

Question 1:

The makers of duct tape would not be liable for contributory infringement (§271(c)) because, although they would be supplying the component of a claimed invention to the direct infringer, the component must be a nonstaple component, i.e. a component or part of an invention that is not suitable for a substantial use other than in the patented invention (***Bard***); duct tape is similar to a screw or nail. The makers of duct tape also would not be liable for induced infringement because they do not provide the direct infringer with any sort of instructions and information about how to make or use Pat's device (§271(b)).

Question 2:

Utility

The first issue that Pat will face for challenging the validity of his patent would be utility. Utility is divided into three major issues: practical, beneficial, and operable.

The issue for practical utility is whether the invention has a substantial enough utility to merit a patent. Here, Pat's patent allows people to take unobstructed pictures at events, instead of capturing other people's hands or cell phones. This is substantially enough to satisfy this requirement.

The issue for beneficial utility is whether the invention has a socially harmful or deleterious purpose. "The law does not look to the degree of utility; it simply requires . . . that the use is such as sound morals and policy do not discountenance or prohibit. *Lowell*. Here, a periscope allowing a photographer to take unobstructed photos does not seem to have a socially harmful purpose. It might be argued that the periscope could lend itself to more obtrusive photos, such as those over fences or through windows, but as long as an invention is capable of providing *some* identifiable benefit, it satisfies the beneficial utility requirement.

The issue for operable utility is whether the invention can actually accomplish the utility alleged by the inventor. Pat was able to make a prototype of this invention, and he was able to sell a few units of his product. It may be challenged that Pat's product does not have operable utility due to its commercial failure, but that does not infer that the invention cannot actually accomplish the utility set forth by the inventor. Thus, there does not seem to be an operable utility issue.

Section 112

The next issues are challenges under §112 for lack of enablement or written description. Section 112 contains a written description requirement separate from an enablement requirement. *Ariad*.

Enablement requires the inventor to describe her invention clearly enough so that a PHOSITA can understand it well enough to make and use it without undue experimentation. *Wands*. This standard is judged as of the patent's filing date. There are a few enablement issues with Pat's patent.

First, claim 1 states "a series of lenses and mirrors *sufficient* to" Pat does not disclose the angle at which the lenses and mirrors need to be placed to obtain a suitable image. Additionally, Pat merely provides that the invention contains a series of lenses and mirrors. Pat does not provide how many mirrors or lenses are sufficient, or the ratio of mirrors to lenses. When looking at the specification, it merely provides that the light enters in one end, and is redirected to the camera end of the lens. Moreover, Pat states that the center points of the lenses are at least 4 inches apart. Considering a proper periscope, it seems that he meant to say that the center of the *mirrors* were at least four inches apart, since this is what allows the image to be sent through the periscope. Finally, Pat's means-plus-function claim is not sufficiently enabled in claim 1. Looking at the specification, he merely states the use of duct tape for securing the lens to the phone, but does not disclose where on the phone to tape the lens, such that the duct tape does not get in the way of the phone's screen.

Pat can argue, however, that no undue experimentation is necessary. Considering the *Wands* factors, a PHOSITA could easily figure out the angle at which the mirrors need to

be placed to achieve an optimal image. Moreover, the amount of experimentation needed to figure out how to tape the periscope to the camera does not seem to be such that it amounts to undue.

Claim 2, presents the same problems as Claim 1, minus the means-plus-function.

The written description standard looks to see whether the inventor was in possession of what he claimed. Problems arise when applicants claim too broadly. Here, claim 1 does not seem to present a written description issue. Although claim 1, read in light of the specification, does not seem to enable claim 1, it does seem that Pat is in possession of it.

Claim 2, however, does present a written description problem. The issue arises in the connector language of 2c. Here, Pat seems to have claimed too broadly. Although the specification has provided a means to connect the lens to the camera, it does not disclose a connector for doing so. The only item disclosed by the specification is duct tape. Allowing Pat to claim all such connectors, when the specification does not provide for one, grants him too broad of a claim.

