

Table of Contents

Dedication	v
About the Author	vii
Table of Chapters	ix
Preface	xix
Introduction	xxi

Chapter 1 Statutory Provisions—Some Basic Principles

§ 1:1	The Statute	1-2
§ 1:2	Omnibus Claims	1-3
§ 1:3	The Statutory Classes	1-5
§ 1:4	Exceptions to Statutory Eligibility of Claims Under 35 U.S.C. § 101	1-8
§ 1:4.1	<i>Bilski</i> and Computer-Implemented Methods and Business Methods	1-10
§ 1:4.2	<i>Pre-CLS Bank International v. Alice Corp.</i> Background for Claims to a Computer Program or Software-Related Invention	1-15
[A]	Current Claiming for Software Inventions	1-20
§ 1:4.3	Business Methods	1-22
[A]	Blockchain	1-27
§ 1:4.4	Law of Nature, Natural Phenomenon, or Natural Article— <i>Mayo v. Prometheus</i>	1-28
§ 1:4.5	“Something Significantly More” for Patent Claims Eligibility	1-34
§ 1:4.6	Laws of Nature and Naturally Occurring Substances— <i>Association for Molecular Pathology v. Myriad Genetics, Inc.</i> and Subsequent Decisions	1-39
[A]	Methods of Treatment	1-45
§ 1:4.7	Patent Office Guidance	1-48
§ 1:4.8	Abstract Ideas— <i>CLS Bank International v. Alice Corp.</i>	1-54

§ 1:4.9	<i>CLS Bank International v. Alice Corp.</i> in the Supreme Court	1-56
§ 1:4.10	Opinions Preceding <i>CLS Bank International v. Alice Corp.</i>	1-66
§ 1:5	Later Developments Based on <i>Alice Corp. v. CLS Bank</i>	1-71
§ 1:5.1	Toward a Unified Test for Patent Eligibility of a Claim	1-71
§ 1:5.2	Combining the <i>Mayo</i> Test with the <i>Alice</i> Test	1-73
§ 1:5.3	Combining the <i>Myriad</i> Test with the <i>Alice</i> Test	1-78
§ 1:5.4	Abstract Ideas and <i>Alice</i>	1-79
§ 1:5.5	Patent Claim Eligibility Decisions After <i>Alice</i>	1-85
§ 1:5.6	<i>Bilski v. Kappos</i> Combined with <i>Alice</i>	1-101
§ 1:5.7	Patent-Eligible Claims Without Claiming Abstract Ideas	1-102
§ 1:5.8	Patent Office Guidance	1-107
§ 1:6	Double Patenting	1-110

Chapter 2 Claim Forms and Formats in General

§ 2:1	Placement After Specification	2-1
§ 2:2	Single Sentence	2-2
§ 2:3	Numbering and Order	2-3
§ 2:3.1	Status Indicators	2-4
§ 2:4	Preamble	2-5
§ 2:5	Transition from Preamble to Body—“Comprising” and Other Open-Ended Terms	2-21
§ 2:6	“Consisting”—“Consisting Essentially of” and Other Closed-Ended Transition Terms	2-26
§ 2:7	Body of the Claim	2-31
§ 2:8	Format and Punctuation; Subparagraph Form	2-32
§ 2:9	Dependent Claims	2-34
§ 2:10	Independent Claims	2-53
§ 2:11	Multiple Dependent Claims	2-55
§ 2:12	Fees Payable for Claims	2-60
§ 2:13	Amending a Filed Claim or a Granted Claim; Effect on Equivalence	2-62
§ 2:14	Definiteness of a Claim	2-70

Chapter 3 Apparatus or Machine Claims

§ 3:1 In General 3-2

 § 3:1.1 Example I—Shaker 3-3

 Example I: Shaker 3-4

§ 3:2 Preambles for Apparatus Claims..... 3-5

§ 3:3 Elements of Apparatus Claims 3-7

§ 3:4 Workpiece or Environmental Element 3-10

§ 3:5 Negative Limitations 3-13

§ 3:6 Support in Specification and Drawings 3-15

§ 3:7 Naming the Elements 3-19

§ 3:8 Plain Meaning of Claim Terms 3-30

§ 3:9 Importing the Specification into the Claims;
Disavowal 3-47

§ 3:10 Specification Words of Criticality..... 3-67

§ 3:11 Singular and Plural Elements..... 3-73

§ 3:12 Double Inclusion of Elements..... 3-78

§ 3:13 Use of Reference Numerals in Claims 3-79

§ 3:14 Antecedents; Indefiniteness (“A” Versus “The”) 3-80

§ 3:15 Alternative Expressions 3-85

§ 3:16 Parts or Features of Elements..... 3-88

§ 3:17 Claiming Holes..... 3-90

§ 3:18 Relative Terminology 3-91

§ 3:19 Words of Approximation—“Substantially” et al. 3-96

§ 3:20 Numerical Ranges and Amounts 3-107

§ 3:21 Order of Elements..... 3-113

§ 3:22 Tying the Elements Together..... 3-115

 Example II: Shaker Sketch 3-118

§ 3:23 Structural Connection 3-118

§ 3:24 Functional or Operational Expressions; “Adapted to,”
“Configured to” 3-120

