

Exam Number: _____

**VILLANOVA UNIVERSITY SCHOOL
OF LAW**

**Patent Law
Risch
Spring 2024**

Final Exam

Exam Number: _____

**VILLANOVA SCHOOL OF LAW
EXAMINATION IN PATENT LAW
8 HOURS**

Professor Risch

Spring 2024

INSTRUCTIONS (READ THEM ALL)

1. **Materials Permitted:** This is an OPEN book exam, with OPEN HARD DRIVE/OPEN NETWORK. **You may not receive help from any person, including AI “people.”**
2. This exam consists of 10 pages, including the cover page. Please check to be sure your exam is complete and contains all pages.
3. Time allotted for the entire examination is 8 hours. This is a take-home exam. Thus, you have eight (8) hours from the time you download the exam to complete and upload the answer. If you are late, your grade will be reduced. If you experience technical difficulties, please follow registrar office directions or contact the registrar.
4. 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.
5. **Note that the exam will be held until the 3L cutoff, 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 an announcement notifying you that you may do so.**
6. **This exam follows the honor code. Do not discuss the exam with others and do not collaborate. You don’t need to, you don’t want to.**
7. **THIS EXAM INCLUDES A STRICT WORD LIMIT OF 4400 WORDS.** 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. **I will stop reading after the word limit is reached.**
8. Do not rely on page counts; you should count words using your word processor’s “properties” menu item or in the bottom bar of your word processor. You may divide the word limit among the different questions however you wish. Your exam must be typed, double spaced, in legible font, and on 8.5 x 11 paper size.
9. Use **only** your exam number. You may not use your name or anything else that might identify you on these materials, so check your document properties. Word has a way to clean this in File|Info|Inspect Document, though printing to PDF will also clean much up. You may not identify yourself in any way to the professor as the author of an exam until the grades are published. Make sure that your exam number appears on each page, which is most easily done with a header or footer.

Have a great summer!

Patent Law Final Exam
Spring 2024

The questions are weighted as follows: Question 1, 49 points, Question 2, 37 points, Question 3, 6 points, and Question 4, 8 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, PATENTS, AND EVENTS ARE FICTIONAL, EXCEPT THOSE THAT ARE REAL, BUT EVEN THEN DO NOT LOOK OUTSIDE THE FACT PATTERN GIVEN. DO NOT RELY ON 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.

Cold Hands

When it gets cold outside, people who are outside get cold hands. This is not a new problem. From time immemorial, people have looked for ways to keep their hands warm, including gloves and mittens.

A recent innovation in warming hands are chemical handwarmers (or just “handwarmers”). These pouches contain chemicals that are separated by an internal barrier. When the barrier is broken, the chemicals mix, causing a chemical reaction that produces heat. The specific reaction isn’t important here, only that the pouches provide heat.

People often hold the pouches to keep their hands warm.



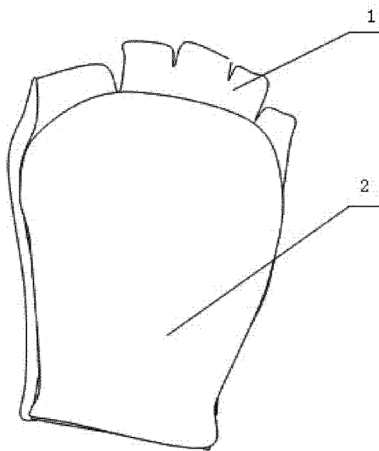
Gloves and Handwarmers

The problem with holding handwarmers is that you can't use your hands to do anything else. So, people have looked for ways to keep their hands warm. In February of 2020, an Amazon advertisement for handwarmers had this picture showing someone dropping a handwarmer into a glove in front of the hand.



There are two drawbacks to the pictured method. First, the handwarmer can get hot directly against the skin. Second, for many gloves, squeezing a handwarmer between the skin and the glove in may be difficult and uncomfortable due to the small amount of space.

