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Licensing In The Far East

By Jack D. Slobod

Senior Director IP Licensing

Philips Intellectual Property & Standards

Briarcliff Manor, NY

Disclaime

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Licensing in the Far East

Outline

- Brief Background of Philips and IP&S
- Consumer Electronics, Semiconductor, Computer & Telecom Industries
 - Convergence of technologies
 - Economic models The Intellectual Economy
- · Electronics industry
 - Asian Players the conglomerates and the newcomers

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Licensing in the Far East

Outline, cont'd

- Licensing-importance of perceptions of patent enforceability in jurisdictions of sale, use, manufacture
 - U.S.
 - Europe
 - Japan
 - KoreaChina
 - Taiwan

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Outline, cont'd

- Impact of China domestic standards
- Technology licensing

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Royal Philips Electronics

Royal Philips Electronics of the Netherlands (NYSE: PHG, AEX: PHI)

- sales of EUR 30.3 billion in 2004.
- activities in the three interlocking domains of healthcare, lifestyle and technology
- 161,100 employees in more than 60 countries
- market leadership positions in medical diagnostic imaging and patient monitoring, color television sets, electric shavers, and lighting.

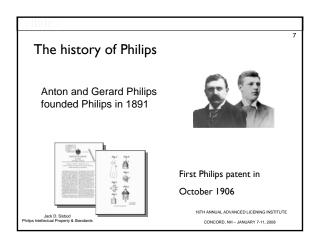
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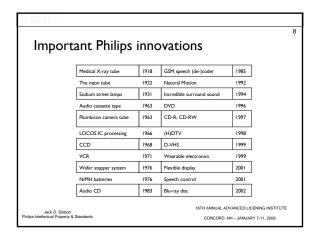
Royal Philips Electronics, cont'd

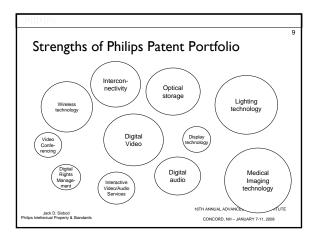
- Healthcare
 - Medical diagnostic imaging
 - Patient monitoring
 - Medical IT
- Lifestyle
 - consumer electronics
 - lighting
 - grooming, domestic appliances, oral healthcare
- Technology
- Solid State Lighting

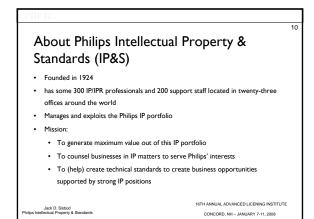
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Convergence - products

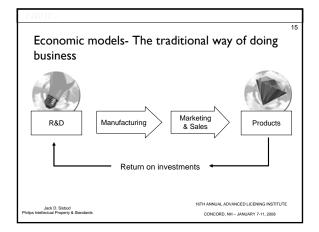
Today's electronics products use technologies developed from Consumer Electronics, Semiconductor, Computer & Telecom Industries- examples:

mobile phones laptops
STBs TVs
AV players & recorders cameras
navigation systems automotive electronics

Convergence - technologies Examples IC processing RF modulation AV codecs AV transport streams connectivity mobile telephony air interface WiFi display technology LCD Plasma OLED 16TH ANNUAL ADVANCED LICENING INSTITUTE Jack D. Slobod ellectual Property & Standards CONCORD, NH - JANUARY 7-11, 2008

Convergence - technologies Problem of royalty stacking • Multiple technologies are needed for a converged product • Multiple Licensors are active in licensing a technology 16TH ANNUAL ADVANCED LICENING INSTITUTE Jack D. Slobod Nectual Property & Standard CONCORD, NH - JANUARY 7-11, 2008

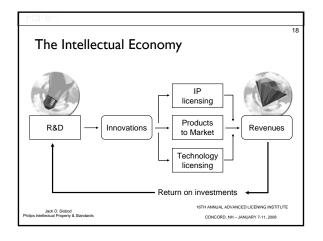
Electronics Industry · A global marketplace · impact of global standards · regional standards • impact of defacto standards 16TH ANNUAL ADVANCED LICENING INSTITUTE Jack D. Slobod ellectual Property & Standards CONCORD, NH - JANUARY 7-11, 2008



