

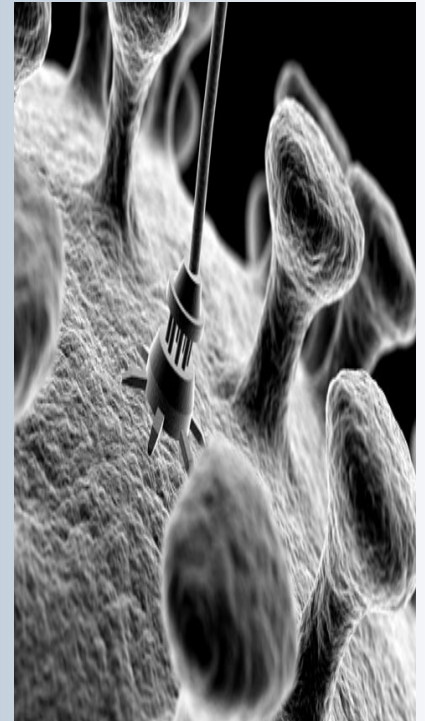


CONCEPT OF IP AND ITS SIGNIFICANCE

Yumiko Hamano
IP Consultant
MBA, LLM

Outline

- My background
- IP and economic development
- Different types of IP
- PCT int. patent application
- IP commercialization and Licensing





**27+ years
working at WIPO**

**Promoting
balanced IP
system and
effective use of it**

WIPO

- **One of 17 United Nations Specialized Agencies**
- **Dedicated to developing balanced and accessible intellectual property systems that encourage and reward creativity and contribute to the economic and cultural growth to the benefit of human kind.**
- **Headquarters located in Geneva, Switzerland**
- **185 Member States**
- **Administration of 25 international treaties**
- **Some 1,500 employees**

My background

- Technical translator of patent documents and patent examination reports
- IP portfolio management
- 17+ years in the PCT Sector of WIPO – Management of PCT applications from Japan, Trilateral Coordinator
- Project Manager – WIPO University Initiative:
 - 10+ years assisting 300+ universities/R&D institutions in 80+ countries for building their IP and technology management capacity
- Provision of training on:
 - PCT system, patent filing, IP and technology management, institutional IP policy, technology transfer, licensing, IP commercialization, patent drafting, patenting strategies

What Are IP Assets?

Creations of the mind:

1. Industrial property

- patents (inventions)
- utility models
- trade secret
- trademarks
- industrial designs
- geographic indications
- new plant varieties

2. Copyrights



The diagram illustrates the components of Intellectual Property (IP) Assets. At the top, the title 'What Are IP Assets?' is displayed in large yellow font. Below it, the phrase 'Creations of the mind:' is written in white. Two colored boxes represent the categories of IP: a cyan box for '1. Industrial property' and a light green box for '2. Copyrights'. The cyan box contains a bulleted list of specific IP types: patents (inventions), utility models, trade secret, trademarks, industrial designs, geographic indications, and new plant varieties. The light green box is currently empty. Below these two boxes is a red box labeled 'IP Assets'. Two large, curved yellow arrows point from the cyan and green boxes towards the red box, indicating that both categories contribute to the total IP Assets.

IP Assets

International Law of IP

- Paris Convention
- Patent Cooperation Treaty (PCT)
- TRIPS Agreement – administered by WTO
- Madrid Agreement (trademarks)
- Hague Agreement (industrial designs)
- Berne Convention (copyrights)
- WIPO Internet Treaties

Economic Benefits of IP

- Create portfolios of IP as a source of competitive advantage
- Enhance products and promote brand value
- Enhance corporate value
- Attract investment
- Avoid and defend against litigation
- Provide incentives and recognition of creativity
- Job creation

Fortune 500 Companies

Over 80% of market value of Fortune 500 companies is based on their intangible assets

Intangible assets

(knowledge based assets)

e.g.

