Index

Australia
enhanced damages, 95
lost profits availability, 56
lost profits, unwitting infringer, 56

bargaining power, 246
bargaining power discount, 249
circularity, 251
high discount rate, 247
incremental value, division of, 25
independent creation, 252
information asymmetries, 253
informational disadvantage, 253
Nash Bargaining Solution, 246, 248
optimal patent term, 250

Canada
disgorgement, 75, 81, 83
enhanced damages, 95
lost profits availability, 56
preliminary injunctions, 124
reasonable royalty factors, 14

China
antimonopoly law, 222
bundling, 225
calculating damages, 201
damages, 8
disgorgement, 79
enhanced damages, 95
exclusionary abuses, 219
FRAND, 187, 201
litigation cost recovery, 105
lost profit awards, 58
lost profits availability, 58
Chinese Patent Act
disgorgement, 79
circularity, 36
discounting, 37

holdup/holdout circularity, 36
probabilistic circularity, 36
competition law
anticompetitive effects, 216
antitrust agencies, 206
behavioral remedies, 233
bundling, 224, 225
circular products, 209, 223, 236
EU competition law, 207
exceptionalism, 207
excessive pricing, 224
FRAND licensing, 215, 221
future licensing, 218
goals, 204
holdout, 212
holdup, 212
injunctive relief, 212, 213, 233
level discrimination, 226
monetary remedies, 232
multi-level licensing, 228
patent acquisition, 231
patent pools, 228
price discrimination, 224
privateering, 230
refusal to supply, 221
SEP holder obligations, 210, 217, 219
tying, 224, 225
unfair trading conditions, 220

complementarity, 20
calculating damages, 201
damages, 8
disgorgement, 79
discounting, 37

Daubert
reasonable royalty, 47
deterrence
underdeterrence, 9
disgorgement, 72–89
burden of proof, 88
definition, 50
deterrence, 73
differential profit method, 82
drawbacks, 80
fixed costs, 85
objective, 50
potential benefits, 80
unjust enrichment, 72

enhanced damages, 91–104
calculating multipliers, 288
catch-me-if-you-can problem, 98
criminal sanctions, 96
detering beneficial challenges, 100
effect on patent reading, 101
EU Enforcement Directive, 94
holdout, 98
objective recklessness, 92
promoting innovation, 97
purpose, 97
underdetection, 100
willfulness findings, study of, 92
etire market value, 42, 44, 64

European Union
disgorgement, 76
enhanced damages, 94
exclusionary abuses, 219
FRAND, 165, 175
injunctive relief, 126
level discrimination, 227
litigation cost recovery, 105
lost profits availability, 57
ex ante
assessing social value, 244
contingent ex ante approach, 244
ex ante negotiation, 243
incentive to invent, 245
lock-in cost, 245
pure ex ante approach, 244
sunk costs, 243

France
disgorgement, 78
injunctions, abuse of rights, 142
lost profits availability, 57
preliminary injunctions, 124
FRAND
abuse of rights, 190
bottom up approach, 168
comity device, 176
enhanced damages, 165
EU competition law, 176, 185, 188

FRAND royalty rates, 167
Georgia-Pacific factors, 162
holdout, 164
infringement notification, 178
injunctive relief, 171–90
jurisdictional issues, 184
licensing offer, 179
monetary damages, 161–71
proportionality, 189
reasonable royalty calculation, 162
refusal to license, 166
standard-essential patents, 164
top down approach, 168, 170
Treaty on the Functioning of the European Union, 165

Georgia-Pacific
alternatives, 16
criticism of, 14
fundamental questions, 15
incremental value, division of, 24
post-infringement evidence, 32
restructuring analysis, 15
similar factors, Canada, 14
similar factors, Germany, 14
similar factors, Japan, 14

German Patent Act
calculating damages, 77, 191
estimating damages, 192
monetary damages, 191

