

BOOK REVIEW

PROTECTING YOUR PROPRIETARY RIGHTS IN THE COMPUTER AND HIGH TECHNOLOGY INDUSTRIES

By Tobey B. Marzouk.

Washington, D.C.: Computer Society Press, 1988, pp. 212.

*Reviewed by Barry D. Rein**

The rapid development of computers in the past few decades has posed challenges to many areas of the law and to lawyers called upon to deal with them. It has, for example, required both a major reshaping of the traditional laws affecting intellectual property rights in order to accommodate important new concepts, and the addition of a new form of protection for the "mask works" underlying integrated circuit technology. Like biotechnology, another developmental wave of profound impact, computer technology has given rise to new industries, new cultural phenomena, and new vocabulary.

The rise of these new mega-technologies challenges the intellectual property specialist to explain her field of expertise to those in the affected industries. *Protecting Your Proprietary Rights in the Computer and High Technology Industries*¹ by Tobey B. Marzouk is a response to this challenge. It undertakes to acquaint the reader with the "fundamental elements of proprietary rights protection in the computer and high technology industries,"² and to explain to persons in these industries how to protect rights in hardware and software.

Mr. Marzouk's book accomplishes its first goal, setting out the basic tenets of the laws of trade secrets, patents, copyrights, and trademarks with illustrations of their application to computer technology. It goes further, dealing in separate chapters with the licensing process, protection against infringing imports, the rules and pitfalls of government contracting, and so-called "computer crime." However, the book falls short of affording the lay reader a genuine appreciation of the legal tools available to protect hardware and software, and does not directly address the

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1. T. MARZOUK, *PROTECTING YOUR PROPRIETARY RIGHTS IN THE COMPUTER AND HIGH TECHNOLOGY INDUSTRIES* (1988) [hereinafter *PROTECTING YOUR PROPRIETARY RIGHTS*].

2. *Id.* at 3.

problem of obtaining protection "without unduly hampering [a company's] business development and competitive abilities,"³ one of its stated goals. *Protecting Your Proprietary Rights* would do much more to afford that kind of appreciation if it focused on particular computer-related technologies (e.g., software graphics or semiconductor design) and if it had gone further toward addressing legal problems as they are perceived, or are likely to be perceived, by people in these target industries.

Protecting Your Proprietary Rights is one in a series of books published by The Computer Society, a member society of the Institute of Electrical and Electronics Engineers, the primary professional organization for electrical engineers in the United States.⁴ Mr. Marzouk, a graduate of Harvard Law School, practices law in Washington, D.C. He specializes in matters relating to computers and has written a number of articles on legal problems relating to computer technology.

Protecting Your Proprietary Rights contains ten substantive sections, a brief introduction and conclusion, and seven appendices containing relevant articles previously written by Mr. Marzouk. The first three sections set forth the basic precepts of the primary vehicles for protecting intellectual property: trade secrets, copyrights, and patents. Two sections deal with contracts: one is a primer on employment contracts, including negotiating, drafting, executing, and enforcing them; the other (captioned "Marketing Protection for Computer Software and Hardware") outlines the provisions of three different types of software licenses and also briefly treats trademarks and the antitrust pitfalls of tying arrangements. Two other sections deal with so-called import and export protection: the first treats International Trade Commission proceedings under 19 U.S.C. § 1337 and procedures for registering copyrights and trademarks with the Customs Service; the second addresses international copyright protection under the Universal Copyright Convention and the Berne Convention.

The next two sections cover contracting with the federal government, and include a survey of applicable policies and provisions bearing on computer hardware and software, as well as a series of paragraph-long summaries of relevant cases that add useful flavor to the otherwise

3. *Id.*

4. Other titles from The Computer Society range from highly technical and specific works for engineers to more broadly focused works for managers. They include *COMPUTER ARCHITECTURE* (D. Gajski, V. Milutinovic, H. Siegel & B. Furth eds. 1987); *S. LAM. PRINCIPLES OF COMMUNICATION AND NETWORKING PROTOCOLS* (1984); *END USER FACILITIES IN THE 1980'S* (J. Larson ed. 1982); *B. MATLEY & T. MCDANNOLD. NATIONAL COMPUTER POLICIES* (1988); and *SOFTWARE MANAGEMENT* (D. Reifer 3d ed. 1986).

skeletal treatment. The final section, "Criminal Sanctions for Computer Theft," deals primarily with the Virginia Computer Crimes Act and suggests its usefulness as a model state statute in the computer-related crimes area.