- Patents
- Trademarks
- Brand

>

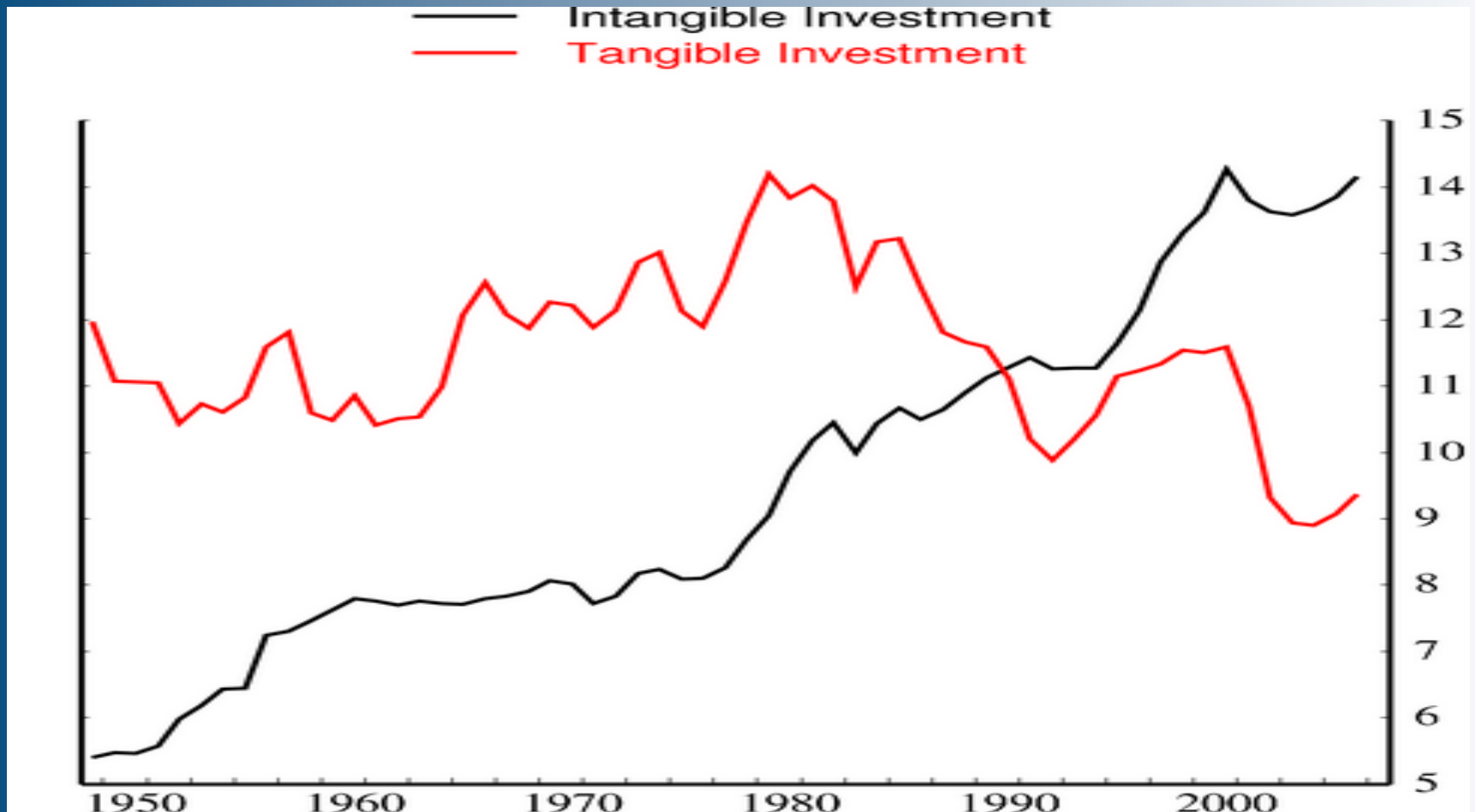
Tangible assets

(physical assets)

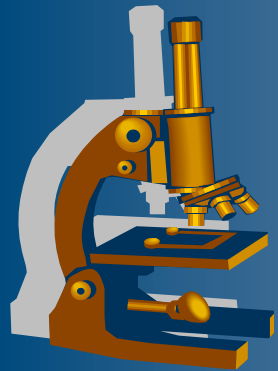
e.g.

- Real estate
- Equipment
- Cash

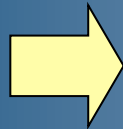
Business investment in the US: tangible vs. intangible investment (% business output)



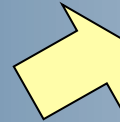
From Laboratory to Market



R&D



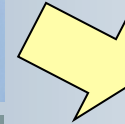
**Patent
application**



Licensing



Start-up/ Spin-off



Commercialization



Technology Transfer

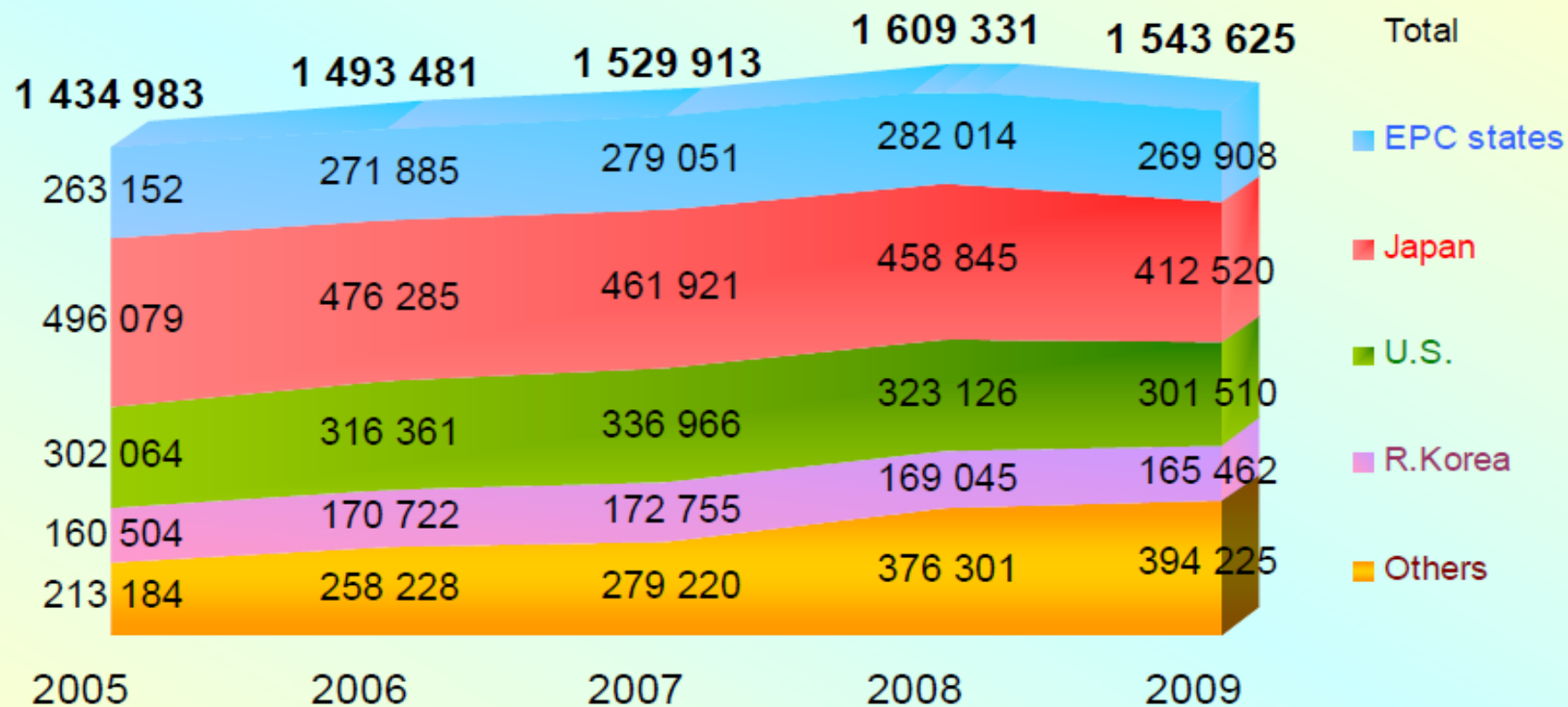
CREATION

PROTECTION

EXPLOITATION

Worldwide Patent Filing

Fig. 3.2 WORLDWIDE PATENT FILINGS BY BLOC OF ORIGIN



Patent (1)

