

**Intellectual Property**  
**Fall 2022**  
**Midterm Memo**

I graded your essays as follows:

- Correct and complete legal analysis: 70%
- Strategic advice: 15%
- Clarity and organization: 15%

The bullet points in the following outline do not directly correspond to my grading rubric, but they do reflect the overall weight I put on different parts of the analysis. I awarded full credit for identifying an issue and analyzing it carefully even if you reached a different conclusion than I did. Indeed, in several cases I awarded bonus points for spotting an issue I missed, or for surprising me with an argument I had not thought of.

I will of course be happy to discuss your essays and your grades with you if you have any questions.

## Harder than Diamonds and More Slow

There is something obviously wrong about Stark's attempt to enforce the '456 patent against adamantium contaminated with trace amounts of adamantium beta. The hard part is pinning down just what the problem is.

### Trade Secret

Wolverine faces no trade secret risk.

- There is no protectable trade secret in the composition of adamantium. It was disclosed by the '123 patent and years of sales. Similarly, the standard process for making adamantium is widely known following its disclosure in the '123 patent.
- There is no protectable trade secret in the composition of adamantium beta or in the method of making it using vibranium. These are disclosed in the '456 patent.
- Even if there were trade secrets, Wolverine has engaged in permissible reverse engineering (of Stark's adamantium) and its own independent research (on its own adamantium).

### '123 Patent

The '123 patent has long since expired and does not prevent Wolverine from making and selling adamantium or adamantium beta.

### '456 Patent Validity

Claim 2 of the '456 patent is likely valid, but claims 1 and 3 may not be.

- Claims 1 and 2 are directed to patentable processes that involve combining physical substances. Claim 3 is directed to a composition of matter.
- There is an argument that adamantium beta is an unpatentable product of nature. If so, then claim 3 is invalid. It does not appear, however, that adamantium beta existed in the world before Stark's experiments in 2009. (Further investigation is required.)

- Adamantium beta is useful in knives and armor so the product (claim 3) and processes for making it (claims 1 and 2) have patentable utility.
- The claim term “strengthening agent” in claim 1 may be indefinite because it does not adequately specify what substances are strengthening agents.
- Similarly, Stark has disclosed only one specific strengthening agent (vibranium), so claim 1 is insufficiently enabled.
- Although claim 1 does not describe the proportions of unobtainium, jumbonium, and chelonium, these proportions are presumably well-known to PHOSITAs from the long history of making adamantium, so claims 1 and 2 are sufficiently enabled in that respect.
- Adamantium beta is novel over the `123 patent and over adamantium, because the crystalline structure gives it new properties that are not present in preexisting adamantium. (Adamantium beta is a species in the genus of adamantium, so it would have *infringed* the `123 patent, but the `123 patent did not *anticipate* adamantium beta.)
- Stark’s official sales of adamantium beta started in 2018, which is after the `456 patent’s filing date of 2013.
- However, Stark’s sales of adamantium from at least 2012 onwards contained microscopic grains of adamantium beta. Depending on the precise dates, this may be more than one year before the `456 patent’s 2013 filing date. (Per the instructions, you did not need to worry about the America Invents Act’s effective date.)
- Stark was likely unaware of this contamination, so the adamantium beta was not being offered for sale. Still, it was arguably “in public use” and “on sale” (because of the completed sales), which would render it prior art as to the `456 patent.
- Under this test, claim 3 is invalid because it literally reads on the product that Stark was selling. Claim 2 is valid because Stark was *not* selling adamantium beta made by using vibranium as the strengthening agent. Claim 1 would be invalid if adamantium beta is regarded as a strengthening agent.
- Adamantium beta and the process for making it are nonobvious. The crystalline structure was unexpected and (as far as we know) unpre-

dictable. It was not obvious in advance that any particular added chemical would have such dramatic consequences for the properties of the resulting adamantium

### **`456 Patent Infringement**

Wolverine might infringe on claims 1 and 3 of the `456 patent, but those are the claims that are likely to be invalid.

- Under claim 1, Wolverine is literally producing adamantium beta during the process of manufacturing adamantium using the described method. The introduction of trace quantities of adamantium beta results in the creation of more adamantium beta.
- Wolverine's best argument here is that adamantium beta is not a "strengthening agent," which would require claim construction based on a closer analysis of the patent's specification.
- Wolverine does not literally infringe claim 2 because it does not use vibranium in its adamantium production process. "Vibranium" is an element of this claim (indeed, it is the only new element of this claim), so the doctrine of equivalents should not be used to capture adamantium beta as an equivalent to vibranium.
- Wolverine arguably infringes claim 3 because its adamantium literally consists of .01% adamantium beta.
- It does not matter that Wolverine does not intend to create adamantium beta, which is an inevitable consequence of adamantium beta contamination. Patent infringement is strict liability.
- It does not matter that Wolverine makes only small quantities of adamantium beta. There is no *de minimis* exception to patent infringement.
- Wolverine both makes and sells adamantium beta. It does not offer adamantium beta for sale (since it advertises only bulk adamantium) and it does not appear that Wolverine uses adamantium beta.
- Wolverine probably cannot raise a prior-use defense because its use of adamantium beta appears to date back only to 2019, well after the `456 patent issued.
- Wolverine cannot raise an experimental-use defense because it has been engaged in clearly commercial activities selling adamantium.

## Strategy

If Wolverine is unwilling to deal with the expense and uncertainty of litigation, or if it loses and the `456 patent is held to be valid and infringed:

- Wolverine will have to stop manufacturing adamantium, or take a license from Stark.
- If it takes a license, Wolverine should demand that Stark enforce its patent against all other adamantium makers. At the current market price, Stark's proposed royalty is uneconomical.
- It is also uneconomical to build a new adamantium facility, and any new facility would be just as vulnerable to contamination.
- Wolverine could consider taking a license to make adamantium beta, which might be profitable at the proposed royalty.

If Wolverine succeeds in showing that it does not infringe the patent, or that claims 1 and 3 are invalid:

- Wolverine can continue manufacturing adamantium.
- Wolverine could consider taking a license to make adamantium beta, as above.
- Wolverine can experiment with other strengthening agents to create high-purity adamantium beta (the .01% of adamantium beta produced via contamination is not likely to be commercially valuable).

If Wolverine succeeds in invalidating the `456 patent, *including claim 2*:

- Wolverine can continue manufacturing adamantium.
- Wolverine can enter the adamantium beta market, using vibranium to make adamantium beta. But other companies are likely to enter the market too, so the high prices currently charged by Stark are unlikely to persist.