

Patent Pool and Public Interest

Taking Philips' patent right invalidation case as an example

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2007 4 18

April 18th, 2007

Part I The trend of Global Enterprises Patent Strategy

Technology Patenting

Patent Standardization

Standard Globalization

Problems



Market controlled
by patent holder;
Monopolied by a few
large enterprises

Monopoly price
Limit competition

Product price increased
as the result of
higher operating cost of
standard

Deficient of common
parts and its
negative influence on innovation

More co-existing standards
are harmful to
consumers

18/04/2007

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The birth and evolution of the patent pool

- Fierce fight over patent applications
 - Sharp Increase of Patent Authorization
 - Prominent Overlap between patent rights
 - The complex dependent relationships between patent operation
 - Substantial increase in operating cost of patents
 - Formation of Patent Thicket
 - “Explosion” of Patent Suits
- The industrial development is increasingly controlled by many decentralized and independent patent rights, which makes the patented technology not be utilized fully and efficiently. Therefore, the patent pool is born.**

The Concept of Patent Pool

- Patent Pool: a kind of patent association in its essence. It indicates that two or more patent holders give license to each other or the third party, granting one or more of their patents upon consultation. In the typical patent pool, all patents included are open to all parties involved. To the third party outside the patent pool agreement, it usually provides the licensing contracts of standards. License fees obtained from patent pool is distributed to its members in accordance with predetermined way.

Patent Pool & Technical Standards

Setting up patent pool is often based on special technical standards:

- Essential Patents Pool in DVB standard of Europe Union
- Essential Patents Platform in 3G standard
- Essential Patent Portfolio in MPEG-2 standard
- 3C and 6C patent pooling in DVD standard

General problems during developing patent pool

- Evaluation procedure of necessary patent and material condition questioning: evaluation expert
- Uncertainty of patent disclosure: internal patent and external potential patent
- Unclear necessary patent: credibility of patent holder
- Bundled license: Suspicion of unnecessary patent tying
- Too many traps in the calculation of licensing fees: questioning its scientific content
- Unfair grant-back clause: exclusive grant-back in technical improvement
- non-questioning clauses of right: conceal invalid patent
- Solutions to dispute jurisdiction: strong bargaining position
- Limit competition, hinder innovation, industrial development problem

Part II Causes of Invalidating Philips Chinese Patent

- 1. Think about the problems that exist in the patent pool.
- 2. Challenge the credibility of patent holder.
- 3. Experience in researching good operation of IP system
- 4. Concerns about the mainland enterprises in the awareness and application of patent
- 5. Constructive considerations on national anti-trust legislation and industrial interest
- 6. Attempt to combine academic research of IP and social demand

Part II Causes of Invalidating Philips Chinese Patent

1. Patent invalidation of City bank ,which simmered in 2003
2. Argumentation of digital camera patent in 2003.
Will digital camera follow in the footsteps of DVD?
3. Global legitimation of DVD patent began in 2005.
4. Subsequently, Dongjin case, Dongzheng case, Dongqiang case
5. decide to take 3C patent as the contact point
6. Invalidate Chinese patent CN95192413.3, i.e. Transmitting and receiving method of code data, and its transmitter and receiver.

Part II Causes of Invalidating Philips Chinese Patent

- **Grounds to be defined as request of nonprofit patent invalidation**
- First of all, it is hoped that this case can promote the national legal construction in the aspect of IP anti-trust through the analysis of limited competition and innovation hindrance in the patent pooling license. Intellectual property must be operated under the regulation of Antitrust Law, which is the worldwide experience. However, there are still institutional drawbacks in the aspect of IP antitrust.
- Standard is public product, but intellectual property is private right.
- Standard containing Intellectual property is the public goods with impurities.
- The government has to establish the corresponding system to prevent IP from being misused.

