

**Intellectual Property**  
**The Knowledge Society and Global Trade**

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# **Intellectual Property, The Knowledge Society and Global Trade**

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### **I. Preface**

In the knowledge-based economy, intellectual property (IP) is an essential element as well as a significant asset. By applying Trade Related Intellectual Property Agreements (TRIPs), the WTO contemplates to provide a platform for creating a uniform and globalized IP protection regulatory environment. By doing so, the WTO may also have an effect to stimulate technology transfer and technology commercialization.

### **II. Global Trend of IP Developments**

#### ***1. Expanding Scope of IP Rights***

Technology developments create new categories of IP rights. IP laws and regulations thus have to keep evolving in order to accommodate the changing needs of the technology market and industry. Since innovation has become an important asset, the value of IP becomes greater. Countries emphasizing innovation and technology development tend to set up a legal infrastructure that is more favorable to IP owners.

#### ***2. IP Protection, Management and Commercialization is an Important Industrial Policy for Every Country***

IP is a significant indicator of a country's competitiveness, which links to industrial development policy. Almost every country in the modern world will endeavor to enhance its own IP protection environment in order to attract inward transfer of technology and to build up its own technology industry. Without adequate IP protection environment, innovation and R&D will be jeopardized and technology transfer will be hindered.

#### ***3. Harmonization and Standardization of IP Laws***

Under the WTO, member countries are required to meet the minimum standards set forth in TRIPs. Therefore, each member country either has changed or is in the process of changing its IP laws and regulations to comply with TRIPs.

Compared with the laws in other arenas, IP laws of WTO member countries are more internationalized and standardized. Also, comprehensive discussions are being held regarding harmonization of IP laws among member countries such as unification and simplification of registration procedures to enhance global or regional registration systems.

#### ***4. IP Rights Have Become an Important Object in Global Trade***

During the past decade, laws and regulations for protecting IP have been upgraded and streamlined to meet the international standards. Some countries even adopted laws with higher standards. Because the value of IP is significant, certain governments may intervene to resolve the IP protection issue. Disputes over IP rights are not simply between IP owners and infringers but an important subject for trade negotiations. On the other hand, many countries have been actively fostering the environment to encourage the commercialization of IP with the goal to realize the value of IP. IP, separated from product, has become an important object in global trade.

### **III. IP Activities in Knowledge Society**

#### ***1 IP Creation (Innovation)***

##### **(1) Sound R&D Environment**

In order to encourage innovation and foster better R&D environment, many countries have promulgated legislations to establish the science and technology policy and programs. In general, those legislations, among other things, provide that the government will continue to contribute to R&D, dedicate its efforts to encourage a stable nationwide increase of R&D funds, support basic research, establish open and fair qualification screening system to recruit desired technical talents, encourage the commercialization of R&D, and design incentive mechanisms for R&D activities.

##### **(2) R&D Consortium/Alliance and R&D Cooperation**

Nowadays, R&D requires large amounts of financial commitments from industries. R&D consortium/alliance will provide collaboration and cost sharing for R&D projects while the government will provide incentives to

encourage the formation of R&D alliance. R&D cooperation among industries, research institutions and academic institutions should be encouraged as well to assure that the direction of R&D will meet the needs of industries.

### (3) International Cooperation on R&D

For less developed countries, international cooperation on R&D will be an effective vehicle to obtain advanced technologies with the additional benefit of upgrading technology capability.

## ***2. IP Protection (Legal Framework)***

### (1) Foster Adequate IP Protection Environment

Protection of IP rights has always been a long outstanding issue for trade talks among nations. Fostering an adequate IP protection environment is the minimum requirement for attracting foreign investment and encouraging R&D. TRIPs establish the minimum international standards for members to comply with. By domestic legislation, a nation can provide more effective tools in dealing with IP protection issue. For instance, the US Economic Espionage Act (1996) allows the US Ministry of Justice to indict an infringer of trade secret whose act committed in or outside of the United States.

### (2) Enforcement of IP Laws Against Counterfeiting, Piracy and Infringement

Evidence shows that counterfeiting activities have increased in terms of size, scope and severity. The overall advancement of science and technology has greatly improved counterfeiting techniques. IP infringement causes innumerable economic losses to the public and the government. Most importantly, it damages the faith of the technology holders to value IP as an important asset. The government has to pay closer attention to counterfeiting activities and develop enforcement techniques to effectively crack down IP infringement.

### (3) Reinforce the Cooperation Against Cross-Border IP Counterfeiting and Infringement

A surge in counterfeit imports and exports has made counterfeit a

trans-territorial and trans-regional problem. In the past, infringement acts may be limited within a certain territory. Cross-border counterfeiting activities will be a much greater concern under the WTO framework. Special coordinated efforts from customs authorities of different jurisdictions are suggested to be made to tackle these activities.

