Index

A & M Records Inc. v Napster Inc. 211, 215–16
AAMC 235
abuse of the patent system 47
academic freedom 221–2
accounting language 268–9, 270, 270–5
Adeney, E. 178
Administrative Judges 18
agreed patent database 20–2
agricultural biotechnology 63, 131–2
Alcazar, J.E. 145
Alkermes 66
all-species encyclopedia see Encyclopedia of Life
American Association for the Advancement of Science 231
American Physical Society 179
Anderson, C. 176–7
Angiotech Pharm. Inc. v Conor MedSystems Inc. 22–3
Anglo-Australian Copyright Acts 203, 213
antibiotics 14, 82
anticommons problem 69–71, 130, 131–2, 138–9
anti-poaching covenants 272–4, 277
arbitration, technical 4, 17–18
Arora, A. 66–7, 68, 70–1
Arup, C. 290, 300
arXiv 180
Ashby, E. 221
assets, knowledge 155–7
Association of American Publishers 183
Association of American Universities (AAU) 235
Association of University Technology Managers (AUTM) 225, 233, 234
Australia 1, 63, 101–25, 267, 289
  Backing Australia’s Ability (BAA) 237
  biotechnology industry 74–5
  clusters 287
  commercialization of university research 221–49
  objectives and policies 240–2
  reviews and reform recommendations 237–40
  Competition Principles Agreement (CPA) 103, 104–11, 122
  Copyright Act 1968 108, 110, 122
default rules for patents and copyright 297
failure of small biomedical companies 67–8
human capital 301
induced patents 34–6
National Principles of Intellectual Property (NP) 238
nineteenth century newspapers 200, 201
patent review 1984 29
Patents Act 1990 101–2, 102–3, 122
amendments and new practices 111
regulatory quality and performance according to the CPA 104–11
restrictive covenants 280–1, 282
split entitlements 298–9
Therapeutic Goods Act 1989 103
Trade Practices Act 1974 101, 102, 103–4, 111, 122, 267
justification for partial exemption of the Patents Act 103–4, 112–21
transaction costs 45
Australian Code for the Responsible Conduct of Research (the Code) 239
Australian Competition and Consumer Commission (ACCC) guidelines 118, 120
Australian National University (ANU) 250
Australian Universities Quality Audit (AUQA) 250
Australian Research Council (ARC) grant conditions 239
Authors’ Guild 183
authorship  
collective 172–98
and ownership 177–80
Ayyangar Committee Report 82–3
background intellectual property 166–7
Backing Australia’s Ability – An Innovation Action Plan for the Future (BAA) 237
Bagchi, A.K. 87, 97
Baidu Baike 182–3
Bakels, R. 47
balance of probabilities evidence standard 111
Balkin, J. 194
ballads 199, 207, 212
Banerjee, P. 87, 97
Bar-Gill, O. 67
Barton, J. 46
Bartow, A. 32
Basheer, S. 93
basic research 55
with immediately identifiable commercial application 222–3
Bayh–Dole Act 58–9, 225, 232, 233, 234, 243
bazaar governance 132, 146–7
Beesley, A. 177
Bell v Whitehead 203, 207
Benkler, Y. 5, 132, 137, 177, 287, 294
Bently, L. 296
Berger, P. 156
Berlin University 221
Bernstein, L. 296
Berry, M. 287
Bessen, J. 11, 30, 32, 33, 38, 46
‘best endeavours’ clause 114–15
Bhattacharya, U.K. 87, 97
Bienstock, A. 233
bilateral agreements 16
BioBricks Foundation 142
biodiversity  
Encyclopedia of Life see open source community for crop biodiversity conservation 145
Biodiversity Heritage Library 189–90
BioForge 143
bioinformatics software, open source 145–6
Biological Innovation for Open Society (BIOS) 143–4, 161–2
Biomedical Open Source (BiOS)  
licencing 63, 143–4, 161–2
biomedical research 5, 55–79, 131
changing the biomedical business model 74–6
history 57–60
strong patent rights and the small firm 63–9
strong patent rights and the university 60–3
strong patent rights and weak patent standards 68–74
follow-on innovation 69–71
twenty-first century 71–4
bioscience 154–71
assets, property and capital in knowledge 155–7
intellectual property to promote innovation 154–5
open licence models 158–63
openness under certain conditions 165–8
possibilities for openness 158
biotechnology, open source see open source biotechnology
Bishop, E. 40
blocking 39
Board of Patent Appeals and Interferences 18
Bogsch, A. 15
Boldrin, M. 44
Botanicus 190
boundaries, patent 38, 46, 47
Bourdieu, P. 296
Boyce, G. 205
Boyer, H. 58, 61
Boyle, J. 130, 132, 142
Braithwaite, J. 4, 15
Brandt, D. 182
Brazil 80
BRCA2 159–61
breach of confidence cases 271
### Index

*Breen v Williams* 271  
British Technology Group 42  
broadness of patents 72–3  
Brooks, D. 191  
Bureau of Industry Economics (BIE) 29–30  
