

PART IV

Foreign Filing and Prosecution

General Rules

- Absolute Novelty: Any publication, sales, public or commercial use prior to patent application filing date is a bar to the issuance of a patent.
 - No 1-year “grace” period as in U. S.
- First to File: Priority is strictly established by the filing date of patent application.
 - Absolute priority to first to file.
 - A “race to the Patent Office.”
 - Date of invention is irrelevant.
- Enforcement: It depends. Some countries have strong patent systems (UK, Germany, Canada); others, especially less developed countries, have weak systems (China, but improving).

Foreign Filing and Prosecution

Where to File?

- Theoretically can file in all countries of world to prevent others from making, using and selling the invention
- Practically limited by cost and other considerations
- Generally foreign file in countries where:
 - You plan on making, using or selling the invention, and/or
 - Where your competitors may make, use or sell a competing alternative, and/or
 - Where you may have licensing opportunities, and or
 - Where the technology may have merit for future business ventures.
- File to cover key markets and competitors' manufacturing sites
- Consider ability to enforce rights

Foreign Filing and Prosecution

Cost Considerations

- Costly process for foreign patents, which includes:
 - Filing fees
 - Translation fees
 - Application maintenance fees
 - Examination fees
 - Foreign agent prosecution fees
 - Issue or grant fees
 - Patent maintenance fees
- Approximate costs for some countries:
 - Japan – \$45,000
 - Brazil – \$18,000
 - China – \$16,000
 - Mexico - \$10,000
 - Canada - \$8,000
 - Cost based on 35 page application with 20 claims and 2 drawings. Includes agents responding to 2 Office actions

Foreign Filing and Prosecution

Paris Convention

- Creates a 12 month period (“priority year”) in which the applicant can file his application in foreign jurisdictions.
- The first patent application filing is the “priority document” or base case.
- Creates the right to “claim priority” back to the priority document as of its “priority date”. Gives applicant some of the rights first granted in the original filing.
- Examples of priority document:
 - U.S. patent application
 - PCT patent application

Foreign Filing and Prosecution

Paris Convention

- Can have more than one priority document.
- Rights do not start until you file the application in a Paris Convention country (waiting is bad).
- The application must be right the first time (filing quickly is bad).
- Paris Convention still valid today. Countries (and the PCT) adhere to its principles.
- However, a need existed for centralized means of filing patent applications.

Foreign Filing and Prosecution

Patent Cooperation Treaty

- The “PCT” (Patent Cooperation Treaty) is an agreement between various countries that allows for direct filing of patent applications in one location and to be recognized in all countries that are a party to the PCT.
 - Administered by the World Intellectual Property Organization (WIPO) in Geneva.
- The PCT is not a replacement for each member country’s patent laws.
- The PCT is somewhat of a holding pattern for patent applications. Delays decision for foreign filing.
 - Delays decision to enter national patent offices for 30 months from priority filing date and 18 months from filing date of PCT application
- Filing under the PCT is generally the preferred route when foreign filing in more than 3 foreign countries
 - Most important countries covered with some notable exceptions:
 - Argentina, Some Gulf coast countries (Kuwait, Saudi Arabia), Taiwan, and Venezuela.
 - File direct into non-PCT countries when appropriate

Foreign Filing and Prosecution PCT Member Countries

PCT Contracting States and Two-letter Codes (148 on 4 July 2013)



