## UNIVERSITY OF NORTH DAKOTA SCHOOL OF LAW Intellectual Property Spring 2012

Eric E. Johnson Associate Professor of Law

### 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 April 25, 2012.
- 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.
- 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 proctor or school officials being the exception. You may not view, attempt to view, or use information obtained from viewing materials other than your own.
- 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. <u>Bluebooks:</u> 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. <u>Please use a separate bluebook for each subpart.</u>
- 13. <u>Computers: Please clearly label each subpart of your answer.</u>
- 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 8.5inch-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!

## **Bad Days for Good Cheer**

FOR DECADES, THE FOLKS AT THE GOOD CHEER GREETING CARD COMPANY have been helping well-wishers everywhere to express their heartfelt sentiments to the people they care about. The company's work has brought smiles to the faces of millions. According to research done by a leading business magazine, employees of Good Cheer are the happiest of any company in the United States. Is that because they are the best compensated? Certainly not. Maybe the sort of people who are attracted to the greeting card industry are the sort of people who are just happy to get thoughtful cards from their employer on every conceivable occasion. And they definitely get that. Good Cheer gives good cheer.

Today, unfortunately, Good Cheer faces an existential threat. Suppliers are skittish on credit terms, and cash reserves have gotten dangerously low. On its last legs, Good Cheer is now facing a spate of intellectual-property lawsuits that could finish off the company and push the town under.

The root of the problem is that Good Cheer's arch rival – Sapindale Sentiments – has been gaining on Good Cheer for years, taking over key distribution channels with exclusive deals and undercutting Good Cheer with a lower cost structure. Recently, however, there was a breakthrough that has allowed Good Cheer to win back lost ground.

Last year, one of Good Cheer's top executives, Senior Vice President of Birthdays and Anniversaries Vic Vasarelski, went on an out-of-town trip to Nashlanta, Arkassippi, where Sapindale is based. He went there in an attempt to recruit key creative and marketing personnel. The hope was that by gaining key Sapindale executives, Good Cheer would obtain the know-how it needed to reverse the market losses it has suffered over the past few years. After a day of prowling bars and coffee shops for card-industry people, Vasarelski

went back to his hotel room and kicked back with one of the free DVD rentals from the hotel's front desk. Up in his room, when Vasarelski popped open the package for Atomic Avalanche, he noticed the DVD had a handwritten label that simply said "Confidential financial data, greeting card designs, distribution negotiation spreadsheets, audio chip designs." Curious, Vasarelski slipped the DVD into his laptop. What he found was no B-list disaster flick. It was a treasure trove of Sapindale Sentiments files - all unencrypted.



**FIG. 1:** The town of Montvale, Massachusetts, built upon the success of the Good Cheer Greeting Card Company. Everything from the offices, to their printing operation, warehouse, shipping – they are the local economy.

The folder marked "greeting card designs" was the first Vasarelski checked. That folder, however, was empty.

The "audio chip designs" folder, however, had a lot of content – huge graphics files with a series of images showing a three-dimensional pattern of etchings from the layers of a semiconductor chip, useful for a lithographic process to create cheap, low-power microprocessors for embedding in greeting cards that, when opened, play a song, sound effect, or other audio program. Good stuff, Vic thought.

The "distribution negotiation spreadsheets" folder was even better. It contained a customer list of card buyers, including drug stores, convenience stores, independent groceries, and retail chains with which Sapindale had deals. For each buyer, there were numbers spelling out the projected squeal point (threshold fallback negotiation position) for each buyer. It showed how to get the best deal out of each of them, including how to get an exclusive deal that would cut out all the other card-industry competitors.

The folder marked "financial data" was also good. It contained a database of Sapindale Sentiments cash flows, income, losses, assets, and liabilities.

Vasarelski copied everything to a flash drive, ejected the disc, and wiped it down to erase any fingerprints. He felt kind of silly about this. But he also felt kind of guilty about copying the files. He then returned the DVD to the front desk, gingerly carrying the case by the corners to keep his prints off of it. Telling the desk clerk the movie didn't seem to work, he got workplace rom-com *Working for the Devil* instead.