Burk, D. 57, 67  
C. V. Starr Virtual Herbarium 190–1  
*Cactus Imaging Pty Ltd v Peters* 268, 274  
California 289, 293  
judicial policy 298  
CAMBIA (Center for Application of Molecular Biology in International Agriculture) 143–4, 161–2  
Cancer Research Technology Ltd (CRTL) 159–61  
capability market power 12–13  
capital, knowledge 155–7  
capital payments 25–6  
capitalism 2, 286, 301–2  
Carnegie-Mellon Survey (CMS) 32, 33, 39, 40  
Carrigan, F. 295  
cartels 82  
Casper, S. 287  
CC-BY (Attribution) 188  
CC-BY-NC ( Attribution-NonCommercial) 189  
CC-BY-NC-SA ( Attribution-NonCommercial-ShareAlike) 189  
CC-BY-SA ( Attribution-ShareAlike) 188  
CCST 224  
Ceccagnoli, M. 68  
Chand Patents Enquiry Committee 82–3  
chemicals industry 33, 86, 90–1, 97  
Chicago School 293  
China 80  
Cho, C. 71  
Citizendum 174, 182, 183–4  
Clarke, R. 184  
click-wrap database licence 141  
clusters 285–305  
complementary policies 300–2  
furthering legal policy of split entitlements 293–300  
policy 288–90  
policy rationales and innovation 290–3  
theory 285–8  
coalition of poorer countries 16–17  
Coase’s theorem 293  
codified knowledge/information 60–1, 288  
coercion of labour, freedom from 269–70, 270, 278–9  
Cohen, N. 180  
Cohen, S. 58  
Cohen, W. 12, 39, 44, 68, 70–1  
Cole, J. 38, 44  
collaborations 189–91  
collective action theory 26  
collective authorship 172–98  
Encyclopedia of Life 172, 174, 184–92  
Collins, H. 270, 297  
commmercial offices 238  
commercialisation  
OSB and 134  
university research 5, 221–49  
areas of concern 226–7  
benefits 228  
defining commercialisation activity 224–5  
international context 229–36  
policy and development in Australia 237–42  
practical problems in rejecting commercialisation 227–8  
some degree of commercialisation as a sensible strategy 225–9  
Commission of Intellectual Property Rights 131  
common law doctrine making illegal restraints of trade 269, 270, 275–7, 281  
common law obligations 297  
commons-based peer production 132, 146–7  
communities  
interpretive communities 93–4  
openness within 166–7  
universities’ role in economic and social renewal 228  
Community Patent Review project 20
competition
Australian competition law and patents 6, 101–25
competitors’ access to inventions 24–5
impacts of patent system 35, 42–5
innovation as competitive strategy 254–5
OSB and restructuring 137–8
patents regulating 256
problems with 255–6
Wikipedia’s imitators, competitors and rivals 182–4
Competition Principles Agreement (CPA) 103, 122
regulatory quality and performance of the Australian Patents Act 104–11
complementary proprietary products 137
complexity 91–2
compulsory licensing 24–5, 82–3, 111
Confederation of Indian Industry 85
confidence, equitable obligation of 260
confidential information 270–2, 276–7, 281, 298
confidentiality agreements 226
confidentiality clauses 260, 261, 262
conflicts of interest 226, 235
Congress Party 85
Conservapedia 182
conserved varieties register 145
Considine, M. 228
consumer surpluses 36–7
contextualisation 2, 306–7
contracts 307
contract law and restrictive covenants 6, 267–84
innovation by individuals and 257, 258–9, 259–62
psychological contracts 291
split entitlements 288–9, 293–7
contract practices 294–6
default rules 296–7
freedom of contract 293–4
control mechanisms, licences 160–1, 162
Controller of Patents and Designs 81
Cooper, D. 293
cooperative mechanisms 75
Copinger and Skone James on the Law of Copyright 203, 205
copyleft licences 134, 139, 147
copyright 3
default rules in Australia 297
and encyclopedias 175–6
online media 176, 178–82, 188–9, 192–4
and parallel importing 108–9, 110
and street literature 4, 199–217
marginal effect 200–1
new street literature 205–12
old street literature 199–205, 207
co-regulation 4
corporate capitalism 2, 286
costs and benefits of patent systems 29–54
dissemination of information 35, 40–2
impacts on innovation 35, 36–40
induced patents 31–6
priorities 47–8
transaction/regulatory costs 36, 45–7
used patents 31–6, 43
Council on Governmental Relations (COGR) 236
Court of Appeals of the Federal Circuit (CAFC) 59
covenants 121
restrictive see restrictive covenants
Creative Cluster Study 289
Creative Commons 132
licences 188–9
creativity 250–1, 253–4, 307–8
optimal conditions for 257–9
Cukier, K. 141
Cunningham, S. 292
Cunningham, W. 172
