

---

## CONTENTS

Figures and Tables	xv
Acknowledgments	xvii
Introduction	xix
I. The Inception of an Idea	xix
II. Structure of the Study	xxi
III. Methodology and Terminology	xxii
A. Methodology	xxii
B. Terminology	xxiii
IV. The Thesis	xxiv

### PART 1. INFORMATION, PROPERTY, ACCESS 1

#### Chapter 1. Information 3

I. Introductory Remarks	3
II. Theoretical Approaches to Conceptual Analysis of Information	5
A. General Classifications	5
B. The Distinction Between Information and Knowledge	7
III. Information as a Process	9
A. Introduction to Information As-a-Process	9
B. Micro and Macro Perspectives	10
IV. The Model	11
A. The Linear Representation	11
B. Originator	13
C. Recipient	14
D. Media and the Role of the Channel	16
1. <i>Logical Media</i>	16
2. <i>Logistic Media</i>	16
3. Multifunctional Media	17
E. Medial Message	17
1. Levels of Analysis	17
2. Formal and Material Criteria	18
3. Aspects of Comprehensibility	20

V.	Application of the Model to Copyright Law	27
A.	Acquisition of Copyrights	28
1.	Work as Message	28
2.	Application to Authorship and Copyrightability	36
B.	Infringement as Communication	45
1.	The Argument	45
2.	Economic Rights	46
3.	Moral Rights	47
C.	Copyright Policy, Regulation, and Stakeholders	51
1.	Copyright Policy and Regulation	51
2.	Copyright Stakeholders	53
VI.	Conclusion	58
Chapter 2. Property and Property Rights		59
I.	Introduction	59
II.	The Hohfeldian Model of Jural Relations	60
A.	The Model as an Analytical Apparatus	60
B.	The Scheme	62
1.	The Right/Duty and Privilege/No-Right Rubrics	62
2.	The Power/Liability Rubric	64
III.	Private Property	66
A.	Introduction	66
B.	Conceptual Dimensions of Property	68
1.	Property, Its Res, and Thing-Ownership	68
2.	The Right to Exclude	71
3.	The In Rem Principle	72
4.	The <i>Numerus Clausus</i> Principle	73
5.	Property Rule	75
C.	The Concept of Property and the Information Cost Theory	77
1.	Property's Conceptual Erosion	77
2.	The Information Cost Theory	78
IV.	Intellectual Property	84
A.	Proprietary Entitlements in Information	84
1.	Information as "Public Good"	85
2.	Information and Possession	90
B.	Theoretical Approaches to Intellectual Property	92
1.	The Lockean Argument	94
2.	The Hegelian Personality Theory	106
3.	Utilitarian Theories	115
V.	Conclusion	123

Chapter 3. Access 125	
I. Introduction 125	
II. Access to Information Revisited 128	
A. Human Access to Information 128	
B. Technological Access to Information 129	
1. General Observations 129	
2. Real-Life Scenarios: The <i>Chamberlain</i> and <i>Lexmark</i> Decisions 131	
C. Access-Conducts and Communication-Conducts 139	
1. Access-Conducts 139	
2. Communication-Conducts 142	
III. The Access-Right and Rights-of-Access 144	
A. The Access-Right 144	
1. The Access-Right: Toward a Definition 144	
2. The Access-Right Defined 146	
3. The Access-Right in Positive Copyright Law 148	
B. The Right to Access Information 153	
1. The Right-of-Access Defined 153	
2. Legal and Normative Sources of Rights-of-Access 154	
IV. Technological Protections Measures 192	
A. Concept and Function 192	
1. TPMs and DRMS 193	
2. Protection of Content versus Protection of Rights in Content 194	
B. TPMs Classifications 195	
C. Features of Digital Rights Management Systems 196	
V. Conclusion 198	

**PART 2. DIGITAL REPRODUCTION, DIGITAL COMMUNICATION, AND ANTICIRCUMVENTION LAW 201**

Chapter 4. The Digital Reproduction Right 203	
I. Introduction 203	
II. Some Technical Aspects 208	
A. RAM Reproduction 208	
B. Streaming Media 209	
III. International Copyright Law and Digital Reproduction 210	
A. The Berne Convention and the WIPO Treaties 210	

