CHAPTER ONE
An Introduction to Intellectual Property
and Technology Due Diligence 1
By Lacy Kolo

I. Introduction 1
II. What Are the Most Common Types
    of Intellectual Property? 3
    A. Patents 3
    B. Copyrights 9
    C. Trademarks 11
    D. Trade Secrets 14
    E. Other Intellectual Property Issues 15

CHAPTER TWO
The Structure of a Deal and Its Impact
on the Scope of Due Diligence 17
By Lacy Kolo

I. Introduction 17
II. Basic Transaction Structures 18
    A. Stock Acquisition 18
    B. Asset Acquisition 20
    C. Divestiture 22
    D. Merger 22
    E. Tender Offer 24
CHAPTER THREE
Intellectual Property Due Diligence: An Overview 31
By Brian Kolo and Lacy Kolo

I. Introduction 31
II. Planning the Transaction: Ask the 5W Questions 32
   A. The WHAT Questions 32
   B. The WHY Question 37
   C. The WHO Questions 38
   D. The WHEN Questions 39
   E. The WHERE Questions 40
III. Reporting and Communication on a Project 41
IV. Conducting the Due Diligence Project: Steps Taken 42
   A. What Is the Intellectual Property and Technology Involved in the Transaction? 44
   B. Who Owns the Intellectual Property? 49
   C. Does Anyone Else Have Any Rights to or in the Intellectual Property? 50
   D. Is the Intellectual Property Valid and Enforceable? 51
   E. Does the Target Have Freedom to Operate in the Marketplace? 51
   F. Are There Infringement Issues, Either by the Target or by a Third Party? 51
   G. Are Agreements Transferable? 52
   H. Can Risk Be Managed by Use of Representations and Warranties? 52
   I. What Must Occur after Closing? 53
V. Examining Intellectual Property from the Perspective of Product Development 53
   A. R&D Stage 54
   B. Pre-Production Stage 55
   C. Manufacturing Stage 56
   D. Commercialization Stage 56
VI. Opinions and Other Privileged Information 56
CHAPTER FOUR
Trademark Due Diligence 61

By Edward Klaris

I. Introduction 61
II. Ownership of Trademark 64
   A. Establishing Ownership 64
   B. Transfer of Ownership 64
III. The Validity of a Trademark 69
   A. Registration Considerations 69
   B. Subject Matter of Trademark Protection 71
   C. Distinctiveness 72
   D. Dilution 75
   E. Unprotectable Marks 77
   F. Term 78
   G. Abandonment 79
   H. Genericization 81
IV. Are There Others Using the Trademark? 84
   A. Freedom-to-Operate Opinion 84
V. Trademark Monitoring 89
   A. Monitoring Methods 89
   B. Licensing 92
VI. Marketing the Product: Does the Trademark Cover What Is Sold or Provided? 93
   A. Registration Considerations 93
   B. Geographic Considerations 95
   C. Failure to Register All Necessary Classes 96
   D. Why the Trademark Does Not Have to Literally Describe the Product or Service 97
   E. Due Diligence in Protecting Your Trademark through Marketing 98
VII. Internet Domain Names 99
   A. Domain Name Registration and Ownership 99
   B. Domain Names and Trademarks 103
VIII. Special Considerations Regarding Trademark Infringement Procedure 106
   A. Trademark Infringement Procedure 106
   B. Trademark Dilution 113
C. Fair Use Defense 115
D. Remedies for Violations of the Lanham Act 120

IX. International Trademark Framework 126
   A. International Trademark Agreements 130
   B. International Trademark Registration and Maintenance 137
   C. International Rules for Assignment of Trademarks 139

CHAPTER FIVE
Copyright Due Diligence 143
By Edward Klaris

I. Introduction 143
II. Due Diligence Materials 145
   A. Transaction Structure 145
   B. Communications with Seller 146
   C. Copyrighted Assets 147
   D. Content Development 149
   E. Licensing 150
   F. IP Monitoring 151
   G. IP-Related Disputes 153

III. Who Owns the Copyright? 154
   A. Initial Ownership 154
   B. Joint Ownership 154
   C. Collective Works 156
   D. Works Made for Hire 157
   E. Transfer of Copyright 158