Curran, J. 205
customer connection cases 272–3
DArT network 143
databases 89–90
agreed patent database 20–2
David, P. 168
Dean, R. 297
default rules 289, 296–7, 307
defensive patenting 32, 39, 68
deferred examination 90
Demil, B. 133
Index

Department of Education, Science and Training (DEST) (Australia) 224
deregulation of labour markets 269–70
developing countries
coalition of 16–17
and patents 93–4, 96–7
_Diamond v Chakrabarty_ 58
direct protection of innovation 22–6
disclosure 65–6
disparate innovation 251, 257
dispute settlement 17
patent litigation 17, 38, 45–6, 95–6
technical arbitration 4, 17–18
dissemination 5–6, 25–6
American universities and effectiveness of 235–6
Australian universities 239–40
impacts of patent system 35, 40–2
_Diversity Arrays Technology (DArT)_ 142–3
doctrine against restraints 269, 270, 275–7, 281
_DNA patents_ 72
_Doha Round_ 94
_Dormer, M. 37
double patenting 92
_Drahos, P. 15, 93
_Drews, J. 135
_Dreyfuss, R. 5
_Drugs for Neglected Diseases Initiative_ 142
dual licensing 148
dynamic efficiency 107
_Edison, T. 39
_Edwards, C. 33
_Edwards, J. 187
_Eisenberg, R. 56, 69–70, 130, 294, 295
_Electronic Frontier Foundation_ 132
_Eli Lilly_ 58
_embryo-free human stem cells_ 250
_employee entitlements to statutory IPRs_ 259
_employment contracts see contracts
_Encarta_ 176
_encoded capacity building_ 94
_Encyclopedia Britannica_ 176
_Encyclopedia of Life_ 172, 174, 184–92
challenges 191–2
 colaborations 189–91
legal dangers 188–9
_Endeshaw, A. 39
_Ensembl Project_ 185
_entry of firms_ 44
_environment_ 301, 309–10
_Equitable Access licensing_ 144–5
_equity_ 257, 259–62
_Ergas Report_ 105–11, 116–19, 122
_interim report_ 113–14
_European Patent Observatory_ 47
_European Patent Office (EPO)_ 41, 45, 93–4
_Memorandum of Understanding with India_ 89–90
_Research Fund_ 21
_evergreening_ 92
_examination of patents_ 73–4, 90
_examiners, patent_ 3, 81–2, 89, 90, 93–4
_excessive proprietary control_ 131, 138–9
_exclusionary provisions_ 120, 121
_exclusive marketing rights_ 85–6
_exit of firms_ 44
_exploitation incentives_ 291–2
_expressed sequence tags (ESTs)_ 59
_fair use
and free speech_ 203–4
new street literature 4, 208, 209–10, 211–12
rise of 202–3
wiki-based sites 180–2, 193
_Fanton, J.F. 187
_fast-track patent process_ 95
_Ferry, G. 141
_filing costs_ 45
_financial conflicts of interest_ 226, 235
_Firestone, O. 31
_firms
entry and exit 44
incentives for innovation and the need for patents 251, 251–7, 262
large 286, 292
small see small firms
_First, H. 5
‘flash of creative genius’ 14
_Florida, R. 300, 301
_follow-on innovation_ 69–71
_Folsom v Marsh_ 206, 214–15
_Food and Drug Administration (FDA)_ 21
to participate in OSB projects 134–8
pervasive 253–5
income from research, universities’ 227
incomplete contracts 295
incomplete production (wikis) 193
incontestability period 20–2
incremental innovation 24–5
independent invention 39
India 15
encouragement of R&D outsourcing
to 90–1
Patents Act 1970  83–4, 86, 87, 88, 91–2, 95, 97
2005 amendment 92
Patents (Amendment) Act 2002  86
Indian Patent Office 3, 80–100
modernization 88–90
re-design of colonial institution 81–5
patent interpretive community 93–4
TRIPs 85–6, 94, 97
individuals
creativity 253, 257–9
incentives to innovate 251, 257–62, 262
legal mechanisms 259–62
optimal conditions for creativity
257–9
tension between systems and 309
induced patents 31–6
inducement doctrine 181
inherited values 221–2
injunctions 279–81
innovation 2–3, 307–8
clusters and 287, 290–3
direct protection of 22–6
disparate 251, 257
impacts of patent system 35, 36–40
incentives and 250–66
firms 251, 251–7, 262
individuals 251, 257–62, 262
intellectual property, innovation and openess 154–71
and patents in biomedical research 55–79
patents and investment in 11–12
Innovation Authority 23
innovation networks 229
innovation patents 23
innovation policies 230
innovation warrants 23
institutional conflicts of interest 226
insulin 58
intellectual property
assets, property and capital in knowledge 155–6
background, foreground and sideground 166–7
and establishing openness 157–8
promotion of innovation 154–5
Intellectual Property Committee (IPC) 16
Intellectual Property and Competition Review Committee (IPCRC) 30
intellectual property policies, universities’ 238, 240–2
interference procedure 18
intermediaries 296
International HapMap Project 76, 141
