

SUB-PATENT INNOVATION RIGHTS

This ground-breaking work delves into the world of sub-patent intellectual property rights, exploring utility model and similar protection offered by over 100 countries worldwide. Drawing on the expertise of leading scholars from around the globe, this volume provides a comprehensive analysis of sub-patent protection systems, comparing and contrasting statutory frameworks, registration requirements, corporate strategies, and litigation tactics. The book also highlights current policy debates surrounding these systems, including their potential to promote local innovation and economic development, proposals for cross-border harmonization, and their interaction with increasingly integrated litigation systems. This book is an invaluable resource for scholars, attorneys, historians, economists, and anyone dealing with complex international intellectual property matters. This title is also available as Open Access on Cambridge Core.

Jorge L. Contreras, the James T. Jensen Endowed Professor for Transactional Law at the University of Utah S.J. Quinney College of Law, is an internationally recognized expert on intellectual property law and practice. He is the author or editor of twelve prior books and more than 150 scholarly book chapters and articles. Before entering academia, he was a partner at a major international law firm where he practiced transactional intellectual property law in Boston, Washington, DC, and London.

Sub-patent Innovation Rights

UTILITY MODELS, PETTY PATENTS AND INNOVATION
PATENTS AROUND THE WORLD

Edited by
JORGE L. CONTRERAS
University of Utah



CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press & Assessment
 978-1-009-47809-0 — Sub-patent Innovation Rights
 Edited by Jorge L. Contreras
 Frontmatter
[More Information](#)



CAMBRIDGE
UNIVERSITY PRESS

Shaftesbury Road, Cambridge CB2 8EA, United Kingdom
 One Liberty Plaza, 20th Floor, New York, NY 10006, USA
 477 Williamstown Road, Port Melbourne, VIC 3207, Australia
 314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India
 103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment,
 a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of
 education, learning and research at the highest international levels of excellence.

www.cambridge.org
 Information on this title: www.cambridge.org/9781009478120

DOI: 10.1017/9781009478113

© Jorge L. Contreras 2025

This publication is in copyright. Subject to statutory exception and to the provisions
 of relevant collective licensing agreements, with the exception of the Creative Commons version the link
 for which is provided below, no reproduction of any part may take
 place without the written permission of Cambridge University Press & Assessment.

An online version of this work is published at doi.org/10.1017/9781009478113 under a Creative Commons
 Open Access license CC-BY-NC 4.0 which permits re-use, distribution and reproduction in any medium
 for non-commercial purposes providing appropriate credit to the original work is given and any changes
 made are indicated. To view a copy of this license visit <https://creativecommons.org/licenses/by-nc/4.0>

When citing this work, please include a reference to the DOI 10.1017/9781009478113

First published 2025

A catalogue record for this publication is available from the British Library.

Library of Congress Cataloging-in-Publication Data

NAMES: Contreras, Jorge L., editor.

TITLE: Sub-patent innovation rights : utility models, petty patents, and innovation patents around the
 world / edited by Jorge L. Contreras, University of Utah.

DESCRIPTION: Cambridge, United Kingdom ; New York, NY : Cambridge University Press, 2024. |
 Includes bibliographical references and index.

IDENTIFIERS: LCCN 2024023516 (print) | LCCN 2024023517 (ebook) | ISBN 9781009478120 (hardback) |
 ISBN 9781009478090 (paperback) | ISBN 9781009478113 (epub)

SUBJECTS: LCSH: Patent laws and legislation. | Patent licenses. | Technological innovations—Law and
 legislation | Inventions.

CLASSIFICATION: LCC K1505 .S83 2024 (print) | LCC K1505 (ebook) | DDC 346.04/86—dc23/eng/20240527
 LC record available at <https://lcn.loc.gov/2024023516>

LC ebook record available at <https://lcn.loc.gov/2024023517>

ISBN 978-1-009-47812-0 Hardback

ISBN 978-1-009-47809-0 Paperback

Cambridge University Press & Assessment has no responsibility for the persistence
 or accuracy of URLs for external or third-party internet websites referred to in this
 publication and does not guarantee that any content on such websites is, or will
 remain, accurate or appropriate.

