Index

AAAS (American Academy of Arts and Sciences) 85
ABA (American Bar Association) 21, 22, 26, 126, 181
Abbott, F.M. 32, 58, 64
abuse of dominance
  compulsory licensing and 150, 159–61
  essential facilities doctrine and 167–8
  proportionality and 147–8, 156–7
  refusal of access to essential services
    and 154–6, 158, 162–5
  refusal to license and 150–51, 153–4, 163, 169
  refusal to supply and 147–9, 151–4
  requirements for 152, 153–4, 156, 165
  Treaty of Rome and 103
  vertical integration and 145–7, 149, 151
acceptability
  right to health and 78
access
  essential services, to, refusal of 154–6, 158, 162–5
  see also technology access
accessibility
  right to health and 78
ACIP (Advisory Council on Intellectual Property) 47, 51, 52, 53, 54
Adcock, M. 88
agreement see MTA; TRIPS
Aguilera, M.C. 9
ancillary activity
  reservation of, leverage cases and duty
to deal 130–33
anti-commons
  property rights and 109–10
  research fragmentation and 5, 6
anti-competitive conduct
  remedy for, compulsory licensing as 63
antitrust
  aims 101
  compulsory licensing as interchangeable remedy with 189
control
  effect on incentives to innovate,
    IPRs and competition law 116–19
  recent recognition of, IPRs and competition law 119–21
  essential facilities doctrine and 133–4
  intellectual property and, transition
    from separate to unified fields
    115
law see competition law; duty to deal
  technology access problems and 185–6
Aoki, R. 180, 186, 196
Areeda, P. 134, 135
Arora, A. 195
Arrow, K.J. 49, 117, 180
Attwood, J. 166
Austin, D. 22
Australia
  compulsory licensing 64
  experimental use exemption 47
Australian Department of Health and Ageing 47
Austria
  compulsory licensing and experimental use exemption provisions
    see also EU
  availability
    right to health and 78
Ayres, I. 117, 182
Bailey, T.C. 55, 56, 177, 195
Baily, M. 28
Balto, P. 193
Bank, K. 104
Barinaga, M. 9
Barton, J.H. 32, 190, 196
Battcock, R. 65
Belgium
duty to deal 154, 161–2
see also EU
Bendekgey, L. 10
Benkler, Y. 23, 181
Bergman, M.A. 135, 164
Bhatnager, 59
Biotechnology Industry Organization 4
Birdsall, N. 71
Blackburn, R. 8, 177
Bloche, M.G. 83, 94
blocking patents doctrine
patent protection and 37, 49
see also patent
Boone, J. 126, 180
Boyle, J. 108
Brazil
compulsory licensing 59
right to health 94
Britain see UK
Britz, J. 90
Calabresi, G. 182
Campbell, E.G. 6
Carl, P. 78, 81
Carlson, S.C. 34
Carlton, D.W. 123, 124, 131, 193
case law
essential facilities doctrine cases, duty
to deal 122
intellectual property 94–6
patent system, technology access
problems impact on 189–90
public health 93–4
refusal to deal under Art 82 EC 147–9,
151–2, 171–3
denial of access 154–6, 158, 162–5
no effect on trade 150
refusal to continue joint venture
with competitor 156–7
refusal to fully meet supply requests
to prevent parallel imports 170
refusal to license 150–51, 161–2,
165–9
refusal to provide interoperating
information 169
refusal to share spare parts with
independent provider of
aftermarket support 153–4
refusal to supply input to preserve
power in market B 145–7,
159–61
see also courts; dependence cases;
essential facilities doctrine;
leverage cases
Chambers, S.A. 8
Chapman, A.R. 85, 90, 91
Chetley, A. 73
Chien, C.V. 56–7, 118
Cho, M.K. 10
CL (compulsory licensing)
abuse of dominance and 150, 159–61
antitrust as interchangeable remedy
with 189
blocking patents doctrine and 49
incentives to innovate and 118
new product for which potential
consumer demand and, prevent-
ing emergence of 187
patent protection and 37, 63–5
definition and history 54
EU Member State provisions for
66–9
grounds for 57–8
role of 58–63
support and opposition for 54–6
public health case law and 94
research tools and, access through
patent law 182, 184
right to health and 70, 87, 91–3, 96–7
safety net, as, technology access
problems and 177, 195–6
two-market requirement and 188
see also licensing
Clark, J. 51, 52, 53
Cohen, C. 3
Cohen, J. 6, 17
Cohen, W.M. 180
Cohen-Boyer Patents
research tool, as 8
Colombia
right to health 80
commensurability
compulsory licensing role in balancing
58
competition
IPRs and see IPRs, competition law and
potential harm to, refusal to deal and
123–6
Competition Commission (South Africa) 63, 196–7
competition law
human rights approach to, technology access problems and 196–9
see also duty to deal; IPRs, competition law and
Conigliaro, M.J. 34
Connor, S.S. 72
Cornish, B. 88, 97
Cornish, W.R. 39
Correa, C. 32
courts
practice, IPRs and competition law 103–6
see also case law
Cringely, R.X. 181
Cullem, G. 7
Cullet, P. 93
cumulative innovation
biopharmaceutical see R&D
patent breadth and 24
see also invention; patent
Dahdoud, T.N. 192
Dalpé, R. 4
David, P.A. 21–2, 24, 107, 108, 109, 111
Davis, R.W. 190, 192, 194
De Santi, S. 180
deadweight loss
compulsory licensing desirability and 55–6
property rights and 111
demand see product, demand
Denmark
compulsory licensing and experimental use exemption provisions 66
see also EU
Department of Commerce, Patent and Trademark Office (USA) 182
dependence cases
characterization unhelpful 157
duty to deal 122, 128–30
see also case law
Depoorter, B. 126, 180
direct effect
patenting and right to health 87–8
Directives
Biotechnology 12, 37, 60, 94–5
Community Code Relating to Medicinal Products for Human Use,
amending 40
Database 119
In-Vitro Diagnostic Medical Devices 37
Legal Protection of Biotechnology Inventions 27
Legal Protection of Computer Programs 119
Rational Use of Medicines 27
Rental and Lending Rights 95
see also EU; legislation
DNA sequences
biomedical research tools and 9–12
patent trends effect on patent balance for 13, 14
see also genetic diagnostics
Dolmans, M. 190
Domeij, B. 34, 41, 48
Drahos, P. 88
Dreyfuss, R.C. 180
Drlica, K. 9
Ducor, P. 42
Dupuy, R.-J. 73, 76, 79, 81
Dutfield, G. 31, 33
duties
right to health, under 79
duty to deal (Art 82 EC)
refusal to deal under 122–3, 143–4
cases see case law, refusal to deal under Art 82 EC
competition and, potential harm to 123–6
state of law on 126–8
dependence cases 128–30
essential facilities doctrine (EFD) cases, indispensability requirement and 133–41
new product innovation 141–2
leverage cases, ‘reservation of ancillary activity’ 130–33
technology access problems and 185–6
impact on patent system case-law 189–90
indispensability 186
innovation markets in 191–4
new product for which potential consumer demand, preventing emergence of 187
Index

