

The TRIPS Agreement Does Little to Promote the Development of Technology Transfer to Developing Countries

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Abstract: This essay shows surely that the importance of technology for the global development and the object of the TRIPS Agreement is to promote the development of technology transfer. Then it shows the conflict between Developed Countries and Developing Countries through analyzing the used situation of the TRIPS Agreement. After that, the essay draws the conclusion that this Agreement is unfair; it has brought benefits to Developed Country Members by obstructing the development of Developing Country Members. Finally, the essay analysis provisions of agreement, the result is made that the TRIPS Agreement does not promote the development of technology transfer to Less Developed Countries. It has discouraged the development of Developing Countries in most situations recently. It is not in accordance with the object of the agreement, so the TRIPS Agreement should be amended as soon as possible.

Key words: transfer; Development; Intellectual property rights

1. INTRODUCTION

A great Chinese who was a politician and a Strategist—Deng Xiaoping said: Science and technology constitute a primary productive force. This is true enough, as can be seen from British history: the industrial revolution originates from the invention of the steam engine. Thereafter can be seen that the progression of science and technology; useful inventions are very important. Such things all depend on human intellect, which is able to generate tremendous economic benefit. Intellectual property has enormous value. When people notice this they try to control this kind of property. They make rules which allow people to own their creativity and innovation in the same way that they can own physical property. The owner of intellectual property can control and be rewarded for its use. This encourages further innovation and creativity to the benefit of us all. Each country has a different situation so their IP laws have different regulations. During the development of integration with the global economy, many international rules of intellectual property rights were contributed such as the WIPO. In 1996 an agreement between WIPO and WTO came into force. The purpose of the agreement was to provide for co-operation between the two bodies in the implementation of the TRIPS agreement. TRIPS (Trade-related aspects of International Property Right) was the product of WTO's 1988-94 Uruguay

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Round of trade negotiations. It came into effect in 1995. Its broad purpose is to harmonise the manner in which intellectual property is protected worldwide and to provide a mechanism for settling disputes between WTO members. (Davis J P11)

The preamble of the TRIPS said: Desiring to reduce distortions and impediments to international trade, and taking into account the need to promote effective and adequate protection of intellectual property rights, and to ensure that measures and procedures to enforce intellectual property rights do not themselves become barriers to legitimate trade. (Macmillan F. P28)

So according to that preamble, the conclusion can be made that one objective of TRIPS Agreement is to take more advantages from the development of technology. It can be found in Article 7, “the protection and enforcement of intellectual property rights should contribute to the promotion of technological innovation and to the transfer and dissemination of technology, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social and economic welfare, and to a balance of rights and obligations.” Promoting the technology transfer from Developed Countries to Developing Countries is so important in order to enhance the availability of those technologies, because most new technologies and innovations are from Developed Countries. Developed Countries have a powerful economy and the latest technical ability; they own the great majority intellectual property rights. If Developing Countries want to exploit those intellectual properties, they have to transfer them from Developed Countries. This kind of transfer is necessary for global improvement. However, since 1995 when the TRIPS Agreement came into effect, it has not really promoted the development of technology to Developing Countries. In some situations, its provisions even actively discourage this transfer. Those effects will be illustrated in this essay.

2. THE CONFLICT BETWEEN DEVELOPED COUNTRIES AND DEVELOPING COUNTRIES

Developed Countries, especially the US, Japan, European Community and Switzerland wanted an effective protection on the minimum standard for intellectual property rights. The purpose is to avoid competition with the infant enterprise in Developing Countries and to maintain the status of long-established monopoly in Developed Countries. They advised using the Dispute settlement body on the enforced protection and removing barriers which they think hinder the development of trade.

On the other hand, Developing Countries are concerned that protecting intellectual property rights would form obstacles to legal trade. Having strong intellectual property rights advantages the monopoly from transnational corporations; the price of food and medicine increases, thus disadvantaging the public weal. In addition, nowadays many objects of intellectual property rights have not been properly protected; many countries have not got an agreement on the theory and practice. In this situation, it is unfair to require Developing Countries to adopt high standards of protection, because the strong protection costs a lot in Developing Countries.

