



## Co-management Model for Dealing with Intellectual Property Rights in Standards

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### Abstract

As the technical barriers characterized by standards including intellectual property right (IPR) have restricted industrial development in China, to improve industry core competence through self-innovation and standardization and industrialization of independent intellectual property has come to our primary task. On base of the situation in China, the problems arisen from IPRs in standards relate to the government, standardization organizations, enterprises, colleges and universities, scientific research institutions and so on, then how to make the stakeholders cooperate with each other becomes the key point. This paper analyzed current situation of each stakeholder, constructed co-management model including instructing of the government and governmental standardization organizations, folk industrial associations as bridge, industry and research integration with enterprises as the mainstay and with colleges and universities, scientific research institutions as pioneers.

**Keywords:** Standard, Intellectual property right, Co-management

### 1. Introduction

Under the regime of WTO, developed countries and large international corporations have restricted the development of industries with cost advantages in China through technical barrier characterized by standards including IPRs, the DVD industry is exactly the case. To reverse the situation, China needs to encourage innovation and standardization and industrialization of independent intellectual property. However, things come to be complex. In China, inclusion of IPRs into standards concerns many stakeholders, such as the government, standardization organizations, enterprises, colleges and universities, scientific research institutions and so on, and there still exist a series of issues on lack of cooperation between each other. It is therefore crucial to integrate resources so as to improve the industry-wide core competences. This paper constructed cooperation model among stakeholders and made some recommendations for action.

### 2. Cooperation model for inclusion of IPRs into standards

Inclusion of IPRs into standards increases with market share and boosting commercialization of innovation with the advent of knowledge industry (Li, 2006, P.68). Lack of domestically developed IPRs and industrialization leads to the situation of “standards available but unimplemented by relevant industries” (Guan, 2006, p.33). At the Seventeenth National Congress the guideline of “to accelerate to establish the technological innovation system with enterprises as the mainstay, market-oriented, industry and research integration, to channel innovation-encouraged resources into companies and boost commercialization of technological achievements” was set forth, it pointed out the direction for inclusion of IPRs into standards, which includes: 1) macro-management and instructing of the government and governmental standardization organizations, 2) to encourage folk industrial associations to play a role as bridge, 3) industry and research integration with enterprises as the mainstay and with colleges and universities, scientific research institutions as pioneers.

#### 2.1 Enterprises as the mainstay

Most of the enterprises in China have not yet recognized the main body role in market themselves, apart from the industry that shocked by foreign company, for example, TD-SCDMA, AVS, IGRS and so on. In these companies and enterprise alliances, independent innovation and IPRs as well as cooperation with colleges and universities and academic institutes have been paid great attention to during past few years, and they have take an active part in standard development at home and abroad, e.g promoting standard with independent IPRs to international standards and establishing policies for the inclusion of IPRs into standards. International standards established in AVS, IGRS and TD-SCDMA are making their way to be industrialized nowadays.

However, for most companies, they are less aware of innovation and standardization, lack of a system for research and development and spend less than 1% of the revenues on R&D (Gao, 2008, P.291), as well as lack in cooperation with colleges and universities and academic institutes or if there exist cooperation but only limited to technical transfer, cooperative development and authorized development (Yan, 2007). Partial companies failed to promote their standards to international such as WAPI, owing to lack of knowledge of international standardization regulations, despite of recognizing the important of standardization. On the other hand, some available standards are unimplemented by relevant industries such as EVD, owing to considerations only on the state-of-the-art but not compatibility (Guan, 2006, p.33).

It follows that the enterprises as the mainstay in inclusion of IPRs into standards shall pay attention to both standard development and IPRs. They shall orient their standards to consumer needs and increase investment in innovation, summon the awareness of standard development, conduct standard development, recruit and maintain talented people in standard development, set up department for inclusion of IPRs into standards to analyze IPR-related issues and set out IPR strategy for standard development, take an active part in international standard development and understand relevant procedures so as to set their IPRs into international standards or direct the standard development.

In addition, companies shall pay great attention to other companies, colleges and universities and academic institutes to develop IPR policies and alliance standards, to deepen their cooperation with colleges and universities and academic institutes by participating in funding national engineering (technological) research centers, national engineering laboratories and national priority laboratories.

### *2.2 Colleges and universities and academic institutes as a pioneers*

Colleges and universities and academic institutes make great contribution to educate people and experts and to provide technical and intellectual support for standard development, technical progress and industrial improvement in China. Additionally, colleges and universities such as Tsinghua University, Peking Universities and academic institutes have built cooperation with companies and joint IGRS and AVS for intellectual support and standard development. As of Feb. 2009, there were 19 colleges and universities and 5 academic institutes included in the list of AVS members and 8 colleges and universities and 5 academic institutes in that of IGRS members.