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Part II Causes of Invalidating Philips Chinese Patent

- Secondly, mainland enterprises should be inspired of intellectual property protection and its application capabilities. As the patent system itself cannot guarantee the "purity" of patent quality, and the foreign patent holder has strength and advantage in the aspect of law utilization and market expansion, a large number of "questionable patents" are seeking monopoly interest through the legal way. Presently, international parties involved have reviewed the impact that patent system has brought on innovation and competition, and begun to discuss the reform of patent system. The mainland enterprises should learn to use IP strategy to protect and develop themselves.

Part II Causes of Invalidating Philips Chinese Patent

- Thirdly, advocating the combination of theoretical research of IP and development of national industry. In the constitution of technical standard patent pool and utilization of foreign patent pool, if it is involved with the research of foreign antitrust system and the way to learn and apply, only when you have a thorough understanding of domestic practice can you decide the direction of academic research.

Part III 3C Patent Pool and Analysis of License Policy



Part III 3C Patent Pool and Analysis of License Policy

- ◆ Patents overlap in different patent pool.
- ◆ In fact, hundreds of patents in a patent pool are only concerned with scores of inventions.
- ◆ Patent family is basically same in technical features(Applied Internationally), but different in parts.

Causes: Continue application, continue partial application, divisions or make amendments to adjust it to the patent law in different countries.

Part III 3C Patent Pool and Analysis of Joint License Policy

- ◆ Philips carries on joint license on behalf of 3C, the patents include (1) the patents belong to or possessed by 3C and their own affiliated company. (2) the patents before the date of filing or priority; (3) Necessary patents which conform to DVD standards, and the patent necessity is judged by American or European independent experts.
- ◆ In the Joint License Agreement, Philips grants licensee non-exclusive and non-transferable license. Licensee has right to manufacture licensed products in accordance with DVD standards in the designated area, and has right to sell the products to all over the world or treat these products in the other way.
- ◆ www.licensing.philips.com

Part III 3C Patent Pool and Analysis of License Policy

- ◆ Different licensed products are granted to different license agreement. Each kind of license agreement may be divided into three versions, that is, American, pacific-Asian, and other areas. The clauses of three versions are nearly identical; the main difference is the applicable law and jurisdiction.
- ◆ License fees are calculated by pieces rather than by percentage of sales price, and it is not subject to the fluctuation of market price of licensed products. License fees are not based on quantity of patents and don't change with the increase or decrease of patent quantity.

Part III 3C Patent Pool and Analysis of License Policy

Clauses of License Fees

Clauses of License Period

- ◆ Licensee pays 10000 dollars in advance, 5000 of which is pre-payments of license fees.
- ◆ 3.5% of sales price or five dollars is charged as license fees for each DVD player, which is sold before July 1st of 2000. The license fees are subject to higher one,
- ◆ Five dollars is charged as license fees for each DVD player, which is sold on or after July 1st of 2000.
- ◆ If the licensee fulfils the obligations of license agreement completely and submits eligible auditing report, each set may be charged 3.5 dollars as license fees.

Within 10 years starting from the date of entry into force of the contract, or the due date on which the last license patents expired in the areas permitted, subject to the first one.

Part III 3C Patent Pool and Analysis of License Policy

Clauses of Applicable Law and Jurisdiction

- ◆ The Law of Netherlands is applicable to the licensing agreement of Players in the Asia-Pacific regions and other areas. When Philips company is the defendant, only the courts in Hague of Netherlands have jurisdiction over such cases.
- ◆ The Law of New York State is applicable to the licensing agreement of Players in USA. When Philips Company is the defendant, only the courts in New York or Federal Courts have jurisdiction over such cases.

3C patent licensing agreement is subject to review of US Department of Justice

- Relevant regulations of American anti-trust law
- The first Article of Sherman Act : Every contract, combination in the form of trust or otherwise, or conspiracy, in restraint of trade or commerce among the several States, or with foreign nations, is declared to be illegal. Every person who shall make any contract or engage in any combination or conspiracy hereby declared to be illegal shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$10,000,000 if a corporation, or, if any other person, \$350,000, or by imprisonment not exceeding three years, or by both said punishments, in the discretion of the court.
- The second Article of Sherman Act : Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a felony, and, on conviction thereof, shall be punished by fine not exceeding \$10,000,000 if a corporation, or, if any other person, \$350,000, or by imprisonment not exceeding three years, or by both said punishments, in the discretion of the court.
- Article 7 "Sherman Act," Any person who suffered property damage because of antitrust issues, can bring up litigation to American Court in the defendant's residence, or the place to be found or exist agency. Regardless of the size of damage, give triple compensation equal to the damages and legal cost and reasonable attorney fees.