AE United Arab Emirates	CR Costa Rica	IN India	ML Mali (OA) ²	SG Singapore
AG Antigua and Barbuda	CU Cuba	IR Islamic Republic of Iran (from 4 October 2013)	MN Mongolia	SI Slovenia (EP) ²
AL Albania (EP)	CY Cyprus (EP) ²	IS Iceland (EP)	MR Mauritania (OA) ²	SK Slovakia (EP)
AM Armenia (EA)	CZ Czech Republic (EP)	IT Italy (EP) ²	MT Malta (EP) ²	SL Sierra Leone (AP)
AO Angola	DE Germany (EP)	JP Japan	MW Malawi (AP)	SM San Marino (EP)
AT Austria (EP)	DK Denmark (EP)	KE Kenya (AP)	MX Mexico	SN Senegal (OA) ²
AU Australia	DM Dominica	KG Kyrgyzstan (EA)	MY Malaysia	ST Sao Tome and Principe
AZ Azerbaijan (EA)	DO Dominican Republic	KM Comoros (OA) ^{2,3}	MZ Mozambique (AP)	SV El Salvador
BA Bosnia and Herzegovina ¹	DZ Algeria	KN Saint Kitts and Nevis	NA Namibia (AP)	SY Syrian Arab Republic
BB Barbados	EC Ecuador	KP Democratic People's Republic of Korea	NE Niger (OA) ²	SZ Swaziland (AP) ²
BE Belgium (EP) ²	EE Estonia (EP)	KR Republic of Korea	NG Nigeria	TD Chad (OA) ²
BF Burkina Faso (OA) ²	EG Egypt	KZ Kazakhstan (EA)	NI Nicaragua	TG Togo (OA) ²
BG Bulgaria (EP)	ES Spain (EP)	LA Lao People's Democratic Republic	NL Netherlands (EP) ²	TH Thailand
BH Bahrain	FI Finland (EP)	LC Saint Lucia	NO Norway (EP)	TJ Tajikistan (EA)
BJ Benin (OA) ²	FR France (EP) ²	LI Liechtenstein (EP)	NZ New Zealand	TM Turkmenistan (EA)
BN Brunei Darussalam	GA Gabon (OA) ²	LK Sri Lanka	OM Oman	TR Tunisia
BR Brazil	GB United Kingdom (EP)	LR Liberia (AP)	PA Panama	TR Turkey (EP)
BW Botswana (AP)	GD Grenada	LS Lesotho (AP)	PG Papua New Guinea	TN Trinidad and Tobago
BY Belarus (EA)	GE Georgia	LT Lithuania (EP)	PH Philippines	TZ United Republic of Tanzania (AP)
BZ Belize	GH Ghana (AP)	LU Luxembourg (EP)	PL Poland (EP)	UA Ukraine
CA Canada	GM Gambia (AP)	LV Latvia (EP) ²	PT Portugal (EP)	UG Uganda (AP)
CF Central African Republic (OA) ²	GN Guinea (OA) ²	LY Libya	QA Qatar	US United States of America
CG Congo (OA) ²	GQ Equatorial Guinea (OA) ²	MA Morocco	RO Romania (EP)	UZ Uzbekistan
CH Switzerland (EP)	GR Greece (EP) ²	MC Monaco (EP) ²	RS Serbia (EP) ²	VC Saint Vincent and the Grenadines
CI Côte d'Ivoire (OA) ²	GT Guatemala	MD Republic of Moldova ⁴	RU Russian Federation (EA)	VN Viet Nam
CL Chile	GW Guinea-Bissau (OA) ²	ME Montenegro ¹	RW Rwanda (AP) ²	ZA South Africa
CM Cameroon (OA) ²	HN Honduras	MG Madagascar	SA Saudi Arabia (from 3 August 2013)	ZM Zambia (AP)
CN China	HR Croatia (EP)	MK The former Yugoslav Republic of Macedonia (EP)	SC Seychelles	ZW Zimbabwe (AP)
CO Colombia	HU Hungary (EP)		SD Sudan (AP)	
	ID Indonesia		SE Sweden (EP)	
	IE Ireland (EP) ²			
	IL Israel			

Foreign Filing and Prosecution Patent Cooperation Treaty

The “PCT application”:

- Can be filed in English language
- Initially designate all states
- Claim to priority (priority document, *e.g.*, U.S. application)
- Delays filing in National Offices for up to 30 months
- Many PCT member states largely defer to PCT Search Report and Preliminary Examination Report (IPER)
- Search of prior art performed by examiner.

