

UNIVERSITY OF NORTH DAKOTA SCHOOL OF LAW
Intellectual Property
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FINAL EXAMINATION

Limited open-book. Three hours.

Write your exam number here: _____

All exam materials (including this booklet and your response) must be turned in at the end of the period. You will not receive credit unless you return this booklet with your exam number written above. Do not turn the page until instructed to begin.

Notes and Instructions

1. Assume that today's date is May 4, 2011.
2. You may write anywhere on the examination materials — e.g., for use as scratch paper. Only answers and material recorded in the proper places, however, will be graded.
3. Your goal is to show your mastery of the material presented in the course and your skills in analyzing legal problems. It is upon these bases that you will be graded.
4. During the exam: You may not consult with anyone — necessary communications with the proctors being the exception. You may not view, attempt to view, or use information obtained from viewing materials other than your own.
5. After the exam: You may discuss the exam with anyone, except that you may not communicate regarding the exam with any enrolled member of the class who has not yet taken the exam.
6. Unless expressly stated otherwise, assume that the facts recited herein occur within one or more hypothetical states within the United States. Base your exam answer on the general state of the common law and typical statutory law in the United States, including all rules, procedures, and cases as presented in class, as well as, where appropriate, the theory and history discussed in class. It is appropriate, if you wish, to note differences between minority and majority approaches in your answer, as well as statutory or other differences among jurisdictions.
7. Unless otherwise explicitly stated, all references to patents and patent applications are to be understood as being in and of the United States, nonprovisional in nature, and of the utility kind (as opposed to plant or design).
8. Note all issues you see. More difficult issues will require more analysis. Spend your time accordingly.
9. Organization counts.
10. Read all exam question subparts before answering any of them — that way you can be sure to put all of your material in the right place.
11. Feel free to use abbreviations, but only if the meaning is entirely clear.
12. **Bluebooks:** Make sure your handwriting is legible. I cannot grade what I cannot read. Skip lines and write on only on one side of the page. Please use a separate bluebook for each subpart.
13. **Computers:** Please clearly label each subpart of your answer.
14. This exam is "limited open book." The only materials to which you may refer during the exam, other than this exam booklet, scratch paper provided as part of the exam administration, and any special references specifically authorized by the Dean of Students office, are: (a) the authorized copy of the Intellectual Property Wypadki, which will be distributed to you in the exam session, and (b) a "reference sheet," consisting of a single 8.5-inch-by-11-inch sheet of paper, upon which anything may be written and/or printed, including on both sides, front and back, (c) sticky tabs labeled with subject headings to insert into the wypadki, if you so choose. You may not consult or access any other piece of paper, including, but not limited to, a copy of the Intellectual Property Wypadki that you have printed out yourself. No materials may be shared during the exam.
15. This exam will be graded anonymously. You may not waive anonymity. Do not write your name on any part of the exam response or identify yourself in any way, other than to use your examination I.D. number appropriately. Self-identification on the exam or afterward will, at a minimum, result in a lower grade, and may result in disciplinary action.
16. Good luck!

The Click of the Wild

BONNIE BAJEKOVA SERVED FOR 20 YEARS in the United States Air Force. In the beginning, she did photography for a weather reconnaissance squadron. She then moved on to become a special ops commando. In later years, the USAF sought to tap her smarts by assigning her to the Air Force Research Laboratory to work on advanced weapons systems. Then, after putting in her 20, Bonnie happily retired to Alaska, where she has since occupied herself as a wildlife photographer and tinkerer. With a home base in Fairbanks, Bonnie has spent most of the last five years trekking all over the huge expanse of tundra on Alaska's North Slope. There, she has attempted to photograph aspects of nature that are ordinarily not visible to people. Her favorite subject is the goshale groundhog, an endangered mammal that lives on the North Slope tundra. As a photographer, Bonnie finds the goshale particularly endearing because it makes a funny clicking noise that sounds uncannily like the shutter of a single-lens reflex camera.

There's long been a dearth of knowledge about the goshale groundhog – especially its breeding habits. In fact, no one had ever been able to observe a juvenile goshale groundhog in the wild. It seems that goshale groundhogs have a special aversion to people. Goshales are so skittish, the only real hope of capturing quality images of them is to use remote, unmanned cameras. Unfortunately, in everyone's experience, if a remote camera station is placed anywhere near a burrow, the goshale groundhogs will vacate.

Bonnie took a methodical approach to find some way around the problem. In the summer of 2009, she spent several weeks testing particular pieces of a remote camera station equipment to find out exactly what it was that was spooking the groundhogs. She eventually determined that the groundhogs had no aversion to the cameras themselves. What they were reacting to, Bonnie figured out, was the lithium-ion battery packs. This turned out to be a big problem, because the only good way to power the cameras was with a solar panel hooked up to high-performance rechargeable batteries.

