

QUESTION 1

To be valid, a patent must: regard patentable subject matter, have utility, be enabling, have an adequate written description, be definite, be novel, and be a nonobvious development.

Patentable Subject Matter (PSM)

§101's expansive terms list "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" as the scope of patentable subject matter. However, patents may not be issued to inventions that are merely claiming laws of nature, physical phenomena, or abstract ideas. **CHAKRABARTY**.

KORU would argue that this patent is directed towards a patent-ineligible concept, therefore rendering it unpatentable. To review such a claim, we must look to the **ALICE** test, which first asks: is the patent directed towards a patent-ineligible concept? All patents are, as every invention relies on at least one law of nature, physical phenomenon, or abstract idea. The patent-ineligible concept here would be the idea that keeping people a certain distance away will protect the wearer from covid-19. However, even if there is a patent-ineligible concept, which here, is pushing it, the second step of the **ALICE** test asks whether the patent contains an inventive concept sufficient to transform the claimed patent-ineligible concept to a patent-eligible one. This depends on the level of abstraction. As the patent here is directed towards the physical item that utilizes the concept, rather than the concept itself, it is not rendered patent-ineligible. **RLM**.

The 123-patent will survive a PSM challenge.

Utility

Utility, created by §101 and §112, requires three types of utility to be present: beneficial, practical, and operable utility.

Beneficial, or moral, utility bars inventions that are injurious to the well-being, good policy, or sound morals of society. **JUICYWHIP**. While KORU would argue that this invention is not an improvement on prior art, an invention need not be an improvement to have beneficial utility.

LOWELL. KORU would have a very difficult time arguing that this invention is not beneficial, partly because it was invented to prevent the spread of disease and partly because they're doing the same thing. **JUICYWHIP**.

Practical utility requires that there be a specific and substantial use for the patented invention.

The use here is a real-world one, rather than a throwaway use, therefore there is substantial utility. **BRANA**. The use is specific for use to wear to prevent the spread of illness. Therefore, there is practical utility.

Operable (credible) utility requires that the utility not be inherently unbelievable. The initial assumption is that inventions are not so fantastic that they demand a credible utility rejection. This presumption has not been overcome here because this invention does not have a utility-negating mistake and is not inherently unbelievable. **JANSSEN**. KORU may argue that the

effectiveness of this invention is doubtful as winds can make the 6-foot radius ineffective in preventing the spread of disease, but mere dubiousness is insufficient to make a credible utility rejection.

The 123-patent will survive a utility challenge.

Enablement, Written Description, and Definiteness

§112(1) creates the need for enablement, written description, and best mode, whereas §112(2) creates the definiteness requirement.

Enablement requires that the specification sets forth the inventions “in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same.” To conduct an enablement analysis, first the claim scope must be determined. Second, it must be determined whether a claim of that scope is enabled. Enablement is measured at the time that the patent application was filed.

Here, the patent has two claims, which will be analyzed separately for enablement.

Claim 1 recites a physical distancing device that has a hoop or other cylindrical structure that is large enough to distance the wearer from bystanders, and the hoop is attached with support members that are worn around the neck and shoulder area. This is a relatively narrow claim because it is limited to a device for use in preventing the spread of disease with two main

features—the hoop and support members. A POSA would be able to read this claim and then make and use the invention without undue experimentation. **INCANDESCENT LIGHT PATENT.**

Claim 2 is dependent on Claim 1 but broadens the claim scope by allowing the device to be worn anywhere on the wearer's body. This is obviously a broader claim, which means that enablement is less likely to be satisfied. KORU would argue that a POSA would have to engage in undue experimentation to figure out where to attach the device to the body. However, it would be quite easy to argue that, based on the **WANDS** factors, undue experimentation is not necessary. Not much experimentation would be necessary, as there are only so many spots on the body to put this, there is a lot of guidance in how this device works, there are working examples, the device is a mechanical invention, therefore is more easily understandable, the prior art lends itself to use in understanding this type of invention, people are relatively skilled in fashioning devices for wearing, the art is incredibly predictable, and the claim still is not too broad.

