COPYRIGHT, PATENT AND TRADEMARK

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This is a FOUR HOUR examination, consisting of THREE questions. You should allocate 75 MINUTES to each question, and reserve 15 MINUTES for additions and corrections. The examination is OPEN BOOK, but you are to take it IN CLASS.

Please organize your analysis carefully before you begin to write, and strive for conciseness as well as completeness. If you think additional facts are necessary, you should state briefly what facts you would like to know and why you think they would be relevant. Whenever you discover an arguable issue in these cases, you should state carefully the best arguments that can be made on either side, and then continue your analysis in the alternative. Finally, you should be careful to consider all aspects of intellectual property law which might be applicable to the present problems, e.g., Copyright, Patent, Trademark, and Related State Doctrines.

Question I

In 1976, Arthur Benson, a resident of San Diego, California, conceived the idea of selling photographic services from a drive-in window at discount prices. Together with an architect friend of his, Benson designed a building for the business: it was a small rectangular kiosk with a steep overhanging three-tired roof; the roof was trapezoidal in shape when viewed from the sides, triangular in shape when viewed from the ends, and it was colored a bright yellow with blue trim. The idea was to place the kiosk on a small concrete platform in the center of the parking lots of suburban shopping centers, so that customers could easily drop off their film and pick up their finished photographs without ever leaving their cars. Benson’s business, which he named AutoPrint, Inc., began with four kiosks in southern California in 1978, and became a nationwide success within a few years. By 1984, there were over 800 AutoPrint stores in 37 states and 3 Canadian
provinces, mostly in the west, the south, and along the east coast.

On July 1, 1978, AutoPrint registered the architectural plans for its kiosks under Section 102(a)(5) of the 1976 Copyright Act, as a “pictorial, graphic, or sculptural work”. At the same time, AutoPrint applied to the U.S. Patent and Trademark Office for a service mark registration for the following two-dimensional drawing of its kiosk:

![Our business is good pictures](image)

which it had been using as a logo on its advertisements, its processing envelopes, its letterheads, and the like. Registration on the Principal Register was granted on September 17, 1980. Benson had suggested to his business associates at one point that AutoPrint ought to try to register the full three-dimensional structure as a service mark, but being advised by counsel that buildings *per se* were not registrable, he never attempted to do so.

Although AutoPrint had not yet established a store in Iowa by the beginning of 1984, they had been contemplating a major expansion into the mid-west at that time. But in March, 1984, Carolyn Dowd, a young woman from White Plains, New York, moved into Iowa City, Iowa, and built three drive-in film-processing kiosks in the parking lots of three suburban shopping centers, calling her business Quick Stop Photo. Quick Stop kiosks were similar to those of AutoPrint, although they differed in certain respects. Both buildings were rectangular in shape, and of almost identical dimensions; both buildings used potted shrubbery to decorate the two ends of the enclosed concrete platform; and both buildings used a steep overhanging roof which was trapezoidal in shape when viewed from the sides, and triangular in shape when viewed from the ends. However, the Quick Stop roof, instead of being three-tiered, was single-tiered with imitation tile marks; and instead of being bright yellow with blue trim, it was bright orange with dark brown trim. The services offered by Quick Stop Photo were identical to those offered by AutoPrint: fast film processing at discount prices.
In November, 1984, AutoPrint built its first four retail stores in Des Moines, Iowa, and in June, 1985, it began construction on two stores in Iowa City. On July 1, 1985, AutoPrint served notice on Quick Stop Photo that, if Quick Stop did not alter its building design substantially in the immediate future, it would face legal action. Carolyn Dowd responded by placing the following signs on the three Quick Stop stores:

An Independent Film Processing Company

Not Affiliated with AutoPrint, Inc.
Or Any Other National Chain

AutoPrint has determined that these signs are just barely readable by a motorist with 20/20 vision traveling at a speed of 35 miles per hour from a distance of approximately 40 yards.

Assume that you work for the law firm representing AutoPrint, Inc. What causes of action can you secure against Quick Stop Photo? What arguments can Quick Stop make in defense? How do you think the legal issues ought to be decided?

