## Intellectual Property Fall 2022 Midterm

This examination consists of **one questions** and **four pages**. Your answer has a limit of **2,000 words**, which will be strictly enforced. It is due by **11:59 PM on Sunday, October 16**. Please submit your answer using the instructions provided by the Law Registrar's office.

This exam will be **blind-graded**. You must not put your name or other identifying information anywhere on your answer. In addition, you must not compromise the anonymity of the grading in your communications with me. If you have any technical issues in taking the exam, you must discuss them with the registrar, not with me.

This is an **open-book** examination. You should not need to consult anything beyond the casebook, the slides, and your notes, but you can if you wish. You are free to discuss the general legal principles we have covered with anyone, including each other.

You are also free to post general **questions** about the material covered in the course or about the *facts* (not the law) in the problems on the exam in the designated discussion area on Canvas. I will answer all questions posted there before 11:59 PM on Tuesday, October 11.

Aside from the above, **you may not discuss the question** with anyone else until after I have returned your grades.

Your work on this examination is subject to the Cornell Code of Academic Integrity, the Law School Code of Academic Integrity, and the Campus Code of Conduct.

## **General Advice**

Please make your answer as **specific** to the facts of the questions as you can. Generic statements or suggestions, such as "Make sure that all employees follow proper security practices," will receive few or no points. Use **simple citations** (e.g. "see Feist") where appropriate. I include **spelling**, **grammar**, **clarity**, **and organization** in my grading. I appreciate the use of headings to organize your answer, but they're not required. If you find the question **ambiguous** or need to **assume additional facts**, state your assumptions and explain how they affect your answer. No reasonable resolution of an ambiguity will be penalized.

You can assume for purposes of the examination that **present-day law** has been fully in effect at all relevant times. Unless otherwise noted, **all names are fictitious**. Please disregard any resemblance to actual persons, places, or institutions, unless they are specifically incorporated into a question.

## Harder Than Diamonds and More Slow

Stark Industries is a major international chemical company. For more than eighty years, it has sold bulk quantities of adamantium, a dense and rigid material with numerous industrial uses. Stark obtained a patent (the `123 patent) on adamantium by claiming its chemical structure and the standard manufacturing process, which consists of heating a mixture of unobtanium, jumbonium and chelonium to 800 degrees. That patent expired in 1958, and since then several other companies also manufacture and sell bulk adamantium, as well as various machine parts made out of solid adamantium. The market price for adamantium is about \$2 per kilogram.

For many years, Stark has been experimenting with ways to modify adamantium to alter its properties. In 2009, one of Stark's scientists added a small quantity of vibranium during the manufacturing process. When tested, this sample was significantly harder and stronger, because the vibranium caused the adamantium to form a crystal structure, unlike the amorphous structure of unmodified adamantium. Stark named this new material "adamantium beta" to distinguish it from unmodified adamantium and continued to perform experiments on it for several years. In 2013, Stark filed for a patent on adamantium beta. It claimed:

- 1. A process for making adamantium, wherein a mixture of unobtanium, jumbonium, and chelonium is heated to 800 degrees centigrade and combined with a strengthening agent.
- 2. The process of claim 1, wherein the strengthening agent is vibranium.
- 3. A compound comprising crystalline adamantium.

The patent issued in 2015 as the `456 patent. Starting in 2018, Stark has been manufacturing adamantium beta and selling it for \$20 per kilogram. It is used primarily in knives and armor.

Your client, Wolverine Metals, is a competing chemical company. It has been selling bulk adamantium since 1993. It sells about 20 million kilograms per year, for about \$40 million in annual revenue and about \$1 million in annual profit.

Earlier this year, while performing a routine quality-control check, one of Wolverine's chemists discovered that the adamantium sample contained microscopic grains of adamantium beta. Wolverine purchased some adamantium beta from Stark and performed further testing. This testing revealed that when heated adamantium is exposed to even a few molecules of adamantium beta, a small portion of it (about .01 percent) spontaneously crystallizes to form more adamantium beta. Wolverine purchased samples of adamantium from other chemical companies and confirmed that they all also contained microscopic grains of adamantium beta. So did samples of adamantium sold by Stark in 2012, 2015, and 2020. and by Wolverine in 2019 and 2021. It appears that every adamantium manufacturing facility in the world is contaminated with trace quantities of adamantium beta, so that any adamantium they produce will contain about .01 percent adamantium beta. Once contaminated, there is no feasible way to clean a facility. Building a new facility would cost about \$100 million.

Two days ago, Stark sent a cease-and-desist letter to Wolverine demanding that Wolverine stop manufacturing adamantium, because the manufacturing process and the resulting adamantium infringe on the `456 patent and Stark's trade secrets. The letter demanded that Wolverine pay a \$20 million settlement for its past infringements, and offered to enter into a licensing arrangement going forward under which Wolverine would pay Stark \$5 per kilogram of adamantium it sold, and \$15 per kilogram of adamantium beta.

Wolverine's CEO, Hugh Howlett, and general counsel, Tatiana Walters, have asked you to advise them. They want to know how Wolverine should respond to the cease-and-desist letter, whether and how Wolverine can continue to make and sell adamantium, and whether and how Wolverine could enter the adamantium beta line of business.

Write a memorandum to Wolverine's executive team of 2,000 words or fewer answering these questions.