Both claims are likely to be found to be sufficiently enabled.

Written description as created in §112(1) and further discussed in §132 and §120, requires that the patentee describes what they claim and claim what they describe. This type of challenge is likely to come up here, as KORU would try to argue that Pat did not possess the invention as claimed. **GENTRYGALLERY.** Whether the written description is adequate depends on whether the disclosure of the application relied upon reasonably conveys to POSAs that the invention had possession of the claimed subject matter as of the filing date.

It would be difficult for KORU to argue that there was insufficient written description to show possession of Claim 1, as the claim fits well with the rest of the specification and the existing physical embodiments of the invention.

On the other hand, KORU may have a strong argument that there is a lack of written description as to Claim 2, as none of Pat's specification references wearing the device as attached anywhere other than the neck and shoulder area. Specifically, the specification says that the supports are "designed to be worn about the neck and shoulder area." KORU would argue that, based on the entirety of the patent application, it is clear that Pat did not possess the idea of wearing the invention in any other position, including around the waist. **GENTRYGALLERY**. KORU would say that, as this is enabled but not described, it is dedicated to the public. **Id.** We could argue that the specification discussing wearing around the neck is merely an example and it is disfavored to read claim limitations from the specification. However, it is very likely that this will be found to be outside the scope of Pat's possession.

Claim definiteness requires that the claims are drafted in such a way that others can easily determine the scope of the patentee's asserted monopoly, as viewed from the perspective of a POSA. **PERMUTIT, ORTHOKINETICS**. An expert in the field must be able to ascertain the boundaries with reasonable certainty. **NAUTILIS**. A patent's claims, viewed in light of the specification and prosecution history, must inform POSAs with the reasonable certainty of an expert of the scope of the invention. **NAUTILIS**. KORU would argue that the claims do not show the metes and bounds of the invention because it could be worn at any part of the body and

that is indefinite. However, this is perfectly definite as a POSA would understand that this invention covers every variation. It must be noted, however, that antecedent basis rejections fall under §112 paragraph 2 and there are several antecedent basis issues here. First, “the wearer” lacks antecedent basis as it had never been referred to before and is referred to using “the” twice, as with “the neck and shoulder area.” Additionally, “the hoop/cylindrical structure” is used in both claims but was referred to as “a hoop or other cylindrical structure” twice in Claim 1. The change makes the language in Claim 2 lack antecedent basis.

Novelty

Novelty under the AIA has three steps. First, relevant prior art references under §102(a) must be identified. Second, any prior art references that may be excluded under §102(b) are not effective prior art. Third, it must be determined whether any single reference anticipates the present invention.

The critical date of Pat’s invention is 4/7/2021—the day on which he filed his patent application.

Here, there are four potential inventions that may be asserted as prior art: 1) barrel dress, 2) the Twitter photo, 3) the Distancing Dress (DD), and 4) Pat’s invention.

Barrel Dress: This would be an effective piece of prior art under §102(a)(1) as it was in public use. A single, non-confidential use of an invention in the ordinary course of business is a public use. **EGBERT**. While, at first, McKernan arguably retained control as he was the one wearing it,

rendering it a private use, his son eventually began wearing it after his death. **MOLECULON**. Because he wore this on TV, it would be hard to argue that McKernan maintained control of the invention, as in **BEACHCOMERS**. This is not exempted under §102(b). However, this prior art reference does not anticipate the present invention, as it does not possess all elements.

ROBERTSON. While it does have an equivalent of a hoop and support members, it is not adapted for use in the prevention of the spread of disease, therefore it does not enable the 123-patent. **ROBERTSON**.

Twitter Photo: This is effective prior art under §102(a)(1) as it was a printed publication. Something is published if it is sufficiently out there to give people the opportunity to copy/disseminate. **KLOPFESTEIN**. Here, that is satisfied as it was posted for a long enough time and there was no expectation that it would not be copied and it would easily be copied. **Id.** It is not exempted under §102(b). However, much like the previously discussed prior art reference, this invention does not anticipate the 123-patent. Although it arguably has an equivalent to a hoop (the head band thing), it does not possess support members. Therefore, it does not have all the elements of the 123-patent and does not destroy novelty.