Foreign Filing and Prosecution

PCT Application Process

- File within 12 months after Priority case (usually US appln)
 - Any national patent office that is a PCT member for receiving office
- International search done in a national patent office that is an International Searching Authority (ISA) at 16 mos.
 - Australia, Austria, Brazil, Canada, China, Chile, Egypt, Finland, India, Israel, Japan, Korea, Russia, Spain, Sweden, Ukraine, U.S., EPO, Nordic patent institute.
- PCT application publishes 18 months from priority date
 - Patentscope search engine for PCT Publications (<https://patentscope.wipo.int/search/en/search.jsf>)
- Written opinion as to patentability (novelty, inventive step and industrial applicability) and formality objections (i.e. clarity)
 - Opportunity to respond to written opinion – not mandatory
 - Amend the specification and claims
 - Beneficial to respond to written opinion – improve condition of application for entry into national patent offices to ease prosecution and decrease costs

Foreign Filing and Prosecution

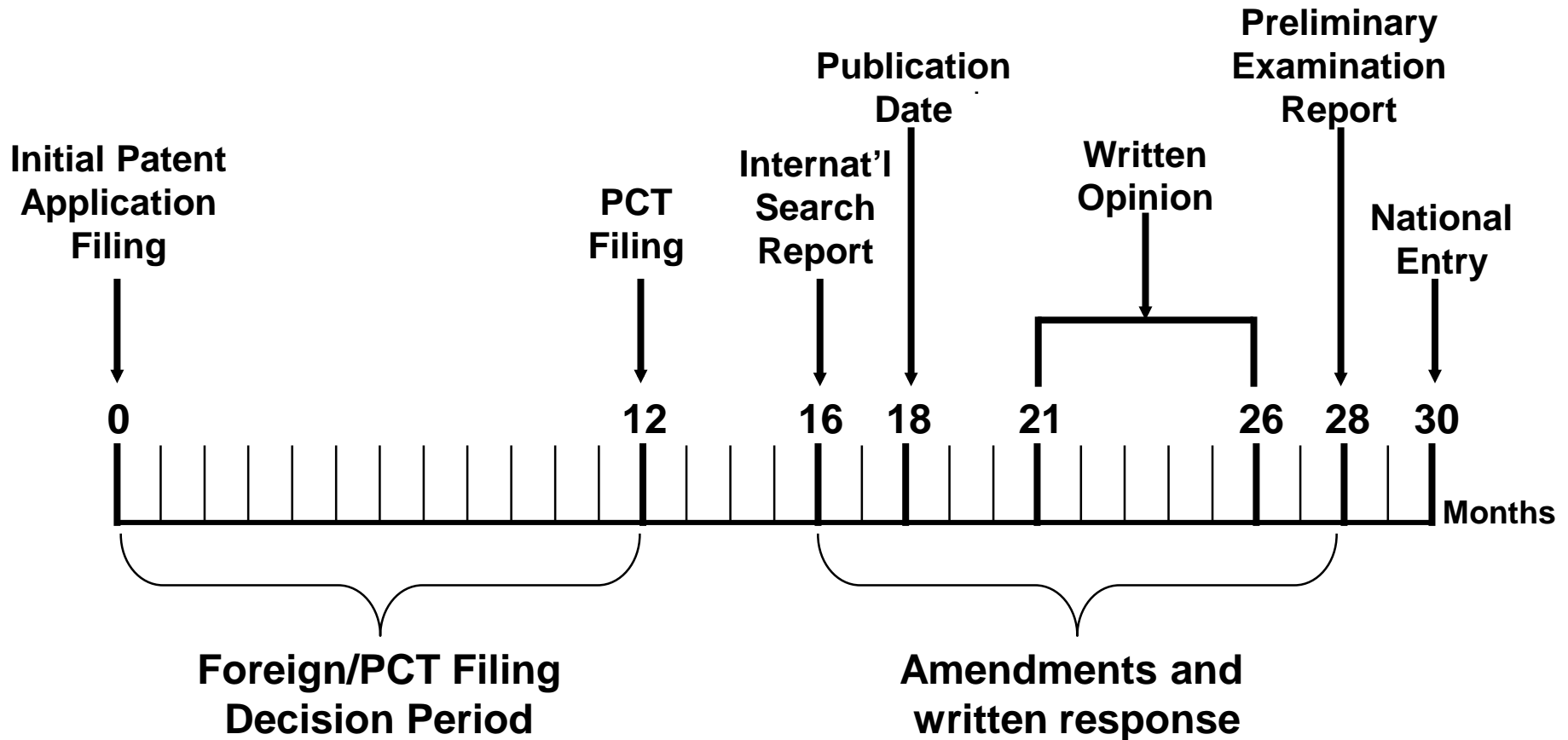
PCT Application Process

- File a demand for international preliminary examination
- Preliminary examination by ISA
 - IPER issued to applicant and sent to designated PCT contracting states along with the search report.
 - IPER is non-binding on national patent offices.
- File in individual PCT countries by end of 30 months from the priority date
- Further examination, prosecution and allowance in each country

Foreign Application Filing PCT Application Process

- Advantages
 - Postpones major costs associated with seeking multinational patent protection
 - Provides a strong basis for patenting decisions
 - Search report
 - Written Opinion
 - Response to Written Opinion
 - International preliminary examination report
 - Streamlines the process of fulfilling diverse formality requirements in national patent offices

Foreign Filing and Prosecution PCT Application Process



PCT = Patent Cooperation Treaty

Foreign Filing and Prosecution Inventor Assistance

1. U.S. provisional Filing to PCT Filing (and regular U.S. Filing)

- Any new prior art references to consider.
- Any new embodiments or examples to add to specification
- Any new claims or amendments to existing claims
- Check cross-reference to related applications.
 - Any other pending related cases with common inventorship to also claim priority to.

2. PCT Examination and Written Opinion

- Read the written opinion and objections to patentability based on clarity, novelty, inventive step and other PCT formality objections