- **A right granted by a state to an inventor, to exclude others from making, using, selling or importing in the territory without the inventor's consent**
- **Granted to an invention of process, method, device, machine, compound, composition, and improvements thereof**
- **In exchange for a disclosure of specification of the invention**
- **Limited period, 20 years in many countries**
- **Territorial**

Patent (2)

Legal Requirements of Patent

- Novelty
- Inventive Step
- Industrial Applicability





Patent (3)

- **Inventor**
- **Publication vs. Patents**
- **Grace period v. Absolute novelty**
- **Provisional patent application**
- **Priority date**

Why are Patents important?

Patents provide **incentives** to individuals by offering them **recognition** for their **creativity** and **material reward** for their marketable inventions.

These incentives encourage **innovation**, which assures that the **quality of human life** is continuously enhanced.

How are inventions invented?

- Through Identifying a need or problem
- Through finding a creative way to solve a specific technical problem
- Improving existing technologies

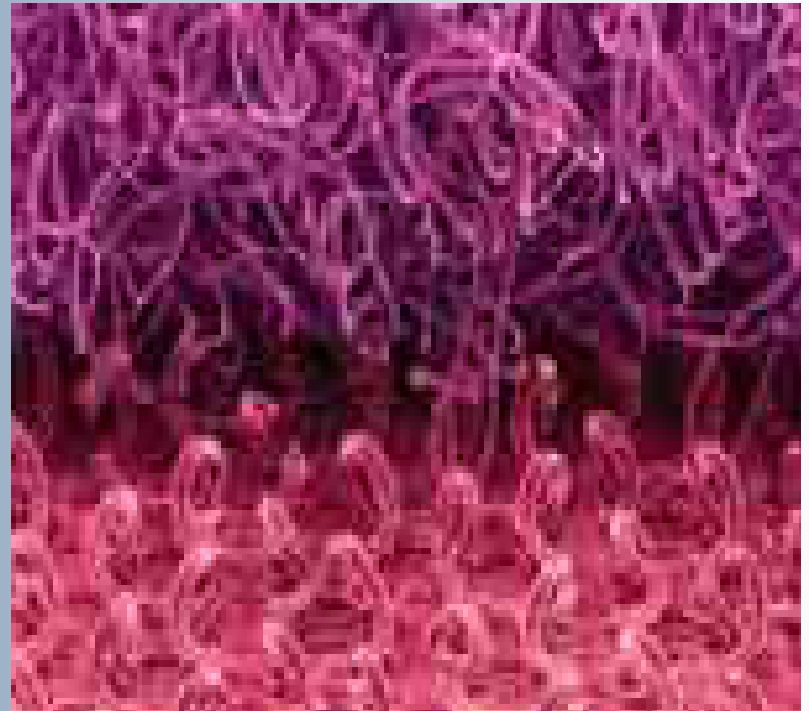


Source: Google

« Necessity is the mother of invention »

How are inventions invented?

Through applying a better understanding of nature:
<VELCRO> invented by George de Maestral



Velcro

prior art:



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synthetic resin

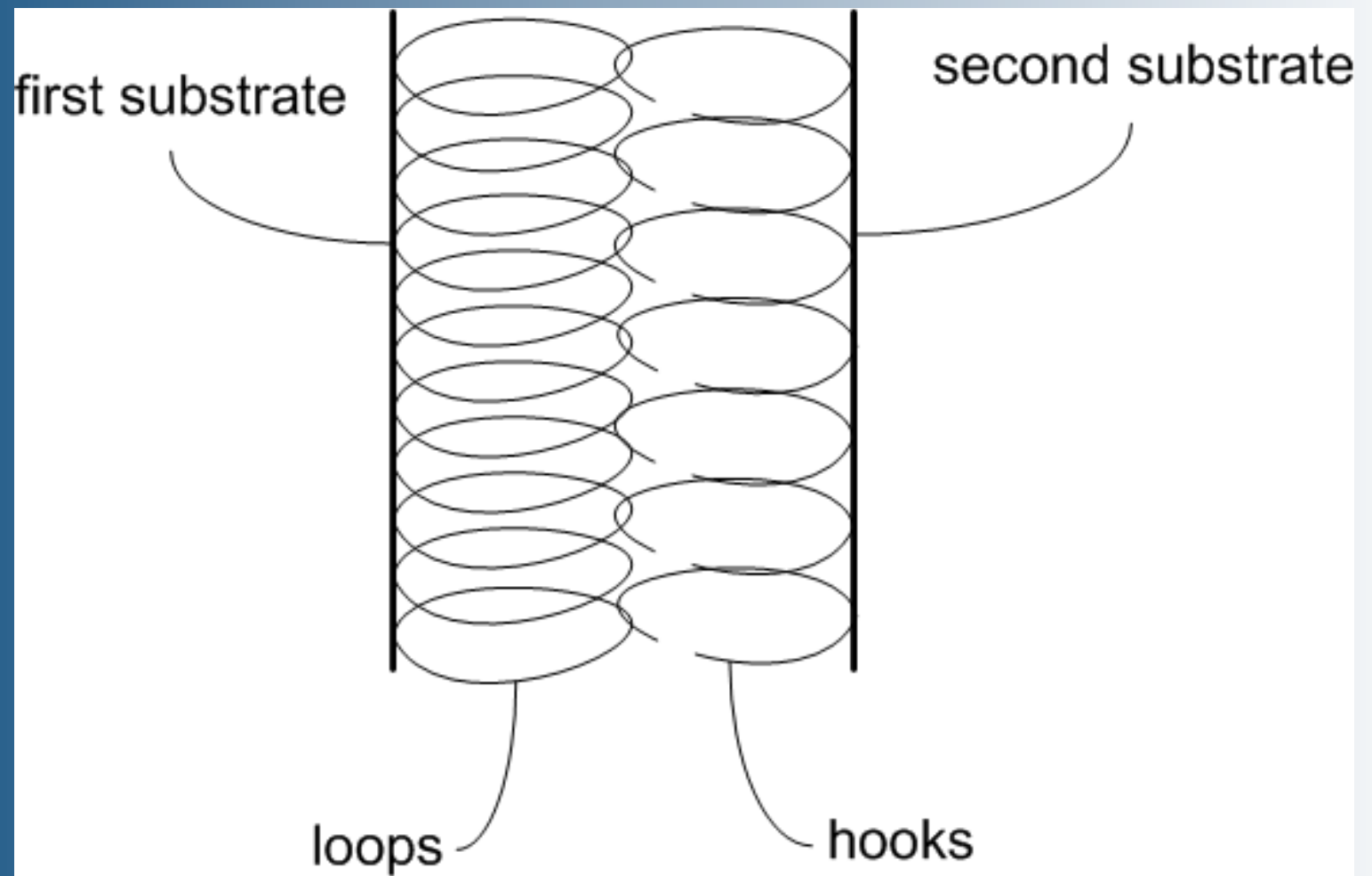


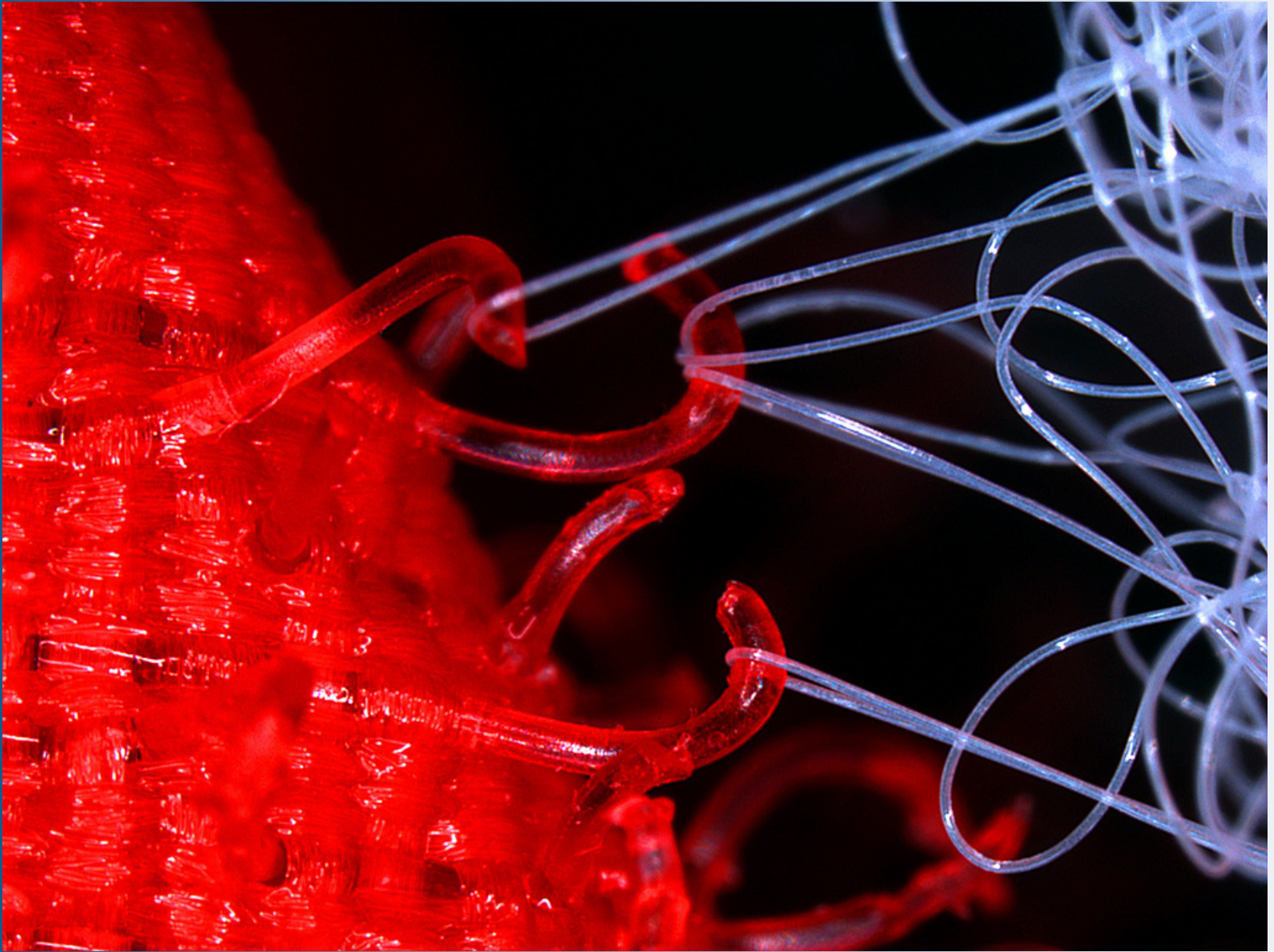
first substrate

second substrate

loops

hooks

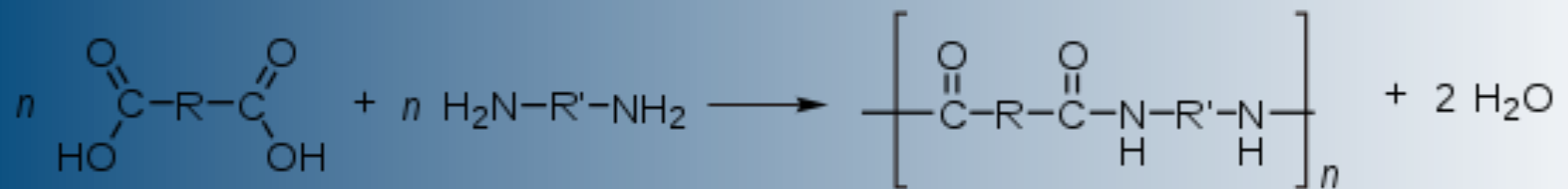




Yumiko Hamano

Synthetic Resin That Forms Hooks and Loops

- Long chain synthetic polymeric amide with recurring amide groups as an integral part of the main polymer chain
- Formed by reacting equal parts of a diamine and a dicarboxylic acid:



where R = 4C and R' = 6C alkanes.



3M



Yumiko Hamano



Baby Mops

★ *Make your children work for their keep*

After the birth of a child there's always the temptation to say "Yes, it's cute, but what can it do?" Until recently the answer was simply "lie there and cry", but now babies can be put on the payroll, so to speak, almost as soon as they're born.

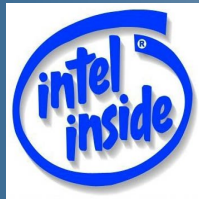
Just dress your young one in Baby Mops and set him or her down on any hard wood or tile floor that needs cleaning. You may at first need to get things started by calling to the infant from across the room, but pretty soon they'll be doing it all by themselves.

There's no child exploitation involved. The kid is doing what he does best anyway: crawling. But with Baby Mops he's also learning responsibility and a healthy work ethic.



Trademarks

- Type of Intellectual Property in the form of a word, name, symbol used to identify goods or services
- Indicates the origin of the goods
- Provides public assurance
- Distinguishes the goods from those of others



- Used to prevent others from using a similar mark that would likely confuse consumers
