Index

Legal cases and publications referred to in the text are in *italics*.

*A & M Records Inc. v Napster* 231, 233, 234, 236, 237, 251, 253

**AAA** 174

abolition of patent system 21

academic institutions 139, 149

biomedical research and development 123–4

commercial development of discoveries made with federal funds 141–2

incentives and rights for innovation 141–2

interaction with government and private sectors 118, 121, 126, 127–9, 130–33, 142, 143, 155, 156

licensing income 130

technology transfer 142, 143, 146 offices 139, 141–2

Accelerating Access to AIDS drugs Initiative (AAA) 174

access to medicines 28, 29, 170–71, 173, 174, 175, 183

partnerships with patent holders 175, 183

ageing societies 162, 163

Aghion, P. 106

agriculture

competition law 345, 353

European regulation 352–3, 359

*see also* geographical indications

*Aimster* 253

Arnst, C. 165–6

Attaran, A. 172, 173

Ayres, I. 258

Bagwell, K. 103

Barro, R. 106

Bayh-Doyle Act (1980) 122, 139, 142, 143, 144, 146–7, 149, 153

Benkler, Y. 255

Berkowitz, L. 111

Berkowitz, R. 177, 178

Berne Convention (1886) 245, 259

Bernheim, D. 103

Bhagat, S. 111

bilateral trade agreements 30, 31, 72–3, 307, 320, 325

*see also* geographical indications

biomedical research and development

academic institutions, role of 123–4

government role 119, 125, 126

basic research and development 119, 120

creation of framework to encourage research 120–22, 123

technology transfer 140–41

interaction of academic, government and private sectors 118, 121, 126, 127–9, 131, 133

examples of 131–3

license agreements 118–19

private-sector organizations

clinical trials 124–5

location of facilities near to academic institutions 123–4

product development 124, 125

role of 124, 125

Bishop, E. 20

Black, F. 93

Boyle, J. 245

Breyer, Justice 231, 239, 240, 260

Buchanan, J. 104

*C.B.S. Songs Ltd. & Ors v Amstrad Consumer Electronics Plc. & Anor.* 235
Chamberlin, E. 8
*Chiron Corporation v Organon Teknika* 197

Cockburn, I. 126
Colson, T. 111

competition law 213, 214, 226, 227
agricultural markets 345, 353
geographical indications 351, 352, 354, 355, 356
prohibited agreements 215
compulsory licenses 171, 179, 180, 181, 182, 183, 218, 220, 223, 226, 227

Conrad, J. 12, 13
*Consten and Grundig v Commission* 214

consumer protection laws
geographic origin of goods 348
labelling 320, 348
unfair competition 348
see also geographical indications
consumer substitutes 251


Cooperative Research and Development Agreements (CRADAs) 122

Copyright Act (1976) 270
copyright law 160–61, 247, 268, 269
access control 278, 279, 280, 281, 282, 284
conflict with freedom of information 281, 282, 283
communication rights 271, 272, 275, 276
consumer substitutes 251
contributory or secondary infringement 259
copy protection devices 251
developing countries
impact on 29, 30
future issues 284–5
global definition of the standard of copyright 285
inducement of infringement 237–8
internet regulation 280–83
justifications for 232, 240, 241
balance between property as capital reward and the public domain 241, 242, 243

ensuring fair and equal shares for all based on ethical grounds 243–4
music industry 244, 245, 246–7
new business models 251, 252, 253
public domain 269–70, 283
human rights 284
reproduction rights 271, 272, 273–5
shared monopolies
effect on competition 253–5
stakeholders 232
corporate 249–50
multilevel-creator 250–51
single-creator 249
technological measures 276, 277, 282, 283
technology 230, 231, 245
as driving force of copyright law 258, 259, 260
example legal force of copyright law 232–40
see also file-sharing technology
counterfeiting see violations of intellectual property rights