Germany
disgorgement, 77
FRAND, implementer response, 182
FRAND, infringement notification, 178
FRAND, licensing offer, 179
FRAND, monetary damages, 165
FRAND, royalty calculation, 181
FRAND, time limits, 178, 183
hypothetical bargain, information available, 28
injunctive relief, 125, 142
level discrimination, 226
lost profits availability, 57
preliminary injunctions, 124
reasonable royalty factors, 14

holdout, 284–89

calculating multipliers, 288
catch-me-if-you-can problem, 284, 285
competition law, 212
definition, 284
European holdout model, 284
fee shifting, 287
injunctive relief, 286
Index

holdout (cont.)
- litigation costs, 285
- transaction cost reforms, 289
- undercompensatory damages, 282, 288
- underdetection, 257
- underdetection and enhanced damages, 287
- holdup, 254–71
- apportionment problem, 258
- assessing excessive royalty, 296
- asymmetric stakes in litigation, 287
- case studies, 295, 296
- competition law, 212
- competitive markets, 266
- complex products, 258, 261
- definitions, 254
- difficulty assessing royalty, 269
- distinguishing royalty stacking, 294
- downstream firms, 266
- early negotiation, 264
- economic literature, 302
- elasticity of demand, 268
- evidence of systematic problem, 294
- ex ante licensing, 271
- ex ante negotiation, 272
- ex post royalties, 255
- fairness-based norms, 254
- hindesight bias, 282
- inelastic demand, 267
- injunctive relief, 268
- liability rule, 279
- licensing business model, 270
- litigation costs, 263
- lost profit damages, 269
- mitigating mechanisms, 271
- network effect appropriation, 256
- network effect value, 297
- overcompensatory jury awards, 282
- patent ambush, 297
- patent central to product, 263
- patentee pays switching costs, 275
- probabilistic patents, 259
- redesign cost, 262
- repeat bargaining, 273
- royalty burden of proof, 281
- stay of injunction, 274
- study of, 209
- sunk costs holdup, 255, 256
- sunk R&D costs, 265
- switching costs, 261, 275
- undercompensatory damages, 279
- unwilling licensor, 275
- hypothetical bargain, 9, 22–23
- circularity, 36
- comparability, 34

contingent ex ante approach, 31
- ex post information, 33
- multiplier, 37, 38
- prior settlements, 39
- probabilistic discounting, 40
- timing of, 28

incremental value, 19
- best patented alternative, 240
- comparables, 26
- course of dealing, 26
- custom of the industry, 26
- definition, 17
- determining value, 242
- division of, 23
- economic value, 19
- relevant evidence, 26
- royalty benchmark, 239
- social value, 19, 240
- value to different users, 242

India
- exclusionary abuses, 219
- lost profits availability, 58
- unwitting infringer, 58

Indian Patent Act
- lost profits, 58

injunctions
- abuse of rights, 125, 141
- as a matter of right, 125
- automatic injunctions, 125
- burden on the public, 117
- causal nexus, 129
- civil law systems, 141–43
- complex products, 120, 125, 130, 140
- design around, 124
- discretionary, 125
- disproportionality, 124, 152, 153
- eBay factors, 127
- economic arguments, 118
- empirical factors, 128
- EU Enforcement Directive, 126, 139
- expected harms, 123
- FRAND, 125, 134
- good faith, 138
- harm to enjoined parties, 148
- harm to the public, 150
- harm to third parties, 149
- holdout, 120, 121
- holdup, 120, 121, 125
- incremental worth, 148
- indirect monetary value, 115
- irreparable harm, 129
- liability rule, 119
- market exclusivity, 131, 132
Index

