Intellectual Property Fall 2010 Exam

Question 1:

Patent Claims

IP's patent claims against ET first depend on the validity of his patent. First, AUTOTUNE is valid subject matter, since it is a machine and machines fall under 101. Second, nothing about the AUTOTUNER lacks utility. A PHOSITA musician would accept its specific use for tuning, that use has real world application for musicians, and the usefulness to the PHOSITA musician is substantial. Fisher.

Next, IP's invention must pass novelty. Under 102(a), IP is barred from patenting if IP's invention was known or used in the USA or published or patented in any country prior to IP's invention. Nothing came before July 1, 2010, the date of invention, so AUTOTUNE passes 102(a) novelty.

102(b) bars a patent if the invention was publicly used or sold in the USA or patented or published in any country more than one year before the filing date. The critical date here is September 7, 2010. ET would first argue that IP's Facebook post made AUTOTUNE the subject of an offer for sale and that it was reduced to practice. Pfaff. Furthermore, ET would argue that the Facebook update is an announcement that triggers both publication and public knowledge, each of which bar patenting. Since all of these events happened before the critical date, IP should be barred for lack of novelty.

IP would first argue that a Facebook status update is not a proper offer for sale. It was merely a solicitation of interest, no one responded, and the solicitation did not include a price. In addition, the Facebook announcement did not enable anyone to make or use the invention, so it did not sufficiently meet public knowledge or publication. Also, the status update, which was only circulated to 250 people, was not sufficiently accessible to constitute a publication. Klupfenstein. IP would probably win on this issue, any public knowledge lacked enablement and wide circulation and solicitation for sale over Facebook is not the type of proposed business transaction contemplated by 102(b).

ET would also argue that his use of the prototype at clubs was private, but an extensive private use can be considered public. Egbert. ET would try to offer evidence that he used the tuner so much and so many people saw it backstage that the use was sufficiently public.

IP would respond that backstage use at the club was private. The only public use began on September 15, 2010, when ET began using the AUTOTUNE on stage. Even that assumes a sufficient number of people went to ET's shows and paid attention to what he used to tune his guitar. IP would probably win on this issue as well. ET's use was not sufficiently public until a week after the critical date and is not invalid for want of novelty.

Next, IP's patent must pass non-obviousness under the Graham test. First, the court would determine the scope and content of the prior art. The prior art here includes the recording interface, the automatic peg turner, and, to some extent, guitar tuning utilities such as howtotuneaguitar.org. Next, the court assesses the difference between the prior art and IP's claimed invention. The difference between the prior art and the claim here is the computer software. All of the creativity and work IP expended went into developing software that would

allow the two prior art items to work compatibly. Next, the court would determine the skill level of the PHOSITA, which, in this case would be a computer programmer with a background in developing software for musicians.

ET would argue that once the automatic peg turner was developed, it would be obvious to the PHOSITA to combine that with a guitar tuning apparatus. When one looks broadly at the prior art, including utilities like howtotuneaguitar.org, the combination of that art is obvious.

IP would argue that, while the invention incorporates the prior art, the software's role in its operation should not be understated and should not be lumped in with utilities like howtotuneaguitar.org. The bridge between the prior art is the heart of the invention, and even a broad consideration of the prior art does not make IP's software obvious.

IP will have a tough time on this issue, since it does seem like the PHOSITA would view the automatic peg turner and see a combination with a tuner as an obvious next step. It would help to know more about how the peg turner knows what pitch to turn to. If the player just presses the up or down button to move up or down a pitch, AUTOTUNE is less obvious. If the player can input a guitar tuning and the pegs will move each string to that pitch, AUTOTUNE is obvious and probably has less utility. Even without that fact, a court would probably find AUTOTUNE to be obvious.

Assuming IP does pass obviousness, AUTOTUNE must also satisfy the description requirement. In claim 3, IP claims software for notifying the user if the signals match. IP is thus claiming AUTOTUNE's ability to inform the user so that the user can manually adjust the pegs, which does not require the automatic peg turner.

ET would argue that claim 3 unduly broadens the scope of IP's patent. If the computer software does not require the automatic peg turner, IP has a monopoly on a user plucking a string, the software comparing the pitches, and the software telling the user to adjust the string. Manual adjustment is easily anticipated by the obvious combination of software such as howtotuneaguitar.org and a recording interface. "Claims may be no broader than their supporting disclosure." Gentry. The software is predicated on the guitar player not having to turn the peg, and the claim should be limited to that.

