Word Count: 4,000

Question 1

I. Trade Secrets

IP should try to assert trade secret claims for the following: (1) knowledge regarding the existence of his automatic tuning device (hereinafter referred to as "TS Claim 1") and knowledge of the his device's inner workings (hereinafter referred to as "TS Claim 2").

a. Possession of a Trade Secret

First, IP must prove that he possessed a trade secret. Programs, methods, and devices are eligible for trade secret protection, but the personal skill and knowledge of an individual privy to the secret are not. In this case, IP created a device to automatically tune guitars (the "Device"), so knowledge of the Device's existence and its inner workings are eligible for trade secret protection.

Under the UTSA and most state common law doctrines, the following criteria must be met for IP to possess a trade secret for both trade secret claims: (1) the Device's existence and inner workings are not generally known; (2) the Device's existence and inner workings are not readily ascertainable; (3) IP took reasonable efforts under the circumstances to maintain secrecy; (4) the Device derives independent economic value from its existence and inner workings not being generally known. Those elements are factual determinations, and accordingly, summary judgment is usually not appropriate. *See, e.g. Rockwell Graphics*.

IP will have difficulty proving the "not generally known" element for TS Claim 1, but he should be able to prove that element for TS Claim 2. IP's Facebook post on August 1st likely qualifies as an intentional public disclosure of the Device's existence. If that knowledge was available to 250 of his friends, along with an offer to sell it to them, it is likely that knowledge about the existence of the Device – even if its specifics were not known – was spread beyond

those 250 Facebook friends. Furthermore, ET used the Device on stage. Whether the existence of the Device was generally known is a question of fact, so it is possible that the lack of response to the Facebook post indicates that very few people actually saw the post. However, it is likely that the Device's existence was publicly known. To the contrary, no one other than IP knew about the Device's inner workings, so IP meets the "not generally known" requirement for TS Claim 2.

Both TS Claims meet the requirement that knowledge of each was not readily ascertainable. IP's Facebook page was only available to his friends, and it took fairly complex reverse engineering for ET's computer programmer to figure out how the Device worked. Accordingly, IP should be able to prove the "not readily ascertainable" element fairly easily.

Whether the secret holder took "reasonable efforts" is a very fact-sensitive judgment that requires a balancing of the costs of secrecy against the benefits of secrecy. *Rockwell Graphic Systems*. In this case, the costs were minimal. Furthermore, both IP's Facebook post and his decision to give a prototype of the Device to a twin brother whom he likely knew to be untrustworthy will preclude IP from meeting his burden of proof for this element for TS Claim 1. Under TS Claim 2, the Facebook post was not a careless way to disclose knowledge regarding the Device's inner working. Providing the Prototype to ET, however, was arguably unreasonable given ET's untrustworthiness and the profits he could make selling the Device to other guitar players in his network. Again, whether providing the Device to ET was unreasonable is a question of fact, but the jury could reasonable conclude that such an act was unreasonable under the circumstances.

Finally, IP will have to prove that the Device derived independent economic value from the secrets relevant to TS Claims 1 and 2. If the secret at issue gives the secret holder a competitive

advantage, the secret provides independent economic value. *See Metallurgical Industries v Fourtek.* For TS Claim 1, IP arguably could say that keeping the existence of the Device secret provides economic value because it enables him to choose the time at which to begin mass marketing the Device, but his Facebook post will provide ET with evidence to defeat this argument since he already started marketing. However, under TS Claim 2, the Device clearly derives economic value from its inner workings being kept secret.

Accordingly, it is extremely unlikely that IP possessed a trade secret under TS Claim 1, but he arguably has a strong case that he possessed a trade secret under TS Claim 2. For TS Claim 2, ET's strongest counterargument is that IP's decision to give him a prototype was a careless, and thus, IP did not take reasonable precautions to keep the Device's inner workings secret.

b. Misappropriation of the Trade Secret

Assuming, *arguendo*, that IP possessed a trade secret under TS Claims 1 and 2, IP will have to prove that ET misappropriated his trade secrets. IP will have to prove the following: (1) ET discovered his secret by improper means or (2) ET's use of the trade secret constitutes a breach of confidence. IP will not be able to prove that ET discovered his secrets by improper means. Under TS Claim 1, IP intentionally disclosed the existence of the Device to ET, and under TS Claim 2, ET reverse engineered the trade secret, which is not an improper way to discover a trade secret.

