

Monica Armillotta

# **Technology Pooling Licensing** Agreements: Promoting Patent Access Through Collaborative **IP** Mechanisms

Nomos

MIPLC Munich Augsburg Intellectual München Property Law Center

Washington DC

Die Deutsche Nationalbibliothek verzeichnet diese Publikation in der Deutschen Nationalbibliografie; detaillierte bibliografische Daten sind im Internet über http://dnb.d-nb.de abrufbar.

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the Internet at http://dnb.d-nb.de.

Zugl.: München, Univ., Diss., 2010

ISBN 978-3-8329-5976-0

#### D 19

#### 1. Auflage 2010

© Nomos Verlagsgesellschaft, Baden-Baden 2010. Printed in Germany. Alle Rechte, auch die des Nachdrucks von Auszügen, der fotomechanischen Wiedergabe und der Übersetzung, vorbehalten. Gedruckt auf alterungsbeständigem Papier.

This work is subject to copyright. All rights are reserved, whether the whole or part of the material is concerned, specifically those of translation, reprinting, re-use of illustrations, broadcasting, reproduction by photocopying machine or similar means, and storage in data banks. Under § 54 of the German Copyright Law where copies are made for other than private use a fee is payable to »Verwertungsgesellschaft Wort«, Munich.

## Dedication

To My Love

&

To My Angel

https://doi.org/10.5771/9783845226316-2, am 18.08.2024, 14:17:18 Open Access – 🕼 די https://www.nomos-elibrary.de/agb

### Acknowledgements

My fondest thanks are for my supervisor, Prof. Dr. Dres. h.c. Joseph Straus, for having believed in me by offering me the chance of attaining a doctoral degree, in the first place, and for dedicating his time and experience into reviewing my work, which has greatly benefited from his comprehensive and constructive suggestions.

I would also like to convey my sincerest thanks both to Prof. Dr. Michael Lehmann, for his appreciative second report, and Prof. Dr. Dr. h.c. mult. Gerhard Schricker, for having attended to my oral exam.

I also owe my deepest thanks to the Munich Intellectual Property Law Center (MIPLC) for providing me with a scholarship award to sustain my doctoral research endeavours. In fact prior to pursuing my Ph.D, I had the good fortune of attending the MIPLC's LL.M. program, which moved me into exploring more in depth the challenging domains of IP and competition law.

In the context of the MIPLC, I would like to dedicate a very special note of thanks to Prof. Martin J. Adelman and Honourable Chief Judge Randall R. Rader, for their inspiring feedback on the US patent law's system and their lasting friendly support all along my academic and professional endeavours.

I would also like to express my true gratitude to the Max Planck Institute for Intellectual Property, Competition and Tax Law for offering exceptional research facilities and for the friendly support I have always received during my stay, and to the Law Faculty of the Ludwig-Maximilians-Universität München (LMU), for welcoming me in their doctoral program. I felt truly privileged to be part of such a great and stimulating academic environment.

Furthermore I would like to express my sincerest gratitude to the editors of the MIPLC Book Series for the honour of having retained my work for publication, as well as to the Nomos's staff, for the extremely cooperative technical and substantial support.

A particular thanks goes also to my friend and colleague Dr. Kristina Janušauskaitė for all her good and practical advices on the journey we shared towards our doctoral degree.

Finally my most deeply felt gratitude goes to my best friend and companion, for his endless patience, encouragement and selfless support all along the way. It is with his love and dedication that this work has been accomplished.

August 2010 Monica Armillotta

https://doi.org/10.5771/9783845226316-2, am 18.08.2024, 14:17:18 Open Access – 🕼 די https://www.nomos-elibrary.de/agb

