

Intellectual Property



And Invention



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What are the Intellectual Property Rights?

- Copyright
- Trade Mark and Service Mark Right
- Registered Designs Right
- Trade Secret and Know-how
- Patent Right



What are the Intellectual Property Rights?

- **Copyright:**

Protects the form of expression of the work (not ideas)

- **Trade Mark and Service Mark Right:**

Protects a badge of origin



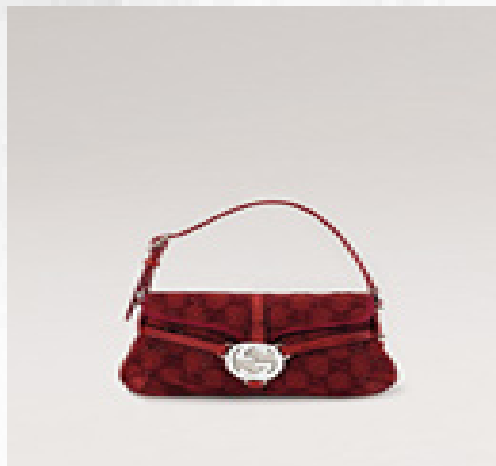
Trademarks



What are the Intellectual Property Rights?

- **Registered Designs Rights:**

Protects features of shape, configuration or pattern



透氣
上透
舒服



What are the Intellectual Property Rights?

- Trade secret and know-how examples: Coca-Cola; KFC.

- Patent Right:
Protects an invention





What is a Patent?

- To grant a patentee a monopoly right in respect of an invention for a period of up to, usually, 20 years*, i.e. the right to exclude others from using that invention.
- In exchange, the patentee must give full disclosure of the invention
- *Pakistan: 16 years (old 1911 Act), as from 2nd December 2000, amended to 20 years.

Patentable Invention

- Patentable invention is an invention which satisfies the following conditions:
 - It is new
 - It involves an inventive step; and
 - It is capable of industrial application

An invention which will generally be expected to encourage offensive, immoral or anti-social behavior is not a patentable invention



It is new

- An invention is novel if it does not form part of the state of the art.

The state of the art of an invention comprises all matter which has been made available to the public whether in Singapore or anywhere in the world prior to the date of the invention by written or oral description by use or in any other way.



It involves an inventive step

- The primary evidence, applied by the courts, is that of properly qualified expert witnesses who will say whether or not, in their opinions, the relevant step could have been obvious to a skilled man having regard to the state of the art.



Industrial Application

- Invention can be made or used in any kind of industry, including agriculture
- “Industry” includes any physical activity of technical character
- As opposed to aesthetic arts or well-established physical law, eg. Archimedes principles.