(4) Establish Database of Relevant Laws of Different Countries to Avoid IP Disputes

Disputes over IP rights have become a popular topic for litigations or arbitrations. Precautionary actions should be taken to reduce possible IP disputes. The government can set up database of relevant IP laws and regulations of various countries and educate the general public on the importance of IP.

(5) Establish Sound and Comprehensive Legal System for Handling IP Disputes

In less developed countries, the legal system for enforcing IP rights and providing remedies still needs to be improved. The government should train more skilled law enforcement personnel including administrative officers, prosecutors and judges to handle IP disputes. The effectiveness of administrative actions as well as criminal and civil procedures should be constantly enhanced.

### **3. *IP Management (Technology Management)***

(1) R&D Strategy and Direction

The overall strategy for IP management should include a clear objective of R&D activities, which is before the IP creation stage. Other important matters in IP management area include: establish IP management system, educate R&D and other personnel, design and devise various guidelines, procedures and contracts regarding the use of IP, conduct patent development trend analysis, patent search and patent mapping to form strategy for technology transfer and license, and monitor market situations, etc.

(2) Compliance with IP Law Requirements

All the relevant laws and regulations, such as filing registrations, paying patent annuity, establishing trademark use evidence, maintaining reasonable efforts for keeping secrecy of trade secret/know how, etc., should be complied with.

(3) Establish IP Portfolio/IP Strategy

Different intellectual properties have different natures and are protected by different laws. IP management requires different strategies when dealing with different categories of IP.

(4) Professional IP Management Service Provider

IP management requires experienced professionals to render such services. The government shall train and educate more people to enter the management service provider industry. Incentive programs such as offering subsidy to an employer who retains in-house IP management staff member or engages outside IP management service provider may be considered.

**4. *IP Commercialization (Knowledge Industrialization)***

(1) Set up Technology Transfer (License) Center

To accelerate the commercialization of IP, the government should encourage universities and research institutions to set up technology transfer (license) center, by means of providing subsidy to them for setting up such center.

(2) Technology Marketplace

For promoting technology transfer, the government should establish platform to release the available IP and technology for public's access and for facilitating technology transfer. A database containing available technologies can be established. The technology marketplace may provide consulting services for technology transfer, consummate technology transfer transactions, assist in resolving technology transfer disputes and form strategic alliance with other technology transfer organizations.

(3) Incubator

For the development of a knowledge-based economy, the government can expand the scale and functions of incubators in collaboration with academic and research institutions. Incubators can form a network to provide technical services to local industries and help to accelerate technology diffusion.

- (4) Establish Knowledge Service Provider Industry (IP Commercialization Service Provider)