international harmonisation 22, 308, 310
International Labour Organisation (ILO) Declaration of Fundamental Rights 269
International Patent Classification (IPC) system 95
International Searching Authority (ISA) status 80, 87, 89
international standardisation 7
International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) 140
Internet 146–7
collective authorship 172–98
new street literature 205–12
Internet Corporation for Assigning Names and Numbers (ICANN) 184
interoperability 136, 192
interpretive communities 93–4
inventing around a patent 38–9
invention 22
inventive step requirement 72
inventiveness 253–4
investment in innovation 11–12
IPAC 40, 43
Italy 33
Jackson, J. 144
Jacobi Tool and Die v Mondi and Ors 280, 281
Japan 300
Jefferson, R. 144
Jensen, K. 70
job security 269–70
Joerges, C. 4
*John Fairfax Publications v Birt* 271–2, 276
judicial policy 298–9
Kahin, B. 47–8
Kamm, O. 174
Kapcynski, A. 144
Keen, A. 174
Kew Royal Botanical Gardens 191
Keynes, J.M. 16
Kilian, A. 142
Kingston, W. 23, 64
Kipling, R. 202
Klimis, G. 292
Knol 174, 182, 184
knowledge
assets, property and capital in 155–7
politics of 172–98
spillovers 36–7
knowledge production model 222, 224
Kondo, E. 43
Koons, J. 215
*Koops Martin v Dean Reeves* 273
*Kores Manufacturing Co. Ltd v Kolok Manufacturing Co. Ltd* 274, 278
Kretschmer, R. 292
Kronz, H. 23
Labich, K. 41
labour, freedom from coercion 269–70, 270, 278–9
labour law 300
and individual creativity 259–62
labour markets, deregulation of 269–70
Lambert Review 230
Lamberton, D. 40
Landes, W. 293
Lanier, J. 174
Lanjouw, J. 45–6
large firms 292
disintegration of the large firm 286
Lastowka, G. 178
Latour, B. 169
Lecocq, X. 133
legal aid 17
legal services 96–7, 296
legislative intervention 299–300
Lemley, M. 57, 73
Lerner, J. 44
Lessig, L. 192–3
Levine, D. 44
liberal capitalism 286
licences of right 83, 84, 92
licensing 40, 71
compulsory 24–5, 82–3, 111
open licensing systems 4–5, 158–63
open source licensing 132–3, 139, 147–9, 194
US universities 232, 233–4
licensor obligations 160, 162
*Lindner v Murdoch’s Garage* 272
litigation, patent 17, 38, 95–6
costs 45–6
*Littlewoods Organisation Ltd v Harris* 276
local environment 301, 309–10
London newspapers 200, 201
*Los Angeles Times v Free Republic* 205–12
Luckmann, T. 156
Luhmann, N. 169
*Lumley v Wagner* 279–80
Macdonald, S. 29, 41, 42, 61, 65–6
Machlup, F. 29, 31, 38–9, 40, 47
Macquarie University 241
*Maggbury v Hafele* 269
managers, and researchers 294
Manber, U. 184
Mandeville, T. 38, 40
Mansfield, E. 32, 36, 43
Marginson, S. 228
market 6
market-based exchanges of information 64–8
technology markets 39–40
market harm 211
market positioning 136–7
market power 12
types of 12–13
market pull innovation 222
Martinez, C. 41
Maskus, K. 1
Massachusetts Route 128 293
Mathews, J. 16
Maurer, S. 141, 142, 144
Index 319

May, C. 225, 227
McDonnell, B. 67
McRobbie, A. 286
Melbourne University 240–1
*Merchant of Venice* (Shakespeare) 277
Merck Gene Index 185
Merges, R. 44, 64–5, 66–7, 69, 290, 291, 292, 293, 295, 296, 298
*Metro-Goldwyn-Mayer Studios Inc. v Grokster Ltd* 181
Meurer, M. 11, 30, 33, 38, 46
Michaels, T. 140
Mill, J.S. 204, 214
Mischlewski, D. 37
Missouri Botanical Garden 190
Mithal, V.P. 81, 82, 86–7
Mobilesoft 278
mobility 5–6, 254, 257, 259–60, 261, 262
anti-poaching clauses 272–4
incentives 292–3
model law of intellectual property 15
Mohan, R. 90
Moir, H. 32
Monash University 241
money, measurement by 23–5
monopoly power 42
Monotti, A.L. 228, 230, 238, 239, 240, 242
*Monthly Chronicle* 203
Mooney, B. 45
Mowery, D. 59, 62
multiple 24, 25
Murray, F. 70
Myers, K. 180, 182
Myriad Genetics 159

National Survey of Research
*Commercialisation Years 2003 and 2004 (NSRC) (Australia)* 225, 227
negative externalities 30
Neglected Disease licensing 144–5
Nelson, R. 39, 69
Netanel, N.W. 193
network effects 136
Network for Open Scientific Innovation (NOSI) 144
networks 229, 301
see also clusters
new street literature 205–12
New York Botanical Garden 190–1
newspapers 200–5
nineteenth century 200–1
Nibart-Devouard, F. 183
Nicol, D. 4, 60, 62, 63, 64, 65, 67–8, 72–3
Nelsen, J. 60, 62, 64, 65, 67–8, 72–3
non-competition clauses see restrictive covenants
non-disclosure clauses 294–6, 298
non-exclusive licences 159–60
non-proprietary business opportunities 136–7
non-proprietary tool kit 139
Nordhaus, W. 11
Novartis 92–3
 novelty 254