Over the next few months, by using the information obtained from the DVD, Good Cheer was able to win back scores of important buyers, gaining back double-digits worth of market penetration. Card sales soon started an upward trajectory, resulting in \$10 million in additional sales for Good Cheer.

Good Cheer also set to work on making use of the audio chip designs from the DVD, using them to create their own embedded-in-card microprocessors. Good Cheer loaded their own originally recorded sound files on the chips, and the cards were very successful.

The financial data was useful as well. When Good Cheer's accountants evaluated it, they found that it revealed off-balance-sheet liabilities that Sapindale, a publicly traded company, had not disclosed to

# The exciting world of polymers!



*DID YOU KNOW?* Wallace Carothers (pictured) first produced nylon (diagrammed), one of the world's most common industrial polymers, at the DuPont Experimental Station in 1935.

A "polymer" is a chemical compound composed entirely of repeating structural units. At the molecular level, polymers are like strings or coils. The most well-known polymers are organic compounds. An "organic" compound is one whose structural backbone is made of carbon. The most familiar industrially produced organic polymers are plastics, including polyvinyl chloride (e.g., PVC pipes), polystyrene (e.g., CD jewel cases), polyester (clothes, pop bottles), acrylonitrile butadiene styrene (e.g. legos), neoprene, nylon, polypropylene, and more.

It is also possible — though much less common — to produce polymers based on atoms other than carbon. For instance, "silane polymers" are non-organic polymers made from silicon.

FIG. 2: Don't you want to be a way-cool scientist like Wallace Carothers?

shareholders. Good Cheer anonymously forwarded this information to *The Wall Street Journal* and to the U.S. Securities and Exchange Commission. This garnered Sapindale a flurry of bad press and a federal securities-fraud investigation.

Things were finally turning around for Good Cheer. With a renewed spirit of optimism, they hired a recent college grad – a whiz in chemistry named Carrie Carlyle – to engage in cutting-edge research. While there was skepticism within the company about Carrie's hire, she soon paid off with an exciting new discovery in polymer chemistry. Carrie was able to synthesize hypochromic hyperpolymers, a new kind of silicon-based (silane) polymer that demonstrated curious characteristics of light absorption and reflection linked to mechanical stresses. When hypochromic hyperpolymers are put under tension – that is, when they are pulled or stretched – they darken in color. This is a surprising result. It is common for colored plastics, such as acrylonitrile butadiene styrene, to whiten when deformed by bending or stretching. But darkening under tension had never been seen before. What's more, the darkening immediately reversed as soon as the hypochromic hyperpolymer was relaxed. It was a true breakthrough.

Good Cheer, of course, wanted a way to use hypochromic hyperpolymer – which they soon dubbed "hylonex" – in a greeting card. They turned to senior designer Dieter Danvar. When he got the assignment, Dieter took a blank sketchbook to Carrie's office and collaborated with her. They soon hit upon what they thought would be the perfect use of hylonex – a get-well card that invited the recipient to "pull"; the pulling then causing text to appear on the inside of the card. This is how it worked: By extending the hypochromic hyperpolymers so that they reached across the fold in the greeting card, the opening of the card exerted tension on the hypochromic hyperpolymer materials, allowing words to appear where the hylonex material was exposed.

Once Dieter and Carrie worked up prototypes, they found that the hypochromic hyperpolymer fibers made the greeting card quite hard to open. But they just worked this effect into a gag. As the user opened the card (des. no. 6026-66), the hylonex fibers were stretched, causing first one line of text to appear ("C'mon, pull!"), and then, after more pulling, two more lines of text to appear ("We know you can pull through! / Get well soon!").