IP may be able to meet the misappropriation requirement by proving that ET's reverse engineering of the Device and his subsequent sales of his version of the Device constituted a breach of confidence. *Kadant v. Seely Machine* (holding reverse engineering is not allowable if information necessary to do so was acquired through a confidential relationship). A confidential relationship can be formed either expressly or implicitly. *See Restatement (Third) Unfair*

Competition. ET's response of "whatever" probably defeats any claim that he and IP expressly formed a confidential relationship. However, his familial relationship to IP and IP's explicit request that he not disclose the Device to anyone are strong evidence to support the Restatement's two requirements for an implicit relationship- (1) ET knew or had reason to know that the disclosure was intended in confidence and (2) IP reasonably inferred that ET consented to the obligation. ET's response, however, is strong counter evidence to the existence of a confidential relationship; it seems unreasonable to infer that ET consented to his obligation to keep the Device secret if he responded "whatever."

Therefore, the evidence is mixed regarding ET's misappropriation of IP's trade secrets, but IP is likely to lose on his trade secret claim.

c. Conclusion

Considering the evidence in its totality, I believe that the trier of fact will find that IP's decision to give ET a prototype of the Device was careless, thereby defeating his claim to a trade secret, and even if the trier of fact finds the existence of trade secrets under the TS Claims, there was no confidential relationship between the two parties to support a claim of misappropriation.

II. Patent Claim

IP should also file a patent claim against ET. However, similar to the trade secret claims, IP's patent claim is not likely to succeed.

a. Patentability

Even though IP's patent was granted by the PTO, ET can defend against IP's patent suit by arguing that IP's patent is invalid.

The first requirement for a valid patent is that the invention be patentable subject matter. The Supreme Court gave a broad interpretation to what constitutes a patentable invention under

Section 101. *See Chakrabarty*. The recording device and automatic tuner are already on the market, so the patentable aspect/point of novelty of the Device is the software component. The software component is not an abstract idea such as an algorithm (*Benson*) and, taken as a whole, the Device appears to fall within patentable subject matter because it meets the requirements of novelty and utility - see analysis below – (*Diamond v Diehr*). Accordingly, the Device falls within the guideposts explained in *Bilski*.

The second element for patentability is utility. The Device operates as claimed, so it meets the operable utility requirement. Likewise, it is not void of moral utility. Under practical utility, the Device is credible because it "is currently available for its purported use." *See In re Fisher*. Likewise, it meets the requirements of specific and substantial utility because it has a particular and practical purpose by tuning guitars automatically utilizing a computer program. *Brenner v Manson*

ET may be able to void IP's patent under the third requirement for patentability- Novelty. 102(a) does not preclude novelty in this case because there is no prior art that meets the allelements rule before July 1, 2010. IP initially publicized the Device on August 1, 2010 via his Facebook page. It is arguable whether a Facebook post to which no one responded constitutes a publication under 102(b). *See, e.g. Hall; Klopfenstein.* However, in the Facebook post, IP asked if anyone was "interested in buying it," and at the time of the post, the Device was ready for patenting. Accordingly, the Facebook post seems to fall under the 102(b) statutory bar because the Device was offered for sale more than a year before the date of the patent application – September 7, 2011. *See Pfaff v Wells Electronics.* Finally, ET's first public use of the device and IPs first sale of the Device were both within the one year period before the date of the patent

application, which does not void patentability under 102(b). Accordingly, ET may be able to void IP's patent pursuant to 102(b).

