

---

## CONTENTS

---

<i>Preface</i>	ix
<b>Introduction</b>	1
<b>PART I—HISTORICAL AND ECONOMIC FACTORS</b>	5
<b>1 The British Tradition</b>	5
BASIC CLAIM THEORY	5
THE TRADITIONAL BRITISH APPROACH	8
Exceptions to the General Rule	11
THE PITH AND MARROW	12
Applying the Test	14
<b>2 History of the Patent System—The Canvas Prepared</b>	23
INTRODUCTION	23
The Guild System: Alternative Monopoly	24
Early Monopoly Grants	24
THE STATUTE OF VENICE	25
The Spread of a Statute	27
EARLY ENGLISH GRANTS	28
A NEW POLICY OF MONOPOLY GRANT	30
NOVELTY AND CONSIDERATION	31
The Working Clause	31
The Revocation Clause	32
THE PROBLEM OF ODIOUS MONOPOLIES	33
Monopoly Classified	34
Mounting Opposition	35
JUDGING MONOPOLY AT COMMON LAW	36
BATTLES OF A KING	37
From Bounty to Statute	38
THE STATUTE OF MONOPOLIES	39
Commentary	40
The True Significance of the Statute	41
A LEGISLATIVE AFTERMATH	42
ISSUES OF JURISDICTION	43

Pressure for Change	44
CONSIDERATION REVISITED—THE BIRTH AND GROWTH OF THE SPECIFICATION	45
From Introduction to Explanation as the Price of Monopoly	46
THE NOVELTY OF NASMITH	47
A Mark of Evolution	50
A PRACTICE ACCEPTED	51
<i>LIARDET v JOHNSON</i>	52
CONCLUSION	54
<b>3 Patents within the Market Economy (Part I)—Classical Economics and Philosophy</b>	<b>57</b>
PREFACE	57
INTRODUCTION	59
PATENTS WITHIN THE MARKET ECONOMY	60
An Economic Analysis of the Patent System—Hiatus	61
Pressure Leading up to the Debate	62
PROPERTY AND PATENTS	64
Free Goods and Public Goods	64
CLASSICAL JUSTIFICATIONS OF PROPERTY IN THE INTANGIBLE— THE PATENT	65
THE NATURAL RIGHT THEORY	66
THE REWARD BY MONOPOLY THEORY	68
THE INCENTIVE TO INVENT THEORY	73
THE EXCHANGE FOR SECRETS THEORY	81
POSTSCRIPT	86
So What Can We Learn from the Victorian Controversy?	88
<b>4 Patents within the Market Economy (Part II)—Does the Philosophy fit the Facts?</b>	<b>91</b>
INTRODUCTION	91
WHY PATENT?	93
Motivation to Patent: Other Considerations	95
DRAFTING A PATENT: DETERMINANTS OF SCOPE	97
Timing	98
The Importance of Knowledge	99
A Breakdown of Communication	100
The Peculiar Problem of the Prior Art	103
THE DRAFTING OF THE SPECIFICATION	106
LITERAL OR LIBERAL INTERPRETATION?	108
The Literal View	108
The Liberal View	112
CONCLUSION	114

<b>5 Patents within the Market Economy (Part III)—Post-Classical Economic Thought &amp; Theories of Protection</b>	119
SOME BASICS OF ECONOMIC ANALYSIS	119
Demand and Price	119
Elasticity	120
The Demand Curve under Competition	121
Marginal Revenue	122
Cost	124
Profit	128
PATENTS AS MONOPOLIES—WHAT’S IN A WORD?	131
THE ECONOMIC ARGUMENT FOR THE PATENT SYSTEM	135
POST-CLASSICAL MODELS AND JUSTIFICATIONS	137
THE PATENT-INDUCED INNOVATION THEORY	138
Questions of Scope	140
Criticisms of the Patent-Induced Theory	141
A BRIEF ASIDE—THE PROBLEM OF CUMULATIVE RESEARCH	143
THE PROSPECT THEORY	145
Implications for Claim Scope	149
THE RACE-TO-INVENT THEORY	151
Criticisms and Implications for Claim Scope	152
THE RENT DISSIPATION THEORY	156
Criticisms and Implications for Patent Scope	158
RECENT ALTERNATIVES	160
Problems with other Theories	160
Patent Signals	163
CLOSING COMMENTS	166
<b>PART II—COMPARATIVE FACTORS</b>	171
<b>6 America—Promoting the Useful Arts</b>	173
PREFACE	173
INTRODUCTION	174
EARLY HISTORY	175
Central Definition Theory	178
Peripheral Definition Theory and the 1870 Act	180
GRAVER TANK	183
The Decision in <i>Graver Tank</i>	184
Criticism of the Decision	185
Section 112 Equivalents: an Aside	187
Hostility and Instability following <i>Graver Tank</i>	189
THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT	190
Expanding the Doctrine of Equivalents: <i>Hughes Aircraft</i>	191
File Wrapper Estoppel: An Introduction	192

