Patent Law Exam
Fall 2007

Question 1

Holder's invention will probably have no utility problem, as the invention is operable, beneficial, and practical (a lifelike holograph simulation substantial and immediate use to the public). The claim involves a room with a holographic projector, a means for generating a force field, and software sufficient to coordinate the images and the force inside a room. The elements are described in the specification but they also must be enabled so that a PHOSITA would not have to undergo undue experimentation to build the invention. If a person skilled in the art would be unable to create the specific software without undue experimentation, Holder may have an enablement problem. She does not describe in detail the software, and it took her several months of experimentation with computer programs to create her invention herself. She can try to argue, as she points out in her specification, that the PHOSTIA would be able to easily determine the necessary software.

Holder will unlikely face written description problems from her amendment because she did not add new matter to the specification and the invention was not changed from her amendment. (Sec. 132). In the claim, Holder claims software "sufficient" to coordinate the projections with the force field. She may run into definiteness problems with this vague language if one skilled in the relevant art would be unable to determine what software is actually claimed. Again, she can argue that the art is such that "sufficient" has a clear meaning when applied to software created to perform a coordination function.

Holder is required to describe the best mode for making the invention in the specification. (112). She does specify the preferred Holographic Projector from BPC, although she first purchased and used a gray market projector, which is suspect because while it may be made by

BPC, there's no way to show the gray market product functions the same as a bona fide BPC one. But if she tested actual BPC projectors that were sold in the US afterward, it's probably okay. Holder describes "any" force field generator. She was utilizing FFD's generator yet she did not disclose that. She obviously had the best mode in mind as the FFD generator because that's the only one she was using, and she failed to name that in the specification. It could technically be a problem but I don't see a court finding her patent invalid based on this detail. She could argue that at the time she filed, the only force field generator on the market was made by FFD, and there is no way to foresee that there might be different variations on future force field generators that may affect the invention when used, and she didn't want to restrain the public from using other generic generators that perform the same function.

In a claim, Holder uses a "means plus function," specifically the "means for force field generation." That's another vague phrase, but since she describes "any force field generator will suffice," and there exists commercial force field generators, the claim is probably fine.

Subject matter will probably not be a problem for Holder. She would be unable to patent a phenomenon of nature, like electromagnetism, but here she is claiming tangible products requiring human intervention to produce the product result.

Holder will have a novelty problem if any of the prior art had and enabled all the elements of her invention, before her invention date. The invention date for Holder would probably be December 2018 when she completed her prototype; or possibly June, 2018 when she purchased the components and worked diligently to construct the invention thereafter. Here, the prior art is the show, Star Trek; the Star Trek publication from 1990; BPC's holographic projector; FFD's force field generator; Holder's description of her invention on the internet; and WSI's simulated warfare with a regular projector. Most of the prior art omits the software element in Holder's

patent, and the last two were dated after Holder's date of invention.

The Star Trek publication describes the holodeck as a force field combined with a holographic projector and software created by future engineers that combine the two. Because the elements that the publication described were admittedly purely fictional at the time, the publication was probably not enabled. Despite its superiority to all other Star Trek series, the Next Generation itself displaying the holodeck may also have had all the elements, but it did not (and even less than the publication) enable someone to build it, and Holder's invention was not anticipated under 102(a). If the show did enable the invention and it constituted public knowledge, the only evidence toward that is testimony because the show copies of the show were destroyed. There would probably need to be very convincing testimony or some sort of corroboration.

Holder may have a statutory bar on her patent. The critical date for statutory bars is one year before Holder's filing date, which would be January 2, 2019. Holder "liked" the idea of a holodeck as far back as 1987, she read about it in the Star Trek publication in 1990, but these things are not actions on her part that would bar her from patenting. The holodeck on Star Trek was in public use before Holder's filing date, but it wasn't real. Flying cars are in movies all the time, but no one has invented one yet. Star Trek's book was a printed publication, but it was still science fiction at that time. Before she filed, BPC and FFD were selling components of Holder's invention, but no one had combined them. (Also, BPC wasn't selling the projector in the US until August 2019). Again, I don't have concerns about the amendment creating a statutory bar because it does not add matter that was not described to begin with.

If BPC's projector is problematic prior art, because the application was in Japanese and not

activated in the US until June of 2019, it wouldn't bar Holder's patent under 102(e). Holder will still want to obtain licenses from both BPC and FFD is she intends to manufacture her product.

On January 1, 2019, Holder posted on her website an advertisement about her holographic room producing lifelike images and she began to receive offers to buy them. She posted her email addressed and directed people to submit pricing and technicalities inquiries to her. This can probably be construed as a commercial offer to sell. And, since she had completed the prototype the night before, the invention was ready for patenting. This bars her patent under 102(b) because she was testing the market more than a year before her filing date, which is not acceptable under the experimental use exception. She can argue that her post was not an offer to sell because she never actually said that the product was for sale on the website and she didn't respond to the offers until June of 2019. She can also argue that the prototype wasn't ready for patenting until she made a commercial version in June.