CRADAs 122
data protection
deficiencies in 63
de Bouftler, S. 3, 4
Deardorff, A. 38
designation of origin 300
definition of 299
protected designations of origin 300, 313, 347
see also geographical indications
developing countries
copyright
problems of 29, 30
foreign direct investment inflows 48, 49
health care problems 163
impact of intellectual property rights 5, 20–21
imports of goods and services 48
perspectives on the importance of intellectual property rights 47
technology transfer 57, 58, 59
acceptance of 39–40
adoption of model laws 24
implementation 24, 25
pressure to comply with 24
violations of intellectual property rights 65, 66, 67
disease
cost of 166
prevalence of 163
Doha Declaration 41–2, 179, 180–81, 183
downstream markets 256, 257
Drahos, P. 27
Druker, B. 132
DSM’s Patent 197
EC see European Commission
economic development
relationship with intellectual property rights 18, 19, 20, 21, 22, 23, 44, 45
Economist 3
Eisenberg, R. 143
enforcement of intellectual property rights 69, 70
costs of 38
dispute settlement mechanisms 74–5
EU
guidebook 76
institutional cooperation within 76–7
outside EU borders 70
responsibility of individual Member States 69
strategy 70–77
identification of priority countries 72
joint initiatives 73
multilateral and bilateral agreements 72–3
obstacles to 67–8
organizations’ strategies 114
political dialogue 73
positive steps towards 68–9
public awareness-raising 75, 76
public–private partnerships 75
technical cooperation 74
see also violations of intellectual property rights
essential medicines 172
access to 170–71, 173, 174
partnerships with patent-holders 175, 183
extent of patenting in developing countries 172, 173, 183
prices of patented medicines 183
European Commission (EC) 63
abuse of a dominant market position 217, 223, 224
refusal to licence 218, 219, 220, 221, 222, 223, 227
Article 81 215, 225
Article 82 217, 226, 227
competition law 214, 226, 227
impact on intellectual property rights 213, 214
prohibited agreements 215
innovation, encouragement of 224, 225, 226, 227
negative sentiment about intellectual property rights 227
technology licensing 215, 216
Technology Transfer Block Exemption Regulation (TTBER) 215–16, 224, 225, 226
Executive Orders 12591 and 12618 (1987) 151
existence/exercise distinction 213–14
Fahey, L. 111
FDI see foreign direct investment
Field, B. 104
File-sharing technology 233–5, 236–7, 238, 239, 240, 246–7, 251, 252, 253, 255
benefits of 255, 256, 257
stakeholders 259–60
Finger, J. 41
Fink, C. 53
Firestone, O. 19
food security 26, 27, 28
Forbes 161
foreign direct investment (FDI)
impact of intellectual property rights 23, 38, 49, 50, 51, 52, 53, 54, 58, 59
inflows to developing countries 48, 49
technology transfer, role in 48–9
free-rider problem 106
gene patents 188, 205, 206
claims to genes 188, 189, 190
criticisms of 203–4
industrial applicability 200, 201, 202, 203
inventive step
  Europe 194–7
  United States 198, 199
products of nature, as
  Europe 191, 192
  United States 193, 194
public policy concerns 199–200
utility, lack of 200, 201, 202, 203
generics companies
  access to drugs 145
  entry into developing countries’ markets 173, 174
  prices of copy drugs 173, 174, 175, 183
Genetech Inc’s Patent 192, 195, 196, 197
genomics 133
  collaboration of government, academia and industry 133
geographical coverage of patent system 38
  transferring wealth from the poor to the rich 39
geographical indications (GIs) 8, 293, 294, 295, 305, 347
  anti-competitive nature of 356, 358, 359, 360
  authenticity of standards 350, 351
  barrier to market entry 298
  beneficiaries of 301, 302
  bilateral and regional agreements 308, 335, 338
  conflicting EU and US obligations 315
  boundaries 351, 356, 357
  collective nature of the protection 351
  competition law
    interface with 351, 352, 354, 355, 356
  consortia administering of 354, 355, 356
definition of 293, 300
developing countries 301, 302
development and promotion of rural society, role in 298–9
divergent food cultures
  problem of 358
economic impact of 297
EU bilateral agreements 314
  accordance of automatic protection 315, 316
  comparative analysis of 321–4
  definition of geographical indications 321
  elimination of TRIPS exceptions 316, 317, 322, 337
homonymous geographical indications 317
  level and means of protection 315, 321, 336
  mutual recognition 324, 337, 338
  objectives of 314, 335
  relationship with trademark protection 318, 323–4
  scope of 337
  structure of 314–15
  traditional expressions 318, 319, 320, 323
EU system for the protection of 299, 300, 301, 312, 313
  higher value markets
    restriction of 359
history of 295–7
inappropriate registrations 356, 357
  market definitions 355
migration of products 349–50, 357