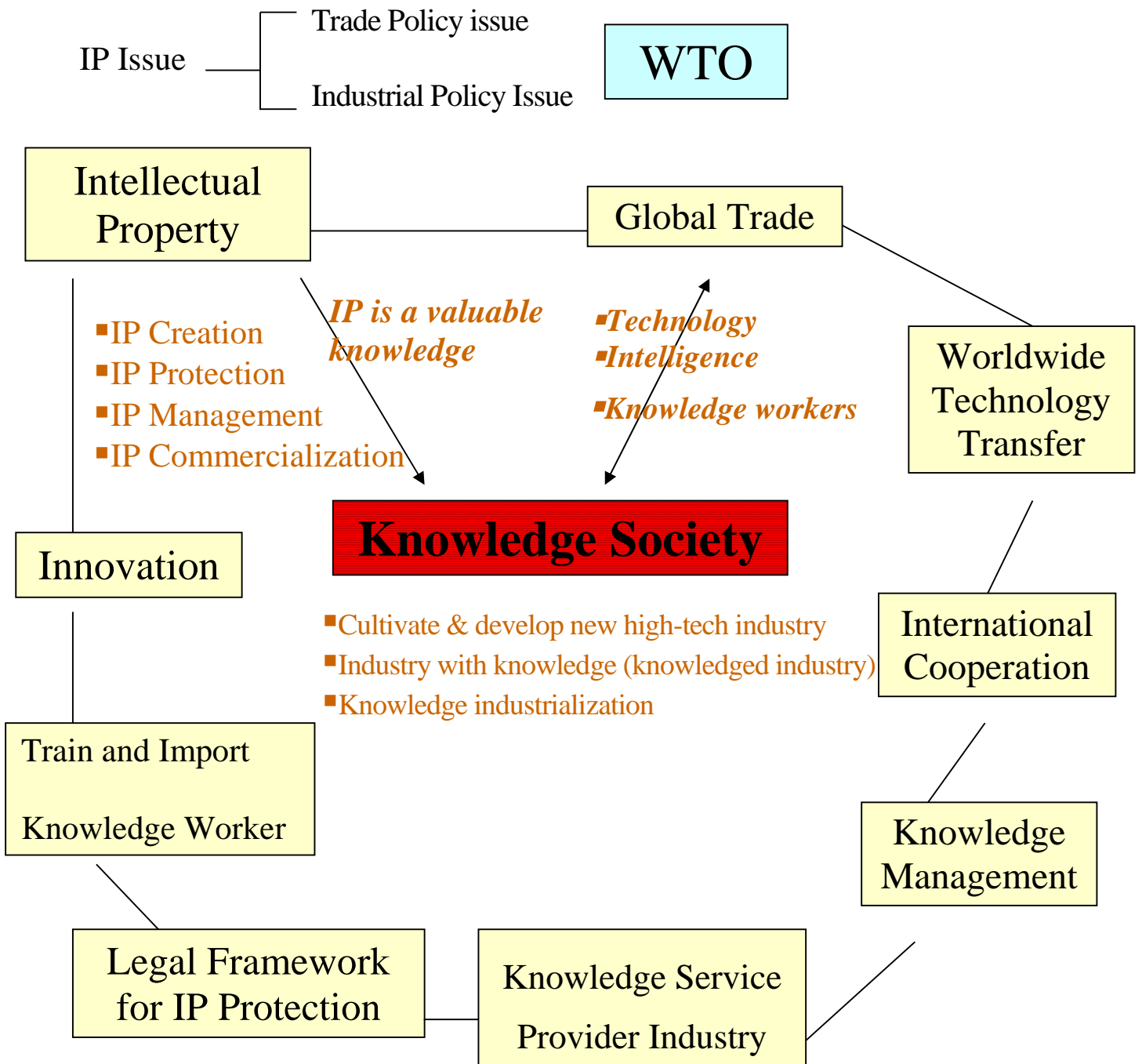
Like the IP management, IP commercialization requires experienced professionals. In the past, there were insufficient skilled knowledge workers in this field. In order to foster a better IP commercialization environment, more education opportunities should be created to solve this issue. The government should train and educate more people to enter the IP commercialization service provider industry. Incentive programs should be implemented. The service providers may provide services relating to sale of IP, IP appraisal, IP commercialization strategy, transaction negotiations, drafting business plan, seeking potential investors/ venture capitalists, etc.

### ***5. Other IP Related Incentives***

The followings are some important incentives relating to IP activities which the government may consider:

- (1) Offering Tax deductions for R&D expenditures
- (2) Offering Tax deductions for R&D personnel training
- (3) Creating a capital market for new strategic enterprises
- (4) Accepting IP as security interest (pledge) for the purpose of obtaining financing

#### IV. Intellectual Property, the Knowledge Society & Global Trade



## **V. Conclusions**

IP protection and knowledge protection of an organization, or even of a nation, has become more important than ever. Since IP issue is also a trade policy issue, IP protection and enforcement will likely become a subject within the WTO dispute resolution mechanism.

Since IP policy is also an integral part of industrial policy, future development of IP laws and infrastructure to cope with new technology development and national interests is worth monitoring. IP being a valuable asset, its management is key to business success in the future.

IP protection may serve as one of many incentives for attracting technology transfer and for stimulating the economic development of a nation. Considering technology transfer and technology commercialization as two of the goals for IP protection and economic development, providing comprehensive legal and regulatory environment for IP protection will also be beneficial to less developed countries. When performing the obligations under TRIPs, members of WTO may consider technology transfer and technology commercialization as important subjects of cooperation and strategic alliance among member countries. Especially, in the technology related supply chain, developed countries (which possess advanced technologies) can cooperate with less developed countries (which may possess natural resources, inexpensive labor or manufacturing capability) for technology commercialization with the objective to expand markets in the global economy.

When dealing with IP, the knowledge society and global trade issues, besides IP, other factors and elements must also be taken into consideration, such as entrepreneurship, innovation, start-up companies, venture capital and capital market, corporate governance, education, establishment of comprehensive information infrastructures to remove barriers to the global exchange of knowledge, utilization of E-commerce, and mobility of human resources, etc. At the 13<sup>th</sup> APEC Ministerial Meeting held in Shanghai in October 2001, the ministerial joint statement adopted "The APEC Best Practices Guidelines for Entrepreneurship and Start-up Companies" which designed desired environment for such purpose. (Please refer to the Attachment). These Guidelines may very well provide a visionary approach for WTO as well on the subject matter we are dealing with in this presentation.