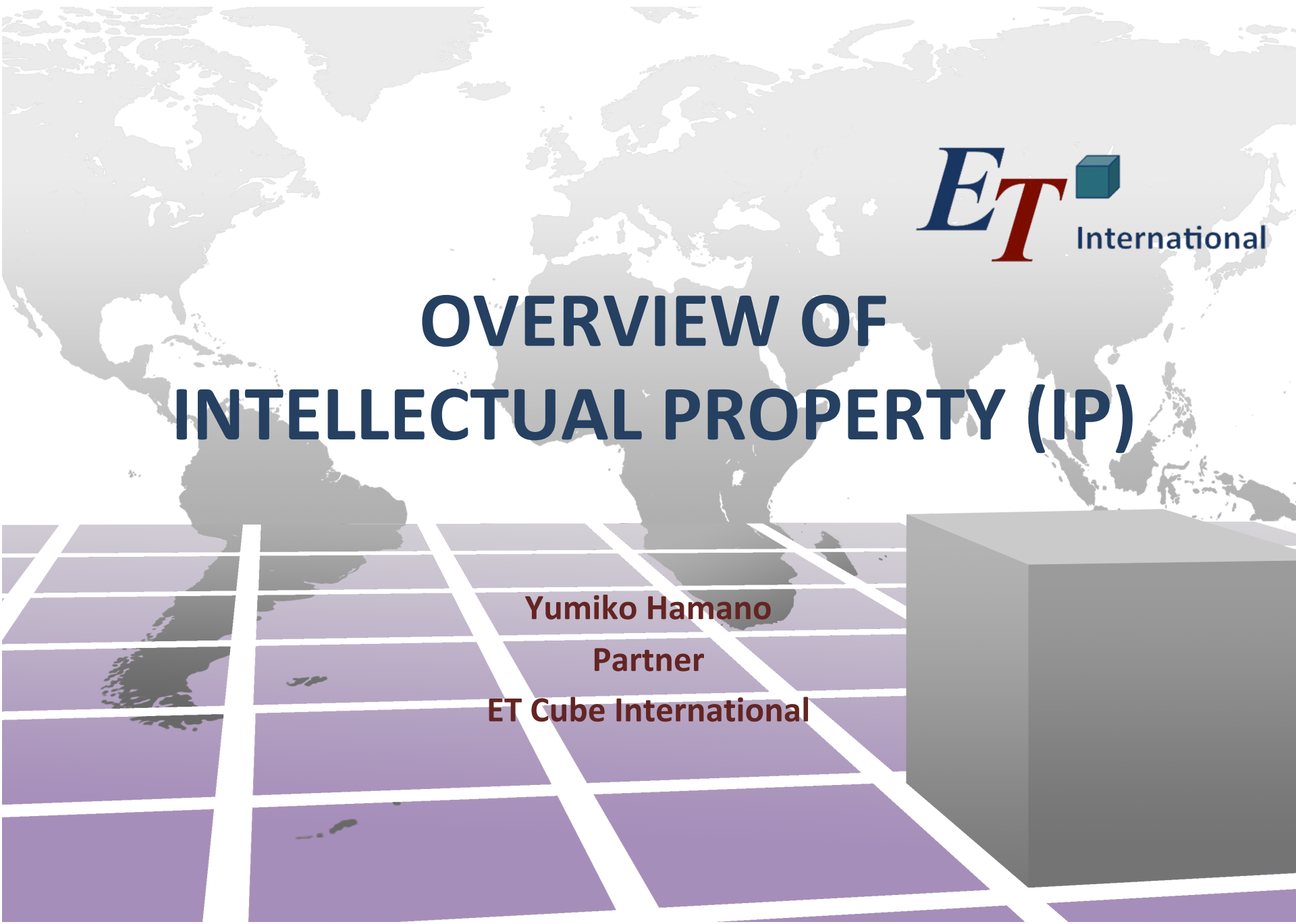

OVERVIEW OF INTELLECTUAL PROPERTY (IP)

Yumiko Hamano
Partner
ET Cube International

Topics

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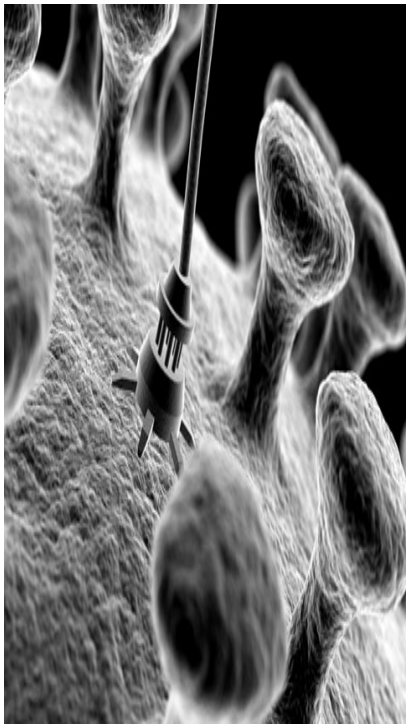
- WIPO
- Today's business trends
- Patent
- Trade secret
- TM
- Industrial Design
- Copyrights
- Benefits of IP