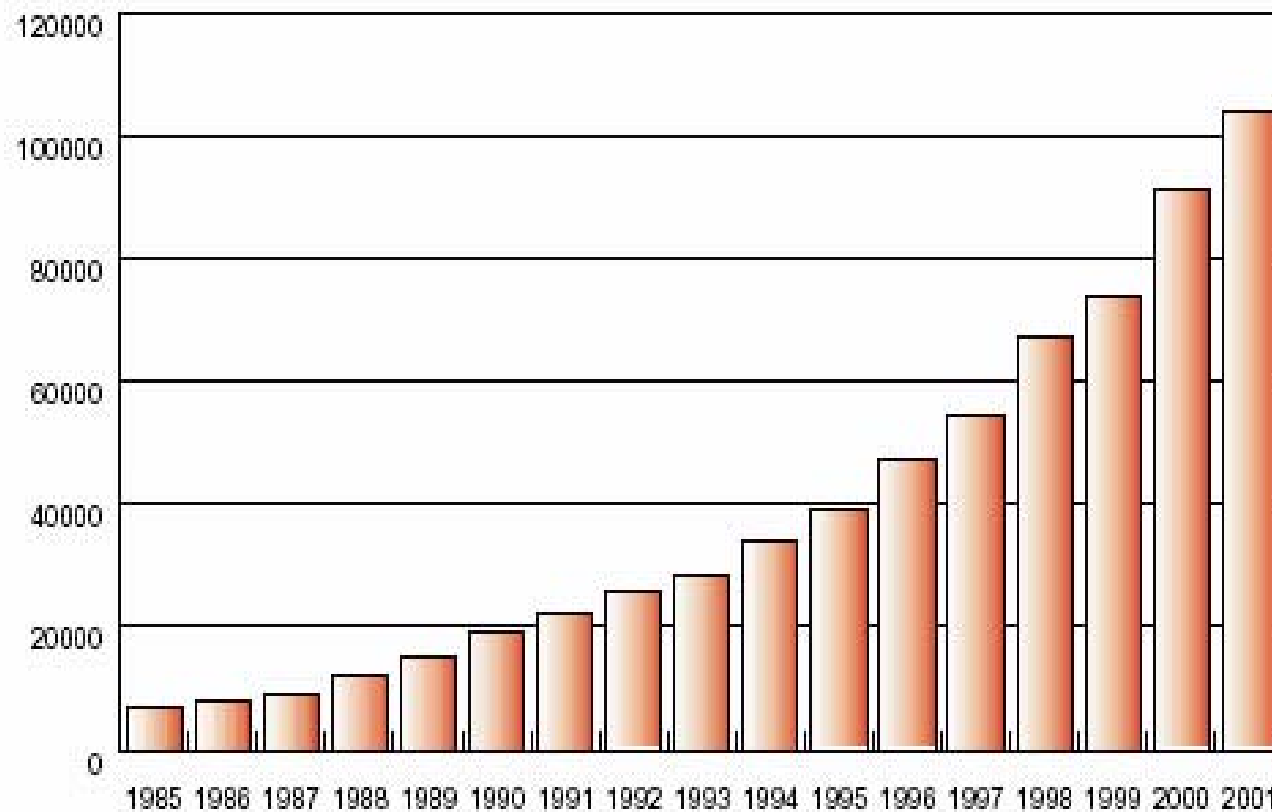
Importance of Patents

- Sharp increase in world wide patenting activities.
- Dramatic rise of Japanese MNCs patenting their inventions.
- Granted patents: No.1 (USA); No. 2 (Japan); No. 3 (Germany); No. 4 (Taiwan).
- Patents accepted as measure of innovative capacity of a company.