IP would argue that claim 3 allows the option of manual adjustment only for the convenience of musicians who might not have the automatic peg turner component on hand. Locking the user out of the software for lack of the automatic component is an affront to its full utility. The patent as a whole should be construed based on the preferred embodiment, which would involve automatic adjustment

This is a difficult issue because if IP's claim is too broad, it is not clear how much claim 3's manual adjustment undermines obviousness. However, IP should not be given a broad monopoly on both uses. It would be reasonable for a court to strike out the manual adjustment portion of the claim. The rest of the specification would remain intact, the preferred embodiment would be preserved, and IP could retain the manual function, though he would not have any patent rights over it.

IP's description must also enable the PHOSITA to make and use AUTOTUNE without undue experimentation. Wands. ET would argue that IP's specification is incomplete because of his deliberate omission of source code. The PHOSITA would have to decompile IP's software in order to determine how it works. 5 lines of source code is crucial to making and using the

software, and if a PHOSITA has to decompile IP's source code to make the software, enablement is not met. IP's specification requires undue experimentation to get IP's result.

IP would argue that a PHOSITA would be able to follow the specification and understand how it works. Some possibility of experimentation should not foreclose enablement. IP may also argue that the computer programmer that ET used is less sophisticated than the PHOSITA. IP does not have to disclose what the PHOSITA knows. A reasonable PHOSITA in computer programming would expect to have to decompile the source code, so IP disclosed enough to enable.

Assuming ET's programmer is a PHOSITA, the fact that the programmer had to copy 5 lines of source code in order to reach an operable result hurts IP's enablement. However, if decompiling to source is a reasonable part of a PHOSITA's process in making or using a program, enablement is met. Therefore, a court would likely find that AUTOTUNE passes enablement.

While IP's patent is flawed, very minor amendments would make it complete. Inclusion of the source code, if necessary, and limitations on Claim 3 would preserve the description requirement. Obviousness is the only other obstacle and, for the purposes of infringement analysis, it should be assumed that AUTOTUNE is non-obvious.

For literal infringement, IP must show that ET's invention includes all of the elements that IP's incorporates. Larami. ET's automatic guitar tuner includes the recording component, the automatic peg turner, and software. IP would argue that the difference in user display does not count as a separate element to ET's software, as it is only a substitute for IP's display and does not add or take anything away. The source code is mostly different, but it accomplishes

the same function. Moreover, the crucial function is sound comparison, the source code for which ET stole. Finally, the fact that ET's program displays nothing when the string is in tune is not a separate element. The programmer had the option to stop coding at that point, or write a function that displays that the string is in tune. He stopped coding because he assumed musicians would not need that notification. Therefore, ET's software is virtually indistinguishable, and the small differences are negligible and not attributable to any effort on ET's part.

ET would respond that, other than those five lines of code, the software is completely different. Claim 3 of IP's specification claims a "notification" element, which ET's does not. Also, taken side by side, the source code would not be comparable. The software arrives at the same result in a substantially different way. Finally, the user display, which IP does not specifically claim, is different. Because ET's invention does not include every element of IP's, there is no literal infringement.

IP would next argue that ET infringed by doctrine of equivalents, which requires that the elements of ET's invention are identical or equivalent to the software claimed by IP. Werner-Jenkinson. Though it is written differently, ET's source code is functionally equivalent since it has an equivalent operation and result. The software's non-display when the strings are in tune is a negligible difference, and should not count as an independent function.

ET would respond that the non-display function is independent enough. Not displaying when the tones match is not equivalent to displaying when the tones match, since they are two completely different results. Therefore, the software lacks enough equivalence to escape doctrine of equivalents infringement.

It is very likely IP would win on literal infringement. ET's product has each of IP's claimed elements, and IP's use of "comprising" means that additional elements, like the display, do not defeat literal infringement. Also, the "or" in claim 3 indicates that IP is not claiming "displaying when the strings are in tune," so ET's non-display is not important. If trivial differences place the issue outside of literal infringement, ET's invention is at least equivalent enough to be infringing under the doctrine of equivalents. The non-display function should not be evaluated as a separate element, since ET's programmer took no affirmative action to develop it.

Copyright

IP has a valid, registered copyright to the software portion of his invention. The software is original and fixed in the tangible medium of source code. 102(a). IP would assert infringement of his reproduction right, derivative work right, and distribution right.

There are two separate infringements of the reproduction right happening. First, ET directly copied five lines of source code for his product. Second, the decompiler created an unauthorized copy of the software in the form of the software's source code. IP would first argue that the five lines of source code are copyright protected material and that their presence in ET's product is "striking similarity" evidence of copying. In addition, decompiling the source code created an infringing copy of IP's creative expression, which was embodied in the source code.