Finally, consider a definiteness challenge. A claim is definite if a PHOSITA understands what is claimed when the claim is read in light of the specification. **§112¶2; *Ortokinetics***. There are a few definiteness issues here. First, in claim 1, a PHOSITA may not understand what sufficient means to bend light. The only insight Pat provides is that the lens is a typical periscope. However, given the existence of a lens, this could present problems that the traditional periscope did not contemplate. Additionally, in claim 2, there is a definiteness issue in the connector language. The spec only discloses the *use* of duct tape to connect the lens, not the use of a connector.

§ 102

Before going into the §102 challenges, let's first establish the date of Pat's invention. An invention date can be established by determining the conception date that leads to a reduction to practice. Between this time, the patentee must exercise due diligence. Conception is the formation in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is thereafter applied, encompassing all limitations. **Barbacid**. Reduction to practice requires that the inventor practiced an embodiment of the invention encompassing all elements of the interference count AND said inventor appreciated that the invention worked for its intended purpose. **Eaton**. When an inventor can only establish a RTP, but not a date of conception, the conception date is the RTP date. Pat came up with the idea of his invention on 2/1/2012. As a possible date of conception, however, this will most likely fail. Pat went home that night and started working on his invention. Although it seems like Pat conceived of the idea on that date, there is a strong argument that not all the limitations were encompassed as of that date. Additionally, if somehow Pat did know of all the limitations as of 2/1, there is no corroborating evidence of this knowledge.

Next, consider the 12/1/2012 prototype. Here, there seems to be a RTP due to the creation of said prototype. The problem arises in the corroboration requirement. The basic rule is that there needs to be some other evidence other than the inventor's testimony to establish each of the key inventive facts. **Honeywell**. For example, if Pat could show written notes or physical exhibits of this prototype, then the court would be comfortable in granting Pat this date. However, such evidence does not seem to exist. The next possible

RTP date would be the 1/1/2013 offer to sell. Although there is no requirement that the invention be commercialized to show RTP (*Friction Div. Prods.*). That fact can be considered corroborating evidence to establish RTP. Thus, the proper RTP date for Pat would be 1/1/2013.

Under the strict identity principle of §102, in order for something to anticipate the claimed invention, the single prior art (PA) reference must disclose every element of that invention. *In re Robertson*. Additionally, the prior art reference must be enabled. *Hafner*. When the anticipatory reference, is a product actually in public use, however, no enablement standard would apply. *Schering*.

102(a)

Under 102(a), a patent is not awarded to the patentee if, before the date of the patentee's invention, the PA invention was known or used by others in this country; or, if before the date of invention, the invention was patented or described in a printed publication anywhere.

There are three possible pieces of prior art here: AI; '901, and CC. First consider AI. The date of sale for AI was 3/1/2012. The AI invention discloses a clamp attached to the lens of the phone. From reading the description of the AI invention, it does not seem like all the elements of Pat's invention are disclosed in AI, specifically the sequence of mirrors and lenses. Thus, AI does not anticipate Pat under 102(a).

Next, consider the '901 periscope patent. The 901 patent is the periscope patent. Although it may seem like '901 anticipates Pat under 102(a), because '901 does not contain all of the elements of either Claim 1 or Claim 2 of Pat's invention. The periscope would not

contain the means-plus claim in Claim 1, nor would it contain the connector claim of Claim 2. Thus, '901 fails under the strict identity principle.

Finally, considering the CC patent, this invention also does not seem to anticipate the Pat invention. The only date given for CC is the 3/1/2013 date of sale. Clearly, this date is after the 1/1/2013 invention date of Pat. If, however, CC could establish a sale before the 1/1/2013 date, they would need to produce corroborating testimony of this sale.

Corroboration is required of any witness whose testimony alones is asserted to invalidate a patent. *Barbed Wire*. If an earlier date can be established, the CC product seems to contain all the elements of Claim 2 of Pat's patent. Additionally, CC would need to establish that clamping the lens on to the phone is the means in which to connect the periscope to the phone in order to satisfy the strict identity rule. Thus, additional information would be needed to determine whether CC anticipates Pat's patent.

