LAW & CYBERSPACE

The course introduces students to the knowledge and analytical tools to perform interdisciplinary analyses of legal issues related to the "virtual geography created by interconnected computers and networks," a.k.a. Cyberspace.

Instructor

> MEIRING de VILLIERS
> mdv@stanford
> www.stanford.edu/~mdv/
> (650) 725-8214
> Terman, Room 409

Teaching Assistant

> PARITOSH GUPTA
> PhD Candidate, Dept. of Management Science & Engineering.
> pari1@stanford

Evaluation: Your course grade will depend on a midterm and final exam.

Required Texts

ARTHUR R. MILLER, AND MICHAEL H. DAVIS, Intellectual Property: Patents, Trademarks and Copyright in a Nutshell (West, 2000.) (Referred to in syllabus as "Nutshell")

CONSTANCE E. BAGLEY, Managers and the Legal Environment Strategies for the 21st Century, Third Edition (West Publishing Company, 2000.) (Referred to in syllabus as "Bagley").

LAWRENCE D. GRAHAM, Legal Battles that Shaped the Computer Industry (Quorum Books, 1999). (Referred to in syllabus as "Legal Battles").

Recommended

KENNETH NICHOLS, Inventing Software The Rise of "Computer-Related" Patents (Quorum Books, 1998).

LAWRENCE LESSIG, Code and Other Laws of Cyberspace (Basic Books, 1999). (Referred to as "Code").

GREGORY A. STOBBS, Software Patents (Aspen, 2000); 2001 Supplement.)Referred to as "Stobbs.")

CLIVE GRINGRASS, The Laws of the Internet (Butterworths, 1997).

ROGER L. MILLER AND GAYLORD A. JENTZ, Law for e-Commerce West, 2002). (Referred to in syllabus as "e-Commerce.")

Intellectual Property in the Age of Universal Access (ACM Publications, 2000).

FERRERA et al., CyberLaw Text and Cases (South-Western College Publishing, 2001).

LEE B. BURGUNDER, Legal Aspects of Managing Technology, 2d ed. (West Publishing Company, 2001.)

WHITFIELD DIFFIE AND SUSAN LANDAU, Privacy on the Line The Politics of Wiretapping and Encryption (MIT Press, 1998.)

STEPHEN ELIAS, AND PATRICIA GIMA, Domain Names: How to Choose & Protect a Great Name for your Website. (Referred to as "Domain Names.")

SYLLABUS

0. INTRODUCTION TO CYBERSPACE.

GRINGRASS, The Laws of the Internet, Chapter 1.

I. INTELLECTUAL PROPERTY.

1. Introduction

Bagley, p. 348

Legal Battles, pp. 7 - 15 ["Legal Protection for Hardware and Software: A Primer."]

2. Principles of Patent Law

2.1 Introduction

Bagley, p. 349.

Nutshell, §§ 1.2, 1.3 , pp. 10-19.

2.2 Subject matter of patents.

Bagley, pp. 349 - 352.

Nutshell, pp. 20-39.

2.3 Patentability

2.3.1 Novelty and Statutory Bar

Nutshell, chapter 3, pp. 40 - 66.

2.3.2 Utility

Nutshell, chapter 4, pp. 67 - 70.

2.3.3 Nonobviousness

Nutshell, chapter 5, pp. 71 - 96.

2.4 Patenting Process

Bagley, pp. 352 - 353 ("Filing for Patent Protection.")

2.5 Patent Infringement

Bagley, pp. 353 - 354.

Nutshell, chapter 8, pp. 128 - 145.

2.6 Remedies

Bagley, pp. 354 - 355.

Nutshell, chapter 9, pp. 146 - 149.

2.7 International Patent Protection

Bagley, pp. 355 - 356.

2.8 Software Patents

  Legal Battles, pp. 140-47.

  Recognition of software patent law by Supreme Court

    Stobbs, § 1.04 [B]

  Patentable subject matter

    Stobbs, § 4.01; § 4.02 [J], [K], [L], [M]; § 4.03 [A], [C](5).

  Patentable subject matter: The common thread.

    Stobbs, § 4.05 [C].

  International aspects.

    Stobbs, Chapter 10.

  Software patent examples

    Stobbs, chapter 11.

  Internet and e-commerce patents.

    Stobbs, chapter 14.

3. Principles of Copyright Law

  3.1 Foundations of copyright protection

    Bagley, p. 356 - 361.

    Nutshell, chapter 19, pp. 285 - 294.

  3.2 Subject matter of copyright

    Nutshell, chapter 20, §§ 20.1 - 20.7, pp. 295 - 321.

  3.3 Copyright formalities

    Bagley, pp. 362 - 363.

  3.4 Exclusive rights

    Nutshell, chapter 21, pp. 323 - 339.

  3.5 Infringement

    Bagley, pp. 363 - 366.

    Nutshell, chapter 22, pp. 340 - 353.

  3.6 Remedies

    Bagley, pp. 363 - 365.