Nupedia 176
objectives of research universities 240–1
Office of Best Practice Regulation 111
Olson, M. 26
online media 172–98
Encyclopedia of Life 172, 174, 184–92
open access 75–6, 139, 147, 190
open arenas 158, 167–8
Open Hardware 132
open licensing systems 4–5, 158–63
BiOS 63, 143–4, 161–2
Cancer Research UK 159–61
PIPRA 63, 162–3
open review 19–20
open science 164

Nicol, D. 4, 60, 62, 63, 64, 65, 67–8

national innovation surveys 43, 47
National Institutes of Health (NIH) (USA)
effectiveness of diffusion 236
Grants Policy 232
principles for patenting 234–5
National Library of Medicine (USA) 236
National Museum of Natural History at the Smithsonian Institute 191
*National Principles of Intellectual Property (NP) (Australia)* 238
National Research Development Corporation (NRDC) (UK) 230

Christopher Arup and William van Caenegem - 9781848441637
Downloaded from Elgar Online at 12/09/2018 10:40:34PM
via free access
open source biotechnology (OSB) 5, 129–53
anticommons problem 130, 131–2, 138–9
challenges in implementing 146–50
excessive proprietary control problems 131, 138–9
incentives for participation 134–8
key elements of approach 132–4
nature of 129–30
real-world examples 140–6
Open Source Definition (OSD) 148
Open Source Initiative (OSI) 148
open source licensing 132–3, 139, 147–9
open source model 166
open source research platforms 166–7
openness 5, 154–71
intellectual property-based structural arenas for 167–8
possibilities for establishing 158
with as few restrictions as possible 165
within a community 166–7
within the research group 165
within the research project 165–6
Oppenheim, C. 41, 45
Oppenheim, J. 179–80
originality 253–4
orphan drugs 21, 23
orphan works 189, 194
Otis Elevator Co. Pty Ltd v Nolan 280–1
outsourcing to India 90–1
over-regulation 307
P2P Foundation 132
Page, R. 192
pamphlets 199, 207
parallel importing 108–9, 122
Parchomovsky, G. 67
Paris Convention 15, 83, 86
1925 meeting at the Hague 13–14
Article 19 26–7
Pasquale, F. 210
passion 227–8
Patel, P. 72
patent attorneys 96–7
patent classes, searching 41
Patent Cooperation Treaty (PCT) 80, 86, 87–8
patent examination/assessment 73–4, 90
patent examiners 3, 81–2, 89, 90, 93–4
patent interpretive community 93–4
Patent Lens 143
patent offices 80–1
India 80–100
patent portfolio races 44–5, 71, 72
patent searches 111
patent secretaries 81
patents 3–4, 11–28, 307
abuse of the patent system 47
agreed patent database 20–2
Australian competition law and 6, 101–25
broadened scope of patentable subject matter 223
commercialisation of university research 228, 234–5
costs and benefits of patent systems 29–54
decline in quality 18–19
default rules in Australia 297
evolution of 13–14
incentives for innovation in firms and 251, 250–7, 262
patents as incentives to invent 251–3
patents regulating competition 256
problems with competition 255–6
India’s strategy on 90–1
and innovation in biomedicine 55–79
strong patent rights and small firms 63–9
strong patent rights and universities 60–3
strong patent rights and weak patent standards 68–74
need for reform 11–17
reform proposals 17–26
penicillin 14
personal conflicts of interest 226
pesticides 84
persuasion market power 12–13
pervasive incentives 253–5
see also incentives
Petrusson, U. 155, 156, 157, 158
pharmaceuticals industry 14, 15, 33
exploitation incentives 292
India 82, 84, 85, 86, 92–3, 97
encouragement of outsourcing R&D to 90–1
patents as incentives to invent 252–3
<table>
<thead>
<tr>
<th>Physical Review Letters</th>
<th>179</th>
</tr>
</thead>
<tbody>
<tr>
<td>pipeline protection</td>
<td>85, 87</td>
</tr>
<tr>
<td>Pisano, G.</td>
<td>75, 288</td>
</tr>
<tr>
<td>plagiarism</td>
<td>180–2</td>
</tr>
<tr>
<td>Plant, A.</td>
<td>38</td>
</tr>
<tr>
<td>politics of knowledge</td>
<td>172–98</td>
</tr>
<tr>
<td>portfolio patent races</td>
<td>44–5, 71, 72</td>
</tr>
<tr>
<td>positive externalities</td>
<td>30, 36–7</td>
</tr>
<tr>
<td>Posner, R.</td>
<td>293</td>
</tr>
<tr>
<td>post-Chandlerian school</td>
<td>64, 76</td>
</tr>
<tr>
<td>post-grant opposition</td>
<td>95</td>
</tr>
<tr>
<td>Powell, W.</td>
<td>135, 296</td>
</tr>
<tr>
<td>Prakash, V.V.</td>
<td>135</td>
</tr>
<tr>
<td>pre-assignment clauses</td>
<td>294–6</td>
</tr>
<tr>
<td>pre-grant opposition</td>
<td>95</td>
</tr>
<tr>
<td>pre-incubators</td>
<td>167–8</td>
</tr>
<tr>
<td>Pressman, L.</td>
<td>60</td>
</tr>
<tr>