102(f)

Under 102(f), no one is entitled to a patent if the invention was derived from someone else's work, whether that work is public or private, written or oral, domestic or foreign. *Campbell*. The challenger would need to produce clear and convincing evidence that the patentee derived his invention from another. The '901 patent and the AI patent can be considered in this analysis because they predated Pat's patent. For the '901 patent, it would be hard to argue derivation. Pat does use the concept of the periscope in his invention, but the creation of combining the periscope to a phone cannot be said to exist in the '901 patent. For the AI patent, there is nothing to suggest that AI contemplated a periscope feature for its lens. AI merely clamps a lens to the back of the phone. If, it can be established that CC predates the RTP of Pat, there is a strong argument that Pat derived his

invention from that of CC's. However, it would be hard for CC to prove that Pat derived his invention under the C&C standard. Thus, there are probably no 102(f) problems.

102(e)

Under 102(e), anticipation may be found through the description of the applicant's invention in a patent or a published patent application of another that was filed by another before the inventor's invention date. Here, there does not seem to be such issue. The AI and CC products do not suggest that there is a patent. If it can be shown that the CC product has a pending patent application in the PTO, then there may be a problem when that patent issues.

102(g)

102(g) has two sections to it: the interference section and the anticipation section. Since there is no interference claim here, 102(g)(1) will not apply. Consider 102(g)(2). This applies if before the person's invention date, the invention was made in this country by another inventor who had not abandoned, suppressed, or concealed it. As mentioned under the 102(a) section, the '901 patent and the AI patent do not contain the same elements of Pat's patent. Moreover, the CC patent, as far as we know, does not predate Pat's patent. However, if the CC patent does predate Pat's patent, then there would be an issue.

The challenger of a prior invention under 102(g)(2) must establish prior invention by clear and convincing evidence. In doing this, corroborating testimony would be most beneficial to CC. Also, CC could win under 102(g)(2) by showing that Pat abandoned his invention between the 1/1/2013 RTP date and the 3/2/2013 date. The facts indicate that Pat did stop selling the item after a commercial failure. If CC can establish that this

constitutes an abandonment of Pat's invention, then CC would have the earlier in time date of making the invention. Because, as above, CC's product contains all the elements of Pat's claim, CC would be successful under this theory.

Statutory Bar

Statutory bars can preclude or bar the applicant from a patent even if the applicant is the first inventor of the claimed invention. Once an inventor waits more than one year to file, additional patents, printed publications and other items begin to qualify as PA under 102(b). Under 102(b), the patentee is not awarded a patent if, more than one year prior to application the invention was patented or described in a printed publication anywhere or the invention was in public use or on sale in this country. For purposes of the analysis, the critical date is one year before the filing date. Thus the critical date here is 3/2/2012.

Pat's offer to sell the invention on 1/1/2013 does not create a statutory bar because it falls within the one year grace period. Although the periscope part of the patent was described in '901, as described above, it does not satisfy the strict identity rule.

The only date that could potentially bar Pat under 102(b) is the 12/1/2012 prototype. This falls outside the 102(b) grace period. If an inventor, having made the device, gives or sells it to another, to be used by the donee or vendee, without limitation or restriction, or injunction of secrecy, and it is so used, such use is public, even though the use and knowledge may be confined to one person. *Egbert*. Here, it does not seem like Pat allowed others to use the prototype at all, never mind outside of his control. If a challenger can prove that Pat did allow free use of his prototype, then he would most likely be barred. However, there is no such evidence of this here.

§ 103 Challenge

Although it seems like Pat will not face any 102 challenges, Pat still needs to anticipate a 103 challenge. Obviousness challenges are considered under *Graham's* obviousness test. (1) Determine the scope and content of the prior art; (2) ascertain differences between the PA and the claims at issue; (3) Find PHOSITA level of skill; (4) determine obviousness/nonobviousness of the subject matter; (5) consider such secondary considerations.