### **Table of Contents**

Acronyms and Abbreviations		15	
Cha	pter 1	Introduction: Putting Patent Pools into Perspective	21
A.	Pro	moting Patent Access through Collaborative IP Mechanisms:	
		ountered Problems and Desired Outcomes	22
	I.	Finding a Way Through the "Patent Thicket"	22
	II.	The Solution Offered by Collaborative IP Mechanisms:	
		A Brief Overview	25
		1. Patent Pools	25
		2. Clearinghouses	26
B.	Pate	ent Pools as Business Models and Comparison with	
		ernative Sharing Solutions	27
	I.	Process Leading to the Establishment of a Patent Pool	28
	II.	A Step Forward from:	29
		1. Bilateral Negotiations	29
		2. Cross-Licensing Agreements	30
C.	Patent Pools and Standards: Endeavors to Promote Access to		
	Standard-Related Patents for Interoperability Purposes		
	I.	Overlaps and Demarcation between Patent Pools and	
		Standard-Setting Organizations	32
		1. Interface / Interoperability Standards	32
		2. Pivotal Role of Patent Rights and Advantages of	
		Collaborative Settings: Patent Pools Strategies to Overcome	
		"Hold-Up" Problems	34
	II.	Boosting Access to Standard-Related Patents for a Competitive	
		Market Integration	36
		1. European Commission: General Policy Concerns and Recently	
		Announced Actions	37
		2. Overcoming the Perceived Shortcomings in the Patent Regime	39
		a. Debated Opportunity of Legislative Interventions	39
		aa. From an Antitrust Law Standpoint	40
		ab. From a Patent Law Standpoint	41
		b. Internal IPR Policies as Self-Regulatory Solutions	43
		ba. Standard-Setting Bodies' Recommendations	43
D	D	bb. Patent Pools' Enforced Licensing Terms	46
D.		ent Pools and the Interface between Intellectual Property Rights and	47
	Ant	itrust Law	47

	I.	Confuting the Traditionally Perceived Antagonism between Patent and Antitrust Law: Introducing the Concept of "Competition of First Level" and Refuting the Idea of "Patent Monopolies"	48
	II.	Matured View of Complementarity between IP Protection and	10
		Competition	49
		1. Stance of the US Antitrust Authorities	51
		2. European Commission's Corresponding Position	53
		3. WTO's TRIPS Acknowledgement of IP as a "Good of Trade"	54
Cha	pter	2 Historical Outlook	57
A.	Ca	se Survey: The First Distinguished Patent Pools	57
	I.	Sewing Machine	57
		Motion Picture	57
		Folding Bed	59
		Airplane	59
		Radio	60
		Hartford-Empire	60
		I. Video	61
В.		scussed Patent Pools' Examples	62
	I.	The Debated Case of Software:	
		The "Open Innovation Network" Initiative	62
		1. Targeting Collective Free "Open Source" Access to	
		Software Patents	62
		a. From Linux-Based Cooperative Research Paradigms	63
		b. To Institutionalised Consortia, as Advocated by IBM at	
		the Madrid OECD Conference on the Research Use of	~
		Patented Inventions in May 2006	64
		2. Drawing up a Balance of "Open Innovation" as Alternative	
		Business Models	66
	II.	The Celebrated "MPEG LA" Case	69
		1. From the First Steps to a Rising Star	69
		2. Still a Necessary Evil?	71
Cha	pter	3 Comparative Analysis: US Legal Treatment of Patent Pools -	
	•	Delineating the Modern Archetype	73
A.	Outlook on the American Model: The Early Years		73
	I.	From the Initial Patent Holders' Immunity to the Fierce	
		Supreme Court's Antitrust Scrutiny	73
	II.	The Patent Act of 1952 and the "Nine No-Nos": Defining the	
		Spheres of Interference between Antitrust and Patent Law	76