DD: FHC's DD is prior art under §102(a)(2) as it was a patent that was effectively filed before the effective filing date of the claimed invention. Under the AIA, foreign applications need not designate the U.S., be in English, or be filed under the PCT to be prior art. However, there is potentially an exemption under §102(b), as Pat began using his invention in public by wearing the 123-patent in public on 4/7/2020 while the DD's patent application was filed on 4/8/2020. We would want to argue that Pat's wearing the invention around constituted public use, equating

the situation to **BEACHCOMERS**. We would say that Pat did not retain control of the invention as everyone could see it and it was attracting reporters. On the other hand, KORU would argue that this was private use or experimental use. KORU would equate this to **MOLECULON**, wherein the inventor allowed others to see and fiddle with the invention but was still found to retain control. We could distinguish this from **MOLECULON**, as Pat was allowing anyone to see the invention, not just coworkers. Additionally, this does not fit within the experimental use exception because Pat was not trying to bring his invention to perfection or testing its effectiveness by wearing it. **NICHOLSON**. We would not wish to argue that the DD is non-enabling, as it is incredibly similar to KORU's product that we are attempting to assert as an infringer and that which would anticipate if before infringes if later. This is a highly fact-sensitive issue and the outcome is difficult to predict, but we have a strong argument in Pat's favor.

Pat's Invention: Pat's actions in using the invention in public likely constitutes public use, as discussed above. §102(a)(1). However, this falls under a grace period exception under §102(b), as the disclosures were made 1 year or less before the effective filing date (4/7/2021) by the inventor. Therefore, it cannot be asserted against Pat. It is obviously anticipatory, as it is his invention.

Novelty with regards to the DD is the main issue at this step, but there is a strong chance that the 123-patent will be found to survive a novelty analysis.

Nonobviousness

Nonobviousness is the “ultimate condition of patentability,” requiring that the invention be a significant enough technical advance to warrant the award of a patent. Under the AIA, obviousness is measured at the time of the effective filing date of the invention. §103. The **GRAHAM** test governs obviousness.

First, the scope and content of the prior art must be identified. Unlike novelty, prior art is limited to the analogous arts for obviousness analysis. **CLAY**. The art is analogous when it is either from the same field of endeavor or whether the reference is reasonably pertinent to the particular problem. **Id.** A POSA is assumed to know all the art.

Barrel Dress: No matter how broadly the field of Pat’s endeavor is defined, it would likely not be found to overlap with this invention’s field of endeavor. The purpose of Pat’s invention is to prevent the spread of disease and, while these two inventions appear marginally similar, no matter how much creativity is credited to a POSA, courts would be unlikely to find that this is the same field of endeavor. **PAULSEN**. However, a court may find that, despite this, it is reasonably pertinent to the particular problem here.

Twitter Photo: This invention is from the same field of endeavor, as both inventors were attempting to protect themselves from the spread of disease.

DD: This invention is from the same field of endeavor, as both inventors were attempting to protect the wearer from the spread of disease.

Second, the differences between the prior art and the claimed invention must be identified.

Barrel Dress: The differences between this reference and the present invention is that the barrel is not large enough to socially distance. While the support members are different from the preferred embodiment, the straps likely fall within the claims of the invention.

Twitter Photo: The differences between this and the 123-patent is that they are basically inverted. Here, the noodle-arms are used to keep people away whereas a loop is used as a means of attachment.

DD: The key difference between this and the 123-patent is that the attachment is made at the waist, but that is within the scope of the invention.

Third, the level of ordinary skill in the art must be identified. This isn't an important step, so we'd assume it is a shop engineer.