Question II

Assume it is January, 1986, and you are an associate with the law firm representing Moog Music, Inc., the well-known manufacturer of electronic musical instruments. For the past several years, Moog has been involved in an intensive research effort to develop a Programmable Digital Synthesizer (PDS), and it has recently succeeded in a remarkable way with the construction of the Moog PDS-100. Unlike the original Moog Synthesizer, which was basically an “analog” device, a “digital” synthesizer produces a musical waveform by generating a sequence of discrete digital pulses, thus allowing the synthesized sound to be precisely controlled by a digital computer program. The hardware of the Moog PDS-100 is quite conventional: a standard micro-computer, a four-channel digital-to-analog converter, an amplifier, and a quadraphonic speaker system. The novelty of the Moog PDS-100 lies instead in its software, which was developed under the direction of Dr. Stanislaw J. Brzeczkowski, a former member of the Polish Academy of Arts and Sciences, and the Institut de Recherche et de Coordination Acoustique/Musique in Paris.

There are two basic kinds of innovations in the software of the Moog PDS-100. First, as a result of Dr. Brzeczkowski’s extensive research in psycho-acoustics, Moog has been able to simulate precisely the depth cues and motion cues of the human ear, and to reproduce unerringly the human sense of musical timbre. For example, a listener seated in an
auditorium between the four speakers of the Moog PDS-100 might hear a sound start out at a position exactly twenty feet to his front-left, and then move in a circular arc to a position thirty feet to his right. The sound might initially have the timbre of a piano, then shift gradually toward the timbre of a violin, and finally toward the timbre of the human voice. Although there had been some earlier efforts to achieve these results (in fact, Dr. Brzeczkowski had himself published two papers on the subject in 1976), it was not until the research at Moog in the past two years that all the problems were solved. The depth cues and motion cues, for example, depended on certain precise relationships between phase shift and frequency shift, and on the amplitude ratio between direct and reflected sound; and the reproduction of musical timbre turned out to depend on a detailed understanding of which sound configurations were perceived by the human ear as similar, and which dissimilar, and why. In short, Dr. Brzeczkowski’s work at Moog had produced a substantial advance in the psycho-acoustic art.

The second basic innovation in the software of the Moog PDS-100 lies in its facilities for a sophisticated form of automatic composition. Given the possible variations of spatial configuration and timbre here, in addition to the traditional variations of rhythm, harmony, and melody, the art of composition for the Moog PDS-100 might become intolerably complex. Dr. Brzeczkowski’s solution to this problem was, first, to provide a special computer language in which the composition would be expressed, and from which the composition could then be automatically performed; and second, as an alternative, to give the composer the option of writing out only the sketchiest description of his or her thematic material, and then having the program itself produce the detailed musical work. This latter alternative was made possible by two additional contributions of Dr. Brzeczkowski: (1.) the application of a set of rules of “structural aesthetics,” which were partially described, for the case of tonal harmony, in Brzeczkowski, 19 Inst. Polsk. Muzyce 123 (1981); and (2.) the application of a special “random pattern generator” based on “fractal sets,” the characteristics of which were first analyzed in Brzeczkowski, 7 Neue Zeitsch. fur Musik. Theorie 229 (1982). In the limit, of course, the Moog PDS-100 could generate its own thematic material, and thus produce a musical work entirely on its own.

You have now been asked to write a memo addressing several novel legal questions which have arisen concerning the Moog PDS-100:

- Dr. Brzeczkowski has not yet filed a patent application for the Moog PDS-100. Are there aspects of this invention which are patentable? You should analyze separately the two major innovations in the PDS-100: first, the system for automatic sound generation; and second, the system for automatic composition.

- Suppose a musician creates a new musical work using, lawfully, the Moog PSD-100 and its automatic composition capability. Who would own the copyright on the composition? The musician? Moog Music, Inc.? Dr.
Brzeczkowski? The PDS-100? Assuming the performance is fixed in a tangible medium of expression, who would own the copyright on the sound recording?

- Assume now that Moog Music and Dr. Brzeczkowski are successful in obtaining a patent on the PDS-100, for either or both of the innovations outlined above. Moog Music is contemplating a special licensing arrangement for the invention, whereby a musician would be granted the right to use the PDS-100 in exchange for 10% of all the royalties derived from the musical works produced on the machine. Would such a licensing arrangement be valid and enforceable?

Draft the requested memo.