  multilateral register 295, 307
problems of 348, 349
protected geographical indications 300, 313, 347
  shared character of 309–10
source of information for consumers 297
  traditional knowledge, protection of 302
  adoption and implementation of standards 306
  continued and similar use of GIs 350
  definition 293, 309, 310
  exceptions 311, 312
  levels of protection 310–11
  scope of protection 310
US regional and bilateral agreements 325, 326, 327
comparative analysis of 333–4
definition and scope 327–8, 333, 337
legal means of protection 328–9, 333, 335–6
mutual protection clauses 331, 332, 334, 338
objectives of 335
procedural features 331, 334
relationship with trademarks 329, 330, 334
TRIPS exceptions 330, 331, 333, 337
violations of 63
wines and spirits 294, 311, 312
see also designation of origin
Georgia-Pacific v U.S. Plywood-Champion Papers Inc. 86
Gillespie–White, L. 173
Ginsburg, Justice 239, 260
Gleevec 132
government
biomedical research and development 119–23, 125, 126, 140–41
interaction with academic and private sectors 118, 121, 126, 127–9, 131–3
provision of intellectual property protection 133, 134
sponsored research
policy issues 143–4
title to inventions 144–5, 149
technology transfer 140–41
Greater Access to Affordable Pharmaceuticals Act (GAAP) 145
Grossman, G. 33, 106
Hall, B. 111
Hansen, F. 111
Hay, J. 165
health care
financing of 164
Helpman, E. 106
Henderson, R. 126
Hoffman, Lord 189, 206
Howard Florey Institutel Relaxin 191, 199, 201
Howitt, P. 106
Hume, D. 242
ICI and CSC v Commission (Commercial Solvents case) 218–19, 224
ICOS Corporation 192, 202
imatinib mesylate 131–2
imitation of ideas
disincentive to innovate 106
implementation costs of IPR agreements 47
IMS Health v NDC Health 221, 222, 223, 226, 254
In re Bell 198
In re Deuel 198
In re Wallach 199
incentive to disclose secrets 3–4
industrial significance of patent protection 19
innovation subsidy policy 107
innovative firms 109, 111
Intellectual Property Institute (IPI) 204
intellectual property rights (IPRs)
forms of 362–3
framework for studying 361, 362, 363
history of 363
impact of 361
internet
regulation of 279, 280
copyright 280–83
IPRs see intellectual property rights
Jones, C. 45, 106
Kazaa 236
see also file-sharing technology
Kearney, A. 54
Khan, A. 7
Killinger, S. 103
Kirin-Amgen Inc and others v Transkaryotic Therapies Inc and others 188, 192, 194, 195, 206
Kline, D. 111
knowledge
excludability of, 106–7
investments in 109
high fixed costs of production 106
low marginal costs of production 106
non-rival nature of 106, 107
product life-cycle curve 109, 110
knowledge-based growth (KBG) 105, 106, 107
patents as dominant policy instrument 108
‘knowledge commons’ 143
Kortum, S. 111
Lamberton, D. 20
Lamy, P. 173
Lang, J. 111
Lanjouw, J. 111, 114
Laramie, A. 104
large organizations
long-term patent strategies 111, 112, 113
patent enforcement strategies 114
resources available for patent applications 112–13
timing of patent filings 113–14
Lee, J.-Y. 53
Lerner, J. 111, 114
Lessig, L. 245
licensing 54–5, 56, 57, 58, 59, 154, 215, 216
academic institutions
licensing income 130
between private companies 129, 130
biomedical research and development 118–19
compulsory licenses 171, 179, 180, 181, 182, 183, 218, 220, 223, 226, 227
provisions in license agreements 127, 154
royalty payments 128, 129
technology transfer 54, 55, 56, 127, 128, 129, 133
valuations 84
Lippoldt, D. 44, 46, 47, 49, 50, 51, 52, 53, 54, 55, 56, 57
Litman, J. 255, 256
Llewellyn, D. 19
local reputations 296
see also geographical indications
Locke, J. 240, 241, 242, 243
Macfie, R. 3
Machlup, F. 2, 3, 4, 5, 6, 19, 363
Macleod, H. 3
Mair, D. 104
Mandeville, T. 20
Mansfield, E. 19, 53, 88
market power 217–18
Maskus, K. 44, 55, 56
material transfer agreements (MTAs) 154–5
reach-through provisions 155
Matthews, D. 111
McCain, J. 145
medical technology
access to 165
Merges, R. 111, 112
Michelangelo, B. 249
Microsoft 223–4, 226, 227, 257–8
Mill, J. 168
monopolies 1, 175
Monsanto Canada, Inc. v Schmeiser 26–7
Moran, W. 299
Murtha, E. 81
music industry
copyright law 244, 245
P2P services 246–7
technological protection measures 246
new technologies 244, 245, 251, 252, 253
Music Publishers Association 259
Nalebuff, B. 258
National Academies Press 198
National Competitiveness Technology Transfer Act (1989) 152
National Institutes of Health (NIH) 153
grants 155–6
natural property right in ideas 2–3
Nelson, R. 112
new businesss models 251, 252, 253
NIH see National Institutes of Health
Nogues, J. 41
Nowell, P. 131
Nunnenkamp, P. 53
OECD 45, 49, 54, 298  
Olewiler, N. 104  
Omnibus Trade and Competitiveness Act (1988) 151  
Organization for Economic Co-operation and Development (OECD) 45, 49, 54, 298  
organized innovation 6–7  
Orphan Drug Act (1983) 161  