The scope of each section is not limited to problems related to computer technology. As one would expect of a work addressed to a lay audience, Mr. Marzouk describes the basic concepts and rules applicable to each area of the law, often flavoring the description with references to features peculiar to computer technology. Discussion of matters unique to this technology are dealt with under each topic, an approach which cannot adequately present the field to those with an industry perspective. On more than a few occasions, legal principles are simply recited with reference to the "computer firm," a repetition that can become annoying.⁵

The book's coverage is broad; it touches upon substantially all areas of intellectual property practice. A notable exception is the Semiconductor Chip Protection Act of 1984,⁶ an adjunct to the Copyright Act that affords essentially the only way of protecting integrated circuit designs, such as the familiar Intel 80286 and 80386 chips that power many personal computers. This significant piece of legislation should be discussed in any book of this scope that is addressed expressly to the "computer industry."

The book's focus on the "computer industry" makes sense only as a shorthand key to its coverage. Software was a technological development that fell largely outside the ambit of intellectual property concepts of the 1950's. The legal system struggled for two decades before producing, in the early 1980's, changes in both the copyright and patent laws that finally held out the promise of being reasonable vehicles for protecting software. Discussing those changes is largely what makes any work on protecting computer technology useful, as distinguished from works on protecting technology generally. The title of Mr. Marzouk's book, by also indicating an attempt to address all "high technology industries," detracts from this useful focus.

Any industry-specific work on intellectual property law will of necessity cover the basic relevant precepts of trade secrets, copyrights, trademarks, patents, and applicable government contract law. While such a primer is applicable to all industries, the true challenge facing the author

5. For example, "to acquire trade secret protection, a computer firm must treat its trade secrets as secret." PROTECTING YOUR PROPRIETARY RIGHTS, *supra* note 1, at 11. "Since the employment contract will ultimately govern relations between the employer and the employee, it is essential for the computer firm to establish careful procedures for negotiating the contract." *Id.* at 41.

6. 17 U.S.C. §§ 901-914.

of an industry-specific book is obtaining a narrower focus by standing in the shoes of the target reader and addressing that individual's questions and concerns. Although executives in various computer-related industries do share some concerns, there is no monolithic "computer industry." For example, executives of a start-up mass-market software company, a silicon foundry based on a unique fabrication process, a computer game company, a maker of computer-aided design workstations, and a developer of expert systems share some common concerns, but they also differ in important aspects. Yet, all of these executives need to be introduced to Mr. Marzouk's world.

Also, Mr. Marzouk could have done more to orient the reader to the subject area. First, I doubt that most executives in computer-related industries think in terms of particular legal tools such as patents or copyrights. Rather, these executives are concerned with protecting their technology in order to exploit it through sale or license so that competitors cannot obtain or use it without paying for it. Since the focus of such executives is functional—protection—the organization and structure of the book could be improved to reflect their concern with the protection itself rather than the specific form of the protection. Second, to the extent some executives do think in terms of specific legal tools, the specialist in this field often must lead the executive to think more broadly about the overall commercial problem and the array of interrelated legal means available to address it. One step towards this type of more integrated perspective would be a longer introductory chapter discussing some of the people in the computer industry whom the author is addressing, and the relevant commercial problems facing them. This would better orient the reader in her relation to the author, fostering a clearer appreciation of how the various chapters and topics will be useful to her.

Other works on intellectual property law addressed to the lay reader in particular industries have gone further in providing an integrated introduction to the overall commercial problem. A few sentences from the preface to a text on chemical patents illustrates this point.⁷

This is a book for practicing chemists and chemical engineers. . . . This is in no sense a book about patent law or about patent licensing and management. . . . This book tries to answer the immediate, practical questions of chemists and engineers about how to read and to understand patents, how to use patents as a source of information, how to recognize that an invention has been made, how to work with attorneys or agents in seeking patent protection for inventions, how to keep

7. See J. MAYNARD, *UNDERSTANDING CHEMICAL PATENTS* (1978).

adequate notebook records, how to watch for infringement of patents, and so on.⁸

Furthermore, the topology of intellectual property law should be approached and explored from the reader's perspective; unfortunately, Mr. Marzouk meets the reader less than half way. An approach to this field from the reader's perspective requires at least a chapter or two for categorizing problems according to commercial or scientific characteristics rather than along lines drawn by the legal system. A book designed to address problems peculiar to software, for example, should include a chapter about software protection, its history, and the different problems raised by mass-market software as contrasted with custom programs or programs written for limited distribution. It should also discuss the different practical problems encountered in protecting and licensing operating systems as opposed to applications software. While some of these topics are briefly treated in *Protecting Your Proprietary Rights* in the separate sections on licensing and copyright, the reader would be better served if these topics were approached from the perspective of her commercial concerns, rather than in separate categories of legal problems or protection.

The inclusion of other omitted topics and discussions could add useful material and help to synthesize much of the material at the reader's level. For example, Mr. Marzouk's discussion of using both copyright and trade secret law to protect particular software⁹ could profitably be extended to include patent protection. The relative costs, benefits, and pitfalls of contract, copyright, and patent protection, as well as specific examples of these factors and how they balance in illustrative contexts, would better afford the reader a practical appreciation of how software is treated and of how to extrapolate that understanding to her particular needs. Moreover, it would be useful to discuss what is for many the threshold difficulty of understanding patent protection for software: namely, that one does not evaluate software per se (i.e., a specific sequence or sequences of instructions) for patentability. Rather, one evaluates the sequence of steps, viewed at the level of the industrial or engineering process being carried out, performed by a computer system under the control of the program. Although Mr. Marzouk discusses some specific cases that illustrate this point,¹⁰ his treatment is not thorough enough to educate the reader to think in terms of protecting an

8. *Id.* at v.

