

## CONTENTS

*List of contributors* x

*Preface* xiii

### **PART I      International Provision of Public Goods under a Globalized Intellectual Property Regime    1**

#### **SECTION 1   THE CONCEPT OF PUBLIC GOODS IN THE EXPANDING KNOWLEDGE ECONOMY   1**

##### **1   The Globalization of Private Knowledge Goods and the Privatization of Global Public Goods   3**

*Keith E. Maskus and Jerome H. Reichman*

##### **2   The Regulation of Public Goods   46**

*Peter Drahos*

Comment: Norms, Institutions, and Cooperation   65

*Robert O. Keohane*

##### **3   Distributive Values and Institutional Design in the Provision of Global Public Goods   69**

*Peter M. Gerhart*

#### **SECTION 2   PRESERVING THE CULTURAL AND SCIENTIFIC COMMONS   79**

##### **4   *Koyaanisqatsi* in Cyberspace: The Economics of an “Out- of-Balance” Regime of Private Property Rights in Data and Information   81**

*Paul A. David*

##### **5   Linkages Between the Market Economy and the Scientific Commons   121**

*Richard R. Nelson*

Comment I: Public Goods and Public Science   139

*Eric Maskin*



6	Sustainable Access to Copyrighted Digital Information Works in Developing Countries	142
	<i>Ruth L. Okediji</i>	
7	Agricultural Research and Intellectual Property Rights	188
	<i>Robert E. Evenson</i>	
	Comment II: Using Intellectual Property Rights to Preserve the Global Genetic Commons: The International Treaty on Plant Genetic Resources for Food and Agriculture	217
	<i>Laurence R. Helfer</i>	
<b>PART II</b>	<b>Innovation and Technology Transfer in a Protectionist Environment</b>	<b>225</b>
<b>SECTION 1</b>	<b>TECHNOLOGY TRANSFER UNDER INTERNATIONAL INTELLECTUAL PROPERTY STANDARDS</b>	<b>225</b>
8	Can the TRIPS Agreement Foster Technology Transfer to Developing Countries?	227
	<i>Carlos M. Correa</i>	
	Comment I: Technology Transfer on the International Agenda	257
	<i>Pedro Roffe</i>	
9	Patent Rights and International Technology Transfer Through Direct Investment and Licensing	265
	<i>Keith E. Maskus, Kamal Saggi, and Thitima Puttitanun</i>	
	Comment II: TRIPS and Technology Transfer – Evidence from Patent Data	282
	<i>Samuel Kortum</i>	
10	Proprietary Rights and Collective Action: The Case of Biotechnology Research with Low Commercial Value	288
	<i>Arti K. Rai</i>	
<b>SECTION 2</b>	<b>STIMULATING LOCAL INNOVATION</b>	<b>307</b>
11	Do Stronger Patents Induce More Local Innovation?	309
	<i>Lee G. Branstetter</i>	
12	Markets for Technology, Intellectual Property Rights, and Development	321
	<i>Ashish Arora, Andrea Fosfuri, and Alfonso Gambardella</i>	
13	Using Liability Rules to Stimulate Local Innovation in Developing Countries: Application to Traditional Knowledge	337
	<i>Jerome H. Reichman and Tracy Lewis</i>	
14	Stimulating Agricultural Innovation	367
	<i>Michael Blakeney</i>	