P2P technology see file-sharing technology  
paclitaxel 132  
Palda, F. 104  
parallel importation 171, 181, 182  
counterfeit and substandard drugs 181  
Park, W. 44, 46, 49, 50, 51, 52, 53, 54, 55, 56, 57  
Parke-Davis v HK Mulford 194  
patents 153, 154  
applications 112  
resources available for 112–13  
as charge for knowledge 36  
claims 153  
dissemination of information 107–8  
drivers for 111, 112  
exception from monopolies 1  
historical debates over patent protection 2, 3, 4, 5, 6  
incentives to innovate 107–8  
infringements of 63  
need for  
when inventions cannot be kept secret 34–5  
organizations’ strategies 111, 112, 113  
social impacts of 35, 36, 38  
specification 153  
terms 37–8  
timing of patent filings 113, 114  
tradeoff between public and private benefit 160  
PDOs 300, 313, 347  

pharmaceutical industry  
extent of research and development 165  
global differential pricing systems 182  
incremental innovation 176, 177  
intellectual property rights 159–60, 164, 165, 166, 167, 168  
data protection 161  
impact on prices in developing countries 177–8, 183  
orphan drugs 161–2  
patent life 177  
patent term extension 161  
proposed global agreement 167  
monopoly pricing power 175, 176, 177, 183  

pharmaceutical products  
financial burden borne by private sector 163–4  
financing the development of 42  
free-riding countries 167  
therapeutic competition 176, 177, 183  

Philips v Ingman 220  
Pickering, F. 111  
Pioneer Hi–Bred International Inc. v J.E.M. Ag Supply Inc. 26  
piracy see violations of intellectual property rights  
Plant, A. 4, 8  
plant variety protection 26, 27, 28  
Polanyi, M. 4  
pricing 161  
Primo Braga, C. 53  
private goods 36  
private property rights 36  
private sector  
biomedical research and development 123–5, 126, 127  
interaction with academic and government sectors 118, 121, 126, 127–9, 131–3, 142, 143  
licensing between companies 129, 130  
source of patented technologies to academic institutions 131  
sponsorship of research 130–31, 155, 156  
protected designations of origin (PDOs) 300, 313, 347
Index

protected geographical indications (PGIs) 300, 313, 347
Prusak, L. 111
public goods 36
financing the production of 36–7
governmental provision of 37

Recording Indus. Association of America, Inc. v Diamond Multimedia Systems Inc. 233
regional trade agreements (RTAs) 47, 307, 320, 325
see also geographical indications
Ricardo, J. 3
rights holders
importance of intellectual property rights 45, 46
Rivette, K. 111
Roberts, K. 104
Rogers, J. 4
Romer, P. 106
Romer, T. 104
Rothschild, R. 111
Rousseau, J.-J. 4
Rozek, R. 177, 178
RTAs see regional trade agreements
RTE and ITP v Commission (Magill case) 219–20, 222, 223, 224, 226, 254

