

CS 4001B Homework 4: Intellectual Property

Due:	April 12, 2018
Format	5-6 pages in all, single spaced, single column, 12 point font
Logistics	Submit as a PDF document on TSquare
Grading criteria	Completeness
	Writing
	Understanding of the fundamentals of intellectual property
	Quality of reasoning, insight into the issue, and analysis
Late policy applies	
Grade	60 points (6% of your overall grade)

Question 1:

A scientist, now an employee of Genentech and formerly a member of a research group at the University of California at San Francisco (UCSF), testified in court, that he had stolen from his old lab at UCSF, a sample of DNA for producing growth hormone that he and others at UCSF had developed. He claimed that he and a Genentech scientist then agreed to use the stolen sample to create a product called Protopin, which was used to correct a growth hormone deficiency in children and which later became extremely successful. He also stated that he had misrepresented the source of the DNA in a Nature article describing his research published in 1979.

Genentech acknowledged the taking of the sample of DNA and paid the University \$2M in compensation in 1979. However, Genentech claimed that they performed their own independent proprietary research to develop the product and denied using the UCSF DNA. UCSF claimed that the growth hormone product infringed on their patent and sued Genentech for \$400M in lost royalties. The dispute has continued for more than 20 years. Recently, a federal court jury deadlocked 8 to 1 in favor of UCSF. A new trial has been scheduled to decide whether infringement of patent rights has occurred and, if so, whether that infringement was willful. In the latter case, damages could reach \$1,500M.

- a) (15 points) Identify if there has been an ethical violation in the case study, analyzing from a Kantian and an act utilitarian perspective. Present your reasoning behind your answer.
- b) (5 points) Discuss the ramifications for Genentech if the new trial finds their patent infringement willful.
- c) (10 points) Discuss a strategy that Genentech could have used to avoid facing this lawsuit. Make assumptions as appropriate for your answer.

Question 2:

Cryo-Cell contracted with the University of Arizona to establish a blood bank to preserve newborns' umbilical-cord blood which could widen options for future cancer treatments to boost a patient's immune system. A professor at the University of Arizona, who was the leading expert in this field, hoped to further his research on the storage and biology of cord blood with the help of Cryo-Cell, which paid him 25 percent of the storage fee charged to patients.

A few years later, the University of Arizona broke its contract with Cryo-Cell, claiming that the company could not provide the appropriate storage device. It contracted with another company, Cord Blood Registry, which charged significantly higher fees and paid the professor's lab 50 percent of the storage fees. The University of Arizona also gave the names of the customers served by Cryo-Cell at the University of Arizona to Cord Blood Registry so that it could continue to collect the storage fees.

Cryo-Cell claimed that the only reason the change to Cord Blood Registry was made was because the professor's lab would receive considerably more money and that providing the names to the new company was misappropriation of trade secrets. The University of Arizona claimed that it had acquired the original Cryo-Cell customers as a result of its own efforts, and hence, owned the customer list. Therefore, there was no misappropriation of trade secrets. The courts ruled in favor of Cryo-Cell. The University of Arizona lost its appeal and had to pay \$1.7M to Cryo-Cell.

- a) (10 points) Identify and discuss the nature of the intellectual property violation in the case study.
- b) (5 points) Discuss the ramifications of the University of Arizona losing its appeal in the courts.

Question 3:

A faculty member has taught a senior-level course in quantum mechanics for several years and has developed an extensive set of notes that she plans to convert into a new textbook as soon as she can find the time. She is close to the end of the term for this year's course when she makes a rather alarming discovery—a student in her class has been selling the notes for her class at a small profit to the other students. The notes are an expanded version of her lectures and contain material from her visual aids, as well as diagrams copied from the textbook.

The student claims that he is only helping the other students learn a very difficult subject and that the profit barely covers his expenses. However, it soon comes to light that he has been doing the same thing for several other courses and actually hires students to take notes in other classes, which he then develops into a sellable form.

The faculty member is very upset. Not only is her lecture material being sold without her permission, but the student has also copyrighted it. Her university's policy clearly states that such traditional academic work product belongs to the faculty member.

- a) (10 points) Identify and discuss the nature of the intellectual property violation in the case study.
- b) (5 points) Could this intellectual property violation have been avoided? If so, suggest an alternative scenario where both the faculty and the student could have met their desired goals. Make assumptions as appropriate for your answer.