Good Cheer debuted the '66 design at the 70th Annual Greeting Card Association Convention. It was a huge hit. The card even won the Louie¹ award in the Get Well/Feel Better Above \$3.50 category. With all the buzz, Good Cheer was able to nab pre-orders for 2 million units. There was controversy, however, when a Sapindale regional sales manager confronted Carrie and Dieter and accused them of plagiarism. It turns out that the '66 card was similar to a card made by Sapindale Sentiments a few years earlier, design no. S5S-55. Neither Carrie nor Dieter had copied it. But once she was shown the '55 design, Carrie realized that she had, indeed, seen it a few years ago. All the same, she hadn't been thinking about it when she was collaborating with Dieter on the '66 card. Besides, the '55 card didn't have magically appearing words. Sapindale's complaints seemed like petty jealousy.

Coming back from the convention, Good Cheer execs were in a fine mood until they were visited by a process server. They were on the receiving end of a lawsuit from Lawndale Laboratories. The complaint charged infringement of claim 1 of U.S. Patent No. 6,101,111.

When she saw the patent, Carrie was livid.

<sup>&</sup>lt;sup>1</sup> The "Louie" is the Emmy or Oscar of the greeting card industry.

**FIG. 3:** A comparison of the two greetings cards. Sapindale's '55 card, on the left, has a yellow front with the word "Pull!" in white letters inside a red box. Good Cheer's '66 card, on the right, has a red front with the word "Pull!" in white letters. The inside of the '55 card is printed in black on white. Words inside the '66 card appear as dark-gray on white. The dimensions of both cards are industry standard A1 sizes.

"They didn't even invent hypochromic hyperpolymers! Hypochromic hyperpolymers are silane polymers! These people wouldn't know an inorganic, silicone-based molecule if it hit them in the head!" she yelled.

Indeed, the '111 specification speaks only of organic polymers. But the claim, according to the lawsuit, embraced hypochromic hyperpolymers:

U.S. Patent No. 6,101,111

What is claimed is:

1. A composition of matter comprising a polymer that changes color when placed under tension.

The next day, Good Cheer got hit with another patent lawsuit, this time from independent inventor Tyork Tyorksson, alleging infringement of claim 2 of U.S. Patent No. 7,209,222:

U.S. Patent No. 7,209,222

I claim:

2. A silane polymer that darkens in color when placed under some mechanical force, such as compression.

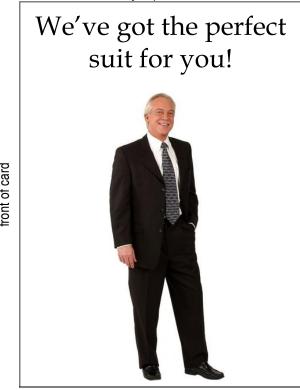
When Carrie saw this lawsuit, she felt deflated. Originally, claim 2 of Tyorksson's application was "A silane polymer that darkens in color when placed under some mechanical force." This claim language, however, was rejected by the examiner on the basis of 35 U.S.C. § 102 as claiming non-novel subject matter. In response to the office action containing the rejection, Tyorksson amended the claim to add the language ", such as compression." When she found this out, it gave Carrie some hope. "Compression" denotes a pushing force. By contrast, the word "tension" denotes pulling force – and hylonex darkens when placed under tension. Also, Carrie did some quick research and found out that Tyorksson has never sold any products or even attempted to license the technology in his patent. Also, she was confident that Tyorksson hadn't created exactly the same molecular structure she had.

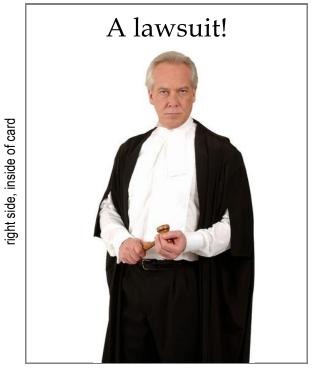
A few days later came another threat of a lawsuit. This time it was letter from Hexetron Xenotech, a materials manufacturer, claiming that "hylonex" infringes its trademark for "Xylenex," which a brand of high-performance-polymer facial tissue. Xylenex is sold mostly to governments for use in human space exploration and other extreme applications that demand the ultimate in nasal hygiene. It costs nearly \$600 per box.