Bonnie was glad to have isolated the problem, but by the time she had, the long Alaskan winter was already moving in. So Bonnie headed south to Fairbanks. Settling in for the winter, with no pressing financial needs and no one breathing down her shoulder for results, Bonnie decided to take on a somewhat inauspicious task: inventing a new rechargeable battery that didn't use the same chemical components as the lithium-ion cells. She decided to experiment with compounds of rubidium, a metal that is quite plentiful in the Earth's crust, but that has been largely useless to industry. Several research publications explained that rubidium was unsuitable for batteries. But Bonnie pressed on nonetheless. After a few months of



Fig. 1: The skittish goshale groundhog stays alert for predators. (Photo: Bonnie Bajekova)

research and calculations, she figured that a compound of rubidium chlorohydroxide might be a promising material for a battery. The problem was that no such compound was listed in any chemistry reference. In fact, it had never been synthesized.

In early 2010, after months of trying many different tacks, Bonnie finally hit upon a method that worked. She used a stepped series of palladium, osmium, and praseodymium catalysts to create the compound. As catalysts, the palladium, osmium, and praseodymium were not ingredients in the rubidium chlorohydroxide; instead, they were merely a way of stimulating the formation of the rubidium chlorohydroxide molecules.

When Bonnie had synthesized enough rubidium chlorohydroxide, she tried it as the cathode in a rubidium-ion battery. To her amazement, the battery took on electricity at an astonishing rate. When the battery was fully charged, Bonnie realized it exhibited an unusually large energy density. That is, it was capable of storing a large amount of energy per unit of volume. The battery could store about 80 megajoules of energy per liter (MJ/L). That made it about 50 times as powerful as a lithium-ion battery, even though it weighed about the same. The commercial potential for such batteries was, of course, immense. They could revolutionize electric-powered vehicles for one. But when used in combination with intermittent wind-power, they might even be able to provide a plentiful renewable form of base-load electricity generation – a feat that had long evaded scientists.

By the time Bonnie had created her working rubidium-ion battery and built several working prototypes, the spring thaw was coming on. Commercializing the technology was not the kind of thing that fired Bonnie's passions, and she was eager to head back up north to the tundra for the summer to try to use the new batteries to get good pictures of goshales. So on Monday, March 15, 2010, she packaged up a rubidium-ion battery, along with a description of how to build and use it, and sent it off by next-day air to an old friend, Stan Slervin, who had strong contacts with industry. She included in her letter her ideas for a trademark name for the battery – RubyPower¹ – along with a proposed logo, which she had rendered herself. The only thing she didn't explain in the letter was how to synthesize the rubidium chlorohydroxide. That is, she said nothing about palladium-osmium-praseodymium catalysis process. It was all written out on a whiteboard in Bonnie's study, and she didn't feel like typing it all out in the letter. She figured she could explain it if Stan asked about it.

After sending the package off to Stan's residence in sweltering Arkassippi, Bonnie took a deep breath of the fresh, cool Alaska air she was grateful to breathe, and she set about packing up her truck. After that, she turned out all the lights in her cabin and opened up the curtains in hopes that sunlight would keep her place from getting too musty. She locked up, hopped in her truck, and headed north.

¹ Rubidium (Rb) bears no direct relationship with the precious gem known as a ruby. The word "ruby" comes from the Latin *ruber*, for red. Similarly, the word "rubidium" was derived from the Latin *rubidus*, for dark red. But rubies contain no rubidium. A ruby consists solely of aluminum oxide doped with chromium ($\text{Al}_2\text{O}_3:\text{Cr}$).



Fig. 2: A sample of the chemical element rubidium (Rb), atomic number 37. The soft, silvery metal is in the alkali group.

USING HER RUBIDIUM-ION BATTERIES, Bonnie managed to set up several propitious camera stations outside groundhog burrows, carefully aiming the cameras to capture the best angles. She then returned to camp and monitored the stations remotely with her laptop. The outposts were rigged to record images whenever the cameras caught movement. The image files then could be downloaded from the outpost hard drives over a wireless link. Through these means, Bonnie was able to get a spectacular sequence in which a swooping bald eagle nabbed a groundhog off the tundra as another groundhog looked in terror.