Formative Years: Further Uncertainties	193
NARROWING THE DOCTRINE OF EQUIVALENTS	196
<i>Pennwalt Corp v Durand-Wayland Inc</i>	196
<i>After Pennwalt: Corning Glass</i>	199
WARNER-JENKINSON: THE SUPREME COURT REVISITS EQUIVALENTS	200
Death of the Doctrine?	200
On File-Wrapper Estoppel	201
Intent of the Defendant	203
After-Arising Equivalents?	204
A Test for Equivalence?	206
MANI-FESTO FOR THE FUTURE?	207
The Problem Identified	208
Judgment <i>en Banc</i>	209
Fallout	211
<i>Festo</i> in the Supreme Court	212
Comment	214
POSTSCRIPT: THE CAFC REVISITS <i>FESTO</i>	216
Rebutting the <i>Festo</i> Presumption	217
The Rebuttal Criteria	218
CONCLUSION	219
<b>7 Germany—A Tradition of Expansive Interpretation</b>	<b>223</b>
PREFACE	223
ARTICLE 69 AND THE PROTOCOL: A BRIEF HISTORY	224
GERMANY: THE HISTORICAL PERSPECTIVE	226
Towards Protection	227
The First Period	228
The Second Period	229
The Third Period	232
THE THREE-PART DOCTRINE	233
The ‘Direct Subject Matter’ of the Invention	233
The ‘Subject Matter’ of the Invention	234
The ‘General Inventive Idea’	236
The Defence of ‘State of the Art’	237
The Object of Criticism	237
THE FOURTH PERIOD	241
<i>FORMSTEIN</i>	242
POST- <i>FORMSTEIN</i> SOLIDIFICATION OF APPROACH	245
<i>EPILADY</i>	246
The Decision	247
IMPLICATIONS AND RECENT PRACTICE	249
<i>Plastic Pipes</i>	250
<i>Cutting Knife I</i>	252

## Contents

xv

CONCLUSION	254
<b>8 Japan—‘And we shall have Patents’</b>	<b>259</b>
PREFACE	259
BRIEF HISTORY	261
Towards Isolation	261
From Abstention to Acceptance—Isolation’s End	263
A Return to Imperial Rule	264
The Protection of invention—a False Start	264
THE 1885 ORDINANCE	265
American Influences	266
National Favouritism—a Lesson from the West?	267
POST-CONVENTION—INCREMENTAL DEVELOPMENT	270
CULTURAL FORMATTING—INSTITUTIONAL COLLECTIVISM?	273
CONTINUED PRESSURE FOR REFORM	275
POLICY REFORMS	278
THE <i>BALL SPLINE</i> DECISION	279
The Patent	280
The Original Decision	280
The Appeal	281
The Repercussions and the Fallout	282
Subsequent Interpretation	283
CONCLUSION	287
<b>9 From Pith to Purpose—British Claim Interpretation under the Protocol</b>	<b>291</b>
PREFACE	291
PATENTS IN TRANSITION	293
THE <i>CATNIC</i> LEGACY	294
The Dispute	295
<i>Catnic</i> in the Lords	296
The Judgment	297
PROBLEMS WITH APPLICATION OF THE TEST	298
An Objective Assessment . . . with Prejudice	299
Interpretation as of Publication	301
POST <i>CATNIC</i>	303
<i>CATNIC</i> BEGETS IMPROVER	305
Post <i>Catnic</i> . Hiatus	305
<i>Improver</i> in the Court of Appeal	307
<i>IMPROVER</i> AT FULL TRIAL: REFORMULATION OF THE TEST	309
The Test in Operation	310
Reference to Germany	312
<i>IMPROVER</i> ACCEPTED	314
REBELLION INSTIGATED . . .	316
The Dissenting View	317

xvi	<i>Contents</i>	
	Deconstructing the Dissent	320
	... REBELLION QUASHED	323
	The Approach to Construction	324
	Interpretation under the Protocol: Deconstructing <i>PLG</i>	326
	<i>Assidoman</i> Accepted	328
	So <i>Catnic</i> Lives on ...	331
	IMPROVER BEGETS THE PROTOCOL QUESTIONS	331
	A Radical Approach?	332
	The Majority View	335
	Comment	336
	SYSTEMIC CHANGE	339
	<i>KIRIN-AMGEN</i> TO THE COURT OF APPEAL	342
	CONCLUSION	345
10	<i>Kirin-Amgen</i> and Beyond—Cast Adrift on a Sea of Uncertainty?	349
	INTRODUCTION	349
	IN THE INTERIM	350
	Comment	354
	A PROTOCOL REMASTERED	355
	<i>KIRIN-AMGEN</i> IN THE LORDS	357
	Of Article 69, The Protocol and the Function of the Claims	358
	Of Purpose and Context	359
	Of Protection for Equivalents	362
	Of the New Protocol and the Protocol Questions	364
	Claim Construction on the Facts	365
	Of New Technology	367
	COMMENT ON <i>KIRIN</i>	371
	Repercussive Effects	373
	POST <i>KIRIN-AMGEN</i> : ADRIFT ON A SEA OF UNCERTAINTY	376
	CONCLUSION	378
11	<b>A Summary</b>	381
	THE JOURNEY SO FAR	381
	OF FAIRNESS, CERTAINTY AND HARMONISATION	385
	SO WHERE NOW?	388
	Towards Further Harmonisation	388
	A Modest Proposal	389
	TO CONCLUDE	391
	<i>Bibliography</i>	393
	<i>Index</i>	417