Sala-i-Martin, X. 106
scale neutrality of intellectual property policy instruments 103, 104, 105, 114–15
drivers for patenting intellectual assets 111, 112
patent enforcement strategies 114
resources available for patent applications 112, 113
timing of patent filings 113, 114
Schankerman, M. 111
Schechter, F. 8
Scholes, M. 93
Schumer, C. 144, 145
Schwartz, M. 88
secondary markets 256, 257
Securities Data Corporation 56
Shapiro, C. 33
Silbertson, Z. 19
Small Business Innovation Development Act (1982) 149
small organizations
patent enforcement strategies 114
resources available for patent applications 113
short-term patent strategies 112
timing of patent filings 113
Smarzynska, B. 53
Smith, A. 354
Smith, M. 111
social contract 4
social progress 3
Somaya, D. 114
Sony Corp. v Universal Studios Inc. 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 257, 259
Space-shifting activities 233
Spatz, J. 53
sponsored research 130–31, 143, 144, 145, 149, 155, 156
stakeholders 232, 248
corporate 249–50
multilevel-creator 250–51
primary 248
secondary 248
single-creator 249
Statute of Anne (1710) 245
Statute of Monopolies I
Stevenson–Wylder Technology Innovation Act (1980) 139, 149
Sunday Telegraph 356
survival rates 165, 166
Tabellini, G. 103
targeted treatment 166
Taxol 132
Taylor, C. 19
technical designs
infringements of 63
technology
copyright law 230, 231
as driving force of 258, 259, 260
example cases 232–40
time and 258, 259
see also technology transfer
technology transfer 21, 39, 146
academic institutions 142, 143, 146
developing countries
  influence of intellectual property
  rights 57, 58, 59
need for complementary
  conditions 58–9
foreign direct investment, role of
  48–9
government sector 140–41
government sponsored research
  policy issues 143–4
  title to inventions 144–5, 149
interaction of academic and private
  sector 126–7, 142, 143
legislation 149–52
licensing 54, 55, 56, 127, 128, 129,
  133
market forces 133, 134
  offices 139, 141–2
  trade as a vehicle for 47, 48
Teece, D. 109, 111
theft of intellectual property
  concern of businesses 54
Thomas, Judge 230
Tiercé Ladbroke v Commission 221,
  223
time-shifting activities 232, 235
timing of a patent filing 113–14
Tizzano, Advocate General 222
Toole, A. 131
trade
  influence of intellectual property
  rights 49, 50, 51, 53, 58, 59
trade-related aspects of intellectual
  property rights (TRIPS)
  agreement 5–6, 17, 18, 40, 41,
  46–7, 178, 348
amendments to 41, 42
  beneficiaries of 22
  compulsory licenses 179, 180
  copyright 30
  counterfeit medicines 180
  countries’ differing stances 305
developing countries
  acceptance of 39–40
  adoption of model laws 24
  implementation 24, 25
  pressure to comply 24
  enforcement of intellectual property
  rights 72, 73
  expenses of 41
geographical indications 293, 294,
  295, 305, 308, 318
  adoption and implementation of
  standards 306
  continued and similar use of GIs
  350
  definition of 293, 309, 310
  EU elimination of exceptions 316,
  317, 322, 337
  exceptions 311, 312
  levels of protection 310–11
  multilateral register 295, 307
  scope of protection 310
  wines and spirits 294, 311,
  312
impact on access to medicines and
  public health 178–9, 183
institutional costs of compliance
  25–6
review agenda 22, 25
technology transfer objectives 21
  traditional expressions 319, 320
  transfer of wealth from poor to rich
  33, 39
see also Doha Declaration
Trademark Clarification Act (1984)
  150
trademarks 8, 160
  violations of 63
see also geographical indications
  traditional expressions 318, 319, 320,
  323
  traditional knowledge 302
  Trajtenberg, M. 111
TRIPS agreement see trade–related
  aspects of intellectual property
  rights agreement
UK Commission on Intellectual
  Property Rights 23
United Nations Conference on Trade
  and Development (UNCTAD) 5,
  19, 25
United States
  access to generic drugs 145
  bilateral and regional agreements
  320, 325
  preference for 30, 31
  government funding for science and
  technology 140
state-sponsored agricultural certification programmes 346

*see also* geographical indications

*Universal City Studios v Reimerdes* 278

universities *see* academic institutions

US Patent and Trademark Office 346

valuation of intellectual property 67, 81, 83, 99

accounting standards, compliance with 85

acquisitions 84

bankruptcy proceedings 86–7

business decisions 83–4

consistency in valuations 87

cost approach 82

divestitures 84

holding of patents 84

importance of 111

income approach 81, 83, 87–8, 99

discounted cash flow (DCF) method 81, 88–9, 90, 97, 98, 99

real option method 81, 89, 91–7, 99

licensing transactions 84

litigation 86

market approach 82–3

patents as a proxy for 111

spin-offs 84

tax regulations, compliance with 85, 86

venture capital financing 85

Vernon, R. 4, 5

violations of intellectual property rights 63

criminal organizations, involvement of 65

developed countries, effect on 64–5

developing countries, effect on 65, 66, 67

health and consumer protection 64–5

impact on trade 17, 18, 62

need for comprehensive policy to tackle 66, 67

tax revenues, effect on 65

types of 63

*see also* enforcement of intellectual property rights

*Volvo v Veng* 219, 220

von Justi, J. 168

Wagner, S. 88

wealthier countries

impact of intellectual property rights 47

Weidenbaum, M. 103

Wertheimer, A. 176

WHO 164, 171, 172, 174–5

WIPO *see* World Intellectual Property Organization

Wolowski, L. 4

World Health Organization (WHO) 164, 171, 172, 174–5

World Intellectual Property Organization (WIPO) 18, 19

international (IPR) agreements 46, 246

World Trade Organization (WTO) 45, 46, 47, 180, 183

developing countries’ view of 33

*see also* trade-related aspects of intellectual property rights agreement

Zahra, S. 111