Contents

<i>List of Contributors</i>	<i>page</i> xi
<i>Foreword</i>	xv
by Richard Arnold	
<i>Preface</i>	xvii
1 Utility Models and Other Forms of Sub-patent Protection	1
Jorge L. Contreras, Martin Husovec, and Matthew Rimmer	
1.1 Adoption of Utility Model Protection around the World	2
1.2 Utility Models under International Agreements	3
1.3 Characteristics of Utility Model Protection	6
1.4 Assessing Utility Model Systems	11
1.5 Contents of This Volume	17
2 Overview of Worldwide Utility Model Filings, Litigation and Activity	19
Daniel R. Cahoy, Jorge L. Contreras and Lynda J. Oswald	
2.1 Representation of Utility Model Systems across the World	19
2.2 Descriptive Statistics on Utility Models	21
PART I UTILITY MODEL LAWS AND PRACTICES AROUND THE WORLD	
3 The Rise and Fall of the United Kingdom’s Forgotten Utility Model: The Utility Designs Act 1843	31
Lionel Bently and Brad Sherman	
3.1 The Background to the Utility Designs Act	32
3.2 Reception of the Utility Designs Act	35
3.3 Judicial and Administrative Responses	50

3.4	The Demise of the Utility Design Act	70
3.5	Forgetting the Utility Designs Act 1843	77
4	Utility Models in Danish Law	86
	Tine Sommer, Timo Minssen and Jens Schovsbo	
4.1	The Regulation of Utility Models in Denmark: Background	86
4.2	Protectable Subject Matter and Substantive Criteria	88
4.3	Utility Model Statistics	89
4.4	Granting Procedure	92
4.5	Fees, DKPTO	95
4.6	The Administrative Appeal Procedure and Revocation by a Court Decision	95
4.7	Utility Model Infringement, Damages and Injunctions	96
4.8	Branching-Off from a Patent Application or Patent under Opposition	97
5	Utility Models in French Law	99
	Thibault Gisclard	
5.1	Historical Background	99
5.2	Application Procedure	100
5.3	Practical Use of Utility Certificates	102
5.4	Publication of Utility Certificates	103
5.5	Effectiveness of Utility Certificates	103
5.6	Enforcement of Utility Certificates against Infringers	104
5.7	Conversion between Utility Certificates and Full Patents	106
5.8	Practical Use of Utility Certificates	107
6	Utility Models in Germany and Switzerland	109
	Peter Georg Picht and Marian Weber	
6.1	General Overview	109
6.2	Protection and Granting Requirements	110
6.3	Application Process and Associated Costs	112
6.4	Challenging Validity	113
6.5	Enforcing Utility Models	114
6.6	Coexistence of Utility Models and Patents	115
6.7	Utility Models in Switzerland?	116
7	Utility Models in Italy	117
	Alessandro Cogo and Marco Ricolfi	
7.1	Sources of Law and Historical Development	117
7.2	Subject Matter	118
7.3	Requirements for Protection	118

Contents

vii

7.4	Relationship to Patents	119
7.5	Conclusion	128
8	Utility Model Protection in Poland: In Search of a Regulatory Framework Capable of Incentivizing Innovation	129
	Rafał Sikorski	
8.1	Historical Perspective	130
8.2	Relative Success of Utility Model Protection in Polish IP Law	133
8.3	Rationale for Utility Model Protection	136
8.4	Current State of Utility Model Protection in Poland and the Planned Reform	139
8.5	Conclusions	142
9	Key Performance Indicators for Utility Model Systems: An Application to Finland	144
	Jussi T. S. Heikkilä	
9.1	Key Performance Indicators for Utility Model Systems	145
9.2	Empirical Analysis of the Finnish Utility Model System	147
9.3	Conclusions	167
10	Reinventing the Wheel: The Rise and Fall of the Australian Innovation Patent	171
	Matthew Rimmer	
10.1	The Petty Patent System	174
10.2	Innovation Patent	179
10.3	Filing and Registration Data on Innovation Patents	182
10.4	Litigation over Innovation Patents	183
10.5	The Advisory Council on Intellectual Property	189
10.6	The Productivity Commission	191
10.7	IP Australia	194
10.8	Abolition of the Innovation Patent	195
10.9	Breakthrough Patents	198
10.10	Conclusion	199
11	China's Utility Model Patent Legal System: Past, Present, and Future	200
	Yu Yang	
11.1	Foundation and Formation of China's Utility Model Patent System	201
11.2	Main Features of Existing Chinese Utility Model Patent Legal System	207