    Nutshell, chapter 26, pp. 407 - 414.

  3.7 Digital Millennium Copyright Act

    Bagley, pp. 361 - 362.

  3.8 Fair use

    Bagley, pp. 358 - 360.

    Nutshell, chapter 23, pp. 354 - 375.

Application: The Napster Case

Overview of case and issues: Bagley, pp. 389 - 391.

Legal Issues

Appellate opinion: A & M Records, Inc. v. Napster, Inc., 2001 U.S. App. LEXIS 1941 (9th Cir. 2001).

Jessica Litman, "New Copyright Paradigms," available at www.law.wayne.edu/litman/papers/paradigm.htm.

Wired Interview with David Boies. Discussion of the issues from Napster's perspective:

Available at www.wired.com/wired/archive/8.10/boies_pr.html.

3.9 Ownership of Programming Languages.

Legal Battles, pp. 93-101.

3.10 Ownership and Control of Data and Databases

Legal Battles, pp. 102-108.

3.11 User Interface Battles

Bagley, pp. 389-91.

Legal Battles, Chapter III, pp. 53-75 ["The Big Deal with Look and Feel," and "Keyboard Commands and Menu Arrangements."]

3.12 Reverse Engineering

Bagley, p. 366 ("Registered Mask Work.")

Legal Battles, pp. 111-118 ["Subversive Techniques: Reverse Engineering."]

Stobbs, § 2.06 [D] (Tools of reverse engineering.)

Behrens & Levary, Practical Legal Aspects of Software Reverse Engineering, in Intellectual Property in the Age of Universal Access (ACM Publications, 2000.)

4. Principles of Trademark Law

4.1 Foundations

Bagley, pp. 366 - 368 ("Statutory Definition," "Other Marks.")

Nutshell, chapter 11, pp. 154 - 163.

4.2 Distinctiveness

Bagley, pp. 368 - 370.

Nutshell, chapter 12, pp. 164 - 187.

4.3 Creating rights in a trademark

Bagley, pp. 371 - 372

Nutshell, chapter 13, pp. 188 - 200.

4.4 Loss of trademark rights

Bagley, pp. 372 -373.

Nutshell, chapter 14, pp. 201 - 223.

4.5 Subject matter

Nutshell, chapter 16, § 16.1 ("Overview"); § 16.5 ("Primary Purpose"); § 16.6 ("The Functional Bar"); § 16.7 ("Color").

4.6 Infringement

Nutshell, chapter 17, pp. 260 - 279.

Legal Battles, pp. 126-31.

Remedies: Nutshell, Chapter 18.

4.7 Internet Domain Names

Bagley, pp. 403-404.

Legal Battles, pp. 132-39.

"Trademark Issues in Cyberspace: The Brave New Frontier," available at www.fenwick.com/pub/cyber.html.

Domain Names, chapters 1, 2, 3, 6, 7.

4.8 Trade Secrets

Bagley, pp. 379 - 385.

4.9 Technology Licensing

Bagley, pp. 385 - 387.

Legal Battles, pp. 151-55 ["Computer Chip Wars."]

II. e-COMMERCE: CONTRACTS AND SALES IN CYBERSPACE

Bagley, Chapter 8.

e-Commerce: Chapter 7 ("e-Contracting"), Chapter 9, Section 3 ("Forming contracts on-line.")

III. PRODUCT LIABILITY

1. Theories of Recovery

1.1 Breach of warranty (Bagley, chapter 10, pp. 318, 19)

1.2 Negligence

Bagley, pp. 319, 320.

Handout: Principles of negligence.

Grady, Untaken Precautions.

1.3 Circumstantial Evidence of Negligence

1.3.1 Introduction to Res Ipsa Loquitur

Keeton and Prosser on the Law of Torts, Ch. 6, §39, pp. 242-257;

J.W. Glannon, The Law of Torts, Chapter 6, pp. 99-118.

1.3.2 Illustrative Cases

Byrne v. Boadle, 159 Eng. Rep. 299 (Ex. 1863).

Escola v. Coca-Cola Bottling Co. of Fresno, 150 P.2d 436 (Cal. 1944).

* 1.3.3 Probabilistic Analysis of Res Ipsa Loquitur:

D. Kaye, June 1979. Probability Theory Meets Res Ipsa Loquitur, 77 Michigan Law Review, 1456-1484.

* 1.3.4 Fuzzy Logic Approach to Res Ipsa Loquitur:

J.F. Thorne, III, 1980. Mathematics, Fuzzy Negligence, and the Logic of Res Ipsa Loquitur, 75 Northwestern Law Review 1, 147-174.

No prior knowledge of fuzzy logic is required. An introductory lecture will be given, drawing heavily on material in the first four chapters in: H.T. Nguyen and E.A. Walker, A First Course in Fuzzy Logic (CRC Press, 1997).

1.3.5 Application: Malevolent Software.

Introduction to computer viruses and virus detection technology.

Principles of negligence in a virus context.

