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Ali Seyhan Uğurlu

Bioethics and the Patent Eligibility of Human Embryonic Stem Cells-Related Inventions in Europe

Nomos

MIPLC Munich Intellectual Property Law Center
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Die **Deutsche Nationalbibliothek** lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data is available in the Internet at http://dnb.d-nb.de

a.t.: Munich, Munich Intellectual Property Law Center, Thesis "Master of Laws in Intellectual Property (LL.M. IP)", 2012

ISBN: HB (Nomos) 978-3-8487-1471-1

British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

ISBN: HB (Nomos) 978-3-8487-1471-1

Library of Congress Cataloging-in-Publication Data
Uğurlu, Ali Seyhan
Bioethics and the Patent Eligibility of Human Embryonic Stem Cells-Related Inventions in Europe
Ali Seyhan Uğurlu
86 p.
Includes bibliographic references.

ISBN 978-3-8487-1471-1 (Nomos)

1. Edition 2014

Foreword

This work corresponds to the thesis submitted to the Munich Intellectual Property Law Center in partial satisfaction of the requirements for the degree of Master of Laws in Intellectual Property (LL.M. IP) in September 2012.

The patent eligibility of hESC-related inventions creating a tempestuous nexus between patent law and stem cell technology is analyzed in this research with a special focus on the situation in Europe. Achievements in the biotechnology industry related to the stem cell technology are quite important. This is also recognized by the Nobel Prize Committee by awarding the Nobel Prize in Physiology or Medicine 2012 to John B. Gurdon and Shinya Yamanaka for the discovery that mature cells can be reprogrammed to become pluripotent. In line with the pace of development in the stem cell technology, awaited judiciary development at the submission date of the thesis has reached to a result and the update has been done accordingly for the publication purpose as of the situation in November 2013.

It is needless to say that the completion of this research is not the sole achievement of the author. I would like to express my deepest and sincere gratitude to Prof. Dr. Dr. h.c Joseph Straus for his valuable guidance and support for the completion of this thesis. It was an immense pleasure working under his supervision. I am thankful to Dr. Gintarė Surblytė and Seth I. Ericsson for keeping open their door to answer any question during the whole LL.M program. I thank to my tutors, Andrea Hüllmandel and Eugenio Hoss for their mentorship, assistance and encouragement during the coursework. I acknowledge the endless help of the MIPLC team to facilitate our stay at MIPLC. I would like to acknowledge the financial support of the Max Planck Institute for Intellectual Property and Competition Law for the publication of this work. Last but not least, I am thankful to my parents who supported and endorsed me during my stay in Munich. This book is dedicated to my grandmothers.

Munich, November 2013 *Ali Seyhan Uğurlu*

Table of Contents

Acronyms and Abbreviations

AG	Advocate General
Apr.	April
Art.	Article
Aug.	August
BGH	Bundesgerichtshof
Biotech Directive	Directive 98/44/EC of the European Parliament and of the Council on the Legal Protection of Biotechnological Inventions
BPatG	Bundespatentgericht
CJEU	Court of Justice of European Union
Dec.	December
DNA	Deoxyribonucleic Acid
EBA	Enlarged Board of Appeal
EC	European Council
ECHR	European Court of Human Rights
ECJ	European Court of Justice
EPC	European Patent Convention
EPO	European Patent Organisation
ESC	Embryonic Stem Cell
EU	European Union
Feb.	February
GPA	German Patent Act
GRUR	Gewerblicher Rechtsschutz und Urheberrecht
hESC	Human Embryonic Stem Cell
IIC	International Review of Intellectual Property and Competition Law
iPSCs	Induced Pluripotent Stem Cells
Jan.	January
Mar.	March
Nov.	November
NGO	Non-Governmental Organisation
Oct.	October
OD	Opposition Division

SCNT	Somatic Cell Nuclear Transfer
TRIPs	Agreement on Trade Related Aspects of Intellectual Property Rights
WTO	World Trade Organisation
para	paragraph
R&D	Research and Development
StZG	Stammzellgesetz (German Stem Cell Act)
TBA	Technical Board of Appeal
TFEU	Treaty on the Functioning of the European Union
U.K.	The United Kingdom
UK IPO	United Kingdom Intellectual Property Office
WARF	Wisconsin Alumni Research Foundation
WTO	World Trade Organisation