objective justification, absence of 188
two-market requirement 187–8

EC Treaty see Treaty of Rome
EFD (essential facilities doctrine)
abuse of dominance and 167–8
access refused to essential services and 154, 158
antitrust and competition and 115
cases, duty to deal 122
exceptional circumstances and 166
indispensability requirement and 133–5
indispensability 135–7
objective justification 139–41
two-market requirement 138–9
refusal to license and 165–9

Eisenberg, R. S.
experimental use exemption and 45, 46, 47
research fragmentation and 5–6
research tools and 8, 13, 14, 15
technology access problems and 16, 181–2, 183

El Salvador
right to health 88

Elliott, R. 89

EMEA (European Medicines Evaluation Agency) 26–7
EPO (European Patent Office) 36–7
Epstein, R.A. 178, 180
ESCRRC (Committee on Economic Social and Cultural Rights) 73

ESTs (expressed sequence tags) research tool, as 8, 182

EU (European Union)
competition law 101, 103, 119, 121
compulsory licensing 60, 66–9
experimental use exemption provisions 66–9
intellectual property cases 94–6
patent protection provisions 38
patent systems and sources 25
reverse doctrine of equivalents 48, 49
right to health 74–5, 94, 97
right to health as human right, status in law 71–4
right to property and IP 84, 86
Supplementary Protection Certificate 30

see also individually named Member States

EUE (experimental use exemption)
patent protection and 37, 39–43, 46–7
EU Member State provisions for 66–9
US experience 44–6
‘relating to’ in, interpretation of 181
research tools and, access through patent law 181–3, 184