Importance of Patents

Number of International Applications

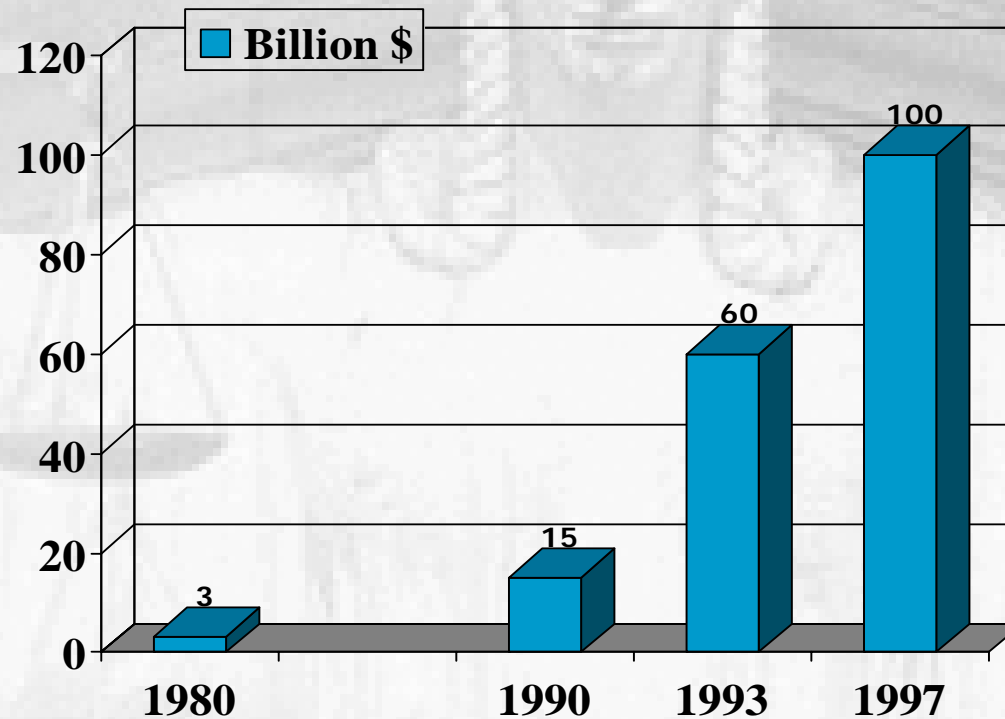


Importance of Patents

<u>COUNTRY OF ORIGIN</u>	<u>2001</u>	<u>Total</u>
Total	166039	166039
U.S. Origin	87607	87607
Foreign Origin	78432	78432
JAPAN	33223	33223
GERMANY	11260	11260
TAIWAN	5371	5371
FRANCE	4041	4041
UNITED KINGDOM	3965	3965
CANADA	3606	3606
SOUTH KOREA	3538	3538
SWEDEN	1743	1743
ITALY	1709	1709
SWITZERLAND	1420	1420
NETHERLANDS	1332	1332
ISRAEL	970	970
AUSTRALIA	875	875
FINLAND	732	732
BELGIUM	718	718
AUSTRIA	589	589
DENMARK	479	479
SINGAPORE	296	296



Importance of Patents



Patent License Revenues of U.S. Companies
Acknowledgement: Siemens AG 2001

Importance of Patents

- Gillette (Sensor shaver)

- 7 different designs for mounting blades.

- Choose the design that competitors found it most difficult to get around.

- 22 interlocking patents in Sensor shaver (cartridge, springs, angle of blades, handle, container, etc).



Importance of Patents

■ Dell Computer

- Innovative direct sales business model.
- 42 patents to bolster market advantage.
- Patents are collateral for a US\$16 billion cross-licensing deal with IBM.



Importance of Patents

■ Hitachi

- Automotive airflow sensor design was easy for competitors to copy.
- But competitors' design were more complex and expensive.
- Effective patent-fence protecting around airflow sensor design.

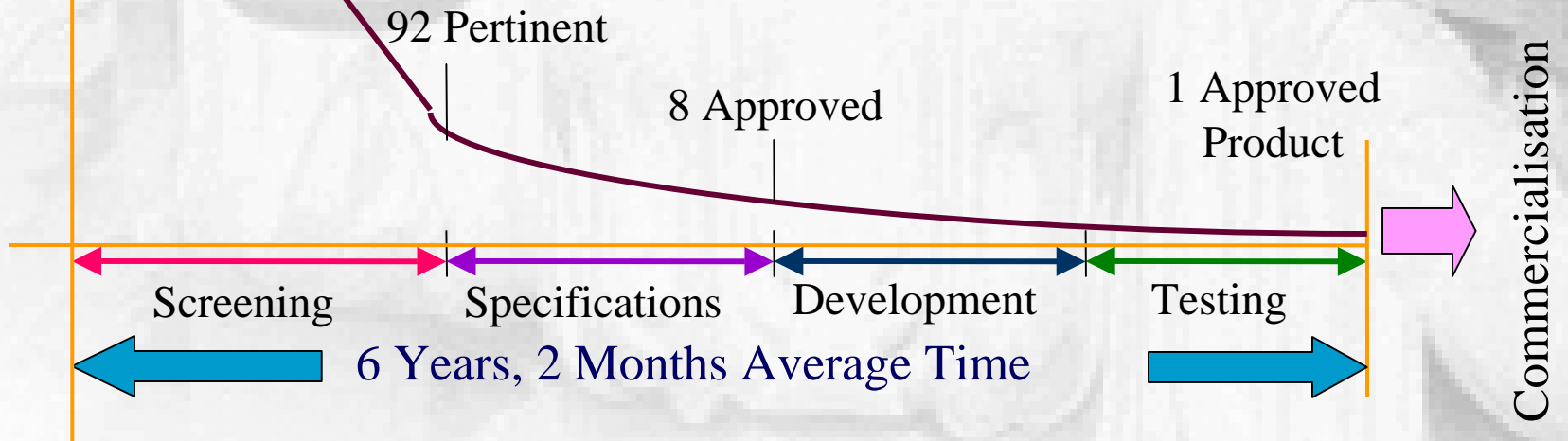


Exploitation of Patents



540 inventions

- Ralph Alterowitz (Venture Tech Corp):
- “only 1 product finally emerged from every 540 inventions?”



Exploitation of Patents

■ Texas Instruments

- Portfolio mining and licensing in mid-1980s resulted in US\$4 billion patent royalties.
- Current licensing revenue is US\$800m a year.
- In 1999, a cross-licensing pact with Hyundai for US\$1 billion over next 10 years.



Exploitation of Patents

■ IBM

- Early 1990s: restructuring and revitalization of IBM.
- Began to systemically exploit its patent portfolio.
- US\$1.7 billion in 2001 from royalties.





THANK YOU

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