11.3	Deficiencies and Development Trends of Chinese Utility Model Patent Legal System	210
11.4	Conclusion	215
12	Utility Models in Japan	217
	Masabumi Suzuki	
12.1	Outline of the Current Utility Model System in Japan	217
12.2	Historical Development of Japanese Intellectual Property Law and the Utility Model Act	223
12.3	Status and Use of the Utility Model System	229
12.4	Recent Discussions on the System	231
13	Utility Models in Korea	232
	Sang Jo Jong	
13.1	History of Utility Model Protection in Korea	232
13.2	Statutory Rationale	233
13.3	Subject Matter	233
13.4	Substantive Requirements	234
13.5	Procedure	234
13.6	Registration	236
13.7	Invalidation	237
13.8	Infringement	238
14	Utility Models in Brazil	240
	Luca Schirru and Maikon Oliveira	
14.1	The Brazilian Legal Framework on Utility Models	240
14.2	Patents on Invention and Utility Models	243
14.3	Administrative Procedure before the INPI	246
14.4	Enforcing Utility Models in Brazil	249
15	Utility Models in Kenya	255
	Isaac Rutenberg	
15.1	Contextualizing the Kenyan UMC	255
15.2	Notable Aspects of the Legal Framework for UMCs in Kenya	257
15.3	Trends in the Acquisition and Use of Kenyan UMCs	258
15.4	Trends in the Acquisition of UMCs at ARIPO	260
15.5	Conclusion	261
16	The Debate over Second-Tier Patent Protection in the United States	262
	Jorge L. Contreras and Mark D. Janis	
16.1	Current Forms of Invention Protection in the US	262

Contents

ix

16.2	The Debate over Sub-patent Protection in the US	266
16.3	Reflections on the Future of Utility Models under US Law	270
16.4	Conclusion	277
PART II UTILITY MODELS IN ACTION		
17	The Unitary Patent System and Utility Models	281
	Lisa van Dongen, Timo Minssen and Tine Sommer	
17.1	The EU, the EPC and the UPCA	283
17.2	Protecting UMs in (Some) EU Member States and the Tentative Beginning of the UPC Arrangement	286
17.3	Division of Judicial Competences Post-UPC	290
17.4	The Relationship between Domestic Courts and UPC Divisions	293
17.5	Converting, Double Patenting and Branching Off (BOUM)	298
17.6	Discussion of Findings and Stakeholder Choices	304
17.7	Concluding Remarks and Open Questions	306
18	Treatment of Utility Models as Standards-Essential Patents	308
	Jorge L. Contreras and Magnus Buggenhagen	
18.1	Standards-Essential Patents and Utility Models	308
18.2	Findings: Standards-Essential Utility Models	311
18.3	Discussion	322
18.4	Conclusion	328
19	Navigating Incomplete Harmonization: Businesses and the Utility Model Environment	329
	Daniel R. Cahoy and Lynda J. Oswald	
19.1	Global IP Strategy and the Challenge of Utility Model Disharmony	330
19.2	Evidence of Firm Utility Model Use and Strategy	332
19.3	A New View on Utility Models: The Zone of Appropriability Preference	334
19.4	Business Strategy and Motivations for Utility Model Filings: A Study of U.S. Patent-to-Utility Model Pathways	338
19.5	Insights on Navigating Utility Model Disharmony	339
19.6	Conclusion	343