- Read the cited prior references used in making objections
- Work with attorney to explain differences
- Work with attorney to amend specification, claims and/or present arguments in filing a response

Foreign Filing and Prosecution Inventor Assistance

3. National Stage Prosecution (for each country)
 - Assist in determining which countries of PCT to enter the national stage in.
 - Read the Office action from country patent office
 - Read the cited references (again)
 - Work with attorney to explain differences
 - Work with attorney to amend specification, claims and/or present arguments in sending instructions to the foreign patent agent

Post Patent Grant Options

- Maintenance
 - Fees due at 4, 8 and 12-years from grant in U.S.
 - Access fee payments at <http://portal.uspto.gov/external/portal/pair>.
 - Fees for most foreign countries
 - Annual patent portfolio maintenance review to determine if patent assets still have value with regard to cost of maintaining.
- Reissue
 - To correct defects in an issued patent by the patentee.
 - Claims too narrow (2-year time limit to correct) or too broad.
 - Disclosure contains inaccuracies.
 - Failed or incorrectly claimed priority to other applications.
- *Ex parte* Re-examination
 - Reexamine an issued patent relative to previously uncited prior art
 - If become aware of new highly relevant prior art after a patent issues, contact your attorney.
 - May make one or more claims of the patent invalid.
 - Can be requested by patent holder or a 3rd party.
 - Burden to initiate: Substantial new question of patentability.

Post Patent Grant Options

- Interferences
 - Pre-AIA applications and patents
 - To determine who is entitled to the patent rights when two different entities allege to be the first inventor.
 - Costly and complex proceeding.
- Derivation
 - Post-AIA applications and patents
 - Deals with allegedly stolen inventions filed on by wrongful party
 - Issue is whether the earlier invention in one patent was derived from the work claimed in another later filed patent or application
- Opposition / Post Grant Review (PGR)
 - Proceeding available to a 3rd party to challenge the grant of issued patent.
 - Time limit to file a notice of opposition is 9-months from grant
 - Available in the U.S. for applications filed on or after March 16, 2013
 - Scope: Challenge may be on statutory subject matter / novelty/ obviousness / insufficient disclosure grounds
 - Burden to initiate: More likely than not burden of proof that at least one claim is invalid
 - Costly and complex proceeding - Discovery