European Commission
antitrust and IP and 115
antitrust control recognition and 120
duty to deal and 144, 157
existence/exercise distinction and 104
experimental use exemption and 181
innovation markets and 191
IPRs and competition law and 103, 121
technology access problems and 198–9

European Group on Ethics in Science and New Technologies 37, 70, 87
exceptional circumstances
essential facilities doctrine and 166
exclusive rights exercise and, interpretation 160–61, 166
exclusivity
patronage, procurement and property and, IPRs and competition law 109–12
existence/exercise distinction
antitrust and competition and 115
IPRs and competition law and 103–6

Fauver, C.M. 55
Feinstein, D.L. 192, 193
Feit, I.N. 12

Finland
compulsory licensing and experimental use exemption provisions 66
duty to deal 150–51
see also EU

Fitzgerald, D. 162
follow-on innovation
compulsory licensing desirability and 55
patent protection and 36–7
blocking patents doctrine 37, 49
compulsory licensing see CL
experimental use exemption see EUE
patent pools 37, 51–3
reverse doctrine of equivalents 37, 48–9, 50
see also invention; patent
France
compulsory licensing and experimental use exemption provisions 66
patents’ importance, overstating 33
see also EU
FTC (Federal Trade Commission) (USA) 32, 193, 194
FTC/DOJ
Antitrust Guidelines for Collaboration Among Competitors 191, 194
Antitrust Guidelines for the Licensing of Intellectual Property 119, 120
Hearings on IP and Competition Law 195
Proceedings on Competition and IPRs 29, 118
Proceedings on the Pharmaceutical Industry 29
Fuenzalida-Puelma, H.L. 72
Fysh, M. 43
Gambardella, A. 26, 27
Gwrg, R. 33
Gatti, J. 198
Geltjns, A.C. 26

Genetic diagnostics
biopharmaceutical R&D and cumulative innovation 4–5, 6
research tools and 8, 9
patent pools and 52
see also DNA sequences
Genevaz, S. 116
Gerber, D.G. 131
Gerber D.J. 135, 138
Germany
compulsory licensing 61, 64–5, 67
duty to deal 129, 150–51, 165–9
experimental use exemption 40, 42, 67
patent pools 53
research tools, patent trends effect on patent balance for 14
see also EU
Gertner, R. 193
Gilat, D. 39, 40, 41, 42, 46, 184
Gilbert, R.J. 24, 193
Gitter, D. 12
Glenken, J. 129
Glover, G. 28, 29
Goldman, A.V. 134
Goldstein, J.A. 15

goods see information goods; public goods
Gordon, H.S. 113
Gorner, P. 97
Gostin, L. 78
Grabowski, H. 23, 27, 28, 29
Greece
compulsory licensing and experimental use exemption provisions 67
duty to deal 170
see also EU
Green, J. 24
Greenberg, A.C. 34
Grosvenor, R. 146, 157
Hahn, E.A. 26
Hamlet-Cox, D. 10
Handley, L.A. 48
Hantman, R.D. 41
Hardin, R. 110
Harhoff, D. 26, 29
Harvard ‘oncomouse’
research tool, as 8
Harz, M.H. 134
Hasenzahl, C. 54, 59
Hawker, N.W. 132, 135
health
emergencies, compulsory licensing role in addressing 61–3
see also public health; right to health
healthcare implications, biopharmaceutical R&D and 4–5
Heller, M.A. 5
Hogerzeil, H. 97
Holzapfel, J. 6
Hooks, J. 138
horizontal dilemma
patent balance and 23
Hovenkamp, H. 56, 58
Hull, D. 166
human rights
approach to competition law, technology access problems and 196–9
right to life 80
*see also* right to health; right to property