PART III THE FUTURE OF SUB-PATENT INNOVATION RIGHTS

20	Utility Models and the European Union: A Fresh Look at the Need for Harmonisation	347
	Martin Stierle	
20.1	The Surprising Lack of Harmonisation	347
20.2	Failed Attempts of the EC	349
20.3	Two Reasons for the Harmonisation of UM Law	351
20.4	General Reasons for UM Protection	355
20.5	The Policy Options	359
20.6	A New Conceptional Starting Point	367
20.7	Conclusion	371
21	Heterogeneities in Utility Model Accessibility: Quantitative and Qualitative Insights	373
	Dan Prud'homme	
21.1	Accessibility of Utility Model Regimes	374
21.2	Quantitative Analysis of Impact of Utility Model Regime Accessibility on Utility Model Usage	376
21.3	Qualitative Analysis of Impact of Utility Model Regime Accessibility on Utility Model Quality	379
21.4	Conclusions	386
22	Utility Models and Innovation in Low-Income Economies	387
	Uma Suthersanen	
22.1	The Uneasy Discourse: Patents, Hybrids and Innovation	388
22.2	Mapping a Sui Generis UM System	392
22.3	Valuing “Real Innovation” in Developing Countries: SDGs and the “Diverse Economies” Paradigm	396
	<i>Bibliography</i>	403
	<i>Index</i>	447

Contributors

Lionel Bently (BA Law, University of Cambridge). KC (hon). Professor of Intellectual Property Law (Herchel Smith), University of Cambridge and professorial fellow of Emmanuel College, Cambridge.

Magnus Buggenhagen (MSc, PhD candidate, Technische Universität Berlin). Principal Consultant, LexisNexis Intellectual Property Solutions/LexisNexis IPlytics GmbH.

Daniel R. Cahoy (JD, University of New Hampshire; BA, University of Iowa) Robert G. and Caroline Schwartz Professor and Professor of Business Law, Pennsylvania State University Smeal College of Business.

Alessandro Cogo (PhD, Università di Pavia; PhD, Ludwig-Maximilians-Universität München; JD, Università degli Studi di Torino). Associate Professor, IP & Business Law, University of Turin.

Jorge L. Contreras (JD, Harvard Law School; BSEE and BA, Rice University). James T. Jensen Endowed Professor for Transactional Law and Director of the Program on Intellectual Property and Technology Law, University of Utah S.J. Quinney College of Law. Visiting Professor, University of Minnesota Law School.

Lisa van Dongen (LLM, Tilburg University) Postdoctoral Researcher at the Institute for Information Law (IViR), University of Amsterdam.

Thibault Gisclard (PhD, Sorbonne & Max Planck Institute; MS, University of Nancy). Associate Professor of Intellectual Property Law and Comparative Law, University of Lille.

Jussi T. S. Heikkilä (DSc, University of Jyväskylä). Adjunct Professor, LUT University.

Martin Husovec (PhD, Ludwig Maximilian University & Max Planck Institute; Masters and Bachelor, Pavol Jozef Safarik University). Associate Professor, London School of Economics and Political Science.

Mark D. Janis (JD, Indiana University; BS, Purdue University). Robert A. Lucas Chair and Professor of Law, Director, Center for Intellectual Property Research, Indiana University Maurer School of Law, Bloomington.

Sang Jo Jong (Law degree, Seoul National University; PhD, London School of Economics). Professor of Law, Seoul National University School of Law.

Timo Minssen (Jur. Dr., LLic., LLM, MICL, Dipl. Jur.). Professor of Law and Managing Director and Founder of the Center for Advanced Studies and the Collaborative Research Programme in Biomedical Innovation Law (CeBIL), University of Copenhagen (UCPH). LML Research Affiliate, University of Cambridge.