Then came the granddaddy of them all – the cease-and-desist letter from Sapindale Sentiments.

Well, it wasn't actually a letter.

It was a card.





Dear Good Cheer Greetings:

We write to inform you that you are in violation of several of Sapindale Sentiments' intellectual property rights, and we herewith demand compensation and an immediate cessation of wrongdoing.

In particular:

We demand that you immediately cease and desist all manufacture and distribution of the Good Cheer card no. 6026-66. To do otherwise constitutes copyright infringement and trademark infringement of Sapindale Sentiments card design no. S5S-55.

We also demand that you immediately cease and desist manufacturing and distributing cards with audio semiconductor chips that make use of designs owned by us that were registered with the U.S. Copyright Office. In addition to our IP rights secured by registration, the designs you are using are trade secrets of Sapindale.

We also have learned that you are in possession of other trade secrets owned by Sapindale, including confidential financial data and certain distribution negotiation spreadsheets. By copying these, you have engaged in copyright infringement and tradesecret misappropriation.

We welcome the opportunity to exchange further greeting cards regarding this matter or to discuss it in person. It is our intent to demand a large damages payment and a stipulated injunction.

With best wishes,  $\mathbb{S}.\mathcal{S}$ . Sapindale Sentiments

FIG. 4: The cease-and-desist card sent by Sapindale Sentiments.

The management at Good Cheer Greetings is very upset. In addition to wanting a comprehensive evaluation of the intellectual property questions involved, they have asked you answer these specific questions:

- Is there a chance Good Cheer could get their own patent on the hypochromic hyperpolymer?
- Does it matter that Tyork Tyorksson never manufactured or sought to license the silane polymer claimed in his patent?
- Is there a chance that anyone at Good Cheer could go to jail?

On top of everything else, you realize that today, Wednesday, April 25, 2012, is Administrative Professionals Day. You'd better make a post-it note to remind yourself to pick up one of your client's greeting cards for your administrative assistant. But you can do that over your lunch hour. Right now, you have to analyze this problem.

#### **QUESTION**

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

Subpart A: Discuss any issues concerning copyright and, if applicable, moral rights.

Subpart B: Discuss any issues concerning patents and trade secrets, and, if applicable, any sui generis rights or other forms of IP protection for inventions, industrial designs, or the like.

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

Subpart D: If there is anything else you wish to discuss, which does not belong in any of subparts A through C, please put it under this Subpart D.

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.

## Some suggested abbreviations for your answer:

111	Claim 1 of U.S. Patent No. 6,101,111	GG	Good Cheer Greeting Card Co.
222	Claim 2 of U.S. Patent No. 7,209,222	HH	hypochromic hyperpolymer (hylonex)
55	Sapindale design no. S5S-55	LL	Lawndale Laboratories
66	Good Cheer design no. 6026-66	MM	Montvale, Massachusetts
ACD	audio chip designs	SS	Sapindale Sentiments
CC	Carrie Carlyle	TT	Tyork Tyorksson
DD	Dieter Danvar	VV	Vic Vasarelski
DNS	distribution negotiation spreadsheets	XX	Hexetron Xenotech

CREDITS: The "Good Cheer Greeting Card Co." is an homage to the television series *Leverage*, which features a fictional company of the same name in episode no. 56, "The Office Job," written by Jeremy Bernstein & Josh Schaer. The caption is Fig. 1 is a quotation from the screenplay. Photo in Fig. 1 by Matthew Rees. See http://en.wikipedia.org/wiki/File:MapleMill.jpg. Photo of Wallace Carothers by an unknown photographer. See http://en.wikipedia.org/wiki/File:Carothers.jpg. Photograph of man in Fig. 4 distributed by Cosmi Corp.