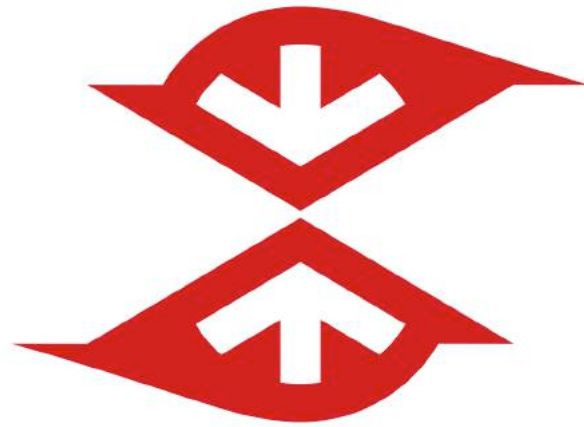


Fig. 3: The RubyPower logo Bonnie created.

Unfortunately, unbeknownst to Bonnie, her work had attracted the attention of a rival wildlife photographer, Taavi Trimnal. The tech-savvy Taavi easily tapped into Bonnie's unencrypted wireless communications. Through his electronic lurking, Taavi was able to intercept and copy the bald-eagle-swooping footage as it was transmitted back to Bonnie's laptop. Then, eager to find out how Bonnie was getting such good images, Taavi ventured out one moonless night to inspect Bonnie's camera stations. Working without a flashlight on the uneven ground, Taavi couldn't see what he was doing, and he stumbled over a camera station, knocking it apart. Afraid he would be caught, he quickly skedaddled. Little did Taavi know, he had knocked a camera right into a goshale burrow.

In the morning, when Bonnie opened her laptop to check on her camera stations, she was startled to find beautiful low-light images of a mother goshale cuddling a brood of three adorable groundhog babies in an underground lair. All of it was automatically captured and recorded by the motion-sensing camera. Bonnie was thrilled to have such excellent footage, and soon, she was headed back to Fairbanks to put together a short film. The key ingredients, of course, were her bald-eagle-swooping footage and her brood/lair footage. The result was a 13-minute film, *Groundhogs of the North Slope*. To her own footage, Bonnie added establishing shots² of tundra that she had shot back when she was doing photography for the Air Force. And, in order to show how frustrating the goshale groundhog had proved for wildlife filmmakers in the past, she used an 11-second sequence of footage from an old hour-long nature special, *Wild Earth*, produced by New England Public Television. The clip showed only fleeting glimpses of goshales as *Wild Earth's* famous narrator Nash Nerfgo w intoned, "The goshale groundhog has proved nearly impossible to capture on film, even for the world's most skillful wildlife photographers."

To build an audience for her film, Bonnie hired a web designer named Umesh Ujdar over the internet. She sent Umesh a contract by e-mail, which he printed out, signed, and returned my U.S. Mail. This is what it said:

I agree that the website I am creating for Bonnie Bajekova is a work-made-for-hire, that I am Bajekova's employee, and that all right interest,

² An "establishing shot" is film-industry jargon for a clip used to set a scene, thus filling out the film's narrative.

title, and copyrights thereto pertaining are therefore the sole property of Bajekova.

In consideration hereof, I will receive \$500, payable when all work is complete to Bajekova's satisfaction.

Umesh Ujdar

Umesh Ujdar

By April 2011, the website was up at groundhogsofthenorthslope.com. Bonnie then uploaded the final cut of *Groundhogs of the North Slope*, and she waited for the reaction. In the meantime, she called up her old friend Stan Slervin to find out if he'd had any luck selling the rubidium-ion battery technology. She was extremely upset at what she learned. Stan was claiming the invention as his own, and he had filed a U.S. patent application for the battery several months ago, on June 15, 2010. What's more, on July 6, 2010, he demonstrated the battery at an electronics expo and claimed it as his own breakthrough. He had also started selling consumer batteries under the name RubyPower, even using the logo Bonnie had created. He wasn't actually selling rubidium-ion batteries. He was just selling AAA, AA, C, and D lithium-ion batteries, and only through select retail outfits in the Nashlanta metro area in the state of Arkassippi. But he planned to start selling rubidium-ion batteries nationwide under the RubyPower mark and logo once he figured out how to synthesize rubidium chlorohydroxide.

"As a peace offering, Bonnie, I'm willing to cut you in on a piece of the profits - if I get issued a patent," Stan said to Bonnie over the phone. "Look, don't contest the patent application, because it's unlikely to issue as it is. Substituting rubidium for lithium in a rechargeable battery is pretty obvious to try for people who work in the field. Lithium is comparatively expensive, so the advantages of using rubidium are pretty clear."