3C patent licensing agreement is subject to review of US Department of Justice

- In 1998, US Department of Justice made review of 3C patent pool licensing agreement in accordance with the review procedures of business activities. 3C joint licensing arrangement is achieved through two licensing agreements. One is the other members of 3C signed licensing agreement with Philips, the other is Philips signed the licensing agreement with the manufacturers of DVD disc or player on behalf of 3C.
- Antitrust review ideas: measuring the anticipated pro-competitive effects and the potential anti-competitive risks of joint patent license (or patent pools). The concrete analytic steps are as follows: identifying whether the patent pool is the combination of complementary patents or not. If so, continue to examine whether the resulting effects outweigh the anti-competitive effects.
- Examination of 3C patent pool made by the Ministry of Justice, is premised on the fact that all of licensed patents are efficient patents. 3C doesn't declare to give up efficiency hypothesis of any licensed patent in the information, which is submitted to the Ministry of Justice by 3C. if the Ministry of Justice received the information weakening the above-mentioned hypothesis, it would change its executive intent of 3C joint licensing arrangement.

3C patent licensing agreement is subject to review of US Department of Justice

However, American Department of Justice finds that 3C joint licensing arrangement is lack of mechanism to eliminate invalid patents. The external experts engaged by Philips only examine the necessity of putting patent into the pool, not the patent validity. Besides, the allocation of license fees is not based on the number of inclusion patents, therefore, 3C members are deficient of motives to challenge the other patents.

[Link: Review of 3C patent licensing policy by Department of Justice](#)

Part IV Patent Disputes of Philips in the World

- **Litigation in USA**
- **In June, 2004, Wuxi Multimedia Co., Ltd. (Hong Kong) accused 3C League of forcing his rivals to succumb to illegal license and charging agreement in the Santiago of United States District Court Southern district of California. It violates the "Sherman Act" and many other laws and regulations.**
- **In December of the same year, Wuxi Orient Power Digital Sci-tech Co., Ltd. the affiliated company of Hong Kong Orient Power Electronics Group, joined the litigation as the co-plaintiff and amended the bill of complaint, making collective complaint on behalf of manufacturer and vendors of DVD players.**

Part IV Patent Disputes of Philips in the World

- Litigation in Hong Kong
- On May 23th of 2005, Philips Company accused Hong Kong Orient Power Electronics Group and its thirteen affiliated companies of failing to report product quantity and pay CD DVD patent royalty of 60 million dollars, also charged it with conspiracy to bring Philips great loss and requested it to make compensation.
- Chinese party said, Philips company making accusation in Hong Kong is purposed to disturb American litigation. However, Philips asserted that there is not any connection between these two litigations.

Part IV Patent Disputes of Philips in the World

- Litigation in Germany
- Hong Kong Orient Power Electronics Group accused Philips of patent right invalidation at German Federal Patent Court, who made the judgment of first trial on June 15th of 2005. It held that Philips' European patent No. EP0745307 is invalid in Germany. Philips lodged an appeal and the appeal court has made no judgment.
- In the first trial, OPEC(Orient Power Electronics Company) argued that European patent EP0745307 has no originality and submitted five comparative documents to the court, who adopted one of them, i.e. American patent US5208665. European patent EP0745307 contains fifteen claims altogether. Claim 1 to 6 are involved with a kind of transmitting way of code data; claim 7 to 12 is concerned with a receiving method of code data; claim 13 is about a kind of transmitter; claim 14 is regarding a sort of receiver and claim 15 is referred to a kind of image signal.