First, ET would respond that those five lines can only be expressed in a very limited number of ways to get the operable result. A court should deny a copyright in such a circumstance, since IP should not have a monopoly on a part of his code that has limited

alternative expressions. Morrissey. Second, ET would argue that IP's entire source code was a method of operation. Lotus. The five lines comprised the core function of the program: sound comparison. Their inclusion is analogous to including a "PLAY" button on a VCR. Because there is nothing expressive about the five lines as well as many other parts of the code, the source code does not deserve copyright protection.

While ET would successfully defend the outright copying of 5 lines of code, he did reproduce the entire source code. That source code included the expressive elements such as how IP's software appeared on the screen. Therefore, ET created an infringing copy and violated the reproduction right.

Under infringement analysis, factual copying is shown here by either direct evidence of ET's decompiling, which is apparent, evidence of ET's access, also clear, or evidence of similarity. ET did not create anything different in this act, since it is fair to say that decompiling into source code does not turn expressive copyrightable content into something unexpressive. Thus, substantial similarity is irrelevant, and the direct evidence and access alone are enough evidence of ET's factual copying to put the question to a jury.

In the second portion of infringement analysis, the court first breaks down IP's work into protectable and unprotectable elements. The five lines and a large portion of the source code are unprotectable methods of operation. The protected "golden nuggets" are the aesthetic portions, which include primarily the user interface. To the ordinary observer, the source code of the user interface and the actual interface would appear different. However, if the jury were held to this analysis, copyright infringement of software would never be found. The jury would

instead compare the IP's user interface and the user interface that the source code compiles to. Obviously, these are the exact same thing, so a jury would find substantial similarity.

Next, IP would claim that ET infringed IP's right to create derivative works. ET decompiled IP's source code, directly lifted the most important five lines, and studied the rest to create a functionally equivalent piece of software. Those five lines constitute the "story being told," and taking them without authorization means ET created an unauthorized derivative work. Stallone. ET's work is entirely based on IP's, and does not add anything substantial. The different display does not constitute a separate expressive element; it is only an insubstantial substitute. Even if it is a separate expressive element, it is structured for utility, and would only be a method of operation. Lotus. Therefore, ET's unauthorized development of a derivative work infringes on IP's right to prepare derivative works.

ET would argue that, again, the five lines should be barred from copyright protection under merger and method of operation. ET would want to show that the majority of the source code was, like the five lines, functional. When broken down into expressive and functional elements, the aesthetic of the software is the only copyrightable aspect. The characters in Rocky constitute the "story being told," and any unauthorized use of them would be an improper derivative work. Stallone. Similarly, to a user, the interface constitutes the "story being told." The user generally does not appreciate the functioning of the program, and only perceives what he or she interacts with. Because ET only used the functional part and developed a distinct interface aesthetic, ET did not use any expressive part of IP's code and therefore could not have prepared an unauthorized derivative work.

ET developed his own expressive element and only appropriated the functional "scenes a faire" portions of IP's code. Nichols. Therefore, because ET left the expressive portions intact, he did not create an unauthorized derivative work.

Finally, IP would assert ET's infringement of the distribution right. ET developed the "knock off" using five lines of IP's source code and then distributed it, including that code, to others. It does not matter that ET's distribution occurred prior to IP's copyright filing. Therefore, ET has infringed IP's distribution right.

ET would emphasize again that the five lines are an uncopyrightable method of operation. ET's program, which only took those five lines, did not distribute anything of IP's that was copyrightable. The only distribution of IP's software was ET giving it to the programmer. In that case, first sale doctrine excludes ET from distribution infringement because ET owned a lawfully made copy and only distributed that copy to the programmer. 109(a). A court would find that ET only included the uncopyrightable five lines in the final product, and should not be liable for distribution infringment.

IP's only winning infringement claim concerns ET decompiling and reproducing the copyrightable expressive portion of the code. ET would argue a fair use defense to this infringement. First, ET would argue that his purpose and character of use was fair. 107. Through decompiling the software into source code, his use was transformative. His purpose was only to study the software, and it would be unreasonably difficult or impossible to decompile in such a way that excludes the source code for expressive elements. Second, ET would argue that because the nature of IP's work was inherently functional, it deserves weak copyright protection. Third, ET would concede that the programmer copied the entire code, though it was

not distributed further. Sony. Finally, ET would have to justify the infringement with a desirable effect on the market. He could argue that musicians have no use for the function of displaying when the string is in tune, and that he wanted to enter the market with a product that serves those musicians. Alternatively, ET could argue that many users prefer ET's interface and they should have a choice.

IP would first respond that ET's purpose was only to make money and turning software into its equivalent source code is not a transformative use. Second, IP would argue that the portion at issue, the expressive elements, were designed with creative conscience and should receive full copyright protection. Finally, ET's infringement has the effect taking sales away from IP. Harper. Unlike the publisher in Texaco, IP would have sold more AUTOTUNEs without ET copying. Moreover, while musicians might not care that the product does not indicate when the strings are in tune, it is as likely that musicians might not care that the product indicates that they are in tune. Nothing about that justification indicates preference on the part of musicians that would place IP's product in a separate market.