§ 3:25 Claiming Desired Results; Overly Broad
Functional Statements 3-126

§ 3:26 “Whereby” and “Thereby” Clauses..... 3-132

 § 3:26.1 “Wherein” Clauses..... 3-135

§ 3:27 Location of Functional Clauses..... 3-136

§ 3:28 Optional Word Clauses..... 3-137

§ 3:29 “Means” or “Step” Clauses 3-138

 § 3:29.1 Statutory Definition..... 3-138

 § 3:29.2 Use of “Means for” or “Step for” 3-142

 § 3:29.3 Function of the Means..... 3-144

 § 3:29.4 Reciting a Structure That Performs the
Function 3-145

 § 3:29.5 Means Limitations and Prior Art 3-147

§ 3:29.6	Structural Elements of the Means, Not a Means-Plus-Function Clause	3-148
§ 3:29.7	Other Words Than “Means” As a Means-Plus-Function Element.....	3-150
§ 3:29.8	“For” Not Required to Be a Means-Plus-Function Element.....	3-158
§ 3:29.9	Use Specification to Define the Means	3-158
§ 3:29.10	Specification Must Describe the Means	3-163
§ 3:29.11	Doctrine of Equivalents Versus Means-Plus-Function Equivalents.....	3-171
§ 3:29.12	Do Not Use Means Clauses for Some Purposes.....	3-172
§ 3:29.13	Single Means Claims	3-173
§ 3:29.14	Single-Word Claim.....	3-174
§ 3:29.15	Means at the Point of Novelty	3-175
§ 3:29.16	Means Clauses Where Function Is to Be Claimed	3-176
§ 3:29.17	Do Not Use the Word “Means” After the Noun to Be Claimed.....	3-178
§ 3:29.18	Means Element in a Computer-Implemented Invention	3-182
§ 3:29.19	Step-for Elements	3-184
§ 3:29.20	Avoiding Means-Plus-Function	3-187
§ 3:29.21	Example III—Take-Up Barrel	3-188
	Example III: Take-Up Barrel.....	3-190
§ 3:30	Electrical Circuit Claims	3-190
	Example IV: Radio Signal.....	3-192
	Example V: Wheatstone Bridge.....	3-195

Chapter 4 Method or Process Claims

§ 4:1	In General	4-1
§ 4:2	Elements of Method Claims	4-4
§ 4:3	Order of Steps.....	4-8
§ 4:4	Obvious Method Using Novel Starting Material or Producing Unobvious Product	4-11
§ 4:5	Claims to Both Method and Apparatus; Method Is Function of Apparatus	4-12
§ 4:6	Apparatus Limitations	4-14
§ 4:7	Chemical Processes	4-16
§ 4:8	Electrical Methods	4-20

Table of Contents

Chapter 5 Other Types of Claims

§ 5:1	Articles of Manufacture	5-1
§ 5:2	Product-by-Process Claims	5-4
§ 5:3	Reissue Patent Claims	5-10
§ 5:4	Design Claims	5-12
§ 5:5	Claims in Continuing Applications	5-15
§ 5:6	Plant Patent Claims	5-17
§ 5:7	Provisional Applications	5-18

Chapter 6 Composition of Matter Claims—Chemical Cases

§ 6:1	In General	6-1
§ 6:2	“ <i>Markush</i> ” Expressions	6-4
§ 6:3	Trademarked Materials; Arbitrary Names	6-13
§ 6:4	Special Claims for Chemical Cases—Fingerprint Claims	6-15
§ 6:5	Coined Name Claims	6-18
§ 6:6	Claims Referring to Drawings	6-19
§ 6:7	Use Claims and New Use Claims; Preamble Limitations	6-22
§ 6:8	Improvement or “ <i>Jepson-Type</i> ” Claims	6-30
§ 6:9	Generic and Species Claims	6-35
§ 6:10	Combination and Subcombination	6-39
§ 6:11	“ <i>Therapeutically Effective</i> ”	6-41

Chapter 7 Claims of Varying Scope

§ 7:1	In General	7-1
§ 7:2	Claiming Different Classes of Invention in One Patent	7-3
§ 7:3	Method Claim Satisfied by One or More Entities	7-6

Chapter 8 Nonart Rejections

§ 8:1	Introduction	8-1
§ 8:2	Duplicate Claiming and Claim Differentiation	8-1
§ 8:3	Double Patenting	8-5
§ 8:4	Undue Multiplicity	8-6
§ 8:5	Old Combination; Overclaiming	8-8
§ 8:6	Aggregation	8-13
§ 8:7	Printed Matter	8-16
§ 8:8	Incomplete	8-19