- Cannot prevent others from making, using, or selling same type of goods
- Only protects the mark but not the goods themselves

Industrial Designs

- Protection for ornamental features associated with articles used in commerce
- Limited uniformity world-wide in requirements and scope of protection available
- Design patents in some countries
- Protection of industrial design and patent protection not mutually exclusive in some countries

Copyrights (1)

Copyrights

- Protection provided to the creators of “original works of authorship”
- Literary, dramatic, photographic, musical, artistic, and other works, both published and unpublished
- Protects expression of ideas rather than idea itself
- Right arises automatically at creation

Copyrights (2)

Copyrights

- Protection in a tangible form
- Gives owner exclusive right to
 - Copy
 - Reproduce
 - Prepare derivative works
 - Distribute copies of work
 - Perform work publicly
 - Display work publicly

Copyrights (3)

Important IP right for protecting computer software and algorithms

- When patenting is not available, then copyright often becomes the strongest form of protection
- In many jurisdictions computer software is not patentable “per se” (not sufficient degree of novelty)

Trade Secrets (1)

- Trade Secrets

- Any information with independent economic value not in public domain
- Any information belonging to an entity that is neither readily known nor readily ascertainable outside the entity

Trade Secrets (2)

Examples of Trade secrets:

- Formulas, patterns, processes, methods, compilations, customer lists, etc.
- Secret formula for making Coca Cola[®]
(Beverage company holds formula as trade secret)

Trade Secrets (3)