Part IV Patent Disputes of Philips in the World

- German court held that there are five technical features in the first independent claim, but four of them have been made public in the comparative document US5208665. Testimony by experts confirmed that the remaining technical feature is common sense for the public. Therefore, the first claim has no originality. Neither do independent claims 7,13,14 and 15, because they only contain the technical features of the object in the first English claims actually. For subordinate claims 2-6 and 8-12, the plaintiff challenges the validity of these subordinate claims in a substantive way, while the defendant didn't elaborate on the technical characteristics, which can be considered to be creative, and the court has not found the existence of these technical features, and therefore these subordinate claims are invalid.

Part IV Patent Disputes of Philips in the World

Litigation in Taiwan

- CDR manufacturers in Taiwan signed joint patent license agreement with the three foreign companies such as the Philips, Sony in 1997 (Philips is representative of the three companies), In 2000, the market price has changed, which makes some of the original provisions of the patent license agreement seem to be unfair to licensee, so these manufacturers request those three companies to amend the provisions of the patent, but they refused to carry on negotiations over it. Therefore, manufacturers file a request to Fair Trade Commission to make antitrust examination for the improper competition, misuse of patent license of these three companies.
- Fair Trade Commission decided that Philips (PHILIPS), Sony (Sony) Taiyo Yuden (TAIYO YUDEN), these three foreign companies in Taiwan Joint CDR product patent licensing to be in breach of fair trading, they were fined 14 million TWD. In the meanwhile, also ordered them to stop its previous violations immediately.
- Presently, the case is under trial.

Part IV Patent Disputes of Philips in the World

Invalidation of Philips Chinese Patent

- On December 4th of 2005, Zhang ping from Law School of Beijing University personally requested invalidation of Chinese patent CN95192413.3 “Transmitting and receiving method of code data, and its transmitter and receiver”
- On January 4th of 2006, Professor Tao Xinliang from Intellectual Property Institute of Shanghai University, professor Shan Xiaoguang from Intellectual Property Institute of Tongji University, Professor Zhu Xuezhong from Intellectual Property Institute of Zhongnan University of Economics and Law, Professor Xu Jiali from Intellectual Property Center of China University of Political Science and Law requested invalidation of the same patent to reexamination board respectively.
- Philips stated their opinions in April, 2006.
- First oral instance was on August 17th of 2006, and then started negotiation.
- Informed of second oral instance in October of 2006, and Philips requested postponement.
- Informed of second oral instance once again in October of 2006, and Philips requested postponement.
- Published Joint Statement on December 10th of 2006.

Part V Analytical considerations on Philips Patent Invalidation

- **Purpose of Philips Chinese patent invalidation .**
- **“To patent pool, not patent”**: promoting the good operation of patent pool through empirical analysis of the case .

Part V Analytical considerations on Philips Patent Invalidation

Patent Pool
Analysis

About litigation and investigation

Number of Patents and Patent Pools

Number of families

Analysis of Patent family

Joint License

Policy Analysis

License Agreement

Concrete Clauses

Purpose of Invalid Patent

Statistics and Analysis of Patent Pool-**Patent Quantity**

Statistical Table of Patent Quantity

Name of Patent Pool	PHILIPS	LG	PIONEER	SONY	Total
DVD-ROM Single Layer DISC	196	4	24	66	290
DVD-ROM Dual Layer DISC	267	8	29	66	370
DVD-VIDEO Single Layer DISC	345	19	166	218	748
DVD-VIDEO Dual Layer DISC	407	23	171	218	819
DVD-ROM Player	212	4	29	58	303
DVD-VIDEO Player	398	36	202	152	788

