Patent Law
Spring 2012 – Michael Risch
Final Exam

This is a take-home exam. You have eight (8) hours from the time you download the exam to complete and upload the answer. If you experience technical difficulties, please follow registrar office directions or contact the registrar. 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, but you may not receive help from any person. Note that the exam will be held during the first week, but there may be make-up exam days. 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 I post a Blackboard announcement notifying you that you may do so. Page two of this exam is a confirmation that you understand this – please print, sign, and turn in to Safia Dias at some point before May 12.

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 4200 words, which is approximately 13-15 pages of a proportionally-spaced font, or many fewer pages with smaller margins. I am grading each exam all at once, so feel free to refer to a prior answer if relevant. NOTE: You do not have to use all of the words available – the questions can be answered in less space than allotted.

Do not rely on page limits; you should count words using your word processor's "properties" menu item (word counts are sometimes in the bottom bar of the word processor as well). You may divide the word limit among the different questions however you wish, **but I will stop reading after the word limit is reached**.

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.

Patent Law Final Exam, Spring 2012.

I _____, confirm that I abided by the instructions of this exam and have obeyed and will obey the Villanova University School of Law Code of Conduct with respect to the above exam, and that I have not discussed and will not discuss any part of the exam, its contents, or my answer with any of my classmates until after I am notified that I may do so.

Dated:_____ Signed: _____

___ Initial here if Prof. Risch may publicly post some or all of your answer (without your name associated with it)

Please return to Safia Dias in Room 260 by 5PM on May 12, 2011. I cannot give you a grade without it.

Patent Law Final Exam
Spring 2012

The questions are weighted as follows: Question 1, 5 points, Question 2, 50 points, Question 3, 25 points, and Question 4, 20 points for a total of 100. If any of your answers depend on facts not stated in the problem, feel free to identify which facts would be helpful, and how they would affect resolution of the issue. You may refer to answers to prior questions. Remember your word limit. **I WILL STOP READING WHEN I REACH THE LIMIT**.

ALL PEOPLE, WEBSITES, AND EVENTS ARE FICTIONAL, EXCEPT THOSE THAT ARE REAL, BUT EVEN THEN DO NOT LOOK OUTSIDE THE FACT PATTERN GIVEN. DO NOT RELY ON ANY CASES, STATUTES, CLAIMS OR OTHER ARGUMENTS THAT ARE NOT BASED ON ASSIGNED READINGS OR CLASS DISCUSSION – YOU DO NOT NEED TO DO RESEARCH TO COMPLETE THIS EXAM.

DO NOT ASSUME THERE IS ANY PRIOR ART OTHER THAN THAT DISCLOSED (IF ANY) IN THIS EXAM.

Pat Holder

Patent "Pat" Holder was not an engineer by training, but does have some technical skills. In April of 2012, Pat Holder had an Easter egg hunt in the backyard using real eggs. A couple of weeks later, Pat gagged at the rotten smell coming from the yard. Apparently Pat's kids had missed a few eggs.

About a week later, on May 1, 2012, Pat read about a study published in Nature Magazine. The study was submitted to Nature on January 1, 2012; sent out for peer review by three university professors on February 1, 2012; and accepted for publication on March 1, 2012. It hit the newsstands on March 20, 2012.

In the study, three chemistry professors at Hudson University described how they had discovered that eggs emit a measurable amount of sulfur. In particular, they found that hardboiled eggs emit 2000 milli-Roentgens per hour (a measurement of particle decay) of sulfur when first boiled, and increasing to much more emissions as they become rotten.

When Pat read this, an idea hit. Why not create an egg detector? That way, Pat could scan the yard after an egg hunt and find missing eggs.

Sulfur Detectors

Since 1908, devices have existed to measure radioactive decay. These devices, commonly called Geiger Counters, use gasses to measure particles emitted by nuclear material. However, the concept has been expanded to measure other chemicals. One such device is a sulfur detector, which is only available in Germany.

The Egg Detector

Pat started working on an Egg Detector on May 2, 2012. It did not take long. Pat started with a sulfur detector Pat bought on a trip to Germany on April 7, 2012, and reprogrammed it to send a signal to an LED light when emissions of more than 2000 milli-Roentgens per hour were detected within 1 foot of the device. Of course, sources of sulfur other than rotten eggs could set off the LED signal as well. The design allowed the signal to be reset for another search. Pat completed the device on August 1, 2012.

The University Egg Strip

After publishing their article, the Hudson University professors started work on their own egg detection test on May 15, 2012. They chose to pursue detection using disposable strips. Working on this project among their other projects, they completed test strips on July 1, 2012. The test strips were designed to operate as follows: the user holds the strip while walking around. When more than 2000 milli-Roentgens of sulfur per hour are detected within three feet, the strip turns green. The strip are intended for one-time use.

The University Patent

Hudson University filed a patent application on the test strip on July 15, 2012. The specification describes the test strip and no other method of detecting eggs. The application was published on January 15, 2014, and issued on June 1, 2015. Claim 1 reads:

We claim a device for detecting the presence of eggs, comprising:
    means for detecting 2000 milli-Roentgens of sulfur per hour; and
    an indicator that such level of sulfur has been detected

Pat's Application

While Hudson University is waiting for its patent to issue, Pat Holder had also filed a patent application. It read as follows:

I have invented an egg detector. It notifies the user if an egg is present nearby. To build the detector, I reprogrammed a German sulfur detector (though any sulfur detector will work) to send a signal to a light emitting diode (LED) when the detector senses more than 2000 milli-Roentgens per hour emissions of sulfur, the amount emitted by a hard-boiled egg. The device has a button to reset and find another egg.

I claim:

1. A device for detecting the presence of eggs, comprising:
        means for detecting 2000 milli-Roentgens of sulfur per hour; and
        an indicator that such level of sulfur has been detected

2. The device of Claim 1, wherein the indicator is an LED.

Pat filed the application on March 16, 2013, before the effective date of the AIA first-to-file provisions. Pat did not disclose the Nature Magazine article by the Hudson University professors to the PTO. The application was published after 18 months, and issued on June 1, 2015.

Egg Dogs

Also tired of rotten eggs, Egg Dogs (ED) was formed on June 1, 2015, to train dogs to sniff out eggs. The training is simple. Dogs are trained to smell eggs in the same way they are trained to smell drugs, criminal substances, or anything else with a particular odor. When the dog finds the egg, it barks and claws at the ground. Expert witnesses on all sides will testify that it is the sulfur that dogs are sniffing when they are trained by ED.

ED obtains dogs through breeders, trains them, and sells them to families as pets and the occasional egg finders.

On January 2, 2016, Pat sues Egg Dogs for patent infringement. Assume that Egg Dogs learns of all of the above facts during discovery.

QUESTIONS:

Q1: Assume that the PTO declared an interference proceeding between Pat Holder and Hudson University on claim 1. In four sentences or less, describe the most likely disputed issues to be considered. (5 points)

Q2: You are counsel for Pat Holder. Please draft a memo describing the challenges to the validity and enforceability of the '123 Patent that Holder might see, and the responses Holder has to such challenges. (50 points)

Q3: You are counsel for Egg Dogs. Please draft a memo describing what claims of *direct* infringement that Egg Dogs might see, and the responses Egg Dogs has to such claims. Be sure to address any non-infringement related defenses. (25 points)

Q4: Describe how the analysis in Q1 and Q2 might change if Pat had waited until April 1, 2013 to file the patent application, after the first-to-file provisions of the AIA became effective. You do not need to worry about transition issues – you can assume all actions and all prior art are governed by the AIA. (20 points)