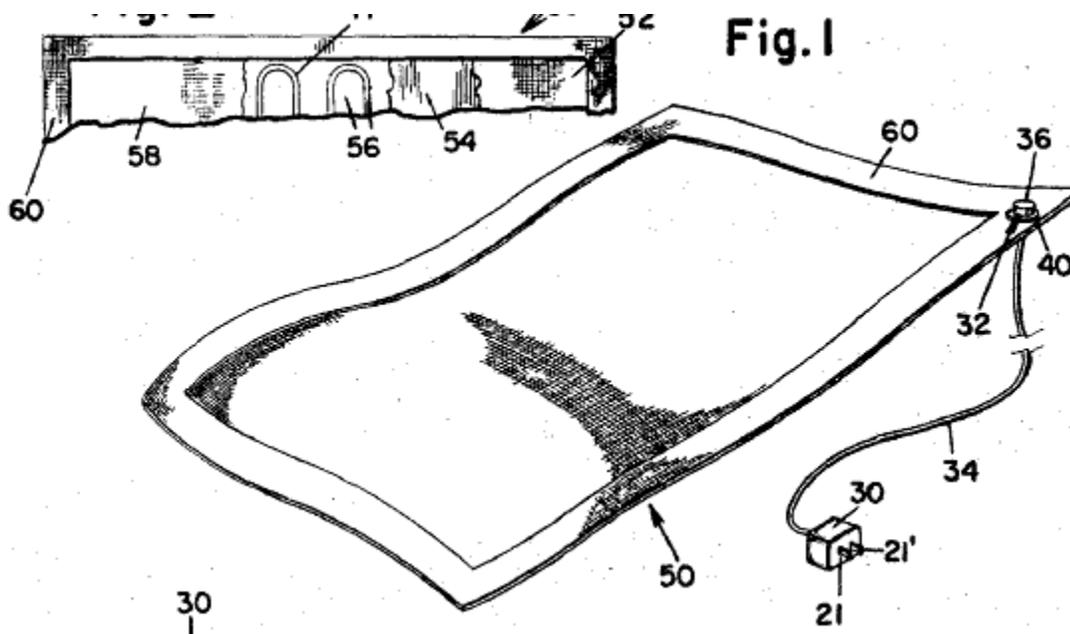
Dated: \_\_\_\_\_ Signed: \_\_\_\_\_

Please return to Karen Feather in Room 117 by December 14, 2009 at 5PM.

## THE '123 PATENT

On New Year's Day, January 1, 2000, while snuggling under an electric blanket and dreading a cold bathroom, Patent "Pat" Holder had a great idea. Why not, Pat thought, use electricity to heat up a towel so that it is nice to step out of a shower to a warm towel?

The following is a drawing of an electric blanket, which is heated when electric current from a standard electrical outlet is sent through wires embedded in the blanket's fabric.



That very day, Pat tried to use the electric blanket as a towel, but the thick fabric was not very absorbent, and – though warm – the blanket failed to work as a towel.

Pat worked diligently for about a week, finally embedding metal wire into terry cloth, which is a traditional fabric used in towels, on January 8, 2000. The "standard" electric towel worked as it should; it absorbed water off of Pat's body, and it was warm while it was plugged in. Pat and Pat's family started using the towel that day, January 8. However, because the towel was thinner than the blanket, Pat would occasionally get shocked due to the electricity running through the towel.

Unhappy with periodic electric shocks, Pat worked off and on over the next year, and on December 20, 2000, Pat perfected a new type of fabric that was both absorbent, and that shielded the electric wire from the user and water to avoid electric shock. The "improved" electric towel was identical to the towel from January 8, except for the new material. On January 10, 2001, Pat filed for a patent, on his own without hiring a patent lawyer.

Pat's specification says the following:

I have invented the electric towel, whose primary use is to stay warm while absorbing water away from a wet human body. The towel may be constructed by running an electric wire through an absorbent fabric, similar to the construction of an electric blanket. The electric wire is then connected to a standard 110 volt electric plug. When the plug is inserted into a standard electrical outlet, electrical current running through the towel warms the absorbent material.

The specification concludes with discussion describing the electrical design such that the wire does not get so hot that the towel catches on fire or burns the user. No prior art references were described in or submitted with the specification.

As filed the *initial application* included two claims:

I claim:

1. An electric towel, comprising:
  - a. Fabric; and
  - b. An electric wire running through the fabric;
  - c. Where such wire is connected to an electrical source sufficient to warm the towel.
  
2. The towel of claim 1:
  - d. Where such fabric is sufficiently shock resistant to avoid electrical shock

The patent examiner rejected these claims on novelty grounds, stating that claim 1 is no different than an electric blanket. Pat then amended the claim by adding the following: "Absorbent fabric" to claim one.