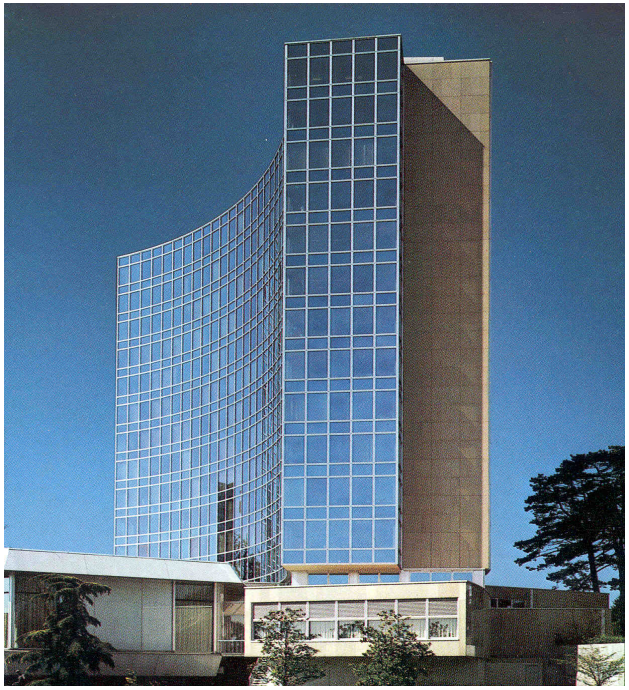
My Experience

- 27+ years at World Intellectual Property Organization (WIPO)
- 15 years dealing with Patent Cooperation Treaty (PCT)
- Supervised PCT Japanese operations of processing PCT international patent applications
- Trilateral (EPO, JPO and USPTO) Technical Cooperation Coordinator from WIPO
- PCT IPER technical translation (10+ years)
- 17 years dealing with Innovation, Technology Transfer and IP Commercialization
- Assisted 300+ universities worldwide in IP and Technology Mgt.
- Assisted in development of 30+ Institutional IP policies/ 50+ establishment of TTOs
- 200+ IP Mgt. training workshops/seminars/conferences
- Dealt with governments of 189 WIPO Member States
- IP Consultant/Forming a company "ET Cube International" - IP commercialization/Entrepreneurship consulting and training services
- Lead Consultant/ Project Manager for WIPO EIE Project in 8 countries in Asia
- LLM in Intellectual Property Law/ MBA specialized in Management in International Organizations

WIPO

"Dedicated to developing balanced intellectual property systems that encourage creativity and contribute to the economic/ cultural/social development"

- One of 17 United Nations Specialized Agencies
- Headquarters located in Geneva, Switzerland
- 189 Member States
- Administration of 25 international treaties
- Some 1,500 employees



What is IP?

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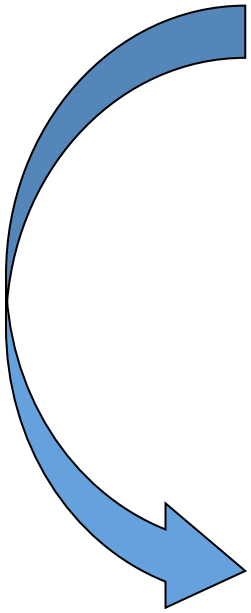
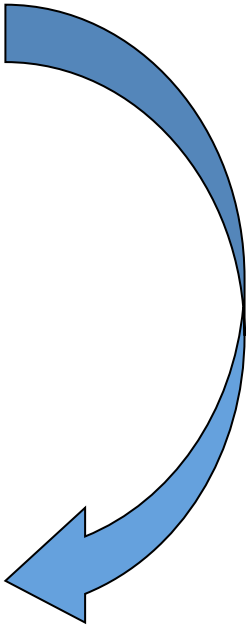
Creations of the mind:

1. Industrial property

- patents (inventions)
- utility models
- trade secret
- Trademarks (TM)
- industrial designs
- geographic indications (GI)
- new plant varieties
- Traditional Knowledge (TK)

2. Copyrights





IP rights

Protected by National and International Laws

WIPO
WORLD
INTELLECTUAL PROPERTY
ORGANIZATION

IP = Assets

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IP can be:

- **traded**
- **sold**
- **licensed**
- **Inherited**

IP provides:

- **Competitive advantage**
- **Can block competitors/prevent competitors from entering the market**

S&P 500 Companies

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Over 80% of market value of S&P500 companies today is based on their intangible assets