B.	<ul> <li>US Guidelines for the Licensing of Intellectual Property: The Current View</li> <li>I. The Institution of the Court of Appeals for the Federal Circuit in 1982 and the 1988 Department of Justice's Antitrust Guidelines: Advocating the "Rule of Reason"</li> <li>II. The Department of Justice and Federal Trade Commission's 1995 IP Guidelines and their Funding Principles</li> <li>III. Driving Criteria for Patent Pools in the IP Guidelines and Business Review Letters: Sanctioning an Overall More Favourable Approach</li> <li>IV. Department of Justice and Federal Trade Commission's Joint Hearings on Competition and IP Law Policy and the Ensuing Innovation Reports: Paving the Way for a Sustainable Balance</li> </ul>	79 79 81 83 86
Cha	pter 4 The EU Legal Framework	89
A.	<ul> <li>Art. 81 of the EC Treaty</li> <li>I. The Proscription of Art. 81 (1) and Its Legal Consequences, in Particular as Set by the 2006 Guidelines on Methods of Setting Fines</li> </ul>	89 89
	II. The Scope of the Individual Exemption under Art. 81 (3)	93
В.	The Way to the TTBER	96
	I. TTBER 1996 and Commission Evaluation Report	96
G	II. TTBER's Review Process	98
C.	Current TTBER and Accompanying Guidelines	103
	I. New TTBER's Operative Principles	103
	<ol> <li>Systematisation and Definition of Technology Pools</li> <li>Questionable Demarcation of the Pool's Agreements</li> </ol>	104
	between TTBER and Guidelines	106
	<ul><li>II. Antitrust Scrutiny of Technology Pools under the Guidelines</li><li>1. Nature of the Pooled Technologies:</li></ul>	109
	<ol> <li>Substitutes v. Complements and the Concept of Essentiality</li> <li>Beyond Categorizations: Competitive Efficiencies from a</li> </ol>	109
	Consumer Perspective	112
	3. Different Categories of Technologies and Possible Combined	
	Scenarios	112
	4. Antitrust Concerns Beyond Merely Technological	
	Systematizations	115
	<ol> <li>Particular Obligations upon Standard-Related Technology Owners Involved in a Pool: Early Disclosure and</li> </ol>	
	Licensing Terms	116
	a. A Delicate Balance of Interests as Base for the	
	Commission's Recommendations	116
	b. The Precedence Set by Standard-Setting Bodies	118

	III. Assessment of Individual Restraints: Non-Compete,		
	Grant-Back and Non-Challenge Clauses	120	
	1. General Principles	120	
	2. Contextual Implementation	122	
	IV. Institutional Framework Governing the Pool	125	
	1. Independent Experts	126	
	2. Open and Indiscriminate Participation	126	
	3. Overseen Exchange of Sensitive Information	127	
	4. Neutral Dispute Resolution Mechanism	127	
D.	Selected EC Case Law on Patent Pools		
	I. Videocassette Recorders (VCR)		
	II. Advanced Photographic System (APS)	128	
	III. Digital Versatile Disc (DVD)	129	
	IV. Moving Picture Experts Group (MPEG)	130	
	V. Third Generation Patent Platform Partnership (3G3P)	130	
	VI. Philips and Sony's CD Disc Licensing Program	133	
Cha	upter 5 Collaborative IP Mechanisms' Applications:		
Cha	Exploring New Frontiers of Life Sciences	139	
	Exploring New Trouters of Ene Sciences	157	
A.	Patent Pools and Biotechnology: Legal and Business Considerations	s 139	
B.	Pilot Experiences		
	I. Cases at Hand	140	
	1. Golden Rice	140	
	2. SNPs	147	
	3. SARS	153	
	4. HNPCC	157	
	II. Some Common Remarks	159	
	1. General Considerations	159	
	2. The Issue of Funding	162	
Cha	upter 6 The Alternative Approach of Clearinghouses:		
Cha	Distinctive Features and Applications in Biotechnology	167	
A.	Defining Characteristics	167	
B.	Models and Applications		
	I. Information Clearinghouse	170	
	1. Biosafety Clearing-House	170	
	2. CAMBIA's Patent Lens	172	
	II. Technology Exchange Clearinghouse	174	
	1. BirchBob	174	
	2. Pharmalicensing	175	

3.	TechEx	177
4.	PIPRA	177
III. Ro	yalty Collection Clearinghouse	184
IV. Op	en Source Clearinghouse	188
1.	Science Commons - A Creative Commons' project	189
2.	BioBricks Foundation	192
3.	CAMBIA's Biological Open Source (BiOS)	193
Chapter 7	Conclusions: the Way Forward	198
List of Work	s Cited	205

https://doi.org/10.5771/9783845226316-2, am 18.08.2024, 14:17:18 Open Access – 🕼 די https://www.nomos-elibrary.de/agb