<td>price fixing</td>
<td>121</td>
</tr>
<tr>
<td>prior art searches</td>
<td>19–20</td>
</tr>
<tr>
<td>prior use defence</td>
<td>111</td>
</tr>
<tr>
<td>privity doctrine, ignorance of</td>
<td>269, 270, 277–8</td>
</tr>
<tr>
<td>process benefits</td>
<td>135</td>
</tr>
<tr>
<td>production incentives</td>
<td>290–1</td>
</tr>
<tr>
<td>productivity</td>
<td>44</td>
</tr>
<tr>
<td>property, knowledge</td>
<td>155–7</td>
</tr>
<tr>
<td>prospect theory</td>
<td>108</td>
</tr>
<tr>
<td>provincial newspapers</td>
<td>201</td>
</tr>
<tr>
<td>psychological contract</td>
<td>291</td>
</tr>
<tr>
<td>public choice theory</td>
<td>46</td>
</tr>
<tr>
<td>Public Intellectual Property Resource for Agriculture (PIPRA)</td>
<td>63, 162–3</td>
</tr>
<tr>
<td>Public Library of Science</td>
<td>132, 185</td>
</tr>
<tr>
<td>public research organizations (PROs)</td>
<td>157–8</td>
</tr>
<tr>
<td>Public Resource.org</td>
<td>191</td>
</tr>
<tr>
<td>publication</td>
<td>230</td>
</tr>
<tr>
<td>PubMed Central</td>
<td>236</td>
</tr>
<tr>
<td>pure research</td>
<td>see basic research</td>
</tr>
<tr>
<td>quality of patents</td>
<td>18–19</td>
</tr>
<tr>
<td>Quanfiki</td>
<td>185</td>
</tr>
<tr>
<td>Queensland University</td>
<td>241</td>
</tr>
<tr>
<td>Quiggin, J.</td>
<td>205–6, 210, 211, 212</td>
</tr>
<tr>
<td>Qwiki</td>
<td>185</td>
</tr>
<tr>
<td>Rai, A.</td>
<td>141, 142</td>
</tr>
<tr>
<td>Railway Times</td>
<td>203</td>
</tr>
<tr>
<td>Ralston, L.</td>
<td>240</td>
</tr>
<tr>
<td>Rao, P. Narasimha</td>
<td>85</td>
</tr>
<tr>
<td>rational ignorance</td>
<td>73</td>
</tr>
<tr>
<td>Raymond, E.</td>
<td>174</td>
</tr>
<tr>
<td>Re Fisher</td>
<td>72</td>
</tr>
<tr>
<td>recombinant DNA technology</td>
<td>57–60, 61</td>
</tr>
<tr>
<td>re-contextualisation</td>
<td>211</td>
</tr>
<tr>
<td>Red Hat</td>
<td>142</td>
</tr>
<tr>
<td>regulation costs</td>
<td>36, 45–7</td>
</tr>
<tr>
<td>regulatory capture</td>
<td>46, 308</td>
</tr>
<tr>
<td>regulatory competition</td>
<td>299–300</td>
</tr>
<tr>
<td>Reichman, J.</td>
<td>4, 15</td>
</tr>
<tr>
<td>‘relates to’, interpretation of</td>
<td>115–16</td>
</tr>
<tr>
<td>renewal fees</td>
<td>111</td>
</tr>
<tr>
<td>rent extraction</td>
<td>91</td>
</tr>
<tr>
<td>representative democracy</td>
<td>204</td>
</tr>
<tr>
<td>reputation</td>
<td>12</td>
</tr>
<tr>
<td>Research Councils UK</td>
<td>230</td>
</tr>
<tr>
<td>research and development, outsourcing</td>
<td>India</td>
</tr>
<tr>
<td>research directions</td>
<td>38</td>
</tr>
<tr>
<td>research groups, openness within</td>
<td>165</td>
</tr>
<tr>
<td>research platforms for openness</td>
<td>164–8</td>
</tr>
<tr>
<td>research projects, openness within</td>
<td>165–6</td>
</tr>
<tr>
<td>researchers, and managers</td>
<td>294</td>
</tr>
<tr>
<td>resource allocation</td>
<td>35, 42–5</td>
</tr>
<tr>
<td>Responsible Use of Public Research programme</td>
<td>157</td>
</tr>
<tr>
<td>restrictions</td>
<td></td>
</tr>
<tr>
<td>justification of restrictions on competition</td>
<td>109–10</td>
</tr>
<tr>
<td>openness with as few as possible</td>
<td>165</td>
</tr>
<tr>
<td>restrictive covenants</td>
<td>6, 260, 261–2, 267–84</td>
</tr>
<tr>
<td>complaints common to recent decisions</td>
<td>268–79</td>
</tr>
<tr>
<td>corruption of common law doctrine</td>
<td>269, 270, 275–7</td>
</tr>
<tr>
<td>human rights dimension</td>
<td>269–70, 270, 278–9</td>
</tr>
<tr>
<td>ignorance of privity doctrine</td>
<td>269, 270, 277–8</td>
</tr>
<tr>
<td>inept adoption of accounting language</td>
<td>268–9, 270, 270–5</td>
</tr>
<tr>
<td>practical measures</td>
<td>279–81</td>
</tr>
<tr>
<td>split entitlements</td>
<td>294–6, 298</td>
</tr>
<tr>
<td>Reuveni, E.</td>
<td>178</td>
</tr>
<tr>
<td>reward theory</td>
<td>108</td>
</tr>
<tr>
<td>Ricketson, S.</td>
<td>228, 230, 238, 242</td>
</tr>
<tr>
<td>rigour</td>
<td>1, 3–4</td>
</tr>
<tr>
<td>Riley, J.</td>
<td>273, 278, 298, 300</td>
</tr>
<tr>
<td>Rimmer, M.</td>
<td>175</td>
</tr>
</tbody>
</table>
Rio Convention on Biological Diversity 185, 192
Roberts, J. 288
Robin, S. 286
Robinson, J. 206, 208
royalties 25

safe havens 180–2, 193–4
Sainsbury Review 231
Sali, A. 141
Samuel Report 116, 117
Sand, I.-J. 4
Sanger, L. 173, 174, 176, 183
Sanger Institute 141
Saxenian, A. 292, 293, 299
scale 12
Schankerman, M. 45–6
Scherer, F. 32, 33
Schollin, K. 164
Scotchmer, S. 69
science, public perceptions of 253