Statistics and Analysis of Patent Pool-**Patent Quantity**

Patent Family Statistical Table A

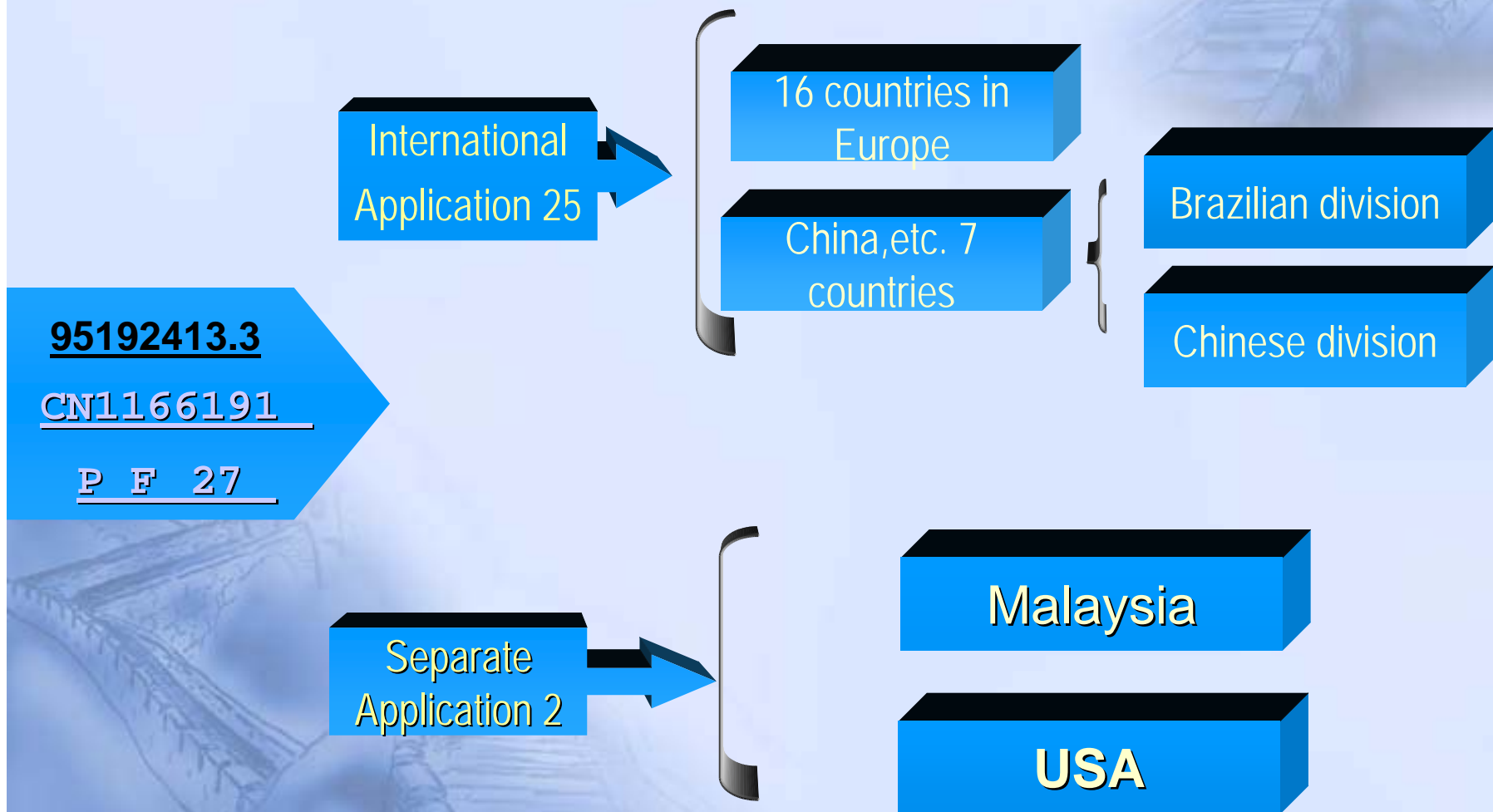
Name of Patent Pool	Patent Holder	Qty	Qty of Patent Family	Max	Total	Basis
DVD ROM Player	PHILIPS	212	11	61	25/ 303	REFERNCE
	LG	4	3	2		TITLE
	PIONEER	29	5	17		TITLE
	SONY	58	6	35		REFERNCE

Statistics and Analysis of Patent Pool-**Patent Quantity**

Patent Family Statistical Table B

Name of Patent Pool	Patent Holder	Qty	Qty of Patent Family	Max	Total	Basis
DVD Video Player	PHILIPS	398	19	58	89/ 788	REFERNCE
	LG	36	10	13		TITLE
	PIONEER	202	46	17		TITLE
	SONY	152	14	35		REFERNCE