1. Berne Convention	210
2. The WIPO Internet Treaties	212
B. Scope and Impact of the International Standards	216
1. The Berne Standard	217
2. The Impact of the Agreed Statements to Article 1(4) WCT	222
IV. Digital Reproduction in U.S. Law	224
A. The Copyright Act	225
B. Other Sources	227
1. CONTU Final Report	227
2. The U.S. Green and White Papers	229
3. Digital Reproduction in the Courts	232
V. Digital Reproduction in Europe	238
A. Early Developments	238
1. The 1998 E.C. Green Paper	238
2. The 1991 Software Directive	240
3. The 1995 E.C. Green Paper and Its 1996 Follow-Up	241
B. Digital Reproduction in the 2001 EUCD	242
1. Article 2 EUCD	242
2. Article 5(1) EUCD	243
VI. The Digital Reproduction Right as Access-Right	245
A. Access and Reproduction—A Convergence	245
B. Toward a Normative Right-of-Access Criterion	246
C. The Death of the Reproduction Right	247
Chapter 5. The Digital Communication Right	249
I. Introduction	249
II. Communication Rights in the Berne Convention	250
A. Public Performance Rights	251
B. Rights of Communication to the Public	252
C. Distribution Rights	254
D. The Need for Reform	255
III. Early Deliberations in the United States and Europe	256
A. The U.S. Green and White Papers	256
1. The U.S. 1994 Green Paper	256
2. The U.S. 1995 White Paper	258
B. The European Green Papers	260
1. The 1988 E.C. Green Paper	260
2. The 1995 E.C. Green Paper	261

IV. The WCT and its “Umbrella Solution”	264
A. Drafting History	264
1. Draft Article 8 WCT	264
2. Adoption of Article 6 WCT (Distribution)	266
3. Draft Article 10 WCT	269
4. Adoption of Article 8 WCT	271
B. The WCT Communication-Making-Available Right	272
1. Scope of Article 8 WCT	272
2. External and Internal Limitations	273
C. Impact of Article 8 WCT	276
V. Communication to the Public in the EUCD	277
A. Substantive Provisions	277
B. Permissible Exceptions	279
C. Several Interpretation Issues	279
D. Communication Rights in Domestic Laws	281
1. German Law	281
2. U.S. Law	282
VI. The Communication Right as Access-Right	284
A. Old/New Communication Rights and Their Access-Right Alter Ego	284
B. Coherence and Balance	284
Chapter 6. Anticircumvention Laws	287
I. Introduction	287
II. External Anticircumvention Laws	288
III. The Inception of Copyright Anticircumvention Laws	290
A. Early Developments in the United States	291
1. The Audio Home Recording Act	291
2. The 1994 U.S. Green Paper	292
3. The 1995 U.S. White Paper	294
B. Early Developments in Europe	295
1. The 1988 E.C. Green Paper and Its Follow-Up	295
2. The 1991 Software Directive	297
3. The 1995 E.C. Green Paper and Its Follow-Up	298
IV. Anticircumvention in the 1996 WIPO Treaties	299
A. Drafting History of Article 11 WCT	299
1. The Emergence of International Anticircumvention Policy	299
2. Draft Article 13 WCT	300
B. The Scope of Article 11 WCT	302
1. “effective technological measures”	303

2. “in connection with the exercise of their rights under this Treaty or the Berne Convention”	305
3. “and that restricts acts, in respect of their works, which are not authorized by the authors concerned”	308
4. “or permitted by law”	310
5. “circumvention”	310
6. “adequate legal protection and effective legal remedies”	311
C. Related WCT Provisions	317
1. Application of Article 10 WCT	317
2. Interface with the Berne Convention: Article 1 WCT	320
3. Right Management Information: Article 12 WCT	337
<b>V. Anticircumvention Law in the United States</b>	<b>348</b>
A. Introduction	348
B. Substantive Prohibitions of Section 1201	349
C. Statutory Anticircumvention Exceptions	351
D. Rulemaking Process	352
E. Other Provisions	353
F. DMCA Anticircumvention Critique	353
1. Structural Issues: Complexity, Inconsistency, Transparency	354
2. A Problematic Distinction: Access-Control versus Copy-Control TPMs	355
3. Overbroad Prohibitions and Narrow Exceptions	356
4. Bending Copyright Subject Matter and Duration Rules	357
5. Chilling and Cross Effects	358
6. Free Speech and Privacy Concerns	359
7. Conflict with Social Norms and Practices	360
G. Section 1201 in Court	361
1. Overview	361
2. The Early (Conservative) Judicial Pattern	362
3. Second-Generation Case Law	365
<b>VI. Article 6 of the E.U. Information Society Directive</b>	<b>367</b>
A. Overview	367
B. Article 6 EUCD	369
1. The Core Anticircumvention Prohibition: Article 6(1)	369