matter of right, 141
noncompensable harm, 151
ongoing reasonable royalty, 157
oppressive to defendant, 136
over-reach, 121
permanent injunction, 127
preliminary injunctions, 122, 123
property rules, 119
proportionality, 140
public interest, 133, 140
rationales, 115
right to exclude, 115, 116
scale of infringement, 147
standard-essential patents, 134, 140, 142
study of, 129, 131
switching costs, 118
tailoring, 133, 155
transaction costs, 277
TRIPS Agreement, 116, 117, 143
undue delay, 132, 138
United Kingdom, 134–41
United States, 127–34
interest, 111–14
Federal Reserve survey rate, 113
restitutio nary interest rate award, 113
undercompensatory prejudgment interest, 111
Italy
injunctions, abuse of rights, 142
Japan
abuse of right, 200
disgorgement, 79
enhanced damages, 96
FRAND, 169, 186, 187, 189, 200
injunctions, abuse of rights, 142
Japanese Institute of Inventors and Innovation (Hatsumei Kyokai), 12
litigation cost recovery, 105
lost profits, 57, 58
reasonable royalty factors, 14
standard royalty rate, 12
statutory prejudgment interest rate, 113
study of, 7
Japanese Patent Act
disgorgement, 79
FRAND, injunctive relief, 185
lost profits, 57
Korea
FRAND, 185, 189, 199
injunctions, abuse of rights, 142
monetary damages, 199
liability rule
bias in damages assessment, 278
definition, 276
injunctions, 119
speculative uses, 277
litigation cost recovery, 104–11
costshifting, study of, 109
effects of awarding costs, 108
EU Enforcement Directive, 104
exceptionality requirement, 107
lost profits, 51–72
apportionment, 66
availability, 52, 55–58
awards, study of, 55
compensable lost sales, 64
converted sales, 64
definition, 50
derivative sales, 65
electronic harm, 69
foreseeable lost profits, 54
future losses, 69
harm to subsidiaries, 69
loss of chance, 71
lost economies of scale, 69
mixed awards, 55
non-infringing alternatives, 60
objective, 50
opportunity costs, 69
Panduit factors, 53
price erosion, 51
reputational damage, 69
standard, United States, 53
study of, 58
unpatented products, 64
unwitting infringer, 56
Model Patent Jury Instructions, 15
Nash Bargaining Solution. See NBS
NBS (Nash Bargaining Solution)
incremental value, division of, 24
Netherlands
injunctions, abuse of rights, 142
willing licensee, 212
non-infringing alternative, 20
nonpracticing entity. See NPE
NPE (nonpracticing entity), 7
option effect, 280
royalty rate errors, 280
patent strength, 254
discounting, 254
preferred measure, 58
recognize non-infringing alternatives, 61
recoverable losses, 65
substitutability of non-infringing alternatives, 62
recommendations, reasonable royalty
ancillary services or risks taken, 25
apply comparables and market evidence with caution, 41
comparables, 14
contingent ex ante approach, 31
total market value, 46
expert evidence, 47
flexible approach to hypothetical bargain, 29
hypothetical bargain framework, 22
incremental value over patented alternative, 21
kickers, 34
principal recommendation, 16
royalties commensurate with value, 19
using competent evidence, 27
royalty stacking
Cournot complements, 290
definition, 283
distinguishing holdup, 294
evidence of systematic problem, 294
input price setting, 292
patent pools, 292, 298
redesign costs, 290
royalty benchmark, 295
study of, 300
tacit coordination, 293
two-stage quantity setting-model, 293

SDO (standards-development organizations), 160
SEP (standard-essential patent)
hypothetical bargain, timing of, 29
non-infringing alternatives, 21
smallest saleable patent-practicing unit. See SSSPU
Spain
preliminary injunctions, 124

SSPPU (smallest saleable patent-practicing unit), 47, 45
standard-essential patent. See SEP
standards-development organizations. See SDO
sunk costs
circularity, 41
holdup, 30
hypothetical bargain, timing of, 29
Switzerland
agreement to contract, 195
calculating damages, 196, 197
effect of FRAND, 196
injunctions, abuse of rights, 142

reasonable royalty, 198
Swiss Code of Obligations, 196
Taiwan
enhanced damages, 96
TRIPS Agreement
criminal penalties, 96
injunctions, 116, 143
limitation of remedies, 117
U.S. Patent Act
disgorgement, design patents, 75
denhanced damages, 91, 92
injunctions, 127
lost profits, 52
prejudgment interest presumption, 111
UK Patent Act
lost profits availability, 55
United Kingdom
bundling, 225, 226
disgorgement, 75, 81
enhanced damages, availability, 94
FRAND, 169
hypothetical bargain, 11
injunctions, 125
lost profits, 55, 56, 61
preliminary injunctions, 124
tying, 225
willing licensing, 212
United States
apportionment, 66
consent decrees, 234
damages reports, 6, 7
disgorgement, availability, 75
denhanced damages, 288
forseeable lost profits, 54
FRAND, 171, 174, 175
hypothetical bargain, 11, 28
injunctions, 125, 126, 127
jury bias, 282
litigation cost recovery, 106
lost profit awards, 55
lost profits, 56, 64
Patent Act, lost profits, 52
post-judgment interest, 112
prejudgment interest presumption, 111
preliminary injunctions, 124
proof of reasonable royalty damages, 47
royalty rates awarded by juries, 43
unfair competition, 218
willing licensee, 212