IACHR (Inter-American Commission on Human Rights) 80
ICESCR (International Covenant on Economic, Social and Cultural Rights)
property rights and, public interest limitations 86
right to health elements and 78
right to health sources and 75–6
right to property and IP as human right and 84, 85
*see also* legislation
incentive reduction
compulsory licensing desirability and 56
India
generic products and drug prices 82
indirect effect
patenting and right to health 88–9
indispensability
duty to deal and technology access problems and 186
essential facilities doctrine and 133–7
objective justification 139–41
two-market requirement 138–9
information
access *see* technology access goods, IPRs and competition law 109–12
*see also* knowledge
innovation
nature of biopharmaceutical 26–8
new product, duty to deal 141–2
patenting and 28–31
*see also* cumulative innovation;
follow-on innovation; patent
innovation incentives
antitrust control effect on 116–19
compulsory licensing and 118
innovation markets
duty to deal and technology access problems and 191–4
optimal structure 179–81
*see also* market
invention
commercialization, as patent system rationale 22–3
dissemination
patent system goals and 23–4
patent system rationale, as 22
motivation, as patent system rationale 21–2
orderly cumulative development of, as patent system rationale 23
*see also* patent
IP (intellectual property)
European cases on, fundamental rights analysis and 94–6
human right, as, right to property and 84–6
system, competition embedded in 114
*see also* property
IPRs (intellectual property rights)
competition law and 101, 103, 121
antitrust control 116–21
competition embedded in IP system 114
courts’ practice 103–6
EC Treaty provisions 102
exclusivity, patronage, procurement and property and 109–12
information goods, patronage, procurement and property and 109–12
IPRs like other property rights for purposes of competition 112–13
public goods
market failure and 107–9
patronage, procurement and property and 109–12
transition from separate to unified fields 114–16
*see also* rights
Ireland
duty to deal 156–7, 159–61
*see also* EU
Israelsen, N.A. 41
Italy
compulsory licensing and experimental use exemption provisions 67
*see also* EU
James, E. 71
Japan
compulsory licensing 61
Jehoram, H.C. 92–3
Jensen, E. 28
Julian-Arnold, G. 57, 59, 60, 62, 64
Junnarker, S. 8

Källaugher, J.J. 134, 158–9
Karjalä, D.S. 185–6
Karp, J.P. 183
Kass, L.R. 77
Kattan, J. 191
Kelley, D. 72
Kenney, P.J. 87
Kenya
generic products and drug prices 82
Kern, M. 39, 60, 64–5
Kezsborn, A. 134
Killick, J. 139
Kind, J.L. 181
Kitchm E.W. 21, 23, 24
Klempner, P. 24, 117, 195
Knable Gotts, I. 191

knowledge
public good, as 107–8
see also information
Ko, Y. 11
Korah, V. 56, 148–9, 162
Kraus, J.G. 191
Kubalski, J. 51
Kukies, J. 26, 29
Kwoka, E. 192

Ladas, S.P. 59
Laherty, C. 42
Lang, J.T. 159
Lao, M. 185, 195
Lawson, C. 6
Leaffer, M. 184
Leary, V.A. 72, 73
Leddy, M. 138

legislation
Act Against Restraint of Competition
(Germany) 129
Affordable Prescription Drugs Act
(USA) 62–3
African Charter on Human and
People’s Rights (Banjul Charter)
72