In an attempt to solve this problem, one Chinese inventor filed a patent on January 1, 2019. The patent application published in China on July 1, 2020, but does not appear to have issued. A rough translation of the Chinese describes a fingerless “hand covering” with a pouch in the palm that opens to hold a “warming device.” Here is the figure from the application:



Non-Chemical Options

Not all methods used to warm hands are based on handwarmers. Given improvements in battery power, electricity is a possible way to warm the hands.

For example, these gloves with wires in the back were available from a variety of retailers beginning on Dec. 1, 2020.



The ad description shows a glove with an electric coil patch on the back connected to a cable. The glove includes wires that extend out from the electric coil along the back of each finger all the way to the fingertip. These wires also heat up and get warm, warming the fingers. The wires are held in place between two layers of fabric – an inner layer that fits around the hand, and an outer layer sewn around the inner layer that (among other things) forms a small space that holds the wires in place along the fingers. Not shown is a battery pack that is worn somewhere on the body. The battery provides current to the coil, heating it up.

Patent Holder

Patent (Pat) Holder is a baseball player. This is a warm pastime for much of the season, but in March, early April, and October, it gets cold—especially for night games. And when it gets cold, Pat’s hands get cold. And when Pat’s hands get cold, Pat’s batting average suffers. It’s hard to swing precisely or hard with cold hands!

Pat has tried to use handwarmers in the dugout, but they do not provide much warmth. Pat does wear batting gloves, but they are thin and provide little warmth. The following is a picture of batting gloves.



Pat had always used handwarmers in the bullpen while waiting to bat but had to leave them there. By the time of the pitch the warmers had lost all effect. On April 15, 2020, Pat had an idea. Why not build a pouch into a batting glove? Obviously, the front wouldn't work. But maybe in the back? Pat tried several prototypes but they didn't work that well. The back of the hand got warm, but the fingers were still cold.

Finally, on August 1, 2020, Pat thought of an idea. Why not channel the heat through to the fingers by making the pouch bigger on the back of the hand and extend it up the fingers. On November 1, 2020, Pat completed a prototype and started using the gloves in team practice.

The '123 Patent

A couple months later, on January 1, 2021, Pat applied for a patent.

Here is the specification and claims, with figures.

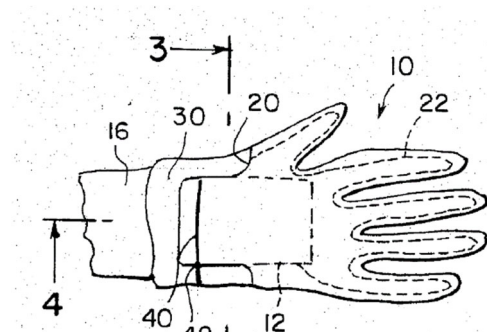


Figure 1

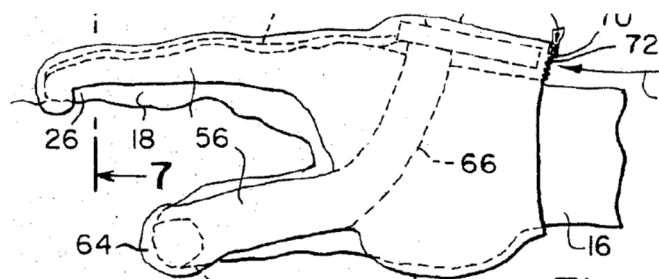


Figure 2

The instant invention relates generally to gloves and more specifically it relates to a heated glove utilizing a hand warmer of conventional fuel burning type such as the JON-WARMER made by ALADDIN MFG Co., INC.

In the winter when a person is doing any activity the gloves that they wear will not always keep their hands warm. The fingertips are the first that freeze in very cold weather.