Global changes in the last 20 years • Globalization in marketing and manufacturing: · More companies • More competition, lower margins • Shorter product life cycles · Increased price erosion • Cost of R&D increases Return on R&D investment becomes more difficult 16TH ANNUAL ADVANCED LICENING INSTITUTE Jack D. Slobod lectual Property & Standards

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Global changes in the last 20 years Originally manufacturing created competitive edge · mass production • miniaturization Now manufacturing has become a commodity outsourcing · low wage countries · Competitive edge of companies shifts from production-based to knowledge-based 16TH ANNUAL ADVANCED LICENING INSTITUTE Jack D. Slobod Ilectual Property & Standards CONCORD, NH - JANUARY 7-11, 2008



| MHE | | |
|--|---|--|
| Industry: Electronics, Electrical Equip. | | |
| Company | Revenue (\$B) | |
| Siemens | 107.3 | |
| Samsung Electronics | 89.5 | |
| Hitachi | 87.6 | |
| Matsushita Electric Ind. | 77.9 | |
| Sony | 70.9 | |
| LG Electronics | 68.8 | |
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| enues established | | | |
|--|--|--|--|
| Industry: Electronics, Electrical Equip. | | | |
| <u>Company</u> | Revenue (\$B) | | |
| Toshiba | 60.8 | | |
| Tyco International | 42.2 | | |
| Hon Hai Precision Ind. | 40.6 | | |
| Royal Philips Electronics | 38.7 | | |
| Mitsubishi Electric | 33.0 | | |
| | | | |
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Industry: Electronics, Electrical Equip.

Company Revenue (\$B)

Sharp 26.7

Sumitomo Electric Ind. 20.4

Emerson Electric 20.1

Sanyo Electric 19.8

Il of top 15 are Asian companies

Japan & South Korea

Japan

many vertically integrated conglomerates which have grown since WWII

South Korea

a handful of vertically integrated conglomerates which in the last two decades have grown to equality with the Japan conglomerates

many small companies which compete in limited areas.

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China & Taiwan

Chinaexplosive growth in small companies active in assembly & mfr of a wide range of electronic products

a handful of rapidly growing conglomerates (Lenovo, TCL/TTE, Haier)

Taiwanexplosive growth in moderately large companies active in IC foundry, optical drives and mechanisms, LCD panel and other component mfr, and ODM manufacture of laptop computers, mobile phones, optical drive players.
many small companies which compete in limited areas.

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Licensing-importance of jurisdictions

Perception of enforceability of IPR in jurisdictions:

• Where product sold

• Where product used

• Where product manufactured

Importance of U.S. jurisdiction

• A large marketplace where products are sold and used, and to a more limited extent, manufactured.

• Asian companies among top filers for U.S. patents

• 31 Asian companies in top 100

• Asian companies dominate top 10

• mostly Japan, some South Korea and Taiwan.

| _ | Asian Companies In 2006 Top U.S. Patent Owners | | | |
|-----------------------------------|---|---|--|--|
| Rank | Company | # patents issued | | |
| 2 | Hitachi | 2581 | | |
| 3 | Samsung Electronics | 2451 | | |
| 4 | Canon | 2438 | | |
| 5 | Matsushita Electric Ind | 2360 | | |
| 8 | Sony | 1906 | | |
| 9 | Toshiba | 1820 | | |
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| Asian Companies In 2006 Top U.S. Patent Owners | | | | |
|---|----------------------------------|---|--|--|
| <u>Rank</u> | Company | # patents issued | | |
| 12 | Fujitsu | 1487 | | |
| 16 | Seiko Epson | 1200 | | |
| 18 | Fuji Photo Film | 906 | | |
| 21 | Honda Motor | 778 | | |
| 23 | Denso | 732 | | |
| 24 | NEC | 728 | | |
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| | Asian Companies In 2006 Top U.S. Patent Owners | | | | |
|-----------------------------------|---|---|--|--|--|
| Rank | Company | # patents issued | | | |
| 26 | LG Electronics | 694 | | | |
| 27 | Ricoh | 693 | | | |
| 29 | Sharp | 665 | | | |
| 35 | Mitsubishi | 610 | | | |
| 39 | Sanyo | 516 | | | |
| 48 | Taiwan Semiconductor | 471 | | | |
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China- increased patent filings

• In 2006, China filed almost 4000 patents at the WIPO, 5 times more than in 2000. This represents a serious increase of awareness and respect for IPR in China.