Berne Convention for the Protection of
Literary and Artistic Works 119
Charter of Fundamental Rights of the
European Union 74–5, 84, 86
Civil Code (Netherlands) 92
Community Patent Convention (CPC)
39
Community Patent Regulation (CPR)
38, 39, 61
Competition Act (South Africa) 63, 197
Convention on the Elimination of All
Forms of Discrimination Against
Women 72, 76
Convention on the Rights of the Child
72, 76
Intellectual Property Code (France) 62
Drug Price Competition and Patent
Term Restoration Act (USA) 40,
46
European Charter of Patients’ Rights 75
European Convention on Human Rights
(ECHR) 84, 86
European Patent Convention (EPC) 15,
35, 36, 38, 39
European Social Charter 72
General Agreement on Trade and
Services 91
International Convention on the
Elimination of All Forms of
Racial Discrimination 72, 76
International Covenant on Civil and
Political Rights (ICCPR) 74, 86
Medicines and Related Substances
Control Amendment Act (South
Africa) 93
Orphan Drugs Act (EU) 30
Orphan Drug Act (USA) 30–31, 87
Paris Convention for the Protection of
Industrial Property 54
Patent Act (Germany) 15–16, 39, 62
Patent Law (Switzerland) 60
Patent Law Including Modifications
(France) 39
Patents Act (UK) 39, 60, 119
Patents and Plant Variety Rights
(Compulsory Licensing) Regulations 60
Public Health Emergencies Act (USA)
62
San Salvador Protocol 88
Technology Transfer Block Exemption
Regulation (TTBER) 191
Universal Declaration of Human
Rights (UDHR) 73–4, 75, 84, 85
Vienna Convention on the Law of
Treaties 89
see also Directives; EPC; ICESCR;
Treaty of Rome; TRIPS
Lemley, M.A. 24, 34, 49, 56, 58
Lerner, J. 180
leverage cases
duty to deal 122, 130–33
see also case law
Levin, R.C. 180
Levy, R. 178
license stacking
patent trends effect on patent balance
for research tools and 13–14
technology access and innovation and
5–6
licensing
broad, compulsory licensing as
mechanism to induce 58–9
compulsory see CL
refusal
abuse of dominance and 150–51,
153–4, 163, 169
essential facilities doctrine and
165–9
refusal to deal, as 124
Lichtenberg, F. 30
Lie, R.K. 73
Lipinski, T.A. 90
Lipsky, A.B. 134, 135
Llewelyn, M. 88
Loury, G.C. 24
Love, J. 46, 64, 196
Lunney, G. 137
Luxembourg
duty to deal 151–2
see also EU
Machlup, F. 21, 24
Mackaay, E. 110, 114
Mackie-Mason, J.K. 124, 125, 126
MacLaren, M. 95
Mann, J. 78
Mansfield, E. 29, 30
Marenco, G. 104
Mark, J. 56, 58
market
failure, public goods and, IPRs and
competition law 107–9
structure, optimal for innovation,
technology access problems and
179–81
see also innovation markets; two-
market requirement
market-oriented experiments
experimental use exception and 40
Marquandt, P. 138
Marshall, E. 13
Maskus, K. 198
Maurer, S. 181
McFetridge, D.G. 56
McGowan, D. 191, 193
McLeod, J.M. 8
Melamed, D. 182
Merges, R.
IPRs and competition law and 110, 111
patent balance and 24
patent protection and 48, 49–50, 51,
52, 53
research tools and 8
Merkin, R. 101
Metz, J.F. 10
Miller, C.G. 105–6
Mongoven, J.F. 192
Montgomery, J. 77, 79
Morse, M.H. 192
MTA (material transfer agreement)
research tools and 7
Mueller, J.M.
duty to deal and technology access
problems and 181, 183, 184
patent protection and 36, 47
research tools and 7, 8, 9, 11, 13, 17
Mully, T. 83, 85–6, 95
Mwalimu, U.A. 82
Myrick, M.E. 104, 105
Nacke, T. 129–30, 157
National Institutes of Health (NIH)
(USA) 13, 183
Nelson, L. 12–13
Nelson, R.R. 24, 111
Netherlands
compulsory licensing and experimen-
tal use exemption provisions 69
see also EU
new product
innovation, duty to deal 141–2
potential consumer demand existing, preventing emergence of, duty to deal and technology access problems and 187
see also product
Newberg, J.A. 115
Nicol, D. 6
Nielsen, J. 6
Nigeria
right to health 80
NIH (National Institutes of Health) (USA) 4, 7, 17, 177, 183
non-use
compulsory licensing role for 59
Norway
compulsory licensing and experimental use exemption provisions 67
Nuffield Institute of Biotechnology 4, 5, 9–10, 11, 13, 14, 17
objective justification
absence of, duty to deal and technology access problems 188
abuse of dominance and 148
essential facilities doctrine and indispensability requirement and 139–41
parallel trade restrictions and 170
refusal to supply and 149
obligations see duties
OECD (Organisation for Economic Cooperation and Development) 3, 13, 27, 29, 52, 134
Ordover, J. 24
ordre public
right to health and 70, 87, 96
Orsengo, L. 26, 27
Oxfam 31
Pammoli, F. 26, 27
Parisi, F. 126, 180
Pate, G.N. 46
patent
blocking, doctrine, patent protection and 37, 49
breadth, patent system goals and 24 dependent 49, 65
importance, overstating 31–3
length, patent system goals and 24
pools, patent protection and 37, 51–3
pre-commercial stage 4, 177–8
see also innovation; invention
patent balance
patent system as balancing system and 21, 23–5
research tools, for, patent trends effect on 12–15
right to health implications see right to health
patent law
right to health and effect of patent law on right to health 82–3
effect of right to health on patent law 83