Post Patent Grant Options

- Supplemental Examination
 - Process to address any issue that may affect the validity of patent
 - Initiated by patentee
 - Applicable to any issue related to validity
 - Statutory subject matter
 - Disclosure requirements
 - Additional novelty/nonobviousness issues
 - Items of information not considered or previously incorrectly considered
- *Inter partes* review
 - Proceeding to challenge grant of an issued patent
 - Initiated by patentee or a 3rd party
 - Challenge based on lack of novelty and/or obviousness due to printed publications
 - Burden to initiate: Reasonable likelihood that petitioner will prevail on at least one claim
 - Burden of proof: More likely than for invalidity
 - Must file after later of 9 months from grant or termination of PGR review, Not time limited like post grant review

Post Patent Grant Options

- Licensing
 - Permission to use a patent right under defined conditions, usually associated with the payment of a royalty amount.
Contract.
 - Analogy → Assignment – ownership, Licensing – paying rent.
 - Used to generate licensing revenue for licensor from patent assets
 - Licensing agreement terms:
 - Definitions
 - Grants – exclusive or non-exclusive
 - Payment - Flat Fee / paid-up license or Running Royalty
 - Confidentiality
 - Hold Harmless
 - Enforcement
- Litigation

Patent Litigation Overview

- Legal Contest between 2 or more parties
- Federal District Courts
 - Exclusive jurisdiction in patent cases
- Recover Damages
- Stop the Infringement
- Declaration of Non-Infringement/
Invalidity

Patent Litigation Overview

- Extensive Pretrial Discovery
- Filing to Trial - 12 to 18 Months
- Jury Trial Possible
- Non-technical Judge and Jury
- Live Testimony
- Battle of Experts - technically complex
- Infringement & Validity Tried Together
- Very Complex and Expensive

Patent Infringement

- Infringement is unauthorized practice of another's patented invention
 - Making, using, or selling that which falls within the claims of another's patent
- Patent owner has right to exclude others from practicing invention
 - No obligation to license in U.S. and most other jurisdictions
- Policy of most companies to respect all valid and enforceable patents held by others

Patent Infringement

- Importation into U.S. of foreign manufactured goods can infringe U.S. process patent if same process was used at foreign site of manufacture.
- Export from U. S. of uncombined components for combination outside the U. S. into patented invention can also infringe.
- Literal infringement
 - Scope of protection determined by claims
 - Each and every element of the claim
- Doctrine of equivalents infringement
 - Limited expansion of claim scope to capture minor or insubstantial changes
 - Insubstantial differences test
 - Function-way-result test
 - Does the accused product or process perform substantially the same function in substantially the same way to achieve substantially the same result?
 - Equivalency determination at time of alleged infringement

Patent Infringement Types

- Direct
 - A patent claims doing A+B+C
 - Doing A+B or A+C is not infringement
 - Doing A+B+C+D is infringement
 - Question: is doing A'+B+C infringement?
- Induced
 - One who actively and knowingly aids another person in directly infringing a patent.
 - Requires knowledge of the existence of the patent, and
 - Direct infringement by induced party.
 - “Aids and abets” the direct infringement by another.
 - Providing instructions and plans that enable another to use a product in an infringing manner.
 - I.e. Advertising, Process licensing.

Patent Infringement Types

- Contributory
 - One who makes, uses or sells less than whole of a patent invention to another
 - Usually involves one who knowingly sells a non-staple article specially made or adapted for use as part of a patented combination or for use in practicing a patent process.
 - Must be a material part of invention.
 - Non-staple article is one that is not suitable in any other way other than that to infringe the patent.
 - If a staple article, may still be liable for induced infringement.

Patent Infringement Defenses

- Non infringement
 - All elements of one or more claims not satisfied by product or process either literally or under the doctrine of equivalents
- Patent is invalid
 - Claims are not novel, are obvious, or were time barred
 - Invention was derived from another, was abandoned or was first made by another
 - Specification inadequate for written description, enablement (no longer best mode)
 - Incorrect inventorship with intent to deceive