However, disalignment between innovative research and commercialization remains, most of the scientific achievements and patents couldn't meet the market needs because the existing evaluation system of research performance stimulates researchers to focus on personal gains instead of availability. Lai Ming, member of the national committee of CPPCC, noted at the 2nd Plenary Session of the 1st Conference of the Ninth CPPCC National Committee that only 20 percent of the scientific achievements were realized and less than 5 percent industrialized and only 5 percent of patents traded. Disalignment between research projects, company and customer needs is the major cause for the low rate of commercialization as commercialization of scientific achievements eventually depends on market demands and the companies know customers' needs best (Zhu, 2008, P. 200).

Colleges and universities and academic institutes serve as pioneers in inclusion of IPRs in standards. They join with companies to streamline inclusions of patents into standard through combining research with commercialization. An innovation-encouraged system of combining research with commercialization needs to pay more attention to efficient communication and cooperation with companies. We also call for government agencies concerned to regulate applications for research projects and improve evaluation system of scientific research by accommodating customer needs and to strengthen their cooperation and communication so as to shared resources and avoid the waste of research fund.

### *2.3 Instructing of the government and governmental standardization organizations*

Standardization organizations generally develop IPR-related policies, provide information services (maintaining patent pools) and serve as an intermediate in the case of disputes arising from standard development and IPRs inclusion (Li, 2007, P.14-15), but are not involved in patent licensing which are left to the market. However, Standard development organizations in China are much more different from overseas counterparts. They are classified into the government-sponsoring and the folk. Standardization organizations sponsored by the government range from SAC, sectoral and local standardization organizations and industry associations built in accordance with official policies or of official character. Folk standardization organizations consist of civil trade associations. Standardization organizations of different nature play different role in standard development.

Standardization system in China follows integrated pattern. The government creates favorable policies and regulations to allow companies to implement standards and IPR strategy. It plays a role in regulation in the context of market economy instead of being involved in standard development and implementation. Standardization organizations sponsored by the government develop and maintain national, local and trade standards. SAC is authorized by the State Council to regulate nation-wide standard development, to develop regulations for standard development and to organize implementation laws and regulations and programs concerning standard development. Compared with the overseas counterparts, SAC plays a leading role in developing and maintaining standards and establishing regulations for

standard development.

Standardization organizations in China have struggled with inclusion of IPRs into standards in recent years. Developing new policies are urgently needed to address relationship between public and private rights, collection and disclosure of information on patents and disposal of patent right. Since 2000 SAC has paid attention to this issue and kept an eye on IPR-related policies from international standardization organizations in the field of information technology. In 2004 it developed the Regulations for Inclusion of Patents into National Standards (provisional), which however has not yet been promulgated. It means therefore that there isn't a complete system for inclusion of IPRs into standards in China.

The government and standardization organizations sponsored by the government (mainly SAC) serve as a policy maker and moderator. With the complexity of inclusion of IPRs into standards at home and abroad, both the government and SAC need to improve existing laws and regulations, develop policies for inclusion of IPRs into standards and boost inclusion of IPRs into standards. They shall coordinate national trade-related policies, sector-specific policies, technical policies and IPR and standard development policies. They shall also encourage innovation and protect public interest by establishing a public service platform for technical standards, pre-warning, response system and restraining abuse of IPR in standards.

#### 2.4 Folk industrial associations as bridge

Folk industrial associations serve as a bridge between companies and the government (Peng, 2003, P.8). They are more sensitive to the market than the government agencies and the standards they develop most reflect the customer needs. The famous standardization organizations in the world are all non-government organizations such as ISO and IEC.

Folk industrial associations are known as trade associations in China. They are founded spontaneously in response to industrial needs and affiliated to federations of industry and commerce. According to statistics from China Federation of Industry and Commerce, there were 8,596 trade organizations as of the second quarter of 2007 and the figure is increasing. In developed countries, most of technical standards are developed by trade associations or societies instead of government agencies. They develop own IPR-specific policies based on those by ISO, IEC and ITU, for example ANSI and BSI. We can learn from their experience in development of IPR-specific policies.

Trade associations are far away from developed countries in China, the role and position in standardization and inclusion of IPRs in standards have not been fully explored. The most challenge before folk industrial associations is the legal status. Their legal status cannot be guaranteed because scopes of civil and official industry associations overlap. According to statistics from Yu Hui, researcher from Chinese Academy of Social Sciences, 60 – 70 percent of folk industrial associations haven't established the legal status (Yu, 2007, P.67). Unsound systems and part-time staff within folk industrial associations make it difficult to provide members with substantial services and obtain acceptance (Peng, 2003, P10).

Efforts shall be made to support folk industrial associations to play as bridge and build up consultation and communication centers between the government and companies. Folk industrial associations itself shall improve their systems, align with overseas counterparts, refine their staff, train talented people and establish a sense of professional services. Government agencies concerned shall legislate for legal status of folk industrial associations so that they can run in a legal way.

### 3. Conclusion

Improving industry-wide core competence needs combination of standards with IPRs as a guarantee and consistent efforts from the government, standardization organizations sponsored by the government, folk industrial associations, companies, colleges and universities and academic institutes. In addition, inclusion of IPRs into standards shall accommodate customer's needs and respect market's role in resource deployment in consideration that inclusion of IPRs into standards is caused by competition among companies (Li, 2006, P.68).

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