IV. The Validity of a Copyright 161
   A. Criteria for Coverage in the United States 161
   B. Originality 162
   C. Tangible Medium of Expression 164
   D. Nonprotectable Works 165
   E. Term of Copyright Protection 171
   F. Open Source Issues 172

V. Exclusive Rights 174
   A. Reproduction 176
   B. Derivative Works 177
   C. Distribution 178
   D. Performance 178
Contents

E. Display 179
F. Statutory Limitations on Exclusive Rights 179
VI. Pre-Publication Copyright Protection (Formalities) 185
   A. Introduction and Context 185
   B. Implications of Publication on Copyright Protection 186
   C. What Is a “Publication”? 189
   D. Fair Use of Unpublished Materials 191
   E. Registration and Deposit 193
VII. Are There Others Using the Copyright? 195
   A. Freedom-to-Operate Opinion 195
   B. Internet Dissemination 198
VIII. Copyright Infringement 202
   A. Infringement Procedure 202
   B. Remedies for Copyright Infringement in Civil Actions 209
   C. Anticircumvention 214
IX. Worldwide Copyright Systems 216
   A. Foreign Protection of U.S. Copyright Assets: Territoriality, National Treatment, and the International Copyright Framework 216
   B. Choice of Law 221

CHAPTER SIX
Patent Due Diligence 225
By Lacy Kolo

I. Introduction 225
II. Patents: A Background 226
   A. Structure of a Patent 227
   B. The Process of Obtaining a Patent 228
III. Beginning Due Diligence: Identify Key Members of Seller Knowledgeable about the Patents 232
IV. Request Information from the Target 233
V. Understanding the Scope of Patents Involved in a Transaction 241
   A. Ex Parte Re-Examination 245
   B. Inter Partes Re-Examination, Postgrant Review, and Inter Partes Review 246
C. Covered Business Method Review 246
D. Interference Proceeding and Derivation Proceeding 247
VI. Inventorship and Ownership 247
   A. Inventorship 247
   B. Ownership under Government Funding 253
   C. Ownership of Intellectual Property
      Generated under Other Agreements 254
   D. Security Liens Recorded against a Patent 255
   E. Timely Recording of Assignments 256
VII. Patent Status and Term 257
   A. Calculating Design Patent Term 258
   B. Calculating Plant Patent Term 258
   C. Calculating Utility Patent Term 258
   D. Maintenance/Annuity Fee Payment 265
   E. Premature Patent Termination 266
VIII. Does the Patent Portfolio Cover
      the Company Products and Services? 266
IX. Patentability and Validity 269
    A. Do the Patents and Applications
       Claim Noneligible Subject Matter? 269
    B. Anticipation and Obviousness: A Brief Review 278
    C. Statutory Bars to Patentability 288
    D. Other Patentability Requirements 292
X. Design Patents 293
    A. Ornamentality and Originality 294
    B. Anticipation and Patentability Bars 294
    C. Obviousness 295
XI. Infringement Analysis and Evidence-of-Use Charts 295
    A. Literal Infringement 296
    B. Doctrine of Equivalents 296
    C. Indirect Infringement 297
    D. Exportation and Importation Impact
       on Patent Infringement 299
    E. Regulatory Approval Process Provides
       a Safe Harbor for Infringing Activities 301
    F. Prior User Rights: A Defense
       to Patent Infringement 301
XII. Examining Enforceability of a Patent 303
XIII. Patent Litigation Due Diligence 305
   A. The District Court Patent Litigation Process 306
   B. ITC Litigation 312
XIV. Standard Essential Patent Due Diligence 313
Appendix 6.1: Due Diligence Action Items 315
Appendix 6.3: Patent Evaluation Template 325
Appendix 6.4: Template for Due Diligence Analysis and Recommendation 329