**Question III**

It has recently become a common practice for over-the-counter software vendors to attempt to protect their computer software by using what are called “shrink-wrap” license agreements. Typically, the software vendor does not actually “sell” its software to the customer, but only “licenses” it. The terms of the license agreement are disclosed to the customer on the back of the package, or in the accompanying literature, and the customer is informed by a conspicuous notice that the act of breaking the seal on the package (hence the name: “shrink-wrap”) constitutes an acceptance of all the terms of the license. These terms will often provide that the algorithms embodied in the software are protected as trade secrets of the manufacturer, and that they are provided to the customer only on a confidential basis. There has been some doubt as to the enforceability of “shrink-wrap” licenses in general, since they might easily be characterized as contracts of adhesion, but several state legislatures have recently attempted to eliminate this uncertainty, at least as a matter of state law.

For example, the state of Louisiana has recently enacted Chapter 27, of Title 51 of the Louisiana Revised Statutes of 1950, which reads (in relevant part) as follows:

**Computer Software License Enforcement Act**

§1952. Definitions.

For purposes of this Chapter the following terms shall have the meanings set forth herein:

...

(3) “Reverse engineering, decompiling or disassembling” means any process by which computer software is converted from one form to another form which is more readily understandable to human beings, including without limitation any decoding or decrypting of any computer program which has been encoded or
encrypted in any manner.

§1953. Requirements for Enforceability.

Any person who acquires computer software or a copy thereof shall be conclusively deemed to have accepted and agreed to all the terms of the license agreement for such software or copy thereof, including any applicable provisions contained in Revised Statutes 51:1954, if

(1) A written legend or notice is affixed to or packaged with the software or copy thereof in such a manner that the legend or notice is clearly and conspicuously visible upon cursory examination of the software and related packaging; and ...

(3) The legend or notice states clearly that: (a) any use of the software or copy thereof will constitute acceptance of the terms of the accompanying license agreement; or (b) any opening of a sealed package, envelope, or container in which the software or copy thereof is contained will constitute acceptance of the terms of the accompanying license agreement; and ...

(5) The person acquiring the software or copy thereof takes such action as is stated in the legend or notice to constitute acceptance of and agreement to the terms of the accompanying license agreement.

§1954. Terms Deemed Accepted.

Terms which shall be deemed to have been accepted under Revised Statutes 51:1953 ... include any or all of the following:

...(3) If title to the copy of computer software has been retained by the licensor, provisions for the prohibition or limitation of rights to modify and/or adapt the copy of the computer software in any way, including without limitation prohibitions on translating, reverse engineering, decompiling, disassembling, and/or creating derivative works based on the computer software.

These provisions became effective on July 13, 1984.

Assume that you are an associate in a law firm representing a small software developer, Robert Ellis and Associates, which has its headquarters and principal place of business in Baton Rouge, Louisiana. Beginning in August, 1984, Robert Ellis began to develop a low-priced version of Lotus-1-2-3, an extremely popular software product marketed nationwide by the Lotus Development Corporation. Naturally, as was the custom in the industry, Ellis purchased a copy of Lotus-1-2-3 in a retail store in Baton Rouge, and proceeded to analyze carefully the details of the computer code which made it work. By December, 1984, Ellis had produced a prototype version of Lotus-1-2-3 which followed the basic organization and logic of the original, but which copied none of the specific code, and by July, 1985, Ellis was ready to launch his new product on the market. He has recently contacted your law firm for advice, however. It turns out that Lotus-1-2-3 was protected by a "shrink-wrap" license agreement of the sort covered by the new Louisiana statute. One of the terms of the license reads as follows:
The Licensee acknowledges that the licensed software contains concepts, algorithms, and programming methods which are the proprietary trade secrets of the licensor. Accordingly, the Licensee agrees not to disassemble, decompile, or otherwise reverse engineer the licensed software, or to use the secret concepts, algorithms, and programming methods which are contained therein for the purpose of creating any functionally similar software.

You may assume, for purposes of analysis, that all the provisions of §1953 on the requirements for enforceability of such licenses have been satisfied.

You have now been asked to write a memo analyzing the potential liability of Robert Ellis and Associates for the development of the low-priced version of *Lotus-1-2-3*. If Robert Ellis and Associates proceed to market their new software, would the Lotus Development Corporation have a cause of action against them? Would Robert Ellis have any defenses? In particular, would the Louisiana statute be preempted, in whole or in part, by the federal patent or copyright laws? Draft the requested memo.

END OF EXAMINATION