<b>PART III</b>	<b>Sectoral Issues: Essential Medicines and Traditional Knowledge</b>	<b>391</b>
<b>SECTION 1</b>	<b>DEVELOPING AND DISTRIBUTING ESSENTIAL MEDICINES</b>	<b>391</b>
15	Managing the Hydra: The Herculean Task of Ensuring Access to Essential Medicines	393
	<i>Frederick M. Abbott</i>	
16	Theory and Implementation of Differential Pricing for Pharmaceuticals	425
	<i>Patricia M. Danzon and Adrian Towse</i>	
17	Increasing R&D Incentives for Neglected Diseases: Lessons from the Orphan Drug Act	457
	<i>Henry Grabowski</i>	
	Comment: Access to Essential Medicines – Promoting Human Rights Over Free Trade and Intellectual Property Claims	481
	<i>Heinz Klug</i>	
<b>SECTION 2</b>	<b>PROTECTING TRADITIONAL KNOWLEDGE</b>	<b>493</b>
18	Legal and Economic Aspects of Traditional Knowledge	495
	<i>Graham Dutfield</i>	
19	Saving the Village: Conserving Jurisprudential Diversity in the International Protection of Traditional Knowledge	521
	<i>Antony Taubman</i>	
20	Legal Perspectives on Traditional Knowledge: The Case for Intellectual Property Protection	565
	<i>Thomas Cottier and Marion Panizzon</i>	
	Comment: Traditional Knowledge, Folklore and the Case for Benign Neglect	595
	<i>David L. Lange</i>	
21	Protecting Cultural Industries to Promote Cultural Diversity: Dilemmas for International Policymaking Posed by the Recognition of Traditional Knowledge	599
	<i>Rosemary J. Coombe</i>	
<b>PART IV</b>	<b>Reform and Regulation Issues</b>	<b>615</b>
<b>SECTION 1</b>	<b>BALANCING PUBLIC AND PRIVATE INTERESTS IN THE GLOBAL INTELLECTUAL PROPERTY SYSTEM</b>	<b>615</b>
22	Issues Posed by a World Patent System	617
	<i>John H. Barton</i>	



- 23 Intellectual Property Arbitrage: How Foreign Rules Can Affect Domestic Protections 635  
*Pamela Samuelson*
- 24 An Agenda for Radical Intellectual Property Reform 653  
*William Kingston*  
Comment: Whose Rules, Whose Needs? Balancing Public and Private Interests 662  
*Geoff Tansey*
- 25 Diffusion and Distribution: The Impacts on Poor Countries of Technological Enforcement within the Biotechnology Sector 669  
*Timothy Swanson and Timo Goeschl*
- 26 Equitable Sharing of Benefits from Biodiversity-Based Innovation: Some Reflections under the Shadow of a Neem Tree 695  
*Gustavo Ghidini*
- SECTION 2 THE ROLE OF COMPETITION LAW 707
- 27 The Critical Role of Competition Law in Preserving Public Goods in Conflict with Intellectual Property Rights 709  
*Josef Drexler*
- 28 Expansionist Intellectual Property Protection and Reductionist Competition Rules: A TRIPS Perspective 726  
*Hanns Ullrich*
- 29 Can Antitrust Policy Protect the Global Commons from the Excesses of IPRs? 758  
*Eleanor M. Fox*  
Comment I: Competition Law as a Means of Containing Intellectual Property Rights 770  
*Carsten Fink*
- 30 “Minimal” Standards for Patent-Related Antitrust Law under TRIPS 774  
*Mark D. Janis*  
Comment II: Competitive Baselines for Intellectual Property Systems 793  
*Shubha Ghosh*
- SECTION 3 DISPUTE SETTLEMENT AT THE WTO AND INTELLECTUAL PROPERTY RIGHTS 815
- 31 WTO Dispute Settlement: Of Sovereign Interests, Private Rights, and Public Goods 817  
*Joost Pauwelyn*



- 32 The Economics of International Trade Agreements and Dispute Settlement with Intellectual Property Rights 831  
*Eric W. Bond*
- 33 Intellectual Property Rights and Dispute Settlement in the World Trade Organization 852  
*Wilfred J. Ethier*
- 34 WTO Dispute Resolution and the Preservation of the Public Domain of Science under International Law 861  
*Graeme Dinwoodie and Rochelle Cooper Dreyfuss*
- 35 Recognizing Public Goods in WTO Dispute Settlement: Who Participates? Who Decides? The Case of TRIPS and Pharmaceutical Patents Protection 884  
*Gregory Shaffer*
- Index* 909