Analysis of Patent Family



18/04/2007

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Analysis of Patent Family

Claims Cross Reference Table

File No.	Property	Right Qty.	Content of Claims
WO9619077	Application Open International	18	are independent claims.
EP0745307 (SE	Authorised Open	15	Two affixation technology included in the independent claim, lack of 18
CA2183257	Application Open	18	Same as international application
US2004075668	Application Open	18	Same as international application
CN1145152A	Application Open	18	Same as international application
CN1166191C	Authorised Open	14	Two affixation technology included in the independent claim, lack of 17,18
CN1585475	Application Open, China Case	20	The first 18 applications are same as international application in,add 19,20

Part VI Solutions

- From August to December 2006, Philips had several discussions with five professors about the following problems:
- 1. Motive that five processors bring up public interest invalidation.
- 2. Impact that the licensing mode of patent pool has on innovation.
- 3. Discussion on the social effect of this public interest invalidation
- 4. Analysis of competitive environment for Chinese enterprises
- 5. Analysis of social effect in the operation of Chinese Intellectual Property System
- 6. The credibility of patent holder: “defect” problem of necessary patent in patent pool
- 7. International responsibility of multinational corporations in the legal environment construction of intellectual property
- 8. Ponderation about the promoting effect that the existing intellectual property system has on the social development.

**Both Parties Publish Joint Statement
to end the case with the largest social effect and the least cost**

- **Link: Original text of Joint Statement on December 10th of 2006**

Thoughts and Summary of the Case

- **1. Social responsibility of a scholar.**
- **2. Research direction of applied legal science**
- **3. Implicative effect on enterprise**
- **4. Empirical support in the aspect of national IP strategic studies.**
- **5. Strength Comparison: Law, team, negotiation, media, corporate culture.....**
Interest: Public or private interest.

Other significance of Joint Statement

- **Not all patents in patent pool are necessary patents. Many “questionable patents”, which try to get license by mean of tying, bear the suspicion of illegal monopoly and limited competition.**
- **The pricing policy of patent pool is unreasonable. As “questionable patents” increase in proportion, revise the pricing policy of patent. If the patent holder persists in unreasonable license fees, it may be necessary to review the antitrust again.**
- **When enterprises carry on negotiations about patent authorization, make sure the patent list in patent pool. After making legal analysis of questionable patent, you will be sure to have more initiatives during negotiation.**
- **The patent involved in the case is not only used in the DVD players, but also concerned with relevant video techniques. According to the Joint Statement, there is no need paying royalty for this Chinese patent from now on.**

Open to discussion

- **1 Necessary patent evaluation.**
- **2 Patent disclosure policy**
- **3 Collection and calculation of patent license fees**
- **4 Public interest in the technical standards**
- **5 Security for anti-monopoly supervisory mechanism**

Market Competition

Patent Pool License Policy

- **EVD**
- **HVD**
- **MPEG LA**
- **IEEE**
- **ATSC**
- **VITA**
- **... ..**
- **Digital TV Portable Store 3G Wi-MAX**

Difference of patent policy in different types of technical standards

1 “de jure” standards

2 “de facto” standards

- de jure standards Take the public interest as its basis

Patent policy basis

Interest of most enterprises

Interest of consumers

Social public interest

- “de facto” standards Take maximizing the interest of patent holder as basis

Anti-trust regulation is a must.

Patent Policy in Technical Standards

Four-side Benefits

1. The formulation, implementation and management of standards by standardization organizations
2. Legitimate interests of patent holders
3. Interest of standard utilizers
4. Interest of Consumers

Choose the patent license mode which is beneficial to innovation and optimizing competitive environment.

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- **Patent Licensing** Important part of Patent System
 - **Standardization: Necessary for Contemporary Industry**
 - **Anti-trust: The core of Marketing Economics System**



Thank you!

18/04/2007

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