Holder never abandoned the invention or exploited it commercially as a trade secret nor did she keep the actual invention secret for a long period of time, which would bar her patent under 102(c).

Holder's idea was derived from the TV show, but that disclosure was not enabling to trigger 102(f), it was only the idea. And corroboration may be necessary to prove derivation, which in this case may be difficult if all the copies of the show are gone.

Next, Holder may have obviousness problems, rendering her patent invalid under 103. Using the Graham Test, the scope of the prior art must be determined. The scope of the actually invented prior art did not include the putting of the projector and the generator together. The show and the Star Trek book suggested this but the two together but were works of fiction with anticipation that either component would actually be invented or how it would work, so I don't

think a court would take them seriously as bars to a patent by themselves. So, the scope of the prior art included holographic projectors and force field generators. The difference between these and Holder's invention is that neither included both, and the necessary software. The ordinary level of skill of someone in the pertinent art may be a software engineer with experience in holographic imaging. Under Winslow, this PHOSITA is omniscient and knows all of the art. At the time Holder invented, someone with skill in the art would probably have found it obvious to combine the projector with the force field, especially considering that Star Trek made that idea famous and published a description that suggested combining the two inventions with software.

Holder can still argue that the software was not obvious, but she may run into problems because of her vague description of the software in the patent application and her assertion that it can be created by a software engineer. She should argue that the combination of the projector and the force field generator are not technically trivial, or even if the leap was small, it was not obvious because the TV show had rendered the invention fictional or fantastical in peoples' minds.

Some secondary considerations for determining obviousness are that the projector and the generator were introduced relatively soon before Holder's invention, so other people may have been combining this, and in fact, WSI eventually did, without knowledge of Holder's patent; perhaps among true Star Trek fans there was a long-felt need for a real holodeck; and the commercial success of Holder's invention can be shown by the response she got from the internet ad and the money that was made from them by her and WSI. Under the old TSM test, FFD's manual "suggests" that consumers create visual markers in the force field, but it does not suggest holographic imaging. At the end of the day, the obviousness test is subjective and yet still up to the judge.

Question 2

WSI should expect to see an infringement action claiming infringement of Holder's invention for WSI's Urban Warfare Simulation and its newer Jungle Warfare Simulation. First of all, WSI will want to see if there are any claim construction issues. Claim construction is determined as a matter of law, usually in Markman hearings. "Software sufficient to coordinate images" is a vague claim, but in the specification Holder says that someone with skill in the art would know what that is, and that language was added in an amendment to narrow Holder's claim. Holder will want to construe "software" in her claim to be the same as "software design console" in WSI's invention. WSI can argue for a narrower claim construction and ask the court to restrict "software" to not include the console.

Holder will first claim literal infringement. The elements of WSI's invention are a BPC holographic projector, a (non-FFD) force field generator, and a software "design console" inside a building. The elements of Holder's invention are a room with holographic projector, means for force field generation, and software sufficient to combine the two. Holder will use the element by element test and claim that each of her elements is present in WSI's invention and that therefore it literally infringes. WSI can say that software design console and "software sufficient to coordinate" are not the same and that the final elements do not match up.

Holder may then argue the Doctrine of Equivalents. She will argue that if there's not literal infringement, then software design console is an insubstantial difference and that the two elements are equivalent. Under the function, way, results test, Holder will argue that the software design console performs the same function, the same way, and gets the same result as her software coordinating the force field and the holographic images. WSI can respond by providing evidence that the console is not equivalent, or that because Holder narrowed her claim

to software combining the images and the force field to validate her patent, under prosecution history estoppel she cannot now broaden the term to include a console as well. Holder would then have the burden of disproving prosecution history estoppel. She may argue that she couldn't reasonably have expected to add "console" to her claim and therefore she did not disclaim it. Whether the doctrine of equivalents applies is a question of fact for the jury, but the judge will decide as a question of law the issue of prosecution history estoppel.

WSI may argue that its invention is different or not equivalent to Holder's because it applies only indoor simulations while Holder's can be indoor and outdoor. However, this is not a great argument because WSI would be showing that they still infringe, and also that they're product is not as good as Holder's. And, Holder's claim encompasses all projection/force field combinations.