**Introduced Licensed Institute Philips Institute Concord, NH - JANUARY 7-11, 2006

Asian companies in U.S. patent litigation

• Asian companies are frequent defendants in U.S. patent infringement and ITC proceedings, and increasingly also plaintiffs.

• Example – Sharp has sued Samsung and more recently, various Taiwanese companies, in E.D. Texas, over LCD technology.

Asian companies in patent U.S. litigation, cont'd

- Asian companies are such frequent litigants in the U.S. that they are beginning to shape the U.S. patent legal system.
 - Example: Quanta Computer Inc., v. LG Electronics Inc.
 - appeal from CAFC, <u>US Sup Ct has granted Certiorari-</u> issue: whether LG's assertion against computer manufacturers using IBM chips is foiled by exhaustion due to IBM- LG cross license, notwithstanding that IBM is required to inform its customers that the LG license doesn't cover combinations with components from other suppliers.

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U.S. patent litigation, cont'd

- Asian companies, like others, are monitoring an apparent tilting of the playing field in U.S. patent litigation towards the defendant.
 - Examples
 - U.S Sup. Ct.-
 - eBay Inc. v. MercExchange LLC (injunctions)
 - KSR v Teleflex (obviousness)
 - CAFC
 - In re Seagate Technology (willfullness)

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U.S. patent litigation, cont'd

Patent Reform pending in Congress also may have the effect of tilting the playing field in the U.S. patent litigation towards the defendant.

- Examples
 - Venue
 - Opposition/ reexamination
 - Apportionment of Damages

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The importance of European market and European litigation

- Market is as large or larger than U.S. market, but suffers from lack of pan-European enforcement of EP patent. Must resort to suit under national law, with jurisdiction split typically between infringement court and a separate tribunal for invalidity actions, which are often filed as a defensive tactic.
- Availability of border seizures.
- Most activity in Germany.

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The importance of the Japanese market and Japanese litigation

- The Japanese market is large, and dominated by products from Japanese companies.
- $\bullet \quad \ \mbox{ Japan Patent Office (JPO) proceedings are now relatively speedy.}$
- In 2002 Japan announced reforms to its IP litigation to increase speed, making Tokyo and Osaka District Courts among the fastest jurisdictions in the world. Both courts have multiple panels of judges working only on IP cases. The courts now consider invalidity as a defense.

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The importance of the Japanese market and Japanese litigation

- The Custom Tariff Law amended in 2003 to allow for injunction to stop importation of infringing products.
- Japanese companies have gotten more litigious in Japanese
 courts
- South Korean companies have begun to bring suits in Japan, while at the same time Japanese companies have begun to bring suits in South Korea.

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The importance of the South Korean market and South Korean litigation

- Korea has a population of only 40M, and is more important as a place of manufacture than a place of sale.
- The Korean Intellectual Property Office (KIPO) has been a leader in shortening the patent processing period.
- The Korean Patent Court was established in 1998 before the establishment of similar courts in both Japan and China. It deals with invalidation and confirmation of scope proceedings.

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The importance of the South Korean market and South Korean litigation, cont'd

- The Ordinary Civil Courts such as the Seoul District Court are also rather fast moving..
- There is a bifurcation of jurisdiction in patent litigation between the Patent Court and the District Court.
- While the District Court can consider invalidity as a defense, it may suspend its proceedings to await the decision of the Patent Court.

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The importance of the Chinese market and Chinese litigation, cont'd

- The Chinese market is enormous as a place of manufacture, and experiencing explosive growth as a place where products are sold.
- In 2006, China put forward the plan to build an innovative country.
- State Intellectual property Office (SIPO) has a rapidly expanding number of applications filed.
- In 2006 alone, SIPO added about 500 examiners, bringing the total number to around 1,500.