Patent Infringement Defenses

- Patent is unenforceable
 - Inequitable conduct on part of patentee in procuring the patent
 - I.e. material prior art reference that was withheld from PTO with intent to deceive
 - Patent misuse, Antitrust counterclaims, Laches, Equitable estoppel
- Infringement is authorized
 - Licensed
 - Prior user defense – limited defense available as to patents claiming method of doing or conducting business
 - Independently reduced method to practice greater than 1 year before patent filed
 - Commercially used continuously before date patent filed
 - Not a general license; personal defense; improvement rights limited
 - Expanded defense (more uses) under the AIA of 2011

Patent Infringement Remedies

- Injunctive relief
 - Prohibits alleged infringer from continuing to make, use and/or sell the patented product or process
 - Shutdown of their operations
 - Preliminary – court order pending a trial
 - Permanent – court order upon completion of trial
- Monetary damages
 - Reasonable royalty or lost profits
 - Enhanced or treble (3X actual) damages
 - Willful infringement – deliberate disregard for patent
 - U.S. feature not generally found elsewhere
 - Competent opinion of counsel relied on is a defense and may preclude a finding of willful infringement.
 - Reasonable attorney fees – in exceptional cases
 - Factors – willful infringement, inequitable conduct before PTO, unjustified litigation, misconduct during litigation
 - Prejudgment interest

Patent infringement

Other Issues

Experimental Use

- Duplicating in a laboratory setting what is claimed in a U.S. patent may constitute infringement
- De minimis damages
- Narrow exception or defense to infringement where intent is to confirm that the invention works the way it is disclosed in the specification
- Reverse engineering and design around activities for the purpose of improving upon the patent not covered under the defense
- Other countries have broader laws for experimental use

Patent infringement

Other Issues

Monitoring competitors to detect infringement

- Much more difficult for process patents as opposed to product patents.
- Market research information
- Review patents, publications, journals and presentations
- Analyze competitive products
- Review government permits and filings

Patent infringement Other Issues

Avoiding Infringement

- Patent watches
- Evaluation of competitors' patents
- Design around
- Patent or publish for freedom of operation
- Freedom to operate (FTO) / right to use / clearance assessments

Patent infringement

Freedom of Operation

- Competitive patents may block our ideas
 - Cross-licensing of own improvement patent relative to competitive dominating patent.
- Options to prevent (least to most preferable):
 - Trade secret – hinders ability to argue that idea was in public domain
 - Conference paper – in public domain, but not generally retrievable by patent examiners
 - Defensive publication - peer review journal or internet site (ip.com). Searched by some examiners. May spur ideas by others outside bounds of patent which may be patented. Must be specific enough to be effective (enabling).
 - File a U.S. patent application to establish idea as prior art of a later blocking patent. Publication 18 months from filing searched by patent offices.

Patent Opinions

Non-Infringement

- Whether manufacture, use or sale of a product or process will infringe a particular patent
- Key components:
 - Definition of proposed product or process
 - Review specification, claims and prosecution history of patent
 - Construe the claims of patent
 - Analyze for literal infringement
 - Analyze for doctrine of equivalents infringement
 - Legal versus factual issues

Patent Opinions Clearance / FTO

- Also referred to as right to use opinion
- Analyze whether there are patents that might affect a company's ability to make, use, and sell a proposed product or process
 - Where product will be sold, produced or used
 - Where process will be operated
- Search for relevant patents with potentially problematic claims
 - Country specific search for patents and published patent applications that may grant into a patent
- Analyze patents identified in searches in same way as a non-infringement opinion, but for all relevant patents identified in search

Patent Opinions

Invalidity

- There is a presumption of validity for a patent
- Burden of proof rests on the challenger.
 - Opinion attacks validity and enforceability of patent based upon prior art and other grounds
- Key Components
 - Search to locate possible invalidating prior art publications
 - Review and analysis of a target patent's file history and cited prior art references
 - Identification of problematic claims in target patents
 - Claim construction
 - Invalidity analysis of problematic claims
 - Often lack of novelty and obviousness arguments
 - Prior art references that Examiner was not aware and hence did not consider during prosecution
 - Drafting of an invalidity opinion
- May help avoid willful infringement allegations and treble damages in patent litigation

Additional Resources

- Intellectual Property Law for Scientists and Engineers, Howard B. Rockman, IEEE 2004, ISBN-10: 0471449989.