Intangible assets

(knowledge based assets)
e.g.
- Patents
- Trademarks
- Design
- Brand Value

>

Tangible assets

(physical assets)
e.g.
- Real estate
- Equipment
- Cash

Tangible vs. Intangible Assets

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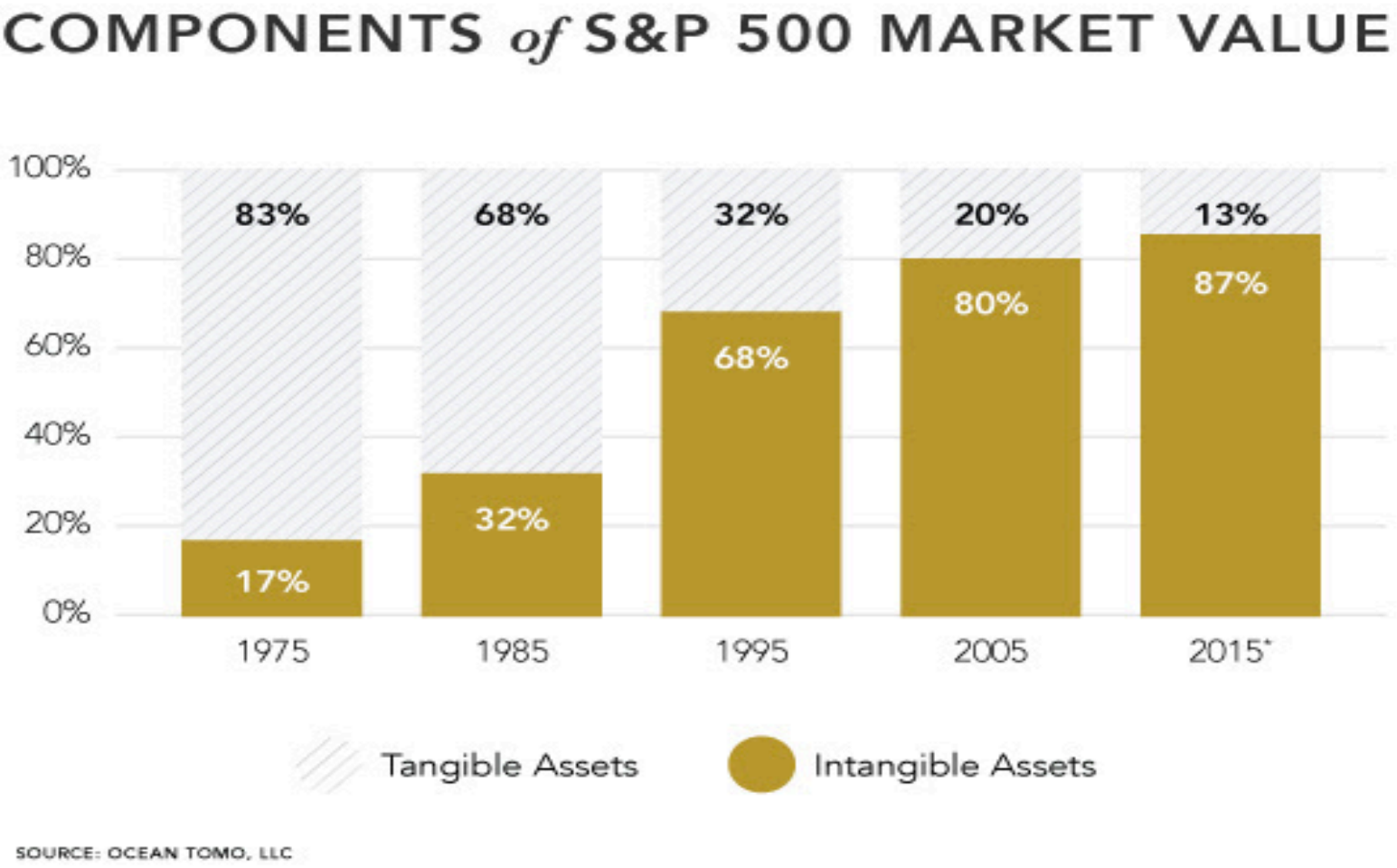

Business Paradigm Shift - Globalization

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- **Internet/ Social media/ Smartphone➔ Easy access to information/ Easier communication**
- **Limited geographic barriers**
- **Global market**
- **Competitive market**
- **Need to improve efficiency**
- **Need to improve quality**
- **Constant generation of new technologies**
- **Fast technology cycle**
- **Technology interdependency ➔ Need to collaborate**
- **Highly knowledge/technology driven economy**

NEED TO INNOVATE !!!!

Patent

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- A right granted by a state to the owner of 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: Legal Requirements

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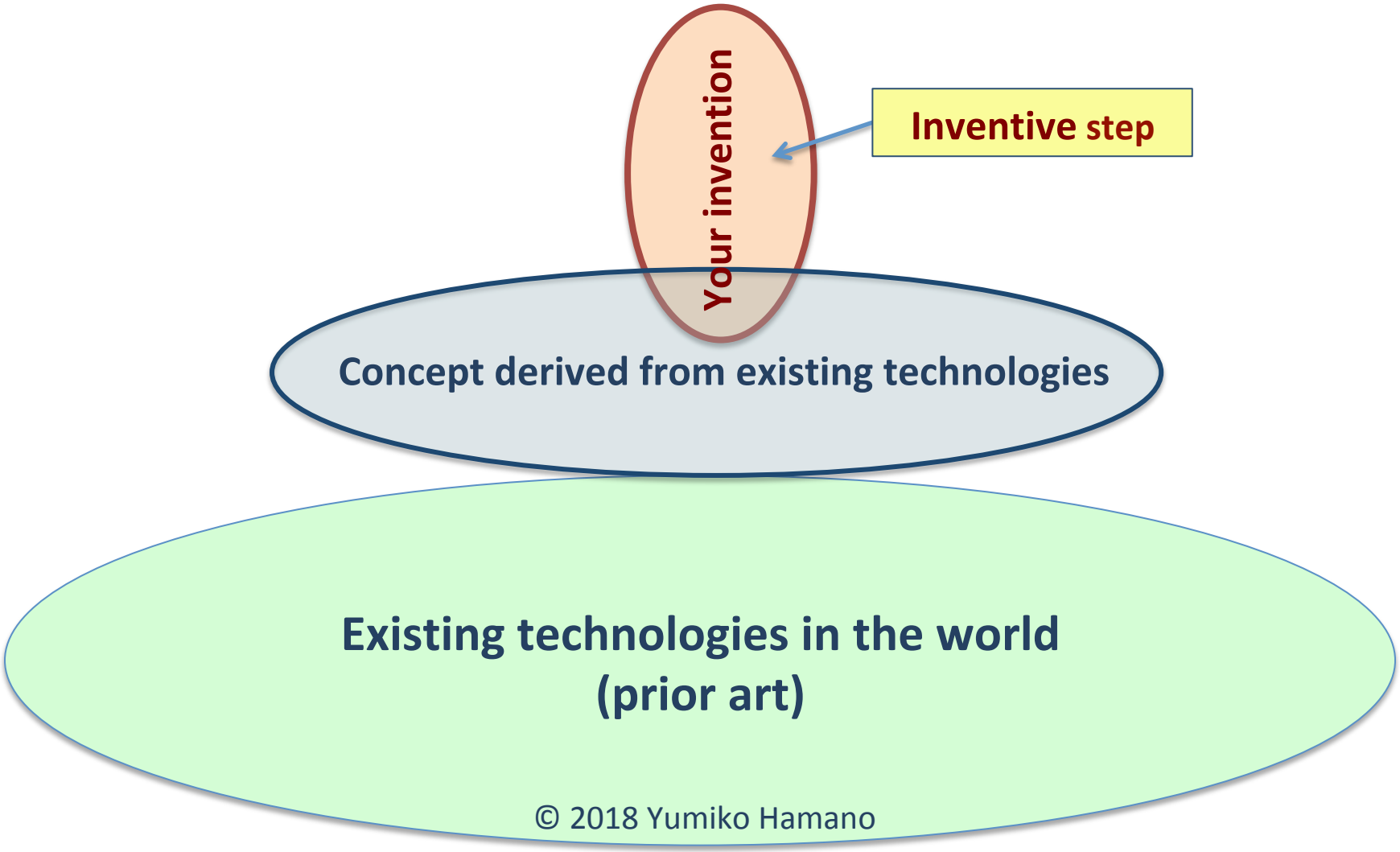
1. Novelty
2. Inventive Step
3. Industrial Applicability