IP will also encounter difficulty meeting the fourth requirement for patentability- nonobviousness. *See section 103*. Under the first step of the *Graham* test, the prior art is the automatic guitar tuner and the recording device. Under the second step, the difference between the Device and prior art is combining the prior art via a computer program. Considering factors such as the education of the inventor, the sophistication of the technology, and the rapidity with which innovations in the field are made, a PHOSITA in this case should be an expert in automatic guitar tuners or one in sound-based computer programs. Finally, under the fourth *Graham* factor, ET may try to argue that it is obvious to simply combine the recording device and automatic guitar tuner because that is the only way to arrive at an invention such as the Device. *See, e.g. John Deere*. However, that argument seems to fall into the hindsight and "obvious to try" pitfalls. IP can probably prove that the several steps it took him to arrive at his invention – initially using the guitar tuning website and then having a "flash of genius" while manually tuning his guitar – demonstrates that combining the elements of the Device was not obvious to the relevant PHOSITA.

Finally, ET can attack the Device's patent specification. *See Section 112*. By describing the Device as an "automatic guitar tuner," IP successfully states that he is "in possession of" the Device under the written description requirement. *Vas-Cath v Mahurkar* However, the claims may be narrower than the description, which could be an issue in infringement. *CF Gentry Gallery*. Under the enablement requirement, a PHOSITA will probably have to engage in undue experimentation because the details of the computer program, which took IP six months to write, is not included in the specification. Accordingly, by claiming that the computer software

performs the tuning functions, but not enabling a PHOSITA, IP appears to have claimed more than he enabled. *See Incandescent Lamp*. Finally, IP does not include the "best mode" in his specification.

Accordingly, ET may be able to void IP's patent under the novelty and enablement requirements.

b. Infringement

Assuming, *arguendo*, that IP's patent is valid, IP will have to prove infringement. Because ET was (1) selling his knock-off (1) without IP's authority, (2) within the United States, the only issue in the infringement analysis is whether the knock-off is an infringing device. *Section 271*

First, the Device's claims must be construed. As a starting point, the claim terms must be given their ordinary meaning according to how a PHOSITA would interpret them, and then the claims must be interpreted in light of all available intrinsic evidence, with extrinsic evidence only being used to interpret, not contradict, the intrinsic evidence. *Phillips*. In this case, the claims (i.e. the metes and bounds of the invention), set forth very specific parameters for what the computer software does- compares the recorded sound and notifies the user or initiating the automatic tuner. Likewise, the claims are fairly specific regarding how the peg turning component operates.

Next, the two devices are not identical because the knock-off's display is different and its computer program does not notify the user if the guitar is in-tune, thereby failing the all-elements requirement for literal infringement. *See Larami* Accordingly, a court will have to evaluate the two inventions under the doctrine of equivalents- seeing if the two devices perform "substantially the same function in substantially the same way to obtain substantially the same

result" (*Garver Tank*) and evaluating the two items on an element-by-element basis (*Warner Jenkins*). Though ET's knock-off device's source code was different than that of IP's device, the two computer programs operate very similarly- they both compare the sounds of the guitar to an expected sound and tune the guitar accordingly. The main difference between the two is the fact that ET's device does not actively notify the user if the sounds match. However, ET's device does not hing when the guitar is in tune but adjusts the guitar when it is not, so it still "notifies" the user if the guitar is in tune through its inactivity. Also, the differences in display aesthetics do not differentiate the two products significantly. Accordingly, the two devices appear equivalent, and because IP did not amend his claim, the doctrine of prosecution history estoppel under *Festo* does not apply.

c. Conclusion

IP may have difficulty defending the validity of his patent, but if the court finds that his patent is valid, IP appears to have a valid infringement claim under the doctrine of equivalents. IP will not be able to assert a secondary liability claim against the computer programmer because the Device wasn't patented at the time he reverse engineered, and accordingly, the knowledge requirement is not met, even if IP could prove the other elements of a secondary liability claim.