§ 8:9	Vague and Indefinite	8-20
§ 8:10	Prolivity	8-23
§ 8:11	New Matter	8-24

Chapter 9 Claiming Biotechnology Inventions

§ 9:1	In General	9-1
§ 9:2	Claims to Living Organisms, e.g., Animals and Plants.....	9-3
§ 9:3	Claims Based on a Biological Deposit	9-8
§ 9:4	Claims to Nucleic Acids and Proteins.....	9-10
§ 9:5	Claims to DNA	9-13
§ 9:6	Novelty.....	9-15
§ 9:7	Obviousness of DNA Inventions	9-17
§ 9:8	Obviousness of Biotechnology Process Claims.....	9-20
§ 9:9	Sufficient Written Description and Utility of Nucleic Acid	9-24
§ 9:10	Enablement for DNA and Protein Claims	9-26
§ 9:11	Claims to Monoclonal Antibodies (MAbs).....	9-30
§ 9:12	Claims to Therapeutics	9-32
§ 9:13	Claims for Gene Therapy	9-36

Chapter 10 Thoughts on Writing a Claim

§ 10:1	Writing Claims	10-2
§ 10:1.1	Goals of Claim Writing.....	10-2
[A]	Covering the Invention.....	10-2
[B]	Claims Coverage Should Be As Broad As Possible.....	10-3
[C]	Cover Competing Products or Methods	10-4
[D]	Avoid the Prior Art.....	10-5
[E]	No Unnecessary Limits	10-5
§ 10:1.2	How to Write the Broad Claim.....	10-6
[A]	Use Different Classes of Claims and Different Perspectives	10-6
[B]	The Goal or Objective of the Invention	10-7
[C]	The Inventor’s Way of Achieving the Objective or Goal.....	10-8
[D]	Writing the Claim.....	10-8
[E]	Claiming Individual Claim Features	10-10
[F]	Revising the Claim After Writing It or Later Amending a Filed Claim	10-15
[G]	Alternate Claim Drafting Techniques	10-16

Table of Contents

§ 10:1.3	Claiming Plural Embodiments.....	10-17
[A]	The Generic Claim.....	10-18
[B]	Use Enough Claims to Completely Cover the Invention.....	10-19
§ 10:1.4	Claiming an Important Function in a Product Claim.....	10-20
[A]	“Whereby” Clauses.....	10-21
§ 10:2	The Means Clause.....	10-22
§ 10:2.1	Avoid Overbroad Means Clause.....	10-22
§ 10:2.2	Use of Means Clause.....	10-22
§ 10:3	Method Claim.....	10-28
§ 10:3.1	Sample Method Claim.....	10-28
§ 10:3.2	Elements of a Method Claim.....	10-30
§ 10:3.3	In a Method Claim, a Product Is Not Being Claimed.....	10-31
§ 10:3.4	A Dependent Method Claim.....	10-31
§ 10:3.5	A Step for Accomplishing a Particular Function.....	10-32
§ 10:3.6	No Physical Interrelationship of Claimed Steps.....	10-33
§ 10:3.7	Review the Claim After Writing.....	10-33
§ 10:4	Article of Manufacture Claims.....	10-34
§ 10:5	Product-by-Process Claims.....	10-34
§ 10:6	The <i>Jepson</i> Claim.....	10-40
§ 10:7	Particular Points Related to Good Claim Drafting.....	10-42
§ 10:7.1	Preamble.....	10-42
§ 10:7.2	Subparagraph Claim Form.....	10-44
§ 10:7.3	Multiple Dependent Claims.....	10-44
§ 10:7.4	Inferential Claiming.....	10-45
§ 10:8	Review of Some Basics.....	10-46
§ 10:8.1	Random Thoughts on How to Draft Claims to Mechanical Apparatus.....	10-46
Appendix A	Claim-Drafting Principles and Practice in Claim-Drafting Techniques	App. A-1
Appendix B	The Art of Describing Structures in Patent Drawings Including a Glossary of Mechanical Terms	App. B-1
Appendix C1	Primary Sources: Title 35 United States Code (Selected Sections)	App. C1-1
Appendix C2	Primary Sources: Rules of Practice (Selected Sections)	App. C2-1

Appendix C3	Primary Sources: Manual of Patent Examining Procedure (Selected Sections)	App. C3-1
Appendix C4	Primary Sources: 2014 Interim Guidance on Patent Subject Matter Eligibility 79 Fed. Reg. 74,618 (Dec. 16, 2014)	App. C4-1
Appendix C5	Primary Sources: Patent Office Examples: Abstract Ideas	App. C5-1
Appendix C6	Primary Sources: July 2015 Update: Subject Matter Eligibility	App. C6-1
Appendix D	Glossary and Index of Patent Terms	App. D-1
Table of Authorities		T-1
Index		I-1