Maikon Oliveira (BA, MA, Universidade Federal do Paraná; MBA, Pontificia Universidade Católica do Rio Grande do Sul). Partner and Head of the Area of Patents and Innovation Management, Baril Advogados Associados.

Lynda J. Oswald (PhD, University of London; JD, MBA, AB, University of Michigan). Louis & Myrtle Moskowitz Research Professor of Business and Law and Professor of Business Law, University of Michigan Stephen M. Ross School of Business.

Peter Georg Picht (PhD, LLM, Yale). Professor for Business, Competition and Intellectual Property Law, University of Zurich; head of the Center for Intellectual Property and Competition Law (CIPCO), University of Zurich. Research Fellow Max Planck Institute.

Dan Prud'homme (PhD, Macquarie University; LLM and PgC, University of Edinburgh Law School; MPP and BA, University of Maryland College Park). Assistant Professor, Florida International University (FIU) College of Business.

Marco Ricolfi (LLM, Yale Law School; JD, Turin University). Professor of Business Law and Intellectual Property, Turin Law School.

Matthew Rimmer (PhD, University of New South Wales). Professor of Intellectual Property and Innovation Law, Faculty of Business and Law, Queensland University of Technology.

Isaac Rutenberg (PhD, California Institute of Technology; JD, Santa Clara University; BS, Colorado School of Mines). Associate Professor of Information, Communication, and Technology Policy and Innovation, Strathmore University; IP Advisor, CIFOR-ICRAF.

List of Contributors

xiii

Luca Schirru (LLM, American University Washington College of Law; MSc, DSc, PPED/UFRJ). Executive director and researcher at Brazilian Copyright Institute (IBDAutoral). Professor, specialization program on Intellectual Property Law at the Pontifical Catholic University of Rio de Janeiro.

Jens Schovsbo (LLD, PhD, University of Copenhagen). Professor in Intellectual Property Law, Center for Information and Innovation Law (CIIR), University of Copenhagen.

Brad Sherman (BEco, LLB, LLM, PhD). ARC Laureate Fellow and Professor of Law, University of Queensland.

Rafał Sikorski (Law degree, Adam Mickiewicz University; LLM, Central European University, PhD, Adam Mickiewicz University). Professor of Law, Adam Mickiewicz University.

Tine Sommer (LLD, PhD, LLM). Professor of Intellectual Property Law, Department of Law, Aarhus BSS, Aarhus University.

Martin Stierle (Dipl.-Jur., University of Bayreuth; LLM, University of California Berkeley; PhD, LMU Munich). Associate Professor, Faculty of Law, Economics and Finance (FDEF), University of Luxembourg.

Uma Suthersanen (LLB, University of Singapore; LLM, PhD, Queen Mary University of London). Director, Queen Mary Intellectual Property Research Institute and Chair in Global Intellectual Property Law, Queen Mary University of London.

Masabumi Suzuki (LLB, University of Tokyo; LLM, Harvard Law School). Professor of Intellectual Property, Faculty of Law, Waseda University.

Marian Weber (BLaw, MArts, University of Zurich). Research assistant, University of Zurich.

Yu Yang (PhD, Fudan University; European Master in Law and Economics, Erasmus Mundus Scholarship). Associate Professor, School of Global Governance, Shanghai University of International Business and Economics.

Foreword

Utility models, also known as petty patents, innovation patents and by various other names, are a long-established form of intellectual property right. Thus some national regimes date from as long ago as the late nineteenth or early twentieth century. They are also an increasingly widespread form of protection, now to be found in over a hundred countries. They are also an internationally recognized form of protection, notably by the Paris Convention for the Protection of Industrial Property since the Washington Act of 1911. As was first recognized in Uma Suthersanen's pioneering study for UNCTAD in 2006, utility models are a form of protection which may be particularly suitable for developing economies. In developed economies, it is common for there to be cyclical debates as to the advantages and disadvantages of such rights, and in particular whether, as some supporters claim, they foster innovation by small and medium-sized enterprises. For example, Australia introduced petty patents in 1979, reformed and re-named them innovation patents in 2001, but abandoned the system in 2021. Finally, utility models can interact with other rights, as was recently highlighted by the decision of the Grand Chamber of the Court of Justice of the European Union in Case C-382/21 P *European Union Intellectual Property Office v. KaiKai Company Jaeger Wichmann GbR* [EU:C:2024:172] (holding that an application for a Community-registered design could claim priority from a design right or utility model filed in another Contracting State of the Paris Convention in the preceding six months, but not from a patent).