Science Commons 132
second enclosure movement 132
secrecy 41–2
see also trade secrets
Sell, S. 15, 16
semiconductor industry 65, 68–9
service provision 136
Shakespeare, W. 277
Shaw, H. 190
Shawn Bentley Orphan Works Act 189
Sheehan, J. 41
Shepard, L. 199, 212, 214
Shiva, V. 145
sidelong intellectual property 166–7
Silberston, Z. 32
Silicon Valley 281, 293, 296
simultaneous invention 44
Sjoberg, L. 175
SklogWiki 185
Slow Food project 145
small firms 61–2, 74–6
strong patent rights and 63–9
Smithsonian Institute 191
SNP Consortium 76, 137, 185
social amenity of the locality 301
social capital policy 301
social constructions 156–7, 169
software programs, open source 145–6
solicitation 277

Sparling, D. 75
specific market power 13
‘specific, substantial and credible’ standard 111
Spekkens, R.W. 179
Spender, J.-C. 169
spin-off companies 60–1
split entitlements 6, 285–305
cluster policy and innovation 290–3
complementary policies 300–2
furthering legal policy 293–300
policy context 285–90
policy rationales 290–3
Sprouse, G. 179
St James’ Gazette 202
stable workforce 273–4
Stallberg, C. 295
Stallman, R. 41, 139
standardisation, international 7
Stern, S. 70
Stokes, D. 56
Stone, K. 270, 291
strategic patenting 32
street literature 4, 199–217
new 205–12
old 199–205, 207
strong patent rights 3, 56–7
positives of 63–4
and small firms 63–9
and universities 60–3
and weak patent standards 68–74
and follow-on innovation 69–71
twenty-first century 71–4
structural transformation 155, 168
sub-licensing 162
Sulston, J. 141
Suthersanen, U. 286, 292
Sykes, Sir R. 231
systems 4, 309
tacit knowledge 3, 60–1, 260, 292
Tapscott, D. 173, 184–5
Taylor, C. 32
Taylor, G. 142
technical arbitration 4, 17–18
technology 254
development and OSB 133
markets 39–40
technological hold-ups 39, 69–71
technology push innovation 222, 230
<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teubner, G.</td>
<td>4, 183–4</td>
<td></td>
</tr>
<tr>
<td>The Synaptic Leap (TSL)</td>
<td>142</td>
<td></td>
</tr>
<tr>
<td>third-line forcing</td>
<td>120, 121</td>
<td></td>
</tr>
<tr>
<td>Thomson, J.</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>threshold tests</td>
<td>107, 108</td>
<td></td>
</tr>
<tr>
<td>Thurbon, J.</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Times, The</td>
<td>202, 204</td>
<td></td>
</tr>
<tr>
<td>Tkacz, N.</td>
<td>174</td>
<td></td>
</tr>
<tr>
<td>total factor productivity</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Towse, R.</td>
<td>286</td>
<td></td>
</tr>
<tr>
<td>Trade Related Aspects of Intellectual Property (TRIPs)</td>
<td>7, 16–17, 22, 26, 74, 154, 300</td>
<td></td>
</tr>
<tr>
<td>India and</td>
<td>84–6, 94, 97</td>
<td></td>
</tr>
<tr>
<td>role of corporations</td>
<td>15–16</td>
<td></td>
</tr>
<tr>
<td>transitional provisions</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>trade secrets</td>
<td>260–1, 270–2, 281, 300</td>
<td></td>
</tr>
<tr>
<td>trademarks</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>trading of patents</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Traditional Knowledge Digital Library</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Traditional Knowledge Resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classification System</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>training of patent examiners</td>
<td>93–4</td>
<td></td>
</tr>
<tr>
<td>transaction costs</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>impacts of patent system</td>
<td>36, 45–7</td>
<td></td>
</tr>
<tr>
<td>transactions</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Transfield Pty Ltd v Arlo International Ltd</td>
<td>114–15</td>
<td></td>
</tr>
<tr>
<td>transformation</td>
<td>208, 211</td>
<td></td>
</tr>
<tr>
<td>transitional arrangements</td>
<td>119</td>
<td></td>
</tr>
<tr>
<td>translational research</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Treaty on Access to Knowledge (A2K)</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td>trilateral</td>
<td>26</td>
<td></td>
</tr>
<tr>
<td>trolling</td>
<td>18–19</td>
<td></td>
</tr>
<tr>
<td>Tropical Diseases Initiative (TDI)</td>
<td>141–2</td>
<td></td>
</tr>
<tr>
<td>United Kingdom (UK)</td>
<td>95, 289</td>
<td></td>
</tr>
<tr>
<td>commercialisation of university research</td>
<td>223, 230–1</td>
<td></td>
</tr>
<tr>
