
Contents

<i>List of abbreviations</i>	ix
<i>Preface</i>	xiii
1 Innovation, IP and intellectual capitalism	1
1.1 Aims and outline	1
1.2 Conceptual framework	3
1.3 Intellectual capital and its growing importance	5
1.4 The evolving pro-IP regime	10
1.5 Patent and innovation developments in Asia	14
1.6 Development of new protective technologies	16
1.7 Innovation spiral statistics in various countries	17
1.8 Institutional environment	30
1.9 Book aims, outline and reading guidelines	33
1.10 Chapter summary and conclusions	36
2 Analytical framework	40
2.1 Chapter aims and outline	40
2.2 Conceptual framework	40
2.3 The main frame of reference	47
2.4 Basic models of innovation and new businesses	52
2.5 R&D, technology and innovation strategies	61
2.6 R&D, technology and innovation policies	72
2.7 The patent system's structure and processes	75
2.8 Chapter summary and conclusions	78
3 Patents and innovations for growth and welfare – a literature review	81
3.1 Chapter aims and outline	81
3.2 Conceptual framework	81
3.3 Economic motives for the patent system and for patenting	83
3.4 Components in the innovation spiral	95
3.5 Relations in the innovation spiral	101
3.6 Recent literature on the relations in the innovation spiral	120
3.7 Chapter summary and conclusions	120
4 Methodology	124
4.1 Chapter aims and outline	124
4.2 The directive for the national investigation	124
4.3 The background according to the directive	125
4.4 The need for an investigation according to the directive	126

vi *Evolving properties of intellectual capitalism*

4.5	Interpretations of key concepts for conducting the national investigation	126
4.6	Previous studies	128
4.7	Summary of the national investigation's research design and methodology	131
4.8	Chronology	135
4.9	The international follow-on investigation	136
4.10	Chapter summary and conclusions	138
5	Patents, innovations and growth – empirical analysis	140
5.1	Chapter aims and outline	140
5.2	Conceptual framework	140
5.3	Empirical studies	141
5.4	Chapter summary and conclusions	177
6	What explains fluctuations in patenting frequency and propensity?	180
6.1	Chapter aims and outline	180
6.2	Conceptual framework	180
6.3	Determinants of patent frequency	182
6.4	Patenting frequency and business cycles	183
6.5	Empirical data on application fluctuations	184
6.6	Explanatory factors behind fluctuations	200
6.7	The patent consultancy study (PEX4-PB)	208
6.8	Patenting in the US by Swedish large companies	212
6.9	Patenting in the US by top nation patentees	213
6.10	Chapter summary and conclusions	214
7	Discussion and general innovation and IP policy recommendations	219
7.1	Chapter aims and outline	219
7.2	Conceptual framework	220
7.3	A changing economy – changing institutional roles	221
7.4	Develop a national culture for IP, innovation and entrepreneurship	222
7.5	Strengthen the entrepreneurial system	224
7.6	Promote national appropriation of growth effects	239
7.7	Strengthen the international collaboration in the field of IP and business development	240
7.8	Promote English as an international language parallel with national languages	242
7.9	The international patent system and patent office organization	244
7.10	The patent system and patent office organization in Europe	247
7.11	The European IP litigation system	251
7.12	Change certain aspects of patentability criteria and their assessment	254
7.13	Create a national strategy council for innovations and IP	259
7.14	Chapter summary and conclusions	261

8	Special recommendations for increasing patent knowledge and patenting	264
8.1	Chapter aims and outline	264
8.2	Conceptual framework	264
8.3	How can awareness, understanding and insight about patent economics be created in companies?	265
8.4	How can companies' opportunities and propensities to patent be stimulated and increased?	275
8.5	Chapter summary and conclusions	288
9	Patent and innovation system developments in Europe, Asia and the US	291
9.1	Chapter aims and outline	291
9.2	Conceptual framework	291
9.3	Patent and innovation system developments in Europe, Asia and the US	292
9.4	Uncertainties in patent and innovation policy-making	312
9.5	Innovation systems and policy convergence	316
9.6	Chapter summary and conclusions	320
10	Transnational policy recommendations and policy issues	322
10.1	Chapter aims and outline	322
10.2	Conceptual framework	322
10.3	Generalizability of results and policy recommendations	323
10.4	General recommendations	324
10.5	Special recommendations	327
10.6	New IP phenomena and policy issues	327
10.7	IPRs as tools for innovation governance	352
10.8	Suggestions for further research	358
10.9	Chapter summary and conclusions	361
11	Global innovation and intellectual capitalism	365
11.1	Chapter aims and outline	365
11.2	Conceptual framework	366
11.3	From national innovation and IP policy convergence towards a global innovation system	367
11.4	Future of the IPR system	373
11.5	Future of intellectual capitalism	377
11.6	Future of capitalism	382
11.7	Chapter summary and conclusions	395
12	Summary and conclusions	400
12.1	Chapter aims and outline	400
12.2	Summary of previous chapters	400
12.3	The innovation spiral	401
12.4	Intellectual capitalism	412

<i>Appendix 1</i>	<i>Questionnaire</i>	417
<i>Appendix 2</i>	<i>Summary of study trips to Asia, 2010–12 (excerpt from letter of introduction)</i>	438
<i>References</i>		439
<i>Glossary</i>		465
<i>Index of names</i>		481
<i>Index of subjects</i>		487