CHAPTER SEVEN
Trade Secrets 339
By Lacy Kolo

I. Introduction 339
II. Trade Secrets: A Background 340
III. Identifying Trade Secrets and Persons Who Know Such Secrets 341
IV. Maintaining Trade Secrets 342
   A. Use of Techniques to Put Employees and Other Persons on Notice of Trade Secret Status of Matter in Which They Are Working or Have Access To 343
   B. Post Warning or Cautionary Signs or Use Document Legends Both Within and Outside of the Company 344
   C. Physically Restricting Access to the Facilities or Equipment Containing the Trade Secret 345
   D. Separating Information and Materials 345
   E. Disguising Ingredient Names 345
   F. Physical Restrictions 346
   G. Use Passwords 346
V. Failure to Maintain Trade Secrets 346
VI. Ownership of Trade Secret 347
   A. Establishing Ownership 347
   B. Transfer of Ownership 349
VII. Trade Secret Validity 349
VIII. Other's Use of the Trade Secret 349
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>IX.</td>
<td>Trade Secret Litigation</td>
<td>350-353</td>
</tr>
<tr>
<td>A.</td>
<td>Protective Order</td>
<td>351</td>
</tr>
<tr>
<td>B.</td>
<td>Legal Theories for Relief</td>
<td>352</td>
</tr>
<tr>
<td>C.</td>
<td>International Trade Commission</td>
<td>353</td>
</tr>
</tbody>
</table>

**CHAPTER EIGHT**

*Technology, Data, and Online Services Due Diligence*

By Edward Klaris

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Introduction</td>
</tr>
<tr>
<td>II.</td>
<td>Technology Assets and Infrastructure</td>
</tr>
<tr>
<td>III.</td>
<td>Cloud Computing, Managed Services, and IT Outsourcing</td>
</tr>
<tr>
<td>A.</td>
<td>Identifying Relevant Agreements</td>
</tr>
<tr>
<td>B.</td>
<td>Security</td>
</tr>
<tr>
<td>IV.</td>
<td>Data, Aggregated Data, and Analytics Tools</td>
</tr>
<tr>
<td>A.</td>
<td>Data Sources</td>
</tr>
<tr>
<td>B.</td>
<td>Aggregated Data</td>
</tr>
<tr>
<td>V.</td>
<td>Online Privacy Considerations</td>
</tr>
<tr>
<td>A.</td>
<td>Data Collection Use and Practices</td>
</tr>
<tr>
<td>B.</td>
<td>Website Privacy Policies</td>
</tr>
<tr>
<td>C.</td>
<td>Terms of Use</td>
</tr>
</tbody>
</table>

**CHAPTER NINE**

*Cybersecurity and Data Privacy Due Diligence*

By Gretchen Ramos and Grace E. King

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Data Privacy and Cybersecurity Considerations</td>
</tr>
<tr>
<td>II.</td>
<td>Assess the Target’s Data Privacy and Cybersecurity Programs</td>
</tr>
<tr>
<td>III.</td>
<td>The Due Diligence Process</td>
</tr>
<tr>
<td>A.</td>
<td>Phase 1: Conduct Initial Assessment</td>
</tr>
<tr>
<td>B.</td>
<td>Phase 2: Form a Due Diligence Team</td>
</tr>
<tr>
<td>C.</td>
<td>Phase 3: Conduct Full Due Diligence Assessment</td>
</tr>
<tr>
<td>IV.</td>
<td>Step 1: Identify Target’s Data and IT Assets</td>
</tr>
<tr>
<td>A.</td>
<td>Create a Data Inventory or Data Map</td>
</tr>
<tr>
<td>V.</td>
<td>Step 2: Determine Applicable Legal Obligations</td>
</tr>
</tbody>
</table>
VI. Step 3: Analyze the Target’s Management of Data and IT Assets 402
VII. Step 4: Assemble and Present the Due Diligence Findings 410
VIII. Step 5: Negotiate Deal Terms and Consider Mitigation Strategies 411
IX. Conclusion 411

CHAPTER TEN
Due Diligence of Agreements 413
By Todd Volyn

I. Introduction 413
II. Obtain an Understanding of the Proposed Transaction 414
III. Use a Diligence Checklist and Questionnaires 417
IV. Gather Agreements and Related Materials from Open Sources; Provide the Target with a Diligence Request 418
V. Obtain Agreements and Related Materials from the Target; Enter the Data Room 419
   A. Survey Agreements and Related Materials 421
   B. Prioritize and Begin Analysis, Starting by Agreement Type or Provision Type 424
   C. Analysis by Agreement Type: Straight License 432
VI. Additional Agreement Types and Additional Provisions 451
   A. Development Agreements and Research Collaborations 451
   B. Settlement Agreements 454
   C. Service Agreements and Consulting Agreements 455
VII. Commercial Agreements 457
   A. What Are the Noncompete and Restrictive Covenant Terms? 457
   B. Work Product 458
VIII. Conclusion 458
Appendix 10.1: Due Diligence Request Questions for Intellectual Property Agreements 461