Application of res ipsa loquitur in virus context.

1.4 Strict Liability

Bagley, pp. 320 - 321.

1.5 Product Defectiveness

Bagley, pp. 321-326.

Handout from "Technological Risk and Issue Preclusion," product defect and analysis of untaken precaution.

2. Application.

R.A. Epstein, *Is Pinto a Criminal,?* Regulation, March/April 1980, 15-21.

IV. ANTITRUST

1. Introduction.

Bagley, Chapter 18.

Shenefield and Stelzer, The Antitrust Laws A Primer: Chapters 1 (Introduction), 2 (The Origins and Objectives of Antitrust).

2. Concept of market power.

Shenefield and Stelzer, Chapter 5 (The Analytical Framework: Markets and Market Power), Appendix B (The Herfindahl-Hirschman Index).

Measuring market power (Herbert Hovenkamp, Economics and Federal Antitrust Law (West Publ. Co., 1985), Chapter 3).

3. Mergers and acquisitions

Shenefield and Stelzer, Chapter 8 (Mergers and Acquisitions).

Hovenkamp, Chapter 11

4. Tying arrangements

Hovenkamp, Chapter 8.

Shenefield and Stelzer, Chapter 9.

Illustrative case: *United States v. Microsoft Corporation*

Background of Microsoft case

Bagley, pp. 699-702.

N. Economides, Preliminary Analysis of U.S. v. Microsoft.

Available at: http://raven.stern.nyu.edu/networks/ms/top.html.

N. Economides, Competition and Vertical Integration in the Computer industry. Available at: http://raven.stern.nyu.edu/networks/ms/top.html. [Click on "Competition in the Computer Industry."]

Paul Krugman, Commentary on US v. MS, available at: http://web.mit.edu/krugman/www/soft.html.

N. Economides, Remedies in the Case of US v. MS

Available at http://raven.stern.nyu.edu/networks/ms/remedies.htm.

Liebowitz and Margolis, Winners, Losers & Microsoft. Chapters I, II and Appendix.

Rosemary S. Thompson, Old Laws v. New Technology: Antediluvian Antitrust Tying Prohibitions and Operating System Software, II Software Law Journal (Spring 1988), 221-241.

Burgunder, Law for Technology Management: Section on Microsoft case

V. PRINCIPLES OF LAW AND FINANCE

1. CORPORATE LAW

Bagley, Chapter 23, "Directors, Officers, and Controlling Shareholders."

2. Public and Private Offerings of Securities

Bagley, Chapter 24.

3. Securities Fraud

Bagley, Chapter 25.

4. Damages

T.E. Patton and T.R. Saunders, Securities Fraud, § 11.1 (Fraud on the Market), Chapter 12 (Damages).

Cornell & Morgan, Using Finance Theory to Measure Damages in Fraud on the Market Cases, 37 UCLA Law Review 883 (1990).

Lev & de Villiers, Stock Price Crashes and 10b-5 Damages: A Legal, Economic and Policy Analysis, 47 Stanford Law Review, 7 (Nov. 1994).

Easterbrook & Fischel, Optimal Damages in Securities Cases, 52 University of Chicago Law Review, 611 (1985).

E.S. Adams and D.E. Runkle, Solving a Profound Flaw in Fraud-on-the-Market Theory: Utilizing a Derivative of Arbitrage Pricing Theory to Measure Rule 10b-5 Damages. 145 University of Pennsylvania Law Review 1097 (May 1997).

Note: From Random Walks to Chaotic Crashes, 62 George Washington Law Review 546 (1994).

5. Insider Trading

Bagley, Chapter 25, pp. 885 - 892.

T.E. Patton and T.R. Saunders, *Securities Fraud*, § 11.2.

Jonathan R. Macey, Insider Trading, Chapter 6 (The legal landscape).

• The following two books chronicle the insider trading and other scandals on Wall Street during the late eighties: James B. Stewart, *Den of Thieves* (Simon & Schuster, 1991) and Daniel R. Fischel, *Payback* (HarperBusiness, 1995). *Den ofThieves* is a journalistic account, with a pro-prosecution bent. Professor Fischel, a University of Chicago Law and Economics scholar, provides a more academically oriented analysis.

6. Investment Suitability Doctrine

T.E. Patton and T.R. Saunders, *Securities Fraud*, § 11.303: Broker-Dealer Issues: Violation of Stock Exchange and Securities Association Rules.

Lecture Notes: Suitability Doctrine and Modern Portfolio Theory.

VI. FINANCE AND e-COMMERCE

1. Business Forms and e-Commerce; Limited Liability; Private Franchises.

e-Commerce, Chapter 13, Sections 1 - 6.

2. Raising Financial Capital

e-Commerce, Chapter 13, Section 7.

3. On-Line Secutities Offerings and Regulation.

e-Commerce, Chapter 14.

4. Cyberbanking and e-Money

Electronic fund transfers

Smart cards and digital cash

Electronic signatures

On-line banking

e-Commerce, Chapter 17.