Step One

References properly qualifying as PA under 103 must be from the same field of endeavor, regardless of the problem addressed, or, if the reference is not within the same field of endeavor, the reference must be reasonably pertinent to the particular problem with which the inventor is involved. **Clay**. Here, it should be of no question that the 102 PA is analogous 103 PA.

Step Two

The easiest way to do this is a table:

Elements	CC	AI	'901
Lens	X	X	
Series of lenses/mirrors (periscope)	X		X
Means for connecting lens to camera	X	X	

A connector	X	X	
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Looking at this chart, Pat's invention is clearly a combination of the inventions. The series of lenses and mirrors in Claim 1(a)-(b), is merely the periscope claimed in the '901 patent. Additionally, AI has a means to connect the lens to the camera via the connector. And on that same vein, AI discloses a connector clamp. The CC invention was not considered because it is probably not PA.

Step 3

Since it does not seem like Pat has any technical background and was able to very easily connect a periscope to the camera, the level of skill of a PHOISTA is fairly low. Anyone skilled in mirrors and lenses (e.g. a physics student) could put this together; especially if they merely taped an already existing periscope to the camera.

Step 4

Under the teaching, suggestion, motivation test, teachings of prior art references can be combined to prove obviousness only if there is some suggestion, teaching or motivation to do so. **ACS Hosp. Sys. KSR** only disapproved of rigid applications of this test. **Orth-McNeil**. Pat wanted to be able to take unobstructed photos. To do so, Pat needed to see above crowds. There is a clear motivation for Pat to attach a periscope to his phone, in a similar way that AI had attached a wider lens. Additionally, this seems to just be a predictable use of prior art elements according to their established function. **Leapfrog**. Thus, Pat's patent is probably obvious.

Step 5

Courts consider such secondary factors as commercial success, long felt but unsolved needs, failures of others. Here, there clearly is not commercial success. Pat

actually stopped selling his invention after commercial failure. There does not seem to be a long felt need this invention. The point of having a camera on a phone, is the ease of only having to carry one item. Having to carry a periscope just seems to be something people would not want to carry around. Finally, it does not seem like others tried this invention. Thus, failures of others cannot be considered.

Most likely Pat's invention is obvious.

§101 Challenges

The last challenge Pat will face is a subject matter challenge. Any new and useful process, machine, manufacture or composition of matter, or any new and useful improvement thereof may obtain a patent. Basically anything under the sun is patentable. ***Chakrabarty***. Only laws of nature, physical phenomena, and abstract ideas have been held unpatentable. Here, it is easy to show that this is a manufacture. Thus, it falls under § 101.

Question 3

First, Pat would pursue a literal infringement claim against CC. There are two steps to finding literal infringement. First the court must construe the claims in light of the intrinsic evidence. *Phillips*. Next, the court must compare the properly interpreted claims with the accused device.

Consider the elements of Pat's claim 1. A series of mirrors and lenses and means for connecting the lens to the camera. The CC product does appear to literally infringe claim 1. CC contains a periscope type camera lens, whose lenses are at least 4 inches apart, that has a means of attaching the lens to the camera. However, because claim 1 contains a means-plus-function claim. Under § 112 ¶ 6, the entire claim containing such an element in the means plus function shall be interpreted as covering the structures disclosed in the specification and its equivalents. Looking at Pat's specification, the means for connecting the invention to the phone is through the use of duct tape. The way to connect the periscope in CC to the phone is through the clamp. It does not seem like the clamp is an equivalent of duct tape. Therefore, CC should argue that under § 112 ¶ 6 claim 1 is not literally infringed. Additionally, if CC's lenses are less than four inches apart, then CC would not infringe as well.