Appendix 10.2: Data Room Invitation 463
Appendix 10.3: Agreement Review Template 465
Appendix 10.4: Agreement Review Checklist 467

CHAPTER ELEVEN
Intellectual Property Due Diligence on Government Contractors 469
By Mary Beth Bosco

I. Introduction 469
II. The Basic Principles of Government Contract Intellectual Property Ownership and License Rights Allocation 470
III. The Government Contract Regulations Governing Patents, Technical Data, and Software 471
   A. Government Patent Rules 471
   B. Government Treatment of Contractor Technical Data 476
IV. Additional Issues for Consideration When Evaluating a Government Contractor 484
   A. The Small Business Innovation Research Program 484
   B. Subcontractor Considerations 486
   C. Rights in Special Works 487
   D. Reach-Back Clauses 487
V. Emerging Trends 488
VI. Conclusion 489
Appendix 11.1: Sample Due Diligence Questions 491
Appendix 11.2: Sample Representations 495

CHAPTER TWELVE
The Life Sciences Sector 497
By Sarah Stec and Lacy Kolo

I. Introduction 497
II. Ownership of Life Science Intellectual Property 498
III. Patent Validity 501
IV. Do the Intellectual Property Registrations Cover the Technology? 503
V. How Patent Term Is Affected by Federal Regulatory Review 505
VI. Impact of the FDA Approval Process on Intellectual Property 510
VII. Exclusivity on the Marketplace, Separate from Patents 511
   A. Orphan Drug Exclusivity 512
   B. New Chemical Exclusivity 512
   C. Generating Antibiotic Incentives Now Exclusivity 512
   D. New Clinical Investigation Exclusivity 513
   E. Pediatric Exclusivity 513
VIII. Strategies to Protect and Extend the Life of a Product Line 514
IX. Generic Drug Manufacturers 517
X. Third-Party Actions in Anticipation of a Patent Expiring 518
XI. Impact of FDA Approval Process on Due Diligence Review for a Medical Device Company 520
XII. Device Classification and Market Access Routes 521
XIII. Changes to Medical Devices 523
XIV. Establishment Registration and Device Listing 523
 XV. Premarket Considerations 524
 XVI. Postmarket Considerations 525
 XVII. Trademark Considerations 526
 XVIII. Software in the Life Science Sector 529

CHAPTER THIRTEEN
Agricultural and Plant Breeding Industry 533
By Katherine Koenig

I. Introduction 533
II. Background on Plant Biology 534
   A. What Is a Plant? 534
   B. Plant Reproduction 535
   C. Breeding Programs and the Development of New Varieties 537
III. Protecting Intellectual Property in Plants 537
   A. Plant Patents 538
   B. Plant Variability under the Act 539
   C. Public Disclosure 540
D. Conditions of Discovery 540
E. Asexual Reproduction 541
F. Red Flags in the Written Description 541
G. Inventors' Names 542
H. Claiming Priority 543
I. Prior Art or Public Disclosure Concerns 544
J. Maintenance Fees 546
K. Biological Deposit Submission 547

IV. Infringement 547
V. Summary 548

VI. Utility Patents for Plants 548
A. Potential § 101 Issues 550
B. Claiming Priority 552
C. Inventorship 552
D. Inventor Assignments 552
E. Biological Deposit Submission 552
F. Potential Infringement 553
G. Summary 553

VII. Plant Variety Protection Certificates 554
A. Monitoring of Licensees: Crop Exemption 556
B. Licensing for Bona Fide Research 556
C. Public Disclosure 557
D. Distinctiveness Requirement 557
E. Uniformity and Stability Requirement 558
F. Seed Deposit 558
G. Seed Labeling and Certification 559
H. Naming of Applicants 560
I. Rights Assignments 560
J. Priority Application 561
K. Potential Infringement 561
L. Summary 562