Advantage

- No time limit for protection
- No patent filing costs

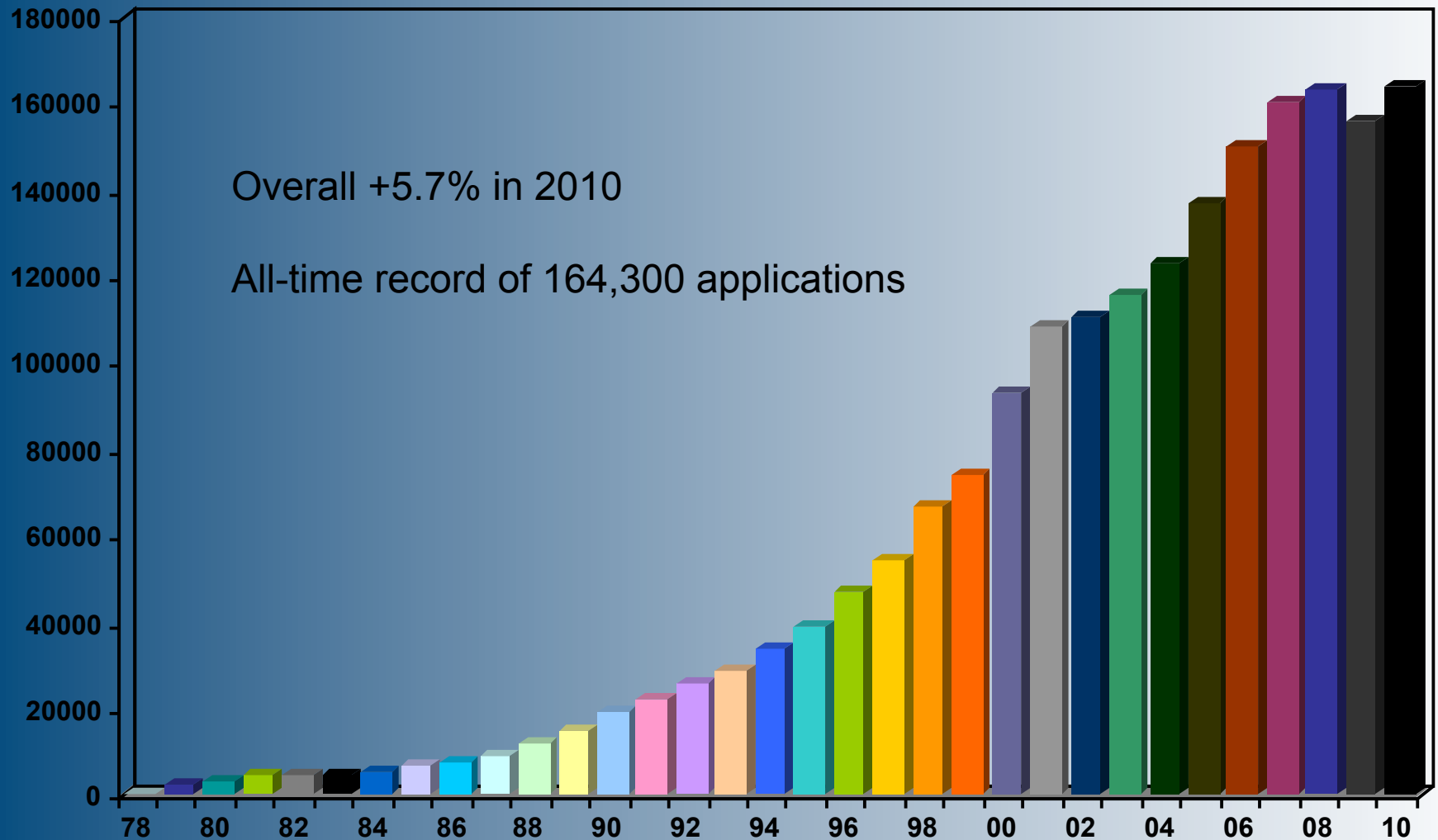
Disadvantage

- Protection only so long as secret is safe

Patent Cooperation Treaty

(PCT)

PCT Statistics



What is Patent Cooperation Treaty?

- An international treaty administered by WIPO
- 145 PCT member states of Paris Convention countries
- Makes it possible to seek patent protection by filing a single “international” patent application instead of filing several separate national or regional applications.

PCT International Applications

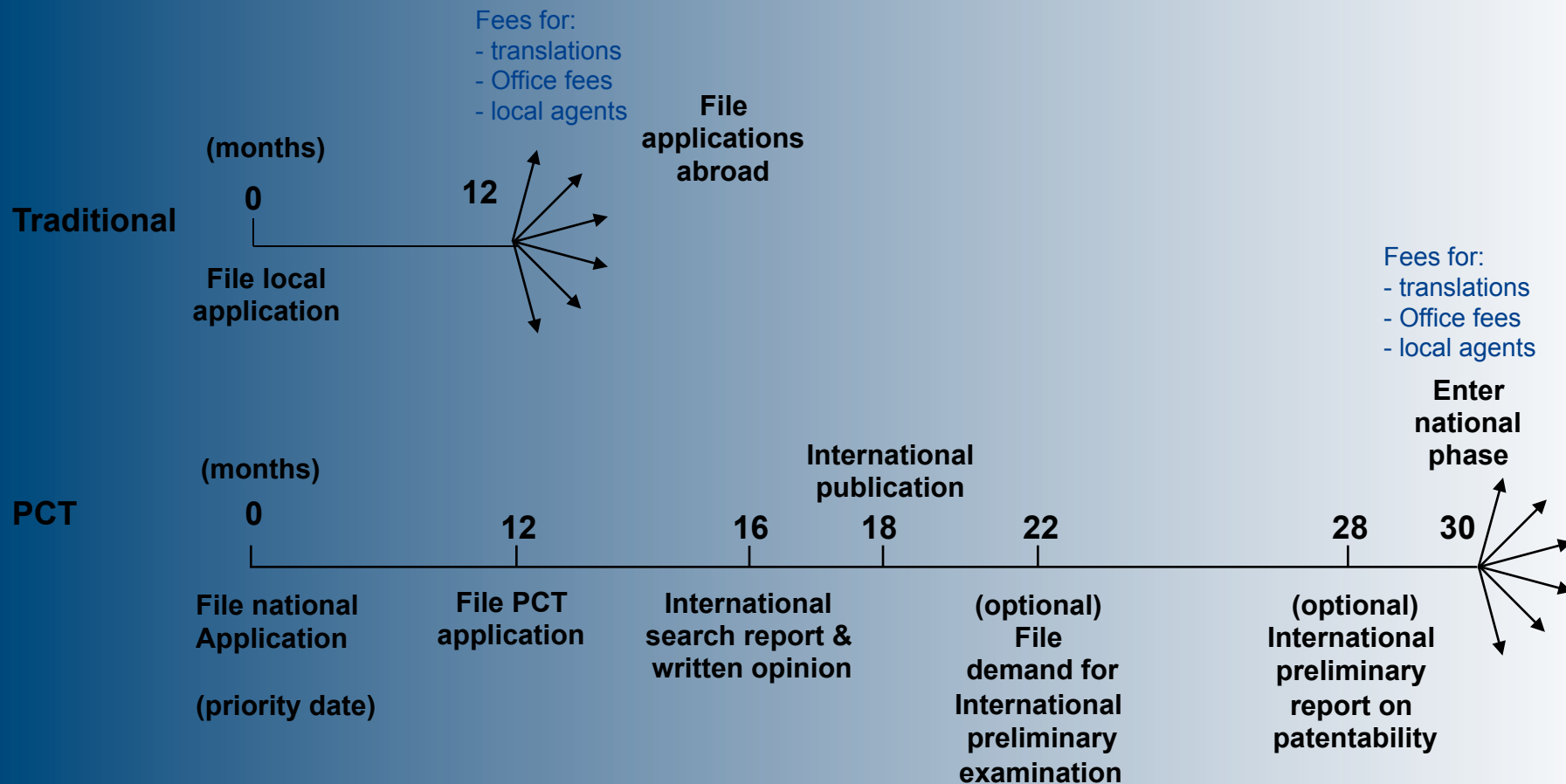
Top 10 countries

- United States 34.5%
- Japan 22.9%
- Germany 12%
- Republic of Korea 5%
- France 4.1%
- United Kingdom 3.8%
- China 3.6%
- Netherland 3.4%
- Switzerland 2.7%
- Sweden 2.5%

Patent Filing

- A national or resident of one or of the PCT Contracting States
- Either with your national patent office or directly with WIPO
- Either on paper or electronically
- In any language accepted by the receiving office
- The Request Form in 7 languages of the international publication: Chinese, English, French, German, Japanese, Russian and Spanish.