ET's fair use defense will probably fail. ET was primarily motivated by commercial gain, which is not a fair use justification. In contrast, Sega's permissive holding on reverse engineering was partially predicated on the fact that Accolade was not going to usurp Sega's market. Therefore, ET infringed IP's copyright by reproducing the code.

In addition, ET is vicariously liable for the programmer's infringement. The programmer could be considered ET's employee, and ET would be liable under respondeat superior. Under general vicarious liability, ET has the ability to prevent the infringement and a financial interest in the infringement. A court would most likely find secondary liability for ET.

Trade Secret

IP's software derives independent economic value from not being known. IP expended effort and, presumably, money to invent the prototype. IP has a trade secret misappropriation claim against ET if he took reasonable precautions to guard its secrecy. Metallurgical. He gave the prototype to ET under an implied obligation of confidentiality. Smith.

However, ET could argue that he is not a sophisticated businessperson and a reasonable layperson or musician would not understand the implied obligation of confidentiality. Also he lawfully acquired the product from IP and found the secret through legitimate reverse engineering. Kadent. Finally, ET's disclosure through manufacturing its product came after IP's first sale. IP did not bind customers to a non-disclosure agreement, so that secret became readily ascertainable after IP's sale. Because the trade secret was readily ascertainable before ET's disclosure, ET cannot be liable for misappropriation.

Question 2:

First, Antares would argue trademark infringement under the AMF test. AUTO-TUNE is a suggestive mark requiring some consumer imagination to connect it to music and singing. At the very least, it is a descriptive mark with secondary meaning, acquired through extensive use by artists. Zatarain's. While Antares and IP are not competing, their goods are close in use and function. On sight, it is easy to overlook the hyphen, so the trademarks look similar. The marks also sound exactly the same. Both marks stand for automatic tuner, which would mean the same thing. Both products would presumably be sold through musical equipment vendors, which places them in the same marketing channels. As far as the types of goods and the degree of care exercised by consumers, they are distinct products and only someone who plays guitar and sings would buy both. IP's use was accidental and he most likely did not intend to free ride on the mark, so good faith is met. While IP might not expand into the vocal pitch correction market, Antares might expand into the guitar utility market, though there are no facts to indicate such possibility.

Alternatively, Antares would argue trademark dilution through blurring. 43(c). Due to its extensive geographical reach and sales of AUTO-TUNE, the fact that most music listeners are

probably aware of AUTO-TUNE, and registration, Antares has a famous mark. It is not clear from the facts that IP has made interstate sales, though it is reasonable to assume he has not restricted offers to one state. The marks are similar, Antares has acquired distinctiveness, Antares makes exclusive use of AUTO-TUNE, and the product is widely recognized. However, IP probably had no intent to associate the products, and there is no evidence of actual association. Since both products are promoted in the same market, there is a significant likelihood of association by ordinary consumers. Finally, IP's use of AUTOTUNE is likely to impair the distinctive nature of Antares's mark, since consumers will began to presume some connection between the two. If a court did not find trademark infringement, it would find IP liable under dilution by blurring.

IP would respond that AUTO-TUNE has entered the public domain beyond recall, and has lost trademark protection through genericide. Murphy Bed. While extensive use by artists has helped Antares's sales, most people associate the trademark with a particular vocal effect rather than Antares. Therefore, IP should not be liable for using a generic mark.

Also, IP would raise the fair use defense. Under descriptive fair use, IP needs to show accuracy of use, commercial justification for use, and mark strength. AUTOTUNE reflects the fact that the product is an automatic guitar tuner, and is a sufficiently accurate use. IP has only used AUTOTUNE to refer to his own goods and there is no evidence that IP is, in bad faith, trying to tap into Antares's market. More importantly, IP's use is purely commercial, and there is no evidence that IP is interested in its own trademark right. Finally, while AUTO-TUNE is strong mark, artist use and Youtube videos have undermined a significant part of that strength.

Though the marks are similar, some possibility of consumer confusion is compatible with fair use. KP Permanent.

A court would probably grant IP the fair use defense with regard to trademark infringement. However, despite Antares' recent weakening of its mark, a court may not be willing to deem AUTO-TUNE generic. Its use is still tied to the effect produced by Antares' product. Also, the consumers for AUTO-TUNE are musicians, so the general public or even the music-listening public may not identify AUTO-TUNE with Antares if they are not a musician. Despite this, consumers will inevitably encounter the marks in the same context, so a court would find dilution by blurring.