III. Copyright Claim

IP should be able to prove that ET infringed his copyright for his computer program, and it is unlikely that ET will be able to assert a successful fair use defense.

a. Copyright Infringement

First, IP must prove that he owns a copyright over the computer program. Source codes and object codes are copyrightable subject matter under Section 102 (*See Altai*), so IP must prove that the software is an original work of authorship fixed in a tangible medium. The software

program was an independent creation of IP. *Remnick Music; Feist; Sheldon*. The program also took six months to write, so it meets the copyright threshold of having a modicum of creativity. *Feist*. Accordingly, the computer program is an original work of authorship. The program is also fixed in the device, which is "sufficiently stable to permit [the program] to be perceived, reproduced, or otherwise communicated for a period of more than a transitory duration." Therefore, IP owns a valid copyright over the software, and that copyright is valid as of the day he fixed it.

Even though IP owns a valid copyright, ET may not have infringed that copyright if his device only copied unprotected aspects of the Device. By selling his device, ET may have violated IP's reproduction and distribution rights. *See Section 106*. However, IP needs to prove both factual and legal copying. Factual copying will not be difficult to prove in this case. There is direct evidence that ET gave the prototype to the computer programmer to copy IP's program. *See Arnstein v Porter*.

IP can also prove legal copying. Under the abstraction-filtration test, the functional aspects of IP's software that ET copied are not protected, so ET did not infringe by copying those parts. Therefore, the five lines of source code that ET copied for the pitch comparison part of his device are the only protectable aspects of IP's copyright that ET copied. Proving substantial similarity is not an issue in this case because ET copied IP's exact source code. Likewise, even though only five lines of source code were copied, that probably constitutes a substantial enough part of IP's program to make the *de minimis* doctrine inapplicable. ET may be able to prove that those five lines are not very important to both devices' software, but absent such a showing, IP will have met his burden to show copyright infringement.

Furthermore, under his unauthorized copying claim, IP may be able to sue the computer programmer for direct infringement and sue ET for indirect infringement on a respondeat superior theory, thereby increasing the number of parties liable.

b. Fair Use

ET will likely try to defend against IP's infringement claim by asserting the fair use defense. First, ET will likely try to argue that, under *Sega v. Accolade*, his reverse engineering and subsequent copying was necessary to access the unprotected aspects of IP's software. However, the two cases are distinguishable because Accolade was trying to understand the functional requirements of Sega's games in order to compete with its own products. In this case, ET attempted to copy the IP's program to create a cheap knock-off.

Therefore, ET will have to argue fair use under the statutory fair use factors. The first factor will weigh in favor of IP because ET sold his device commercially and ET's use of the five lines of source code was not transformative. The second factor will probably favor IP as well because, even though computer programs are not literary works, they are analogous in the sense that they fall under the "core" of copyrights protection because they are not factual compilations. The third factor will probably favor ET because he only copied five lines, unless IP can prove that those five lines were exceptionally critical to the program. Finally, the most important factor – effect on the potential market – will favor IP because ET's products will likely directly take away his future sales.

c. Conclusion

Therefore, IP will likely prevail on his copyright infringement claim. Finally, there is no evidence of trade dress infringement by ET (assuming "Autotune" is inherently distinctive to even support a trademark claim), so ET has no trademark liability.

Question 2

I. Likelihood of Confusion

First, Auto-Tune must prove that it has a valid trademark. Registration of a trademark is *prime facie* evidence of a valid trademark (*Maj League Baseball*), so IP will have the burden of presenting evidence to rebut that presumption. In this case, Auto-Tune is a word used to identify the source of goods, so it is eligible for trademark protection under Section 45. It is probably a suggestive mark because it takes some imagination to determine the nature of the goods being sold. However, it may also be a descriptive mark, which would require secondary meaning for trademark protection. Secondary meaning occurs when, in the mind of the consumer, the mark is used to "identify the source of the goods rather than the product itself." *Wal-Mart v Samara*. Secondary meaning is a question of fact. Auto-Tune has been used for fifteen years and registered for five, and it appears to have fairly high visibility in the market since it is believed to be used by Taylor Swift, so it probably has acquired secondary meaning. Finally, IP started using his Autotune on November 1, 2010, which is well after Antares began using its trademark. Accordingly, priority of use is not an issue in this case. *See Zazu*. Therefore, it is unlikely that IP will be able to rebut the presumption of validity for Auto-Tune's trademark.