Traditional patent system vs. PCT system



International Search Report

- Conducted by 17 PCT International Searching Authorities
- A list of cited Prior Art documents relevant to the invention
- Contains indications for each of the documents listed as to their possible relevance to the critical patentability questions of novelty and inventive step.
- Non-binding opinion on whether the invention appears to meet the patentability criteria.

Avantages du PCT

- Up to 18 months to reflect on the desirability of seeking protection.
- Your application is in the form prescribed by the PCT.
- You can evaluate, based on the ISR and the written opinion, with reasonable probability the chance of your invention being patented.
- You have the possibility to amend the claims during the international phase.
- Many national office take into consideration ISR and IPER.
- International publication puts the world on notice of your application, which can be an effective means of advertising and looking for potential licensing.

Commercialization

- Donation, licensing or sales of IP
- Start-up and Spin-off



Commercialization

<Licensing>

- **A route of commercialization where an IP rights holder gives another entity the authority to exploit to make, have made, use, sell, copy, display, distribute, modify, etc.) the IP - in return, the licensee will pay royalties**
- **The most popular and sustainable way of commercializing IPR**
- **Managed through written legally bound agreements**
- **Agreements stipulate details of extent of rights of exploitation (key terms: subject matter, scope, exclusive or non-exclusive, fields of use, territory coverage, amount of royalties, periods of royalties, length of exploitation etc.)**

Licensing Agreement

- The subject matter of the agreement: What is licensed?
- Scope of the license: What are you allowed to do with it?
- Financial Terms
- Licensing Conditions
- The licensor's obligations
- Obligations common to both parties

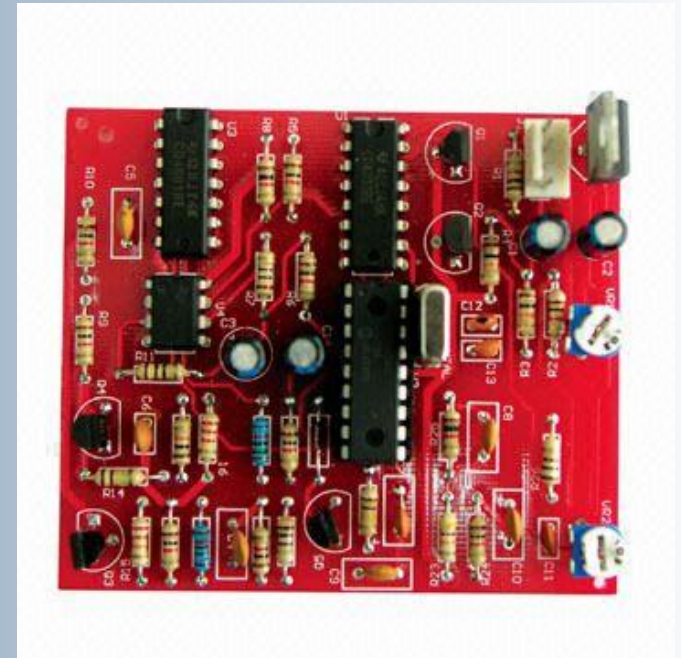
Key Terms and Conditions

- **Subject matter (use specification, technical description, patent No., name of the invention, trademark, standards?)**
- **Scope of the license (make, use, sell, make copies, distribute?)**
- **Field of use (technical fields?)**
- **Ownership**
- **Confidentiality**
- **Exclusive or non-exclusive**
- **Sub-licensing**
- **Territory**
- **Duration (How long? Does this depend on events?)**
- **Financial terms (Royalty, Lump-Sum, stock, payment method)**
- **Development rights**
- **Derivative works, improvements**
- **Future version of the technology**
- **Warranties (for risk of technology defect, defect in title, infringement)**
- **Dispute settlement (where settled? Who indemnifies against risk from 3rd party claims?)**

Licensing Negotiation

Four Phases:

- 1. Preparation Phase*
- 2. Discussion Phase*
- 3. Proposing Phase*
- 4. Bargaining Phase*



Source: “Exchanging Value - Negotiating Technology Licensing Agreements - A Training Manual” http://www.wipo.int/sme/en/documents/guides/technology_licensing.html

Preparation for Negotiation

- What is the business reason for this license?
- What is the best result that can be obtained from this agreement?
- What outcome do you want to avoid?
- What leverage do you and the licensee have?
- What are your and licensee's positions on the key issues?
- What are your and licensee's lowest and highest limits?
- What are you willing to compromise?