FIGS. 1 and 2 illustrate a heated glove 10 utilizing a hand warmer 12. The heated glove 10 contains an inner layer of material placed around a hand 16 and fingers 18. The inner layer forms a sealable top pocket 20 to hold the hand warmer 12 and five ducts 22. Each duct 22 extends from the top pocket 20 over each finger.

An outer layer 30 of leather material is placed around the inner layer and the pocket to form the heated glove. A stiff support member is placed between the top layer and bottom layer of each duct 22 to keep the ducts 22 open. The heat can travel along the ducts 22 to heat the top of the fingertips 26 of the hand 16.

I claim:

1. A heated glove for utilizing a hand warmer which comprises:

(a) an inner layer of material placed around a hand and fingers, the inner layer forming a sealable top pocket to hold the hand warmer and ducts, each duct extending from the top pocket over each finger;

(b) an outer layer of material placed around the inner layer to form the heated glove; and

(c) means for allowing heat to travel from the hand warmer to top of each fingertip of the hand in the heated glove.

2. A heated glove as recited in claim 1, wherein the means for allowing heat to travel from the hand warmer to top of each fingertip of the hand in the heated glove comprises:

stiff support members, each stiff support member placed between the top layer and bottom layer of the ducts to keep the duct open so that the heat can travel along the duct to heat the top of the fingertips of the hand.

This application issued as the '123 Patent on June 20, 2023.

While Pat had developed the invention for baseball gloves, it turned out that market research showed demand for other types of gloves as well.

Convertible Mittens

For many years, convertible mittens have been a thing. These are generally fingerless gloves that have a mitten like pouch sewed to the back that can be pulled over the fingers to keep them warm. Some such gloves need not be fingerless, as we'll see below.

Mitten World

Mitten World sells all manner of mittens (and gloves). One of these is a fingerless convertible mitten.



As the picture shows, in an attempt to garner additional sales, Mitten World suggests on its website that buyers might place a chemical based handwarmer on the back of the hand, and then pull the mitten over in order to keep the hand and the fingers warm.

Mitten World does **not** actually sell the handwarmers.

Metsy

Metsy is a company that also sells mittens. Metsy sells a convertible mitten as well. These mittens have material over the fingers (so they are not fingerless).



Metsy, however, does sell a chemical handwarmer with the mittens. As the picture shows, the website suggests putting the handwarmer in the front of the hand and then pulling the mitten pouch over, but there is no physical impediment to putting the handwarmer on the back of the hand.

Pat wants to go to market, but sees Mitten World and Metsy as direct competition, and immediately sues them both for infringement of the '123 Patent as soon as it issues.

ASSUME THAT THE AMERICA INVENTS ACT APPLIES UNLESS THE QUESTION STATES OTHERWISE

QUESTIONS:

Q1: You are counsel for Pat Holder. Please draft a memo describing the challenges to the validity of the '123 Patent that Holder might see, and the responses Holder has to such challenges. (49 points)

Q2: A. You are counsel for Mitten World. Please draft a memo describing the infringement claims by Pat that Mitten World will likely see, and the responses/defenses Mitten World has to such claims.

B. You are counsel for Metsy. Please draft a memo describing the infringement claims by Pat that Metsy will likely see, and the responses/defenses Metsy has to such claims.

NOTES: 1. You may refer to your analysis in Part A to answer Part B. Indeed, you might need to in order to hit your word limit. 2. There is no need to address contributory or induced infringement (see Q3). There is no need to address any defense of invalidity from Q1. There is no need to address inequitable conduct. (37 points)

Q3. In 10 sentences or less, what are the most important contributory/induced infringement claims (and defenses thereto) for **Mitten World**? You may refer to Q2 response. Assume Mitten World knows about the patent. (6 points)

Q4: Assume that this case fell under the 1952 Act. How would the analysis in Question 1 change? Answer in 10 sentences or less. (8 points)

REMEMBER YOUR WORD LIMITS

END OF EXAM!