Next, Auto-Tune must prove infringement under Section 32 of the Lanham Act (infringement of registered trademarks). The following factors are met: (1) Auto-Tune has a valid trademark; (2) IP used his trademark to sell his goods; (3) in commerce. Accordingly, the only element in dispute is likelihood of confusion.

Applying the *Sleekcraft* factors, a court will likely find that there is a likelihood of consumer confusion due to IP using Autotunes to market his products. First, Auto-Tune is a relatively weak mark because it is suggestive and bordering on descriptive, so the first factor favors IP. *CF*

Sleekcraft (suggestive mark weak so only slightly favored plaintiff). Second, the goods sold under both marks are in the general music market, but one is used for instruments and one is used for vocals, so this factor only slightly favors Auto-Tunes. The third factor, the similarity of the marks, greatly favors Auto-Tune. The two marks sound identical, look very similar, and have the same generic meaning. There is no actual confusion, so the fourth factor is not relevant in this case. The marketing-channels factor favors Auto-Tune because both goods are likely sold in the same stores, on the same websites, and, generally, to the same clients. The sixth factor favors Auto-Tune because the two products aren't similar, so sophisticated music purchasers who are familiar with Auto-Tune's product may assume that IP's product is a new product from Auto-Tune. The seventh factor favors IP because he did not intend to infringe Auto-Tune's trademark. Finally, the eight factor favors Auto-Tune because IP is likely to expand his market, which may lead to further confusion.

Because there is a likelihood of confusion, IP must assert a defense to avoid liability. Assuming that IP cannot prove genericness or abandonment – which the facts do not indicate he can – and because (1) the trademark at issue is not functional trade dress and (2) IP is not using his mark as part of a communicative message or for comparative advertising, IP will only be able to assert classic fair use. Assuming, *arguendo*, that Auto-Tune is descriptive, IP will have to demonstrate that his mark is being used in good faith and in a fair manner to describe his goods, but does not have to prove a complete absence of likelihood of confusion (*KP Permanent Makeup*). The court, however, should still consider likelihood of confusion as well as accuracy, commercial judgment, and the strength of the mark (*Restatement of Unfair Competition*). Though IP used the mark in good faith and in a fair manner, the mark is not purely descriptive and that will probably weigh against a finding of fair use.

Therefore, IP will probably be liable for trademark infringement under Section 32.

II. Trademark Dilution

If there is no likelihood of confusion between the marks, Auto-Tune may also try to assert a trademark dilution claim. The biggest hurdle Auto-Tune will face in proving trademark dilution is proving that it owns a famous mark. The duration factor under Section 43(c)(2)(a) and the fact that Taylor Swift may use the product favor a finding that Auto-Tune's mark is famous. Assuming that Auto-Tune's mark is famous, IP used his own mark (1) in commerce and (2) after the Auto-Tune mark became famous. IP also used his mark commercially and was not using it for either comparative advertising or to parody Auto-Tune, so the statutory dilution defenses are inapplicable, and IP's only possible defense is classic fair use (above). Therefore, the element at issue in this case is dilution.

A court will likely find that there is no dilution. First, Auto-Tune's mark borders on descriptive, so any association between the two marks is not as strong as if Antares's mark was fanciful or arbitrary. Second, under the dilution factors of 43(c)(2)(B), though the two marks are very similar, the Auto-Tune mark is not very inherently distinctive – if it is so at all – and there was no intent to create an association by IP. Accordingly, a court is unlikely to find dilution. Furthermore, there is no evidence that IP's use of his mark tarnishes Auto-Tune in any way to create a dilution cause of action under that theory.