Despite the ubiquity and significance of utility models, they have until now attracted very little attention from scholars. Jorge Contreras is therefore to be congratulated in taking the initiative of editing this volume. He has assembled an international team of distinguished scholars who, between them, have gone a long way to remedy the previous neglect of this important topic. There are chapters by national experts which explore the present or past laws of fifteen countries. In addition, there are cross-jurisdictional contributions which provide an overview of such systems, prospects for harmonisation at least within the European Union,

Cambridge University Press & Assessment
978-1-009-47809-0 — Sub-patent Innovation Rights
Edited by Jorge L. Contreras
Frontmatter
[More Information](#)

xvi

Foreword

interaction with other aspects of the intellectual property system and their economic impact. As such, the book can be whole-heartedly recommended to anyone with an interest in this corner of intellectual property law.

Richard Arnold
Royal Courts of Justice, Strand, London.

Preface

Patents are important tools for innovation policy. They incentivize creation and dissemination of new technical solutions and help to disclose their working to the public in exchange for limited exclusivity. But in addition to patents, more than one hundred countries around the world offer a “lesser” form of protection for innovations known variously as utility models, technical designs, petty patents, innovation patents, short-term patents, which this volume refers to collectively as “utility models.”

Utility models have been contemplated alongside patents by the Paris Convention for the Protection of Industrial Property since 1911. Yet neither the Paris Convention nor any other major international agreement explicitly delineates the scope of utility model protection, which is left largely to the discretion of national and regional jurisdictions. The result of this lack of formal treaty guidance is a diverse set of utility model rules that lack significant harmonization across countries and regions and which have ebbed and flowed over time.

Despite their long history and widespread adoption, utility models remain, as Professor Mark Janis observed more than two decades ago, “a backwater of intellectual property.” Compared to the large body of scholarly literature in other areas of intellectual property law, there is scant literature concerning utility models, and only a handful of empirical studies that focus on them.

This volume represents the first book-length study of utility models and other forms of sub-patent innovation protection around the world. It compares, contrasts, and critically analyzes these forms of protection in a range of jurisdictions while shedding light on the manner in which utility models are utilized by innovators and industry.

The international collaboration of scholars and legal practitioners that resulted in this volume began in February 2022. It involved several online workshops during the summer and fall of 2022, as well as a workshop hosted by the London School of Economics and Political Science in February 2023. Preliminary results of this

collaboration were presented at the European Policy for Intellectual Property (EPIP) conference held Krakow, Poland, in October 2023, as well as other conferences and symposia around the world.

Several chapters of this volume include empirical analyses of filing, assignment, and litigation data available from national patent offices, the World Intellectual Property Organization (WIPO), and IPLytics, a private patent analytics firm with which we have collaborated. Other chapters present statutory and regulatory analysis of local filing rules, case histories, and the experience of practitioners in this area. On the basis of these comparisons, we present conclusions, or at least offer hypotheses, regarding the relative effectiveness of utility model systems in achieving their purported goals, and the degree to which such systems can or should be harmonized to a greater degree.

We hope that this volume will become a definitive resource for intellectual property attorneys, patent offices, regulators, policymakers, academics, and judges who are confronted with these enigmatic and ever-changing forms of legal protection.

We are grateful to Matt Galway, Jady Fauconier-Herry, Balamuthukumaran Pasupathy, and the rest of the production and editorial staff at Cambridge University Press for helping bring this volume to fruition.