The same infringement analysis will apply to WSI's Jungle Warfare Simulation Kit. It has the same elements as the other kit except the projector can now be mounted outside, simulating outdoor scenes, and it has an updated software design console that simulates outdoor scenes. Holder will argue the same literal infringement for this invention, but now there is a bigger issue with the word "room." In claim construction, it needs to be determined if "room" in Holder's claim encompasses outdoors areas as well. Holder will argue that "room" has a broad meaning and can be interpreted as any space used for the invention. WSI can argue for a narrower interpretation and ask the court to construe "room" as specifically contained indoors. Using the Phillips methodology, the court will look at "room" under the PHOSITA standard, which may not give much guidance here because the PHOSITA will presumably be a software engineer. The court will then consider the claim in context with the rest of the patent. The rest of the patent does not give much discussion to the type of room, so the court will move on to intrinsic

evidence. Since the amendments do not disclaim any broad interpretation of "room," if the term is still vague the court may resort to dictionaries, experts, or treatises to decide where "room" encompasses space out of doors.

WSI's Jungle Warfare now simulates outdoor scenes, with a focus on the force treadmill, so it is even more likely that it will literally infringe. WSI can still argue that the console element is different and use the same analysis for its Urban Warfare literal infringement argument. The design console argument will be the same under the doctrine of equivalents for Jungle Warfare too. That is the best argument against infringement for WSI, along with the "room" argument that goes with the Jungle Warfare invention.

WSI may also face a claim for contributory infringement under sec. 271 because it sells the kit that allows a purchaser (or installer) to build the invention and infringe. Holder would have to show that WSI had knowledge of her patent and of the activity that constituted infringement under 271(c). It wouldn't be difficult for Holder to show that someone purchased WSI's kits and assembled them, thus infringing on her patent, however, she would also have to show WSI was aware of her patent, which they claim they were not. Under 271(b), intent is not specifically required, but some level of knowledge is usually required in caselaw to hold a defendant for inducing infringment. For 271(b), it wouldn't matter if WSI could show a substantial noninfringing use as long as it provide customers with installation assistance to use the product in an infringing manner, but still, WSI can argue there was no knowledge that they were infringing.

If they had to for 271(c), WSI may argue that their kits do serve a substantial noninfringing use, that is, simulating warfare as opposed to just images. This has valid grounds in WSI's customer base because they've said the simulation is great for training police and military forces.

WSI does not evade liability for shipping components of the invention to another country. 271(f) imposes liability on component exporters where they sell the invention for foreign assembly and they would be liable under (b) or (c) if the assembly had taken place in the US.

In defense to an infringement claim, WSI has several other defenses. WSI may argue the reverse doctrine of equivalents, that is, that they are not infringing because, even though the elements are literally the same, the invention is being used in a way that is so different that it is not infringing. The difference being the military and police force training usage. WSI cannot argue the experimental use exception because it was selling its product. Prosecution laches probably doesn't apply, but general laches may apply if WSI can show that Holder waited an unreasonable amount of time to prosecute her claim. WSI will want to claim inequitable conduct in its answer, just in case it comes across any. So far, there does not seem to be "unclean hands" during Holder's claim prosecution that would invalidate Holder's entire patent. Also, Holder has not licensed her invention out (that we know of), so patent misuse is probably not a valid defense here.

Holder will pray for remedies of preliminary injunction, which will be granted considering a reasonable likelihood of success, irreparable harm, balancing of hardships, and public impact. Holder will ask for damages, but she can only get them if she provided notice to WSI that she had a patent on the invention they were selling. If there's notice and Holder wins, she may receive damages in the form of lost profits (based on WSI's sales and profits), reasonable royalties (higher than they would have been with no infringement), and attorneys fees.

She may be able to collect the $20,000,000 WSI made from selling its kits by arguing that all of WSI's customers would have purchased her product but for WSI's infringement. However, she may not be able to collect the $5,000,000 that was made from exporting WSI's

product unless she had been marketing overseas too.

Question 3

If BPC is being sued for infringement by Holder, then the action is probably a contributory infringement action. Holder included BPC in its complaint against WSI to hold it liable for providing WSI the means to infringe upon Holder's invention. In other words, because WSI was infringing Holder's patent, BPC was infringing for supplying parts to WSI. BPC was selling a component of a patented combination constituting a material part of the invention. However, 271(c) requires a showing that BPC knew that the combination was both patented and infringing, and 271(b) would not be applicable here because there was no inducement to put the projector together with the force field generator.

When patentees sell patented products to consumers, they are also selling the right to use that article. This right includes the right to sell it. This is the exhaustion doctrine: the patentee's rights are exhausted once the product is sold. BPC may claim this doctrine in its motion to dismiss. If BPC's claims are solely based on noninfringement, then BPC must show the holograph projector has a substantial noninfringing use to avoid liability. BPC has a very strong argument for this case because it was selling holograph projectors before a force field generator was even invented, let alone the combination of the two.

However, the court should deny BPC's motion to dismiss for two reasons. The first reason is that Holder should be given the opportunity to produce evidence that BPC knew of the patent and of the infringing activity. The second reason is that even though BPC has a strong argument for substantial noninfringing use, that is a question of fact, and should go to a jury.