Pat and the PTO had no further communications until the PTO allowed, and then issued, the patent on January 1, 2004. The '123 patent issued to Pat Holder, with the following *final issued claims*:

I claim:

1. An electric towel, comprising:
  - a. Absorbent fabric; and
  - b. An electric wire running through the fabric;
  - c. Where such wire is connected to an electrical source sufficient to warm the towel.
  
2. The towel of claim 1:
  - d. Where such wire/fabric combination is sufficiently shock resistant to avoid electrical shock.

Pat Holder does not have a facility for manufacturing, and thus has never sold an electric towel. Despite efforts to convince towel makers to license the patent, Pat Holder has yet to see any revenue from the '123 patent.

## **BIG TOWEL COMPANY**

Unknown to Pat, Big Towel Company (BTC) also decided to start selling electric towels. BTC started work on an electric towel on January 2, 2000. By January 7, it had tested a wire inserted into a terry cloth towel that was identical in relevant respects to Pat Holder's towel. On January 9, 2000, BTC added a page to its website: "COMING SOON: The Electric Towel. This heated towel will be available in the near future for \$19.95. Please submit your email address to express your interest in receiving a towel in the future." The web page had a picture of a towel with a cord connected to it, but it was not an actual towel – the photographer cut the electric cord off of a lamp and put it under the towel to make it look like the cord was connected. The picture is below.



BTC quickly learned what Pat had learned: the electric towel was easy to shock someone when an electric towel is wet. To solve this problem, BTC designed a Ground Fault Circuit Interrupt (GFCI) electrical plug (pictured below) similar to that found on hair dryers. The GFCI plug disconnects electricity in circumstances where a shock is likely – for example when wet.



BTC did not develop special material. Instead, the first BTC electric towel shipped to customers on June 30, 2000, and used terry cloth towel fabric. The electric towel was an instant hit. Profits in the first six months (July 1 – Dec. 31, 2000) were \$100,000. Profits thereafter were \$400,000.

### **THE LAWSUIT**

Angered that BTC was making money on the electric towel, Pat Holder brought suit in district court, alleging infringement of claims 1 and 2 of the '123 patent. Pat sought damages and a permanent injunction, but did not seek a preliminary injunction.

### **EVIDENCE/PRIOR ART**

During the course of litigation, BTC uncovered the following:

1. It obtained the prosecution history, including the communications between Pat Holder and the PTO.
2. It took Pat Holder's deposition, and learned of all of the facts described above (of course, it already knew the facts about its own activities).
3. Its own investigation uncovered a variety of potential prior references. The following is a list of what BTC discovered (all of which is undisputed):
  - A. Electric blankets of various sizes and shapes (with wires embedded in the fabric and connected to electrical outlets) were in use in the U.S. long before 2000
  - B. GFCI plugs like that of BTC of different types were used for years prior to 2000 in wet applications
  - C. On June 1, 1999, a German company filed a patent application describing and claiming a shock resistant fabric identical to that used by Pat Holder. The German application was activated in a U.S. patent application under the PCT with a filing date of June 1, 2000. The German application was published by the German patent office after 18 months from the German filing, December 1, 2000. It was published in the U.S. by the U.S. PTO after eighteen months from the U.S. filing date, December 1, 2001. The patent issued in Germany in 2003, and is still pending in the U.S. No mention was made in the patent application of a use for the fabric in an electric towel, though the application did note that the fabric was absorbent.

## QUESTIONS

DO NOT CONSIDER ANY EVIDENCE/PRIOR ART OTHER THAN THE FACTS STATED IN THIS EXAM. You may, however, discuss what additional evidence or prior art might be necessary to answer any particular question.

Q1: You are counsel for Pat Holder. Please draft a memo describing the challenges to the validity and enforceability of the '123 Patent that Holder should expect to see, and the responses Holder has to such challenges. (57 points)

Q2: You are counsel for BTC. Please draft a memo describing what claims of infringement that BTC should expect to see, and the responses BTC has to such claims. Be sure to address any non-infringement related defenses. (24 points)

Q3: You are a clerk to the district court judge who is considering the matter. The judge asks you to write a **short** bench memo that *assumes infringement* and details the possible lost profit and final injunction remedies that might be available, and your assessment of whether such remedies should be awarded. *Do not address reasonable royalties or preliminary injunctions in your answer.* (7 points)

Q4: Assume that as part of its suit against BTC, Pat Holder also sued Wire Maker for contributory infringement under 35 U.S.C. §271(c). Wire Maker sells wire that is specially adapted for heated fabric applications, such as electric blankets. BTC uses this wire in its towel. In two sentences or less, describe two reasons that BTC might argue to show that it is not liable. In two sentences or less, describe one reason that Pat Holder might argue to show that BTC is liable. *You need not address whether BTC will win the argument*; just describe the argument and any key facts that support it. (5 points)