

IPR Policy as an Enabler in Effective Standardization

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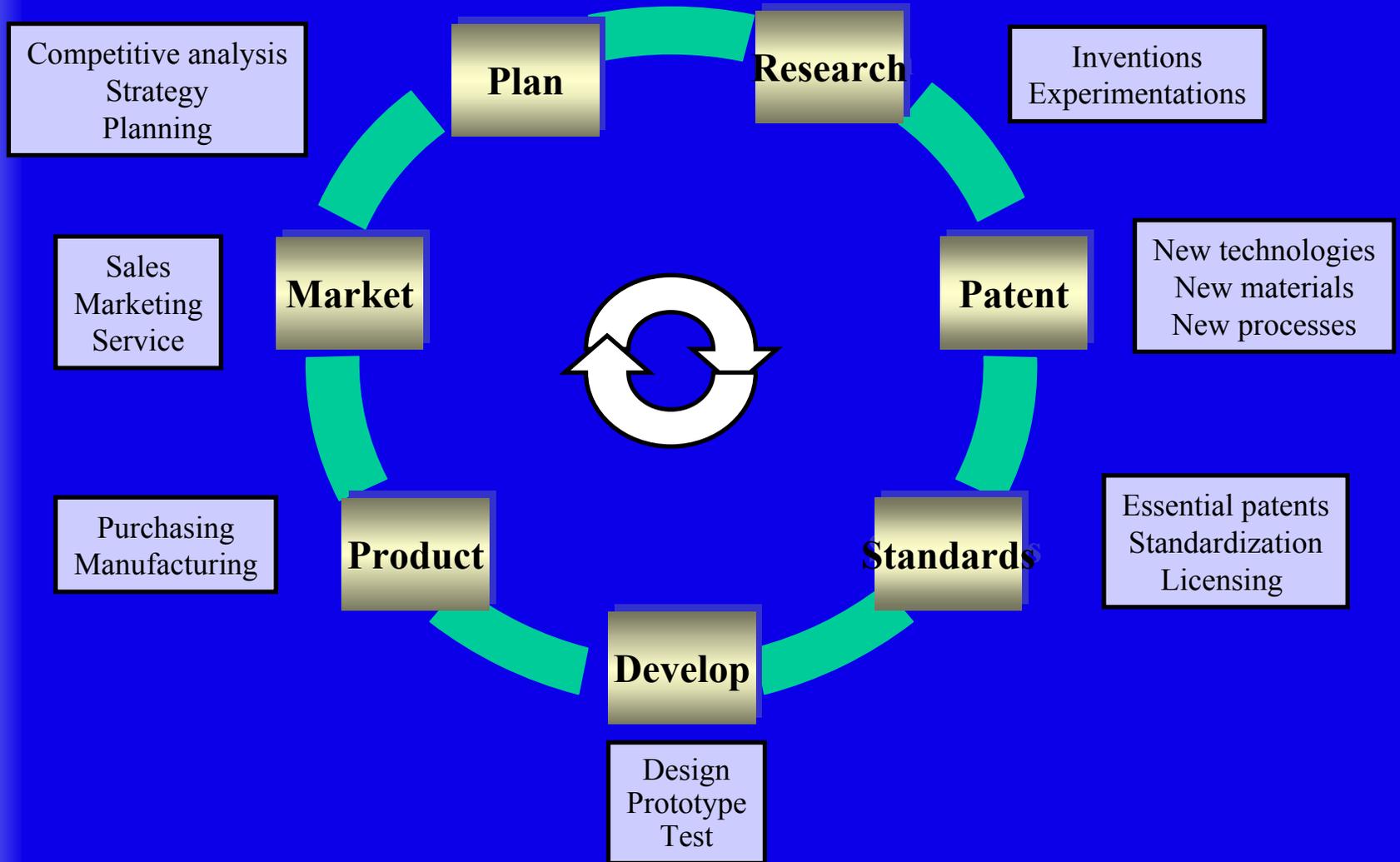
IT/Telecom Breakout

Breakout A: Global Standardization in IT and Telecom (Part II)

China's Standardization Progress

- **On the right track**
 - MoST, AQSIQ and SAC joint research program to reform China's standards system
 - SAC's efforts to set IPR policies for all SDOs in China
- **Active participation in international standardization and successful contributions to international standards**
 - e.g. TD-SCDMA, ITU NGN
- **Have the essential building blocks to become equal partner or even lead in global standards**
- **Numerous multi-lateral and bilateral efforts to cooperate with governments and industry to improve processes, policies and regulations**

From R&D to Commercialized Products



Why do we need Standards?