Consider the elements of Pat's claim 2. The same as claim 1, however the means-plus-function is replaced by the connector element. Comparing this to CC's product, it seems as if there is literal infringement because CC's product contains a clamp that connects the periscope to the phone. To combat this, CC would want to argue exactly what was argued in the written description requirement. Pat seems to claim too broadly when he claims a connector. The specification does not disclose a connector. It only discloses the

use of duct tape, and connection by means of any connector that attaches the lens to the camera. Therefore, CC can reasonably argue noninfringement on both of Pat's claims.

CC could also argue that Pat limited himself in his preamble under a canon of claim construction theory (**Eaton**). CC could state that his invention is not a lens, but a device or attachment.

If the court finds that there is no literal infringement, then Pat will argue that CC infringes his patent under the doctrine of equivalents. A patent may be found to infringe, under the doctrine of equivalents, if there is equivalence between the elements of the accused product and the claimed elements of the patented product. **Graver Tank**. There is a three-part test to finding DOE. Identify each limitation in the claim. Determine equivalence between the limitations using the tripartite test, i.e. an accused device infringes under the DOE if it performs substantially the same function in substantially the same way to obtain the same results. Consider any secondary considerations.

Step 1:

The break down of the limitations are the same as the elements mentioned in literal infringement and the obviousness analysis.

Step 2:

The only issue under the doctrine of equivalents for claim 1 is the means-plus claim. Under the standard of §112 ¶6 discussed above, DOE applies to means-plus claims as equivalents to the equivalents. Pat will argue that the clamp in CC is an equivalent of the equivalent of duct tape in his patent. CC will want to assert that the clamp is too far removed from the duct tape to be considered an equivalent. Applying the tripartite test to this element, the clamp does not work in substantially the same way. The duct tape in Pat

is merely a disposable means of connecting the periscope to the camera, whereas the clamp seems to be a permanent fixture. Thus, it does not seem that the clamp of CC is an equivalent of an equivalent to constitute DOE.

Considering claim 2, CC would make the same argument as above. If it can show that a connector is not supported in Pat's written description, then there will not be an issue.

A final issue does arise however, if CC's mirrors are separated by less than four inches. Here, Pat will argue that anything less than four inches satisfies the DOE's tripartite test. The only way for CC to get around this would be to somehow show that Pat surrendered anything less than 4 inches in its file history. **Festo**. Another way for CC to overcome this equivalence is to argue that before their patent, a periscope with mirrors less than four inches apart was not possible. If CC could do this, then they would also overcome the DOE claim.

Lastly, CC could assert a defense that Pat's patent is unenforceable due to Pat's inequitable conduct (IC). IC is where the patentee has unclean hands during the prosecution of any claim. To prevail on a defense of IC, the accused infringer must prove that the applicant misrepresented or omitted material information with the specific intent to deceive the PTO. **Therasense**. The patentee has the specific intent to deceive if it knows the reference, knows the materiality, and makes the deliberate decision to withhold. The materiality element is satisfied if the PTO would not have granted the patent but for the actions of the plaintiff. Here, nothing from the facts suggests that Pat has unclean hands to garner a claim of inequitable conduct. The only thing that could be suggested is Pat did not include any prior art in his application. But, the PTO surely knows of a periscope, and this

alone would not have barred Pat from obtaining a patent. Thus, CC would not have a case of IC against Pat.

Questions 4

Under the AIA, Pat's prior art analysis would change in that the only date of relevance would be the 4/1/2013 filing date, because the AIA moved the US patent system from first to invent to first to file; the date of invention, date of RTP, date of conception are irrelevant. Under the AIA, a person shall be entitled to a patent unless the claimed invention was . . . otherwise available to the public before the effective filing date of the claimed invention. The 1/1/2013 date is now irrelevant for finding PA under 102(a) because priority is determined as of 4/1/13; thus, Cc's 3/1/13 sale would be PA under 102(a). The statutory bar analysis would remain the same however, as the AIA still grants the patentee a one-year grace period from the filing date; thus, the analysis under 102(b) would not change, and the 1/1/13 would not bar Pat.