Fourth, based on the first three steps, we must determine whether the claimed invention is obvious. Unlike in novelty, prior art references can be combined. KORU would argue that a POSA has ordinary creativity and the differences would have been obvious to make. KORU would say common sense would lead to this invention and that it was obvious to try, especially as seen by the sheer number of people who came up with similar inventions. We could argue that

it was not obvious to try and it is more than a predictable variation of the prior art. Combinations of prior art are not inherently unpatentable. **HYBRIDTECH.**

Finally, secondary considerations—commercial success, long-felt but unsolved needs, unexpected results, disbelief by experts, failure of others, copying by others, and praise—may be considered. To try tipping the scales, we could argue that KORU specifically copied Pat’s invention and that this was a highly needed development in light of the pandemic. People praised it because it was featured on the news. KORU would argue that this was not a long-felt need because the pandemic happened and people immediately invented stuff like this. Additionally, they would point to a lack of showing of commercial success and, even if we did have any, they would say there is no nexus. **CALMAR.**

Nonobviousness would be the most difficult condition for patentability to prove here.

QUESTION 2

Pat will argue that the Mega Hoop Distancer (MHD) literally infringes the 123-patent under 271(a). This requires that all elements be present in the allegedly infringing device.

This requires first that the claims be construed. **MARKMAN**. Claim construction begins with the claims, then looks to the rest of the patent (specification), then to prosecution history, then to extrinsic sources. **PHILLIPS**.

Claim 1: Several elements of Claim 1 are open to interpretation: “hoop or other cylindrical structure,” “support members are attached to said hoop/cylindrical structure in such a manner as to be worn about...,” and “sufficiently sized to distance the wearer from infectious bystanders.”

It will be difficult to argue that the MHD does not possess a hoop as claimed in the 123-patent, as it has a nearly identical hoop at the bottom.

However, we could argue that the element “support members” is not present here. As shown in the image, the MHD has strings that connect to a belt, which is a different means of attachment from the 123-patent. We would argue that based on the ordinary and contextual meanings, the element does not include a belt as a means of attachment. In light of the specification, which again references only straps, ropes, or other supports, we could argue that the 123-patent disclaims subject matter relying on other means of attachment. This will be difficult to argue, as strings are present and additional features of an infringing device do not matter.

Finally, the limitation of “sufficiently sized to distance...” is the most available opportunity to argue noninfringement because the MHD likely is not sufficient to create a safe distance. This is based partly on the DD and the image of the MHD. The DD only created a radius of 3 feet, whereas the estimated needed distance is 6 feet. Similarly, the MHD appears to have a smaller radius. Additionally, the claim is limited to creating a distance from “infectious bystanders.” However, it enables creating a distance from uninfected persons. That which is enabled but not claimed is dedicated to the public. If the MHD is of a smaller radius, it will be difficult for Pat to argue that her invention is infringed, as the whole purpose of his invention is to prevent the spread of disease, so how would it be infringed by something that does not do that? This is especially convincing in light of the prosecution history, as Pat amended her claims to have this limitation to being sufficiently sized, showing that he believed that the invention was unpatentable without this limitation. Additionally, by having Claim 2, it is clear based on claim differentiation that Pat did not believe that Claim 1 included things worn not around the neck.

Claim 2: If this claim is not found invalid, it will be difficult to argue that it is not infringed here. However, much like in Claim 1, we could argue that the support members do not include a belt and therefore is not literally infringed. We can make the same argument regarding the “sufficiently sized” limitation, which is our strongest argument. The limitation regarding “infectious bystanders” is likely not an avenue to success, as infectious people are all kept away and further people are merely a fringe benefit.

Finally, we could argue that the MHD does not infringe Pat's patent based on the reverse doctrine of equivalents. **WESTINGHOUSE**. While this doctrine is rarely asserted, it can come into play when the PTO grants a very broad patent and the alleged infringer makes a great leap beyond the patented technology. **Id.** This could be implicated here as Pat's invention, in light of all the surrounding prior art, is very broad in relation to the minimal amount of inventiveness. In contrast, the MHD is a more involved invention, with the belt and everything, and is a vast and quite unrelated improvement on the 123-patent. This argument will likely not carry the day, as patentees are entitled to the full scope of their invention, regardless of whether it is surprisingly broad, so long as they enabled the later developments.