- Enable interoperable solutions
- Facilitate the best technical solution to become the standard
- Avoid fragmentation of the market
- Accelerate the market adoption of new technology
- Foster competition in commercial products to give choices to consumers

Key Factors for a Successful Standard

- Consensus based
- Follow due process
- Competent standardization process
- Have a clear IPR policy that are in sync with International practices
- Clear market positioning
- Readily accessible to all manufacturers to create competing commercial products
- Developed in cooperation with Government regulations (spectrum and type approval)
- Effective marketing and promotions

Potential Abuse of the Standards Setting Process

- Misuse of standards process to gain unfair advantage
- Agreements that use standards as a means of excluding or hindering actual or potential competitors
- Standardization agreements that risk legal challenge, for example:
 - The parties are restricted from developing alternative standards or non-compliant products
 - The standards body retains exclusive testing rights
 - There are restrictions on making products in conformity with standards

Examples of Good Standards Setting

- **ITU, ISO, IEC, ANSI, TIA, ETSI, 3GPPs**
 - Follows much of the best practices
- **ETSI's Information Accessibility**
 - ETSI IPR Policy is publicly available from http://www.etsi.org/legal/ipr_a.htm
 - ETSI has a robust database for patent searches and how to deal with licensing and other legal issues
http://www.etsi.org/legal/IPR_database/FAQ_IPR-Policy.htm
- **IEEE's RAND practice**
- **CWTS IPR policy**
 - Re-use ETSI rules

Importance of an Effective IPR Policy

- Encourage innovation and investment in the development of new technologies
- Encourage participation and contribution to bring the best technical solution to standards
- Everyone wins:
 - Customers get the best technical solution
 - Operators reduce the CAPEX and OPEX
 - Manufacturers get access to all technology essential to implement standard
 - Technical contributors get a fair return for their R&D investment

Effective Patent Policies should

- Balance the interests of all stakeholders so that the outcomes are representative, inclusive and broadly supported
- Ensure that the language of the policy is clear and accessible for all to review
- Promote the use of the best technical solutions based on commercial requirements
- Recognize the right of patent holders to receive reasonable and adequate compensation for the use of their technology

These widely accepted principles were endorsed at the Global Standards Collaboration 9 in Seoul, Korea

Effective Patent Policies should not

- Impose onerous disclosure obligations that are impractical to fulfill, e.g. require to identify all applicable patents
- Impose inflexible and unreasonable licensing commitments on patent holders, e.g. mandatory licensing of essential IPR on Royalty-Free terms
- Restrict competition and broad market adoption

Elements of an IPR Policy

- Definitions of "Participant", "Members", "Intellectual Property" ...
- "Essential" IP versus non-essential IP
- Contribution of Intellectual Property
- Copyright
- Disclosure obligation
- Licensing
- Dispute resolution
- Withdraw Mechanisms
- Review Period

Disclosure Obligation

- **Include known and granted essential patents only**
 - Not details of an unpublished patent application
 - Technically essential, not commercially attractive
- **Participants personal knowledge only**
 - Not an entire member company's portfolio
 - No obligation to conduct patent research
- **Obligation to draw attention of SDO to any known patent which might be essential, especially when contributing a technical proposal to a standard**
- **Written disclosure of possibly essential claims**
- **No obligation to disclose 3rd party's patent claims**

Availability of Licenses

- **RAND** principle - **R**easonable, **A**nd **N**on-**D**iscriminatory
- **A patent owner (member or 3rd party) can take one of these positions on an essential patent**
 - Licensing with royalty free
 - Licensing on RAND terms and conditions
 - Unwilling to grant license (Non availability of license)
 - Licensing for non-monetary compensation but based on RAND terms
- **If a patent owner is unwilling to license on RAND terms, look to see if a viable alternative technology is available**
 - Not blocked by the patent
 - Meet SDO's requirements
- **If no viable alternative technology available**
 - Request the patent owner to reconsider
 - Work on the standard stops
 - Find other solution

Summary of Good Principles in IPR Policies

- **Encourage innovation, openness and broad participation:**
 - No mandatory excessive disclosure obligation
 - No forcing a particular licensing mode
 - Readily accessible, translatable and understandable IPR policies
- **Provide environment to create the best technology and the best policies**
 - Technical experts to focus on technical issues
 - IPR lawyers (and not technologists and scientists) to write IPR policies

Summary of Best Practices in IPR Policies

- **Patent Disclosure obligations *shall*:**
 - Be limited to issued patents
 - Be limited to patent claims essential to implement the standard
 - Be based on personal knowledge
 - Be limited to specific work items
 - Be based on clearly defined scope of work

- **Patent Disclosure Obligations *shall not*:**
 - Require patent searches
 - Require disclosure of 3rd party IP
 - Detail the scope of patents
- **Patent Licensing obligations *shall*:**
 - Be limited to essential claims
 - Be limited to specific work items
 - Allow Reasonable and Non-Discriminatory (RAND) terms
 - Allow reciprocal licensing
 - Allow both monetary and non-monetary terms
 - Remain consistent, even if the specification has been published