As she tried to calm down, Bonnie checked the internet to see if her site was getting any hits. To her dismay, she found that there was considerable buzz about a rival site "from master wildlife photographer Taavi Trimnal," at goshalesofthearcticslope.com. She was infuriated to see that the site itself - the layout, pages, and interactive features - were all identical to her own. At the bottom of the main page, it said: "Site designed by Umesh Ujdar. Used under license. © 2011 Umesh Ujdar." The site featured a film, produced by Taavi, called *Goshales of the Arctic Slope*. It contained Bonnie's own bald-eagle-swooping footage and brood/lair footage, along with other footage that Taavi must have obtained independently. Nonetheless, the films were extremely similar. And frustratingly for Bonnie, *Goshales of the Arctic Slope* debuted before she uploaded *Groundhogs of the North Slope*, thus scooping her.

Bonnie tracked down Taavi's phone number, and she immediately called him up to complain and threaten legal action. Unfortunately Taavi seemed immune from any anxiety.

"My naïve friend, you have no legal right to stop me," Taavi said. "My film infringes nothing. What's more, if you don't back off, you're going to find yourself in a ton of legal trouble, because your film is the one that is infringing. You have no right to use the U.S. Air Force footage or the New

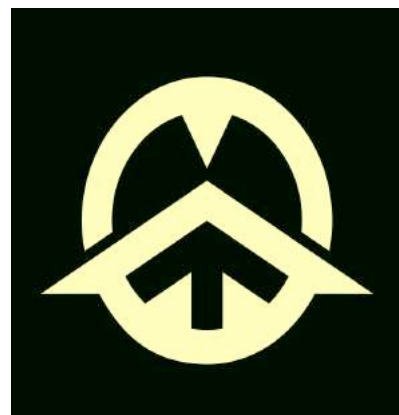


Fig. 4: The logo of Hexetron Systems' next-generation advanced-fuel nuclear reactors. Hexetron expects the reactors to sell for about \$2.8 billion each.

England Public Television footage in your film. Good day." He hung up.

Bonnie then turned to the web to try to find an attorney who could provide her with some advice. While looking around, she was surprised to see that Hexetron Systems, Inc. had just sued Stan for trademark infringement. The giant corporation was claiming that the logo Stan was using – the one Bonnie had drawn – was infringing on Hexetron’s own logo for its next-generation helium-cooled advanced-fuel nuclear reactor, which Hexetron planned to begin marketing to power companies and sovereign governments in early 2012.

Your phone rings. It’s Bonnie. She is retaining you. She wants you to explain this mess to her. What are her rights? Does she have any liabilities? What are the legal positions of Stan Slervin, Taavi Trimnal, and Umesh Ujdar? Can she sue Stan for stealing her invention, her logo, and the name “RubyPower”? Is Hexetron going to win the trademark infringement suit against Stan? Can Bonnie apply for patents of her own? Would that even be the best option for her? Does her film really infringe on the copyrights of others? Can she sue Taavi Trimnal for using her footage and her website design? Can Taavi give his film a title that’s so close to hers? Are there any actions she needs to take at this point to safeguard her rights? What other intellectual property issues are lurking?

The first thing you do is look up Alaska law. You find out that Alaska has adopted the Uniform Trade Secrets Act.

QUESTION

Analyze the parties’ legal positions. Organize your response as follows, clearly labeling the subparts:

Subpart A: Discuss issues concerning copyright, if any.

Subpart B: Discuss issues concerning patents and trade secrets, if any.

Subpart C: Discuss issues concerning trademark (including trade dress, unfair competition, and related doctrines), if any.

Subpart D: Discuss issues concerning other relevant intellectual-property doctrines, if any, that are not specified for subparts A through C.

A few things to keep in mind: The subparts will not all be given equal weight. The subpart structure is provided for organizational purposes only. Thus, it may be entirely appropriate for one subpart to be answered with considerable brevity, while other subparts might require very detailed analysis. Pace yourself appropriately, and plan ahead to put information where it belongs. Also, please provide whatever information you can about deadlines that may apply to any applications or registrations that you would advise Bonnie to consider pursuing. (Note that there’s no need to discuss deadlines for filing any litigation.)

Some suggested abbreviations for your answer:

BB	Bonnie Bajekova	POP	palladium, osmium, and praseodymium
BESF	bald-eagle-swooping footage	RC	rubidium chlorohydroxide
BLF	brood/lair footage	RIB	rubidium-ion battery
GAS	<i>Goshales of the Arctic Slope</i>	SS	Stan Slervin
GNS	<i>Groundhogs of the North Slope</i>	TT	Taavi Trimnal
GG	goshale groundhog	UU	Umesh Ujdar
HSI	Hexetron Systems, Inc.		
NEPT	New England Public Television		

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