QUESTION 3

Pat may argue that the MHD infringes Claim 1 under the doctrine of equivalents. Most likely, he will argue that the belt is an equivalent to the support members, that the sufficient distance element is met with an equivalent, and that wearing the MHD around the waist is an equivalent to the neck/shoulder area.

To fit in the DoE, the alleged equivalent must perform the same function, in the same way, to obtain the same result. **GRAVERTANK**. All elements of the patent must be present, either literally or as an equivalent. **WARNERJENKINSON**. Where the patent amended the claims, they bear the burden of disproving prosecution history estoppel. **Id.** PHE results from any amendments made to the claims that are done to secure the patent and that narrows the scope. **FESTO**. While the addition of Claim 2 broadens the scope of the patent, the changes to Claim 1 narrow the scope of the claim. Therefore, PHE is implicated here.

There was no PHE with regards to the “support member” element, however I would still argue that this is not an equivalent here with the ropes and belt. However, this is a weak argument that I would not focus much energy on.

The sufficient distance element was an entirely new limitation added to escape the prior art reference. Therefore, it is highly relevant here. Pat will have an incredibly difficult time arguing here that the MHD is an equivalent if it is not large enough (i.e. 6+ feet). He could argue that, much like the DD, if multiple of these dresses are worn, safe amounts of space are kept. This is a

weak argument because that requires that there are multiple MHDs to be used to infringe. This would likely require an indirect infringement analysis, where multiple end-users would wear the dresses in a way that prevents the spread of disease. §271(b) and (c). However, there were no instructions provided and the dresses would have substantial noninfringing uses, so these arguments for induced or contributory infringement would be very weak.

Additionally, when attempting to get a patent, Pat was aware of the MHD invention, but still did not initially claim beyond wearing it around the user's neck. This shows that Pat did not believe that this constituted his invention.

A patentee cannot use the DoE to reach matters disclosed but not claimed in an application, as it is dedicated to the public. **JOHNSON**. Pat will have a very difficult time arguing that his Claim 1 should include the elements present in the MHD as equivalents in light of PHE and the context of the patent application.

QUESTION 4

Under the 1952 Act, the key differences would be to the novelty and nonobviousness analyses.

Novelty:

The critical date would be changed to the day he invented, which was 4/1/2020—the day on which he finished his prototype and therefore reduced to practice. If necessary, Pat may be able to argue that his conception date—3/20/2020—is relevant, if he could show diligent efforts to invent. The anticipation analyses are the same under the 1952 Act.

Barrel Dress: This is still prior art as it was known/used by others in this country. §102(a).

Twitter Photo: This is prior art under §102(a) as it was described in a printed publication in this/foreign countries prior to the invention date.

DD: This is the main difference between the AIA and the 1952 Act. Because the patent was filed in Chinese, not under the PCT, and did not appear to designate the U.S., it is not prior art until 4/8/2021, when the U.S. patent application was filed. This is after the critical date and therefore it is not prior art with respect to Pat's invention. These two inventions would likely implicate §102(g)(1), as they were both processing in the U.S. at the same time. Based on the facts, the patent would be given to Pat.

Pat's Invention: Because the critical date is the date of invention, none of Pat's actions could be asserted against him as prior art. §102(a). However, KORU could make an argument that Pat abandoned his invention, as he waited until KORU's financial success to file and did not act in conformity with what to expect of someone who wanted a patent. §102(c). This would be inferred abandonment, as Pat was sitting on his patent rights. **DOW**. It may be active abandonment, as Pat likely did not believe it would have commercial appeal because Covid-19 died down. Pat would argue that it was not long enough for inferred abandonment.

Pat could argue that KORU derived its invention from his because the facts state that KORU did not begin development until it saw Pat's invention. §102(f).

Obviousness under the 1952 Act is measured at the time of invention rather than date of filing. §103. This would probably render the 123-patent nonobvious, as the DD would not be considered.