- **Copyright Licensing Obligations *shall*:**
 - Be non-exclusive to the SDO
 - Be limited to the specific contributions

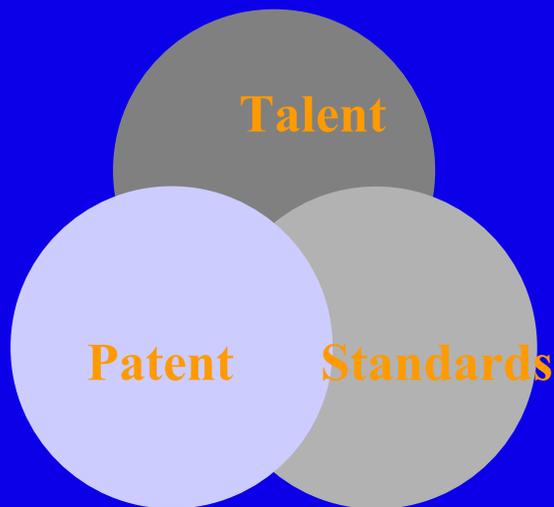
Patent Pools

- **Potential advantages of patent pools**
 - Reduction of transaction costs
 - One stop shop for license acquisitions
- **SDO should play no role in determining the “validity” of a member or 3rd party’s patent claims**
 - Patent in the pool may not be real essential or validated
- **Information should be provided in a neutral manner**
 - No evaluation
 - No guidance for licensing
- **SDO should maintain the most updated information on their websites**
- **Mechanism to withdraw or remove in case**
 - Contributed by others
 - Change in scope and specifications

Potential Abuse in Patent Pools

- Patent pools and cross-licensing may be challenged if they are used to allocate markets or fix prices
- Liability might also arise where competitors are excluded from pool, if patents in pool are critical to compete and pool participants possess market power

China's Three Key Strategies



IPR and technical standards are strategically top priority. Innovation and IPR bring higher profit to hi-tech industry than traditional industries. Essential patent in a technical standard is valued the highest and is ahead of the product production.

Deng Nan, Vice Minister of MoST, PR China

China's Emerging Technology Leadership

- **IT and Telecom Examples:**
 - FuTURE (Future Technologies for Universal Radio Environment)
 - IPv6 (internet protocol version 6)
 - Linux
 - RFID (radio frequency identification tagging)
 - AVS (audio, video coding standard)
 - EVD (enhanced versatile disk)
 - IGRS (intelligent grouping and resource sharing)
 - Many others ...
- **Bilateral and multilateral R&D co-operations with governments and industry**
- **Regional cooperation with Japan and Korea**

Education/Research Trends in China

- **China's growing investment in education**
 - Sent 3 million students to study abroad in 2003
 - Graduating 500,000 engineering and science students a year
- **Total number of graduates from colleges and universities increased by 32% in 2004 (2.8 million vs. 2.12 million in 2003)**
- **China's increased spending on R&D**
 - China is now 3rd in R&D spending behind only the United States and Japan
- **Research and development activities are moving to China**

Patent Filing Trends in China

- 1,931,125 patent applications were filed with SIPO in 2003 - Domestic filings accounted for 82.6% of the total
- Domestic applications for invention patents reached 105,318 - an increase of 31.3%
- For the first time, the amount of domestic applications for invention patents (53.9%) surpassed that of foreign ones
- The top ten countries in terms of the number of patent applications were Japan, USA, the Republic of Korea, Germany, France, Netherlands, Switzerland, United Kingdom, Italy and Sweden

Source: The State Intellectual Property Office (SIPO)

Getting the most value out of China's IP

- **IPR Protection begins with Standards Participation**
 - The more IPR owners stand outside the standards-making process, the higher the likelihood of confrontation over IPR infringement once the standards are implemented in products
- **IPR policies cut both ways**
 - IPR policies that disadvantage other players will not be desirable as China grows in its patent portfolio and desires a level playing field in the global market
- **Optimize practice by taking the best from the world**
 - What we are concerned with now in China are the same as what we were concerned with before somewhere else

Conclusions

- **China's 1.3 Billion people and strong education system will doubtless produce excellent scientists and abundant Intellectual Property**
- **The talent and investments that go into the research and development of leading-edge innovations and break-through technologies should be fairly rewarded**
- **IPR rewards innovation and R&D investment and should be recognized as an enabler**
- **The best IPR policies are those that are easily accessible, readily understandable and give a fair return to innovators**
- **Co-operation between China and the International Standards community will ensure the continuous improvement of policies and practices in IPR policies to enable a larger global market for all**

Thank you!