<td>licences of right</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>Patents and Designs Act 1919</td>
<td>84</td>
<td></td>
</tr>
<tr>
<td>United States of America (USA)</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>Bayh–Dole Act</td>
<td>58–9, 225, 232, 233, 234, 243</td>
<td></td>
</tr>
<tr>
<td>biotechnology companies</td>
<td>63</td>
<td></td>
</tr>
<tr>
<td>commercialisation of university research</td>
<td>231–6, 243</td>
<td></td>
</tr>
<tr>
<td>reviews and reform</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recommendations</td>
<td>232–6</td>
<td></td>
</tr>
<tr>
<td>Constitution 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital Millennium Copyright Act 1998</td>
<td>181, 182</td>
<td></td>
</tr>
<tr>
<td>fair use doctrine</td>
<td>180–1</td>
<td></td>
</tr>
<tr>
<td>history of biomedical research</td>
<td>57–60</td>
<td></td>
</tr>
<tr>
<td>induced patents</td>
<td>34, 36</td>
<td></td>
</tr>
<tr>
<td>interference procedure</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Orphan Drug Act 1983</td>
<td>21, 23</td>
<td></td>
</tr>
<tr>
<td>Shawn Bentley Orphan Works Act 2008</td>
<td>189</td>
<td></td>
</tr>
<tr>
<td>WTO action against India</td>
<td>85, 87</td>
<td></td>
</tr>
<tr>
<td>United States Patent and Trademark Office (USPTO)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>capacity building in developing countries</td>
<td>93–4</td>
<td></td>
</tr>
<tr>
<td>interference procedure</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>universal rules</td>
<td>309–10</td>
<td></td>
</tr>
<tr>
<td>universities</td>
<td>167–8</td>
<td></td>
</tr>
<tr>
<td>commercialisation of research</td>
<td>5, 221–49</td>
<td></td>
</tr>
<tr>
<td>strong patent rights and 60–3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University Companies Association (UNICO)</td>
<td>225, 231</td>
<td></td>
</tr>
<tr>
<td>Uruguay Round</td>
<td>43, 84</td>
<td></td>
</tr>
<tr>
<td>Uruguay Round 43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>use of patents</td>
<td>31–6, 43</td>
<td></td>
</tr>
<tr>
<td>user benefits</td>
<td>135–6</td>
<td></td>
</tr>
<tr>
<td>uses of intellectual property rights</td>
<td>2, 4–5</td>
<td></td>
</tr>
<tr>
<td>valley of death</td>
<td>167</td>
<td></td>
</tr>
<tr>
<td>Van Caenegem, W.</td>
<td>68, 282, 292, 298</td>
<td></td>
</tr>
<tr>
<td>Van Doren, C.</td>
<td>172</td>
<td></td>
</tr>
<tr>
<td>Van Pottelsberghe, B.</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Venter, C.</td>
<td>59</td>
<td></td>
</tr>
<tr>
<td>virtual herbarium</td>
<td>190–1</td>
<td></td>
</tr>
<tr>
<td>Vitale, M.</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>voluntarism</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>voluntary obligations to disseminate research</td>
<td>236, 239</td>
<td></td>
</tr>
<tr>
<td>Wadman, M.</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>Wales, J.</td>
<td>176, 177</td>
<td></td>
</tr>
<tr>
<td>Wallis, R.</td>
<td>292</td>
<td></td>
</tr>
<tr>
<td>Walsh, J.</td>
<td>39, 70–1</td>
<td></td>
</tr>
<tr>
<td>Walter v Howe</td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>Walter v Lane</td>
<td>204</td>
<td></td>
</tr>
<tr>
<td>Walter v Steinkopff</td>
<td>202</td>
<td></td>
</tr>
<tr>
<td>Washington Post</td>
<td>208</td>
<td></td>
</tr>
<tr>
<td>Watt, J.</td>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>
weak patent standards 3–4, 68–74
follow-on innovation 69–71
twenty-first century 71–4
Weisburst, S. 33
Weiss, L. 16
Westenholz, A. 296
wiki communities 177
Wikia Inc. 177
Wikia Search 177
Wikibooks 177
Wikileaks 182
Wikimedia Commons 177
WikiMedia Foundation 177, 181–2, 182–3
Wikinews 177
authorship and ownership 177–80
imitators, rivals and competitors 182–4
plagiarism, fair use and safe harbours 180–2
Wikiquote 177
wikis 172
WikiScanner 182
Wikisource 177
Wikispecies 177
Wilkins v Aikin 202–3, 207–8
Williams, A. 173, 184–5
Williams, R. 200
Wilson, E.O. 185–6, 191, 192
Wingate, P. 205
Winter, A. 179
Wookieepedia 182
Woolworths v Olson 271
work-for-hire doctrine 291–2, 300
World Fairs 38
World Trade Organization (WTO) 84–5
dispute resolution between India and USA 85, 87
India 85, 87, 94
TRIPs see Trade Related Aspects of Intellectual Property
World War I 13
Wright brothers 39
Wright v Gasweld Pty Ltd 271, 276
Yencken, J. 240
Yeo, R. 175
Ziedonis, R. 65, 68–9
Zimmer, C. 184
Zimmerman, D. 5
Zittrain, J. 173–4, 176, 180