interpretive principle, as 70–71, 90–93, 96–8
public-health case-law 93–4
technology access problems and 181–5
patent protection
compulsory licensing as, technology access problems and 177, 195–6
European law provisions for 38
follow-on innovation and 36–7
blocking patents doctrine 37, 49
compulsory licensing (CL) 37, 63–5
definition and history 54
EU Member State provisions for 66–9
grounds for 57–8
role of 58–63
support and opposition for 54–6
experimental use exemption (EUE) 37, 39–43, 46–7
EU Member State provisions for 66–9
US experience 44–6
patent pools 37, 51–3
reverse doctrine of equivalents 37, 48–9, 50
impeding information access and 14–15
patent system
balancing system, as 34–5
biopharmaceutical innovation
nature of 26–8
patenting and 28–31
patent balance 21, 23–5
patents’ importance, overstating 31–3
biopharmaceutical industry and 25–6
case-law, technology access problems impact on 189–90
EU existing 25
importance of, factors in 29–30
main rationales 21–3
research tools and, technology access problems 177–81
safety nets see patent protection
patenting
biopharmaceutical innovation and 28–31
increase in, healthcare implications 4–5
privatization and 5
right to health and 87–9
patronage
public goods, exclusivity and information goods and, IPRs and competition law 109–12
Patterson, D. 138
PBM (Pharmacy Benefits Management) networks
refusal to deal and 178
PCR (polymerase chain reaction) technology
biomedical research tools and 9
research tool, as 8
see also technology
Pekari, J.C. 90
Perrine, J. 166
Perritt, H. 108, 110
Pitofsky, R. 138
Pons, J. 191
Portugal
compulsory licensing and experimental use exemption provisions 68
see also EU
privatization
biopharmaceutical R&D and 5
procurement
public goods, exclusivity and information goods and, IPRs and competition law 109–12
product
demand not met, compulsory licensing desirable where 54–5
see also new product
property
public goods, exclusivity and information goods and, IPRs and competition law 109–12
see also IP; right to property
property rights
specific subject matter doctrine and 115
see also IPRs; rights
proportionality
abuse of dominance and 147–8, 156–7
public goods
market failure and, IPRs and competition law 107–9
patronage, procurement and property and, IPRs and competition law 109–12
public health
case law, patent law and right to health 93–4
compulsory licensing and 70
see also health
public interest
IP as human right and right to property 84, 86
quality
right to health and 78
R&D (research and development)
cumulative innovation and 3–7, 16–18
biomedical research tools 9–12
defining research tools 7–8
patent trends effect on patent balance for research tools 12–15
see also research
Rabinow, P. 9
Rai, R.K. 4
Rapp, R. 193
Ratner, J. 139
Reichman, J. 54, 59
remedy
anti-competitive conduct, for, compulsory licensing as 63, 185
interchangeable, compulsory licensing and antitrust 189
research
fragmentation, biopharmaceutical R&D and 5–7
nature of, recent changes in 3
see also R&D
research tools
biomedical, cumulative innovation and
R&D and 9–12
compulsory licensing usefulness and
58
defining, cumulative innovation and
R&D and 7–8
essential, technology access problems
and 181–5
experimental use exemption and 40,
46–7
patent pools and 53
patent system and, technology access
problems 177–81
patent trends effect on patent balance
for, cumulative innovation and
R&D and 12–15
reverse doctrine of equivalents and 50
reverse doctrine of equivalents
patent protection and 37, 48–9, 50
Rey, P. 132
Richardson, D.M. 87
right to health
elements 77–8
human right, as, status in European
law and 71–4
implications 76–7
obligation to respect, protect and fulfil
79
strengthening, international efforts for
80
sources 74–6
IP 84–6, 94–6
patent law and 70–71, 82–3, 90–94,
96–8
patenting and 87–9
right to property
IP as human right and 84–6
rights
exclusive, exercise of and exceptional
circumstances interpretation
160–61, 166
see also IPRs; property rights
Robertson, A. 165
Robinson, C.O. 134
Ross, D. 118
Scherer, F.M.
duty to deal and technology access
problems and 181
IPRs and competition law and 116,
118
patent balance and 24, 26, 32, 33
patent protection and 56, 64
Schoff, K. 90
Schumpeter, J. 24, 180
Scotchmer, S. 23, 24
Seelen, C.M. 135
Seide, R.K. 8
Semerano, S. 118
Shah, S. 81
Shapiro, C. 24, 51, 52, 129
Shavell, S. 108–9, 111
Sher, S. 193
Shibata, Y. 42
Sidak, J.G. 134, 135
Siebrasse, N. 112
Silberston, Z.A. 56
Sing, L. 52
Singham, S.A. 29, 33
Small, J. 180, 186, 196
SMEs (small- and medium-sized
enterprises)
dependency, abuse of dominance and
148–9, 150
sources 74–6
IP 84–6, 94–6
patent law and 70–71, 82–3, 90–94,
96–8
patenting and 87–9
right to property
IP as human right and 84–6
rights
exclusive, exercise of and exceptional
circumstances interpretation
160–61, 166
see also IPRs; property rights
Robertson, A. 165
Robinson, C.O. 134
Ross, D. 118
Scherer, F.M.
Sweden
  compulsory licensing and experimental use exemption provisions 68
see also EU

