

# Table of Contents

<b>Table of Figures .....</b>	19
<b>1. Introduction.....</b>	21
<b>2. Conceptual underpinnings.....</b>	27
2.1. Justifications of a system for patent protection.....	27
2.2. Importance of patent enforcement within the patent law regime .....	37
2.3. Changes in the socio-economic context .....	40
2.4. Enforcement in transborder network constellations.....	48
2.5. Outline of the legal problem: enforcement of territorially limited patents on geographically divisible inventions and global computer networks.....	60
<b>3. Research question and structure .....</b>	65
<b>4. Research Context .....</b>	81
4.1. Literature Review .....	81
4.2. Enforcement of patent rights.....	88
4.2.1. Territoriality principle and patent enforcement .....	94
4.3. Patent Rights in the International Legal Order.....	102
4.4. Patent Rights at the regional, European level.....	114
4.4.1. European Patent Convention .....	117
4.4.2. Chronology of efforts to develop a patent system for the European Union .....	119
4.4.3. The Unitary Patent Package .....	125
4.5. Conditions for patent enforcement in the European Union .....	142
4.6. The Internet as a factor in the technological shift in paradigm.....	149
4.6.1. Overview of the Internet development .....	149
4.6.2. Internet as a technology .....	157
4.6.3. Regulation in the cloud: legal and socio-economic aspects of cyberspace.....	160
4.6.4. Internet as a factor in patent enforcement.....	170
4.6.5. Geographically divisible inventions (GDIs)/Remotely integrated inventions .....	173
4.6.6. Computer programs .....	176
4.6.7. Conclusions on the Context of this Research .....	185

<b>5. Patent Infringement .....</b>	187
5.1. Determining patent infringement – a conceptual overview .....	188
5.1.1. All elements rule .....	190
5.1.2. Impact of the EPC on national patent infringement proceedings .....	190
5.2. National Context - Germany.....	196
5.2.1. Introduction .....	196
5.2.2. Structure of the German Patent System.....	197
5.2.3. Territorial nature of patents under German law.....	198
5.3. National Context – United Kingdom .....	198
5.3.1. Introduction .....	198
5.3.2. Structure of United Kingdom Patent System .....	201
5.3.3. Territorial nature of patents under UK law .....	203
5.4. Direct Infringement of a Patent .....	203
5.4.1. Direct Patent Infringement under German law(§9 PatG).....	203
5.4.2. Direct Infringement under UK law (Art. 60 (1) 1977 UK Patent Act).....	224
5.5. Indirect Patent Infringement.....	238
5.5.1. Indirect Infringement in Germany (§10 PatG).....	238
5.5.2. Indirect Infringement under UK law (Art. 60 (2) 1977 UK Patent Act).....	253
5.6. Other forms of liability for patent infringement.....	259
5.6.1. Other forms of liability - Germany.....	259
5.6.2. Other forms of liability – United Kingdom.....	263
5.7. Conclusions from comparative analysis of substantive patent infringement provisions in Germany and the United Kingdom .....	265
<b>6. Infringement of patents on geographically divisible inventions .....</b>	269
6.1. German jurisprudence: <i>Prepaid Cards II</i> .....	269
6.2. UK jurisprudence: <i>Menashe v. William Hill</i> .....	274
6.3. Discussion.....	278
6.4. Geographically divisible inventions in the American jurisprudence.....	281
6.4.1. <i>NTP v. RIM</i> .....	282
6.4.2. <i>Akamai Tech. v Limelight Netw.</i> .....	289
6.5. Conclusions based on case law exploration.....	294
<b>7. Policy implications.....</b>	299
7.1. Introduction.....	299
7.2. Current Legislative Proposals.....	299

7.3.	Alternatives to patent-based protection of inventions.....	304
7.4.	Patent-based protection .....	308
7.4.1.	Assessment framework .....	308
7.4.2.	Criteria .....	314
7.5.	Appraisal of solutions provided in the literature .....	323
7.6.	Discussion.....	332
7.7.	Recommendation.....	334
7.8.	Final Considerations.....	342
<b>8.</b>	<b>Conclusion.....</b>	<b>347</b>
<b>Zusammenfassung der Dissertation.....</b>		<b>353</b>
<b>Bibliography.....</b>		<b>371</b>
<b>Abbreviations.....</b>		<b>425</b>
<b>Annex 1 National patent laws.....</b>		<b>431</b>
<b>Annex 2 Unitary patent: infringement provisions.....</b>		<b>441</b>