Protection of intellectual property rights is not only to protect the owner’s private right but also it has turned into a tool for realizing national benefit. The TRIPS Agreement is an equal agreement seemingly; but because Developing Countries are slower than Developed Countries on the development of economy and technology, in fact placing them on the same standard and having same rights and duties is unfair. Firstly, Developed Countries get great benefit from this Agreement. The TRIPS Agreement regulates computer software as literary works to be protected and defines the rental rights of computer programs and cinematographic works. Furthermore medicine and the agricultural chemicals are included in the patent system, and trade secrets are included in the copyright system. Those regulations all bring huge benefit to Developed Countries. Taking the example of the pharmaceutical market, this enormous market actually is controlled by three main countries—— the US, Japan and Germany. These three countries accounted for 77.38% sales volume in 2000. The same year, American and Japanese annual sales increased to 16% and 4% respectively. The global top 10 pharmaceutical companies controlled 36% of the global market and the global top 20 pharmaceutical companies controlled 57% of the global market in 1998. Those top 20 companies all belonged to Developed Countries, there were 8 companies from

America, 4 companies from Germany and 3 companies from Japan.([http: www.bio-soft.net/docyeji.html](http://www.bio-soft.net/docyeji.html), 2004) Secondly, Developing Countries have problems to exercise rights. According to the example in practice, it has been revealed that rights of Developing Countries are not exercised fully in the TRIPS; the regulations are only on paper not actually practiced. There are some exceptive provisions for Developing Countries, although the rights of patentor are protected strictly in the TRIPS. If a Developing Country member is in urgent need of a special medicine to tackle a problem of public health, the state can apply for compulsory patent licences under Article 31 (b) of the TRIPS Agreement. This provision is supposed to be a useful right for Developing Countries; actually the real exercise is difficult. If the Developing Country cannot produce the medicine it needs, gaining the compulsory patent licence is useless.

To sum up, the TRIPS Agreement takes a uniform standard to face different situations. In order to comply with the TRIPS, many profits of Developing Countries are damaged. Patent fee makes the medicine more expensive, copyright makes computer software difficult to improve, and protection of undisclosed information makes a barrier for transferring the technology.

3. THE TRIPS AGREEMENT DOES NOT PROMOTE THE TRANSFER OF TECHNOLOGY AND INNOVATION

Some people agree that protection of intellectual property rights encourages people to make more inventions. "Without the protection of intellectual property rights, 65% medicines would not be put into the market and 60% medicines would not even be created."(Mo C., 2004) However, protection of intellectual property rights only gives people an impetus to create things, it is not an essential for innovation. The development of technology is the result of many effects. If the owner of intellectual property rights could gain a vast interest, this would stimulate innovation, but would not have a direct relationship with the development of technology and improvement of living level. If the range of protection is too wide and the power over production is too strong, the technological innovation will be hindered and the opportunity for technological innovation also will be reduced. (Yuan Y., 1997) Some countries, due to the economic and social constraints, often did not protect intellectual property rights very well in order to assist? the economic development in the initial stages of industrialisation. America is a good example of this. Nowadays America has the strongest technology in this world, but in the initial stages of industrialization, it adopted a policy to weaken the intellectual property rights. It also brought many cases about other countries' infringing intellectual property rights. America has attached great importance to protection of intellectual property rights after its technology reached a high level. (Chen C., 2004) The TRIPS Agreement, which shows the interests of Developed Countries, requires Developing states to give up the right to choose a suitable protective level for their national conditions. All Developed Countries used this right when they were developing. So it can be affirmed that the TRIPS Agreement does not promote the transfer of technology or the development of technology. It is only to promote the economic and political interests of Developed Countries.

If those Developed Countries complied with the TRIPS Agreement when they were developing, most of them would not have attained actual technological level. However, to require Developing Countries to observe strong protection of intellectual property right, actually this is to forbid them to go to the same way as Developed Countries did before. There are many limitations on the technological skill and ability of innovation in Developing Countries. As can be seen from history, imitations and copies are the initial step to improve the technology, during this process skills improve and the people practice, after this innovation appears. On the other hand, if the domestic area of intellectual property rights also allows the foreign owner to be protected, the state will lose the legal right to make imitations and copies. Then the way to improve the state's technology will be forbidden and foreign monopoly groups might control the domestic economy and technological development.

It is difficult to be clear about the implications of the TRIPS Agreement on issues of global trade. Uneven development or technology transfer depends as much on the dynamic which flows from the

agreement. States are not required to produce specific legislation but rather to ensure that the thrust of their legislation accords with the agreement's provisions

3.1 The handicap for computer software

The provisions of Article 10 (1) state, "Computer programs, whether in source of object code, shall be protected as literary works under the Berne Convention (1971)." From this provision, it can be seen that the computer software code has already been protected by copyright. People know that the code is the basic part of software. This provision has protected the right of the one who writes computer programs but it will make the development of software much slower, especially in Developing Countries. If someone wants to create a new computer program, which needs some existing programs to be the foundation, without this provision, they could use the code of programs already created and then add the new parts above or below the existing