Switzerland
  compulsory licensing 60, 61, 69
  experimental use exemption provisions 69
  patents’ importance, overstating 33

Talley, E. 182
Tandon, P. 55
Taq (Thermus aquaticus YT1 DNA polymerase)
  research tool, as 9
Taylor, C.T. 56

technology
  PCR 8, 9
  significant advances, CL role in 59–61

technology access
  competition law, human rights approach to 196–9
  compulsory licensing as safety net 177, 195–6
  duty to deal (Art 82 EC) and see duty to deal, technology access problems and
  impeded, patent protection and 14–15
  innovation and 16–17
  license stacking and 5–6
  research tools and patent system, conclusions
  antitrust law see duty to deal
  innovation, optimal market structure for 179–81
  patent law 181–5
  patent system gap 179
  research tool particularity 177–8
see also access

Thailand
  generic products and drug prices 82
Toebes, C.A. 71, 73, 74
Tom, W.K. 115, 193

Treaty of Rome (EC Treaty)
  abuse by dominant undertaking and 103
  Art 82 see duty to deal
  existence/exercise distinction and 104, 105, 106
  IPRs and competition law and, relevant provisions 102
see also legislation

TRIPS (Trade-Related Aspects of Intellectual Property Rights) Agreement
  antitrust control and 119, 120
  blocking patents doctrine and 49
  compulsory licensing and 57, 58, 185
  property rights and, public interest limitations 86
  right to health as interpretive principle in patent law and 90, 93, 94
  right to health indirect effect and 88–9, 96
see also legislation
Troy, D.E. 134, 135, 139

two-market requirement
  duty to deal and technology access problems and 187–8
  essential facilities doctrine and
    indispensability requirement and 138–9
  refusal to license and 169
see also market
Tuffery, D.E. 41

UK (United Kingdom)
  compulsory licensing provisions 69
  duty to deal 150, 153–4, 159–61
  experimental use exemption 43, 69
  patents’ importance, overstating 33
see also EU
Ullrich, H. 23, 112, 113, 114–15
UN (United Nations) 80, 89, 90
UNDP (United Nations Development Programme) 82

USA (United States of America)
  antitrust control 119
  biopharmaceutical innovation in, nature of 28
  Bolar exception 40
  compulsory licensing 62–3, 64, 65
  essential facilities doctrine 133, 134
  experimental use exemption 44–6
  innovation markets and 191
  research tools, patent trends effect on patent balance for 15
  reverse doctrine of equivalents 35, 48, 49
  right to health 94
Index

technology access problems 194

two-tier R&D system, cumulative innovation and 3

use see EUE; non-use

Van Boven, T.C. 73
Venit, J.S. 134, 158–9
vertical dilemma
patent system goals and 23
vertical integration
abuse of dominance and 145–7, 149, 151

leverage cases and 131–2
Vinje, T. 104, 106
Voissiues and Partner 12

Walsh, J. 3, 6, 17
Walter, W.G. 61
Weissbrod, D. 90
Weisburst, S. 33
Welch, L.T. 41

Whish, R. 164
Whitehead, M. 77, 88
Whitener, M. 131

WHO (World Health Organization)
compulsory licensing and health emergencies and 62
Constitution 71, 73, 76
Declaration of Alma-Ata on Primary Health Care 74
innovation and patenting and 31
right to health and 77–8, 79, 82, 87
WIPO (World Intellectual Property Organization) 33
WTO (World Trade Organization) 31–2, 88–9, 89, 90, 94, 96

Yamin, A.E. 77, 78, 79, 81, 83, 88
Yi, S. 126, 180
Yoo, C.S. 133

Zanon di Valgiurate, L. 149–50