VIII. Foreign Plant Breeders’ Rights 562
IX. Trademarks 564
A. Commercial and Varietal Names 564
B. Trademark License Agreements 565

X. Other Forms of Restriction on the Use of Protected Varieties 565
A. Material Transfer Agreements 566
B. Bag Tags 566
CHAPTER FOURTEEN
Intellectual Property Acquired Through Bankruptcy 579
By Mark A. Salzberg and Grace E. King

I. Introduction 579
II. Background on Bankruptcy 580
   A. Intellectual Property under the Bankruptcy Code 580
   B. Treatment of Intellectual Property Licenses under the Bankruptcy Code 581
   C. License Agreements as Executory Contracts 584
   D. Debtor Rejection of the Intellectual Property License 586
   E. Trademark Licensee Protection 588
   F. Debtor/Licensee Assignment of Licensed Rights 589
   G. Recognition of Foreign Insolvency Proceedings 595
   H. Strategies 596

Appendix 14.1: Checklist for IP License Subject to a Chapter 11 Bankruptcy Filing 601

CHAPTER FIFTEEN
University-Originated Intellectual Property 605
By Timothy Tracy

I. Introduction 605
II. Title/Ownership 607
   A. Is the Inventor a University Employee? 611
   B. Is the Inventor a Student, as Opposed to an Employee? 612
   C. What Is the University Policy on Ownership of Intellectual Property? 612
III. Creation of a Security Interest 668
IV. Perfection of a Security Interest 669
   A. General Perfection under the UCC 669
   B. Trademark Interests: Perfection 670
   C. Patent Interests: Perfection 671
   D. Copyright Interests: Perfection 672
   E. Domain Name Interests: Perfection 673
   F. Software Interests: Perfection 673
V. International Concerns 673
VI. Security Interests in Mergers and Acquisitions 674
   A. Acquired Security Interests 674
   B. Terminated Security Interests 675
VII. The Bottom Line: Security Liens 677
 Appendix 17.1: Security Interest Perfection Overview 679

CHAPTER EIGHTEEN
Closing: What Happens Next? 681
By Randi Karpinia

I. Introduction 681
II. Acquiring Intellectual Property Portfolios 682
III. Patent, Trademark, and Copyright Portfolios:
   Understanding the Acquired Value 682
      A. Ownership Verification 682
      B. Patent Ownership 684
      C. Trademark Ownership 684
      D. Copyright Ownership 685
      F. Licensed or Jointly Owned Patent
         and Trademark Assets 687
      G. Ancillary Intellectual Property Rights 688
IV. Understanding the Acquired Technology 688
      A. The Integrated Portfolio 688
      B. Valuation of the Integrated Portfolio 689
      C. Acting on Unidentified Inventions 689
      D. Acting on Unidentified Trademarks 691
      E. Competitors 691
V. Patent Portfolio: Prosecution 692
VI. Managing Acquired Outside Counsel 694
VII. Paperwork
   A. Case File Numbers 697
   B. Paper Files 697
   C. Electronic Documentation 697
   D. Defective Documentation 698
   E. Correspondence Management 699
   F. Powers of Attorney 699

VIII. People Power: The Newly Acquired Inventing Community 700
   A. The Intellectual Property Attorney as a Teacher and Mentor 700
   B. Developing the Attorney-Client Relationship 702
   C. Employee Retention 703
   D. Reconciling Inventor Awards 705

IX. Epilogue 707

Appendix 18.1: Notification to Firm of Pending Asset Sale 709
Appendix 18.2: Notification to Current Firm of Pending Transfer of Cases 711
Appendix 18.3: Notification to Transfer Cases to [[Preferred Firm or In-House]] 713
Appendix 18.4: Notification to Transfer Cases to [[Preferred Firm or In-House]] 715
Appendix 18.5: Notification to Preferred Firm re Potential Transfer of Acquired Cases 717
Appendix 18.6: IP Postclosing Case File Checklist Template 719
Appendix 18.7: IP Postintegration Checklist Template 721

Index 725