Source: Kitisri Sukhapinda, United States Patent and Trademark Office

Negotiation Tips

- ✓ **Win-Win**
- ✓ **Start with A Minor – Easy to resolve issue**
- ✓ **Best Case v. Worst Case Scenario**
- ✓ **Protect Credibility/Be Accurate**
- ✓ **Assess & Trade Variables Carefully**
- ✓ **Separate People From the Process**
- ✓ **Listen to What is Being Said & Not Said**
- ✓ **Remember - Everything is negotiable**

Confidentiality Agreements

Also known as non disclosure agreement (NDA)

Provisions:

- Identification of parties involved
- Identification of confidential information
- Definition of purposes for which information can be used (e.g. for purposes of evaluating a licensing opportunity)

Confidentiality Agreements

Cannot include:

- Information in the public domain
- Information already possessed by the recipient
- Information made available to the recipient through legitimate means

Necessary Ingredients

Political will

Funds

**Adequate legal system
(protection/enforcement)**

**Marketable
Technologies**

HR with Right Skills

Infrastructure

**Network
(Effective
Collaboration)**

WIPO web site:

www.wipo.int

WIPO University Initiative web site:

www.wipo.int/uipc/en

PCT WIPO webpage

www.wipo.int

Patent Information Databases

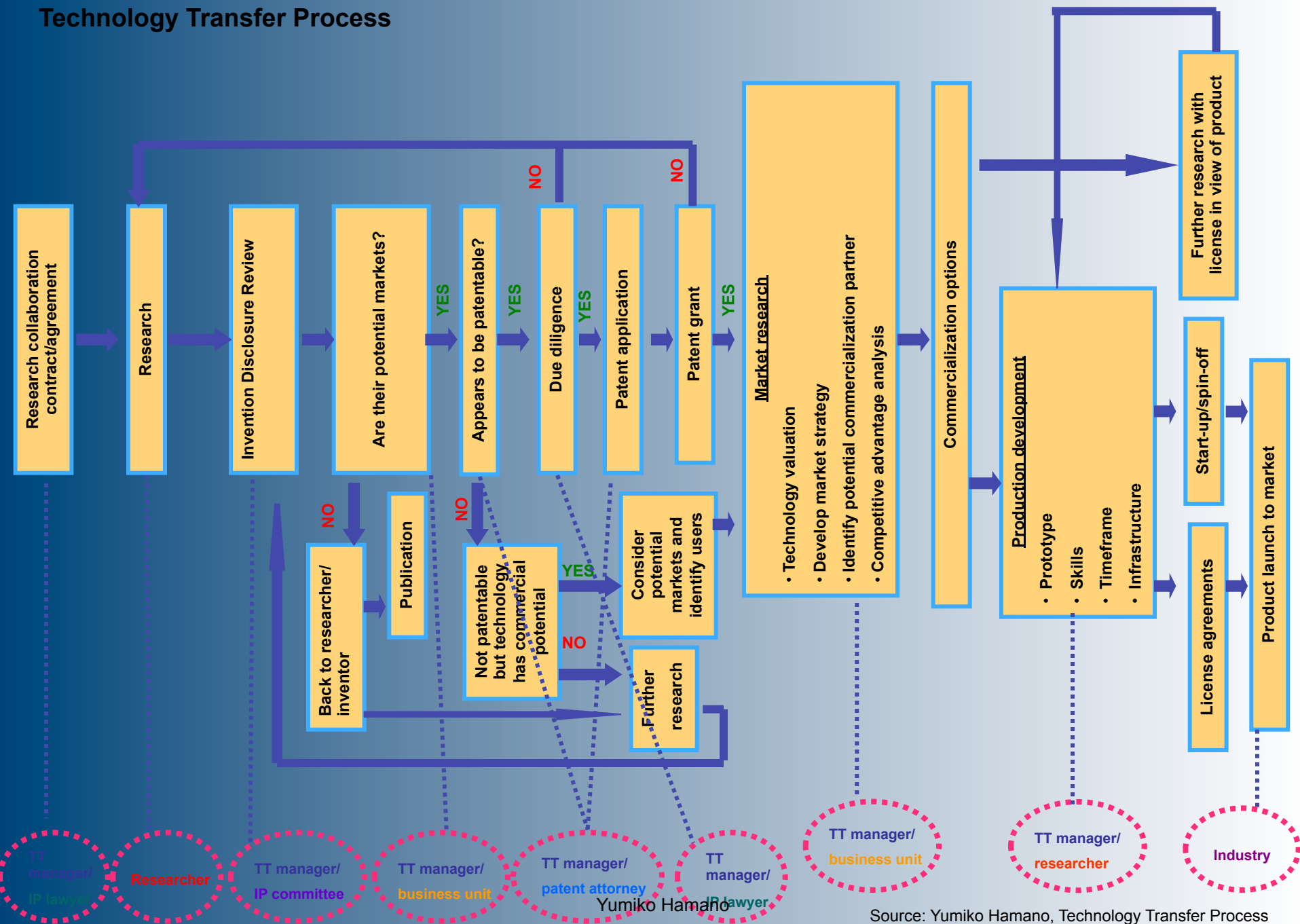
<http://www.wipo.int/patentscope/en/>

<http://ep.espacenet.com/>

<http://www.piug.org/vendors.php>

<http://www.wipo.int/classifications/ipc>

Technology Transfer Process



Sources of Model Agreements

Host	Web Address	Notes
WIPO	http://www.wipo.int/tk/en/databases/contracts/	Range of misc. model and actual agreements including licence and MTAs (freely available)
MIHR	http://www.iphandbook.org/handbook/resources_and_tools/Tools/	Comprehensive set of agreement samples covering a wide range of activity (freely available)
UK Govt	http://www.innovaiton.gov.uk/lambertagreements	5 forms of research collaboration agreement (freely available)
	http://www.1000ventures.com/business_guide/ip/sme_guide_licensing_bywipo.html	Business coaching web-site with free downloads of sample contracts
	http://www.techagreements.com/ also can be sourced through California MCLE http://contracts.onecle.com/authentidate/windhorst.lic.2000.03.02.shtml	Comprehensive set of legal agreements which can be freely previewed but may need purchase
UNICO	http://www.unico.org.uk/publications/practical_guides.asp	Excellent set of model agreements covering licensing, consultancy and spin-out but need to be member to get full access
DESCA	http://www.desca-fp7.eu/download-desca/	Model MTA and research collaboration agreements derived from EU programmes.



Thank you for your attention.