2. The Trafficking Prohibition: Article 6(2)	369
3. Definitions: Article 6(3)	370
4. Anticircumvention Exceptions: Article 6(4)	370
C. Scope and Interpretation	372
1. The EUCD Anticircumvention Framework	372
2. The Issue of “Legal Access”	374
3. “Effective,” “Technological Measures,” and Nexus to Infringement	376
4. Converting Copyright Exceptions into Contractual Duties	377
D. EUCD Anticircumvention Critique	379
VII. Implementation in Germany	380
A. Overview	380
B. The Substantive Anticircumvention Provisions	381
1. Section 95a UrhG.	381
2. Section 95b UrhG.	382
3. Section 95d UrhG.	383
C. Scope and Interpretation	384
1. The Anticircumvention and Trafficking Prohibitions	384
2. Effective TPMs	384
3. The Exceptions Enforcement Mechanism of § 95b UrhG.	385
D. Anticircumvention Provisions in the Courts	389
1. Scope of the Anti-Trafficking Provision	389
2. Effective TPM and the “Analog Hole”	391
3. Constitutionality of the Anticircumvention Law	392
VIII. Anticircumvention Law as Access-Right	393
A. Anticircumvention and the First Access-Right Prong	393
B. The Teleological School and <i>Chamberlain</i>	394
1. The Teleological School: A Doctrinal Earthquake or False Alarm?	394
2. <i>Chamberlain’s</i> “Reasonable Relationship” Theory	396
C. Anticircumvention Laws as Access-Right	397

**PART 3. THE PRESENT AND FUTURE OF THE ACCESS-RIGHT 399**

## Chapter 7. The Present 401

I. Introduction	401
II. The Arguments	402

A. The Case for the Access-Right 402	
1. Copyright's Historical Function 403	
2. The Threat Argument 403	
3. The Economic Efficiency Argument and Discriminatory Pricing 404	
B. The Case Against the Access-Right 409	
1. Empirical Objections 409	
2. The Issue of "Overprotection"—A Normative Objection 410	
III. Approaches Addressing Overprotection 415	
A. Neoconservative Approaches 416	
1. A Restrictive Reading of Exclusive Rights 416	
2. A Restrictive Reading of Anticircumvention Rules 417	
3. Revising Copyright Exemptions 419	
4. Private Ordering, Free Licensing, and Nonproprietary Approaches 426	
5. Technology-Based Approaches 437	
B. Copyright Reformism 448	
1. Shifting to Liability Rules 449	
2. (Re-)Introducing Copyright Formalities 464	
3. Upgrading Nonowners' Privileges and Rights of Access 475	
IV. Neoconservatism or Reformism? 476	
Chapter 8. The Future 479	
I. Introduction 479	
A. The Project 479	
B. The Boundaries 480	
C. The Idea 481	
D. The Form 481	
II. Three Preliminary Distinctions 483	
A. Moral Rights Unaffected 483	
B. Subject Matter Unaffected 484	
C. Only Digital Works Affected 486	
1. The Normative Question 487	
2. The Practical Question 490	
III. The Access-Right Regime 491	
A. An Overview 491	
B. The First Prong: Control over Access-Conducts 493	
1. The Property Rule and Its Rationale 493	

2. Assertion: Attaching Access-Control TPMs	494
C. The Second Prong: Control over Communication-Conducts	496
1. The Property Rule and Its Rationale	496
2. Assertion: Registration, Deposit, and Notice Formalities	499
3. Consequences of Noncompliance	504
IV. The Exemptions	507
A. Rights-of-Access	507
1. Rights-of-Access in the Strong Form	508
2. Rights of Access in the Weak Form	511
B. A Fair Use/Fair Access Privilege	512
V. International Aspects	514
A. Formalities	515
1. Standardization	515
2. Berne's Rule against Formalities	517
B. General Conformity to International Minimum Standards	518
VI. Access-Based Regulation as a Balancing Instrument	519
A. Technological Measures as the Service of Many Masters?	519
B. Technological Measures and the Individual Author	522
C. Locking Up the Information Society?	524
VII. Conclusion	525
A. The Access-Right Model: An Alternative Framework	525
B. Selected Advantages	526
1. Reducing Information Costs	526
2. Legitimizing Technological Access-Control Measures: Threats and Opportunities	527
3. Assertion, Formalities, and "Informal Formalities"	529
C. A Closing Note	531
Bibliography	533
Table of References	575
Case Citation Table	583
Table of Cases	591
Index	595