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The importance of the Chinese market and Chinese litigation, cont'd

- In the first six months of 2007, SIPO granted 167,750 patents, 40 percent more than in the same period last year.
- A total of 142,264 resident patents were approved, increasing by 44.5
 percent, while the number of non-resident patents was 25,486, a 21.7
 percent increase.
- China has a well developed four level court system.
- Filing invalidation proceedings with Patent Reexamination Board (PRB) of SIPO is a common defense tactic, which may cause the patent suit in the court to be stayed.

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The importance of the Chinese market and Chinese litigation, cont'd

 China also has a system of alternative Administrative proceedings before local Intellectual Property Offices of SIPO for IP enforcement (most useful in piracy and counterfeiting. There is authority to impose injunctions but only small fines).

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The importance of the Chinese market and Chinese litigation, cont'd

A practical view

 China is undergoing rapid change as it transitions to an innovation economy and the middle class grows to drive the domestic market. The system of IP enforcement will have greater impact as its use by local companies increases, and local companies grow to compete worldwide as equals with foreign conglomerates.

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The importance of the Chinese market and Chinese litigation, cont'd

A practical view, cont'd.

- There are concerns that products for the domestic market have to be very inexpensive to be affordable by the middle class
- Some licensing schemes are emerging where there is a reduced per unit royalty for manufacture for domestic sale vs. manufacture for export.

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The importance of the Chinese market and Chinese litigation, cont'd

A practical view, cont'd.

 From the perspective of a licensor, there are present concerns that damages are inadequate and/or difficult to prove, and there are too many possibilities for compulsory licenses to be sought.

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Third Amendment to China Patent Law

Compulsory License Issues

- Art. 48 3 year working requirement.
- Art. 50 (added in 2nd Amendment) important technical advance exploitation of which requires use of earlier issued patent.
- Art. 52(A3) use in remedy of unfair competition.
- Art. 62(A13) can continue to exploit (for exploitation fee) after 5 years of no claim.

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Third Amendment to China Patent Law

Damages and Exhaustion Issues

- Art. 60- 5,000 1,000,000 RMB statutory damages if profit of infringer or lost profit can't be determined.
- Art. 62 2 years of past infringement damages max.
- Art. 63(1) placement into commerce outside China exhausts China patent right.

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The importance of the Taiwan market and Taiwan litigation, cont'd

A practical view

- Infringers in Taiwan do not have much fear of the courts.
- When licenses on a running royalty are entered into, underreporting is commonplace.
- From the perspective of a licensor, damages are inadequate and/or difficult to prove and there are concerns about the possibilities for compulsory licenses to be sought.

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Taiwan Patent Law

Compulsory License Issues

- Art. 76
 - applicant's failure to reach a licensing agreement with the patentee concerned under reasonable commercial terms and conditions within a considerable period of time.
 - patentee has imposed restrictions on competition or has committed unfair competition, as confirmed by a judgment given by a court or a disposition made by the Fair Trade Commission.

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Taiwan Patent Law

- Damages Issues Art. 85
 - lost profit
 - Infringer's profit
 - Damage to Reputation
 - If the infringement intentional act, may increase up to triple damages.

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Impact of Chinese National Standards

- · Underlying goals re IPR-
 - Incorporate home grown technology
 - · Reduce exposure to, and royalty cost of, IPR rights of foreign MNCs

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Impact of China National Standards, the WAPI experience

- initially proposed in 2003
- standard for security of data exchanged over WiFi comparable functionality to IEEE 802.11i
- · effectively required purchase of chips made by domestic chipmakers implementing required algorithm
- In 2004, after discussions with U.S. that it was a technical barrier to trade in violation of WTO, China announces indefinite postponement of introduction of WAPI.

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Impact of China National Standards, the AVS experience

- · Audio Visual Standard of China
 - lower royalty cost than MPEG
 - Selection from various "default licensing" models
 - patent pool for Chinese patents of members.
 - Chinese patent pool in formation
 - the "one RMB principle".

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Technology Licensing

• The licensee receives permission to practice the IP, or the IPR is sold to the licensee

and

• Technical information is given to the licensee on how to practice the technology

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Technology Licensing

· China and Taiwan issues

• Technology import and/or export requires advance approval by government.

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