9. PROTECTING YOUR PROPRIETARY RIGHTS, *supra* note 1, at 28.

10. *Id.* at 32-33.

industrial method rather than a printout of the code, or a ROM or tape containing the program.

Other subject matter omitted from *Protecting Your Proprietary Rights* includes discussion of the scope of protection accorded user interfaces and the problems posed if the user is permitted to modify licensed code. Protection of user interfaces (sometimes referred to as the "look and feel" of software) is a subject of substantial interest and active legal controversy. While some of the current litigation may have begun after this book was written, the early cases¹¹ clearly heralded the significance of the issue for the computer industries. User interfaces are becoming increasingly important for marketing purposes, particularly as the trend toward common operating systems (e.g., the various versions of Unix) and greater connectivity reduces other barriers to competition. An example is the litigation initiated by Ashton-Tate to prevent competitors from copying the look and feel of "Dbase," irrespective of whether or not they use similar code.¹² This is an area of growing importance to many companies.

The problem of the licensee's ability to modify licensed code, or to embed it in other programs or embed other programs in it, also deserves discussion. The structural, definitional, and planning problems that must be addressed in contracting to acquire custom software are daunting, and the hazards many; an appreciation of the magnitude of these challenges and of some useful strategies to address them would be welcome.

Equally valuable topics omitted from Mr. Marzouk's discussion include: whether or not the actual code must be or should be included in a patent application intended to protect it; licensing problems posed by the increased use of networks (as well as the use of advanced programming techniques such as intelligent "daemons," which may access databases in background mode to perform searches for the user); and problems peculiar to protecting expert systems. The reader would also benefit from examples culled from the stream of patents that has begun to issue for software. Additionally, certain industry practices could be addressed. For example, how might one insure that valuable programs used confidentially not be subject to injunction for infringing a patent of another that was filed long after the first commercial, but confidential, use of the program? While Mr. Marzouk offers some discussion of international copyright protection, he does not mention the substantial differences in the social and legal climates of different countries. These differences are critical in making business judgments about international

11. See, e.g., *Whelan Associates v. Jaslow Dental Laboratory*, 797 F.2d 1222 (3d Cir. 1986), *cert. denied* 107 S.Ct. 877 (1987).

12. See *Ashton-Tate Corp. v. Fox Software*, No. 88-6837-TJH (C.D. Cal.); see generally 10 INFOWORLD 1, Dec. 12, 1988.

marketing. The whole area of patent protection outside the United States is not touched. In fairness, Mr. Marzouk has staked out a lot of territory to cover, and the requirement of readability for a lay audience may limit the length of this type of book. Nevertheless, these additional areas could have been covered without unduly lengthening the book.

The section on government contract law is particularly useful in presenting an overview of an inherently fragmented field. The subsequent section on government procurement is also helpful, presenting paragraph-long summaries of relevant decisions illustrating the procurement policy tenets of maximum competition, minimum needs, benchmarking, and contract cancellation. Although the information and guidance offered here are useful and clearly presented, I disagree with some of the author's statements. For example, in discussing certain events that can bar the filing of a patent application (unless filed within one year of the event), Mr. Marzouk states: "The potential owner must also be careful not to solicit investments in his invention or to publish any description of his inventions unless he is prepared to file an application within one year."¹³ While the latter is true, the former is not, unless the solicitation amounts to a public disclosure of the invention. Further, Mr. Marzouk states: "The Copyright Act, 17 U.S.C. Sects. 602, 603, and the Lanham Act 15 U.S.C. Sect. 1124, prevent the importation of goods into the U.S. that infringe copyrights, patents, trademarks, and trade names. The U.S. Customs Service, which is an agency of the U.S. Treasury Department, enforces these provisions."¹⁴ While this is true with respect to copyrighted subject matter and registered trademarks, it is not true with respect to patents. The idea of the Customs Service reading patents and determining what goods infringe them is unrealistic. The only relevant provision is 19 C.F.R. § 12.39a, which provides that if an owner makes a patent of record with Customs and describes the allegedly infringing goods with sufficient particularity to enable Customs to identify them, Customs will survey imports for a limited time period and provide the patent owner with the identity of the potentially infringing importers.

In all, *Protecting Your Proprietary Rights* will help lay people to acquire a basic understanding of some specific legal areas that are relevant to high technology industries. It is regrettable that it does not do more.

13. PROTECTING YOUR PROPRIETARY RIGHTS, *supra* note 1, at 36.

14. *Id.* at 84.