Inventive Step (Non-obviousness)



Patent

- Publication vs. Patents
- Grace period v. Absolute novelty
- Provisional patent application
- Utility Models/Petty patents
- Inventor/Applicant

How Many Patents Are there in an Apple iPhone4 ?

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1298 Apple Mobile Patents (2002 - 2012)

• iPhone, Smartphone General	416
• Camera	279
• User Interface	232
• Image Display/ Screen	149
• Battery/ Power Control	88
• Antenna	75
• Calendar	31
• Contact Management	15
• Voice Control	5

Trademarks: 292
Copyright
Industrial Design

Apple Market value: 800+ B

In the Ultra Competitive Marketplace: Apple Revenue expected $200+ Billion in 2015!!!

How are inventions invented?

- Identifying a need or problem
- Through finding a creative way to solve a specific technical problem
- Improving existing technologies
- Applying a better understanding of nature

<VELCRO>

invented by George de Maestral (Swiss Chemist)

Velcro

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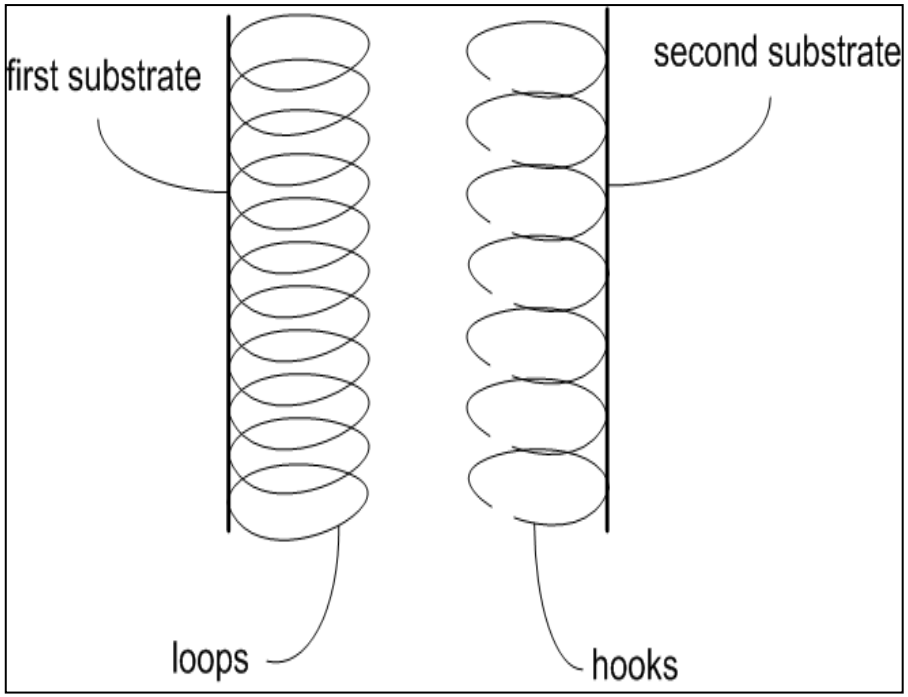
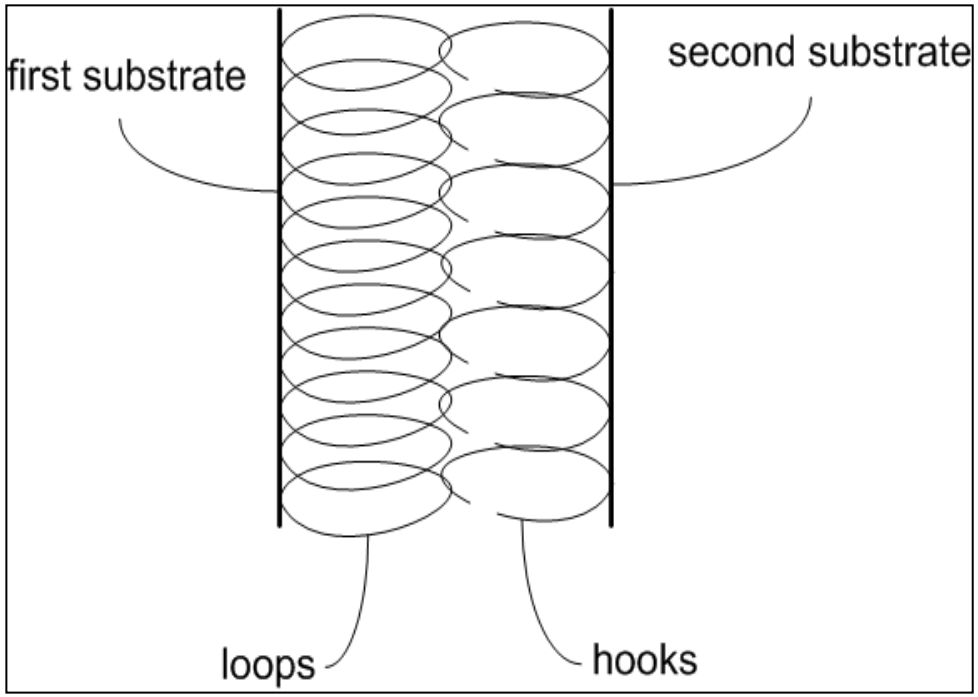
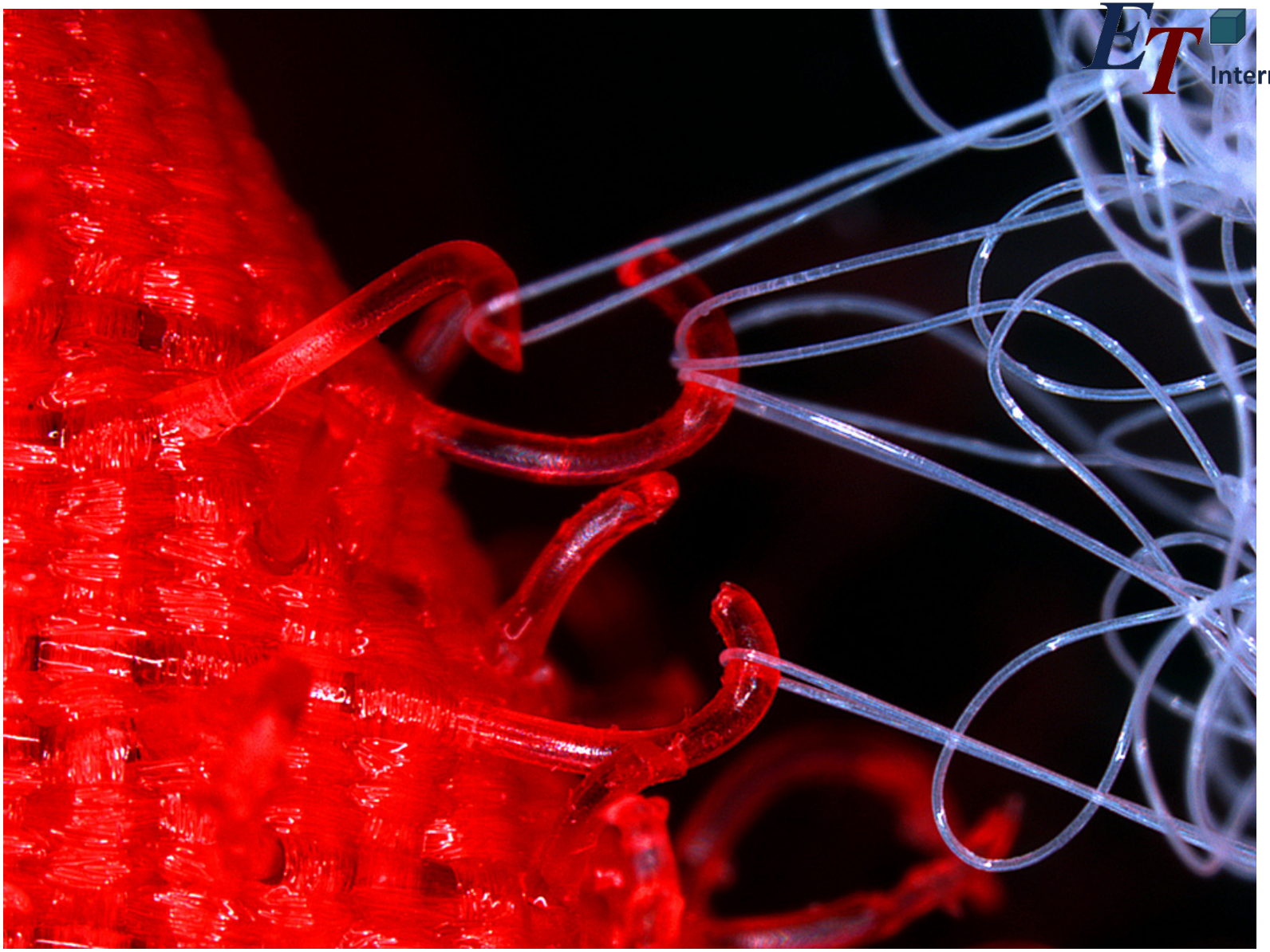
prior art: Cockleburrs

synthetic resin







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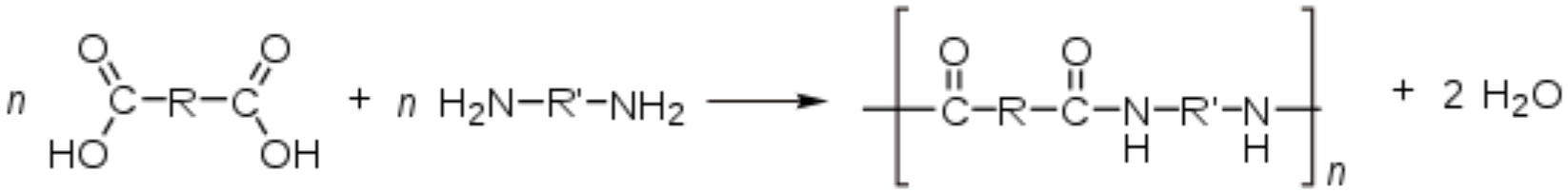
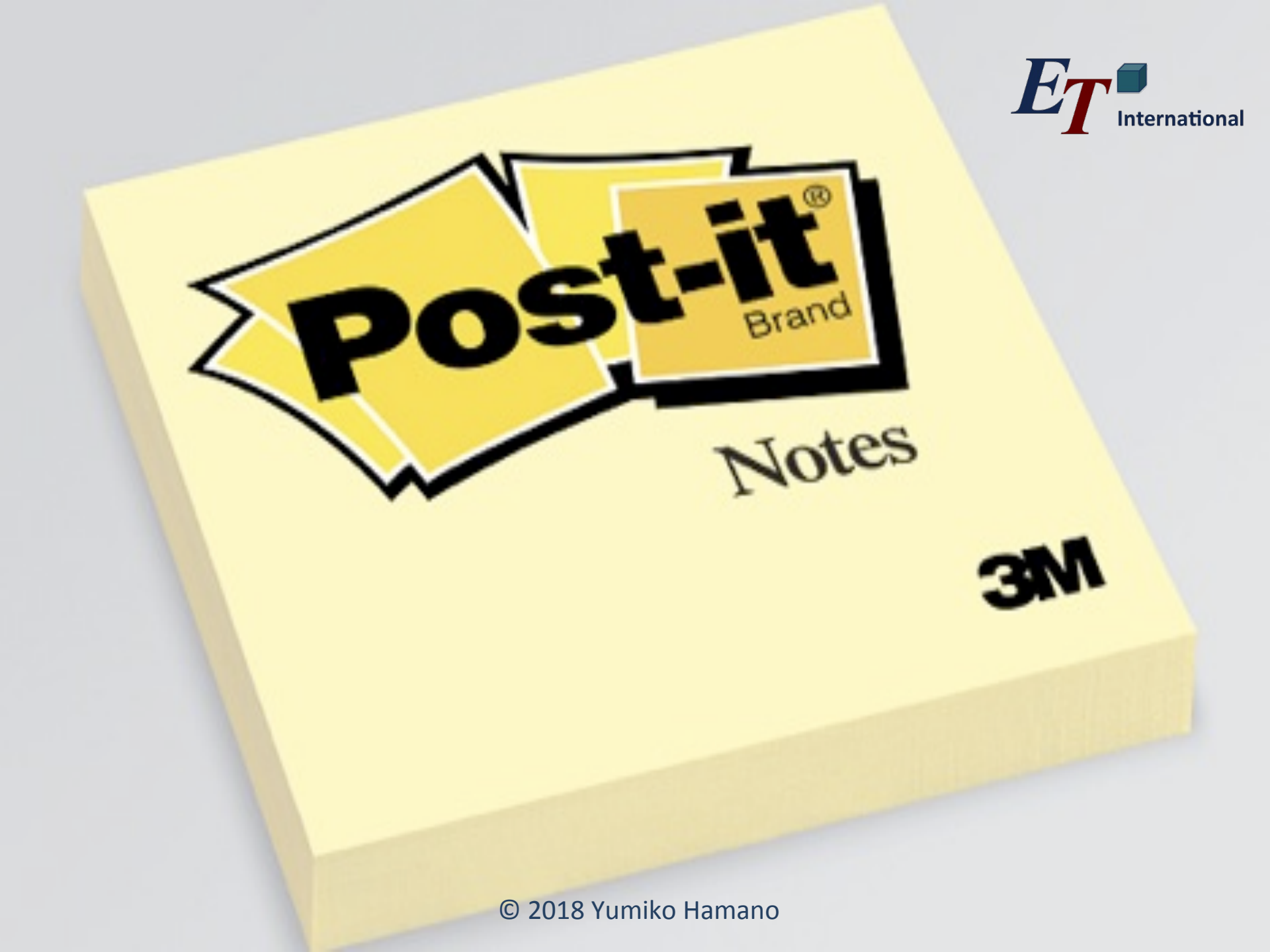
Synthetic Resin That Forms Hooks and Loops

- 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.



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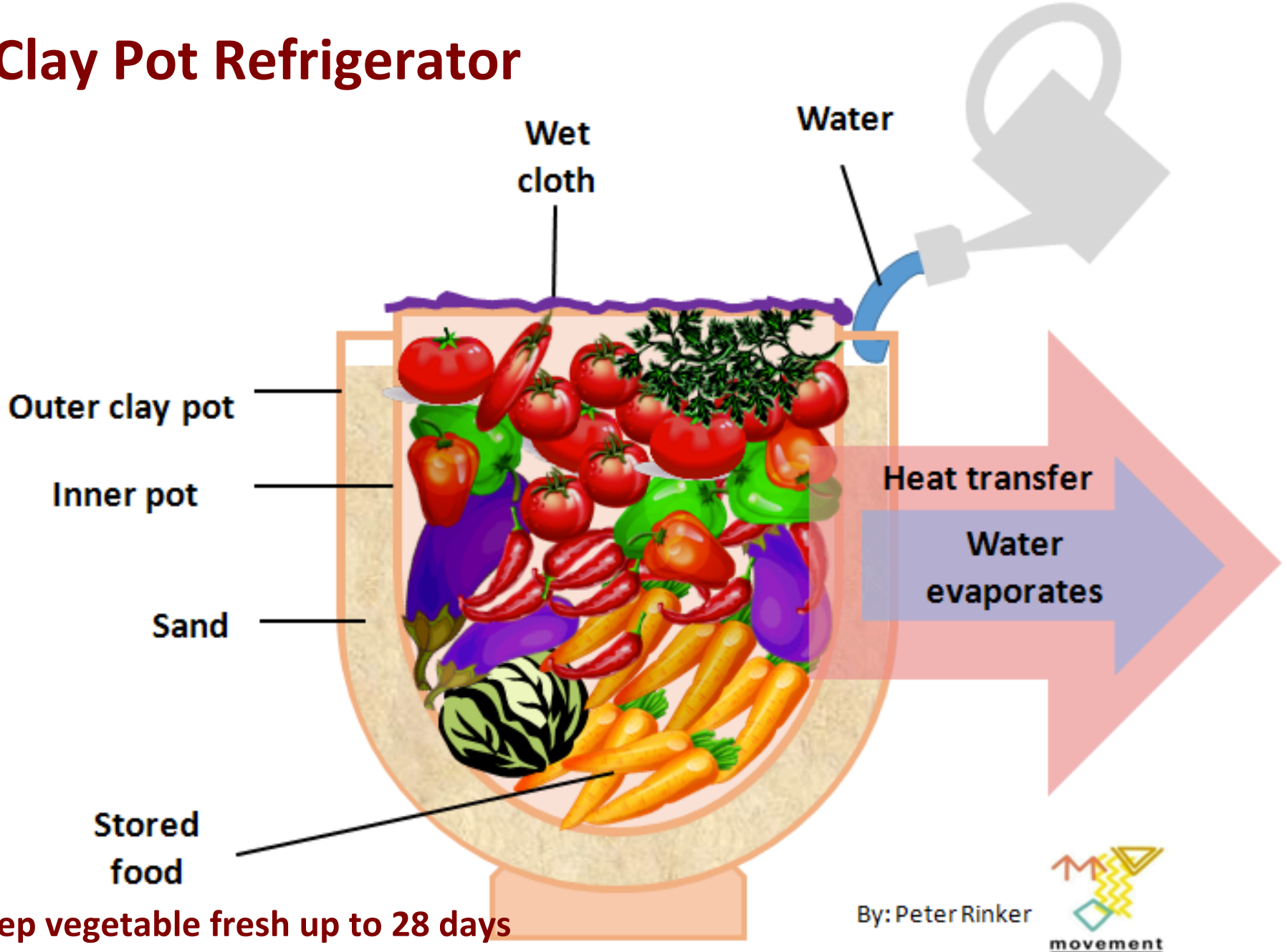
« Necessity is the mother of invention »

Clay Pot Refrigerator



Keep vegetable fresh up to 28 days

By: Peter Rinker

movement

ET International

Baby Mop

Image source: Google

Benefits of Patents

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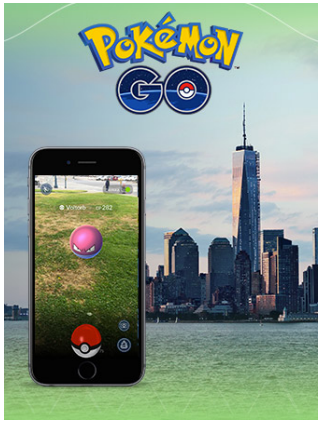
Patents:

- Provide **incentives** by **recognizing** for the **creativity** and reward exclusive right
- Provide strong competitive advantages (high quality and profitable products, revenue, licensing royalty)
- Encourage **innovation**
- **Stimulate** fair competition in the **market**
- Contribute to **economic development**
- Foster **technological advancement**



TOYOTA

WATCH

Google

amazon.com

Pfizer

Nintendo

Microsoft

NOKIA
Connecting People

twitter

HUAWEI

intel inside

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"Logic will get you from A to B. Imagination will take you everywhere"

- Albert Einstein

Patent is certainly important for big companies….

But patent is even more important for small businesses and start-ups, because:

- The patent may be the only **competitive advantage**
- Essential **to find investors and commercialization partners or obtain access to enabling technologies**
- Investors typically view **patents as insurance** for their investment
- The value of a small company's patents may therefore be **a crucial factor** in the decision of a venture capitalist or other investor to invest in a company.
- Strong patents may also be used as **bargaining chips** for licensing, sales and business collaboration opportunities

Trade Secrets

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Trade Secrets

- Any confidential information with independent economic value not in public domain (often know-how of designs, manufacturing method)
- Any information belonging to an entity that is neither readily known nor readily ascertainable outside the entity

Examples of Trade secrets:

- Formulas, patterns, processes, methods, compilations, customer lists, etc.
- Secret formula for making Coca Cola®

(Coca Cola company holds formula as trade secret)

Trade Secrets

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Advantage

- No time limit for protection
- No patent filing costs

Disadvantage

- Protection only as long as secret is kept as secret
- Legally protected only where third parties have obtained the confidential information by illegitimate means (spying, economic espionage, stealing information etc.)
- No uniformed laws of trade secret. Many countries do not have any legal framework for trade secrets protection
- Limited protection i.e., companies are often less interested in licensing trade secrets compared to patents

Trademarks

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- Type of IP in the form of a word, name, symbol, or device used to identify goods
- 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 (*e.g.*, a name) that identifies the good or services and not the goods themselves
- Strong and effective tool for branding

Known Trademarks

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NOKIA
Connecting People

Industrial Designs

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- 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

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- 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

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- 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

Important IP right for protecting computer software and algorithms

- When patenting is not available, then copyright often becomes the strongest form of protection that can be obtained in the information technology field
- A piece of software might not rise to a sufficient degree of novelty and inventive step for patent protection
- In many jurisdictions computer software is not patentable “per se”

Benefits of IP

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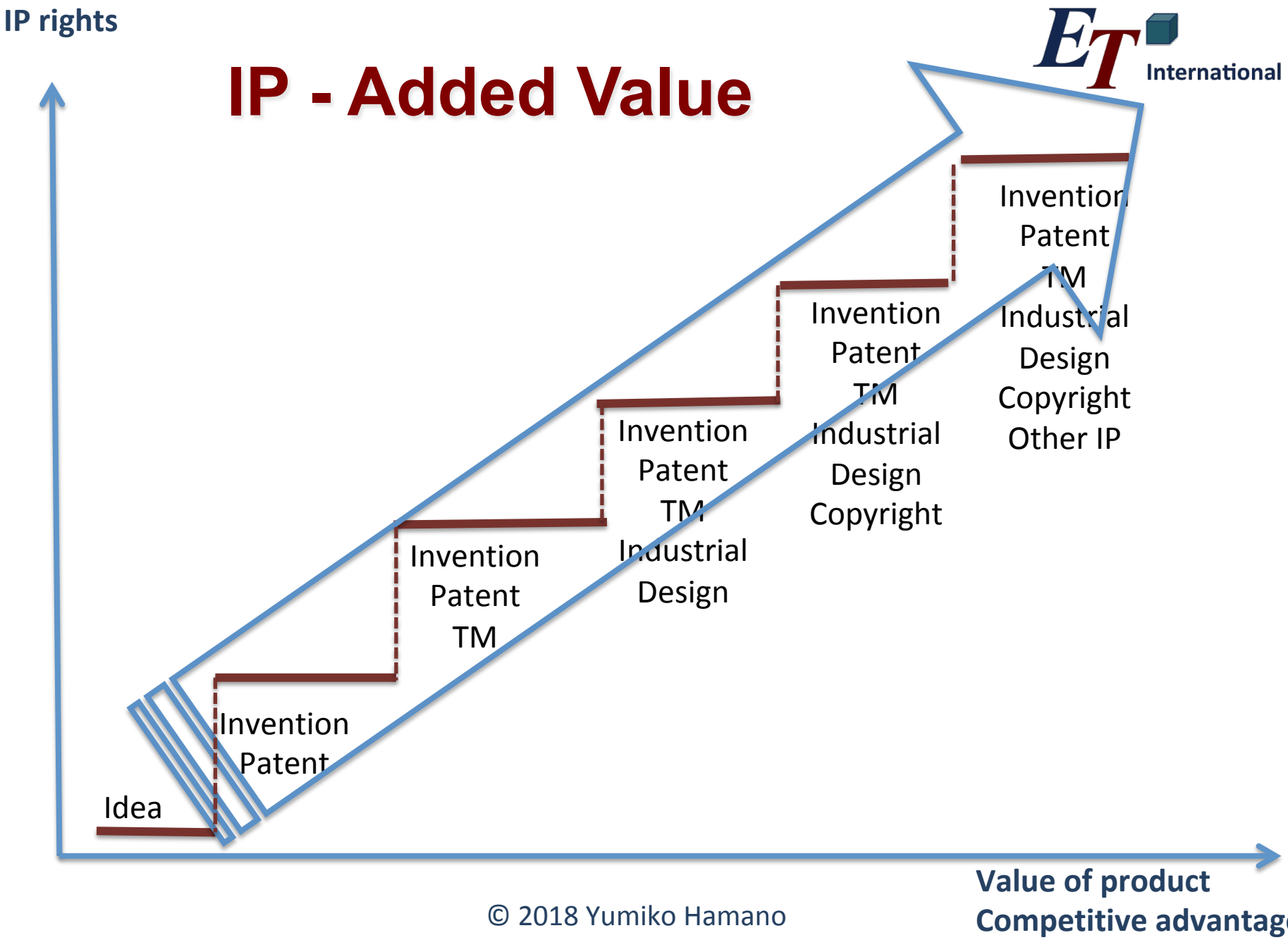
Micro level

- Build strong portfolios of IP as a source of competitive advantage
- Strong and effective tool for branding and marketing
- Enhance corporate value
- Provide incentives and recognition of creativity
- Enables to distinguish your products from others (products/services of high value)
- Avoid and defend against litigation

Macro level

- Increase national competitiveness and GDP
- Enhance exports of high value
- Stimulate R&D and Promote S&T
- Reduce brain drain by providing incentives
- Help address national/global issues
- Develop national brand, cultural identity and reputation
- Attract FDI and local investment
- Job creation



Aquaduct

"Innovate or Die Competition" sponsored by Google

2008 Invention Award

http://www.wimp.com/new-invention-water-purifying-bicycle/

Some Recap

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- What are three criteria of patentability?
- How long does a patent generally last?
- Why is a patent important?
- What are the differences between patent and industrial design?
- Can software code be protected by patent?
- Give examples of different types of IP that you can see in the water bottle.
- Once you get a patent in your country no one else can have the same patent anywhere in the world. True or false?
- An inventor is who had a new idea. True or false?
- Anyone who files patent application is considered an inventor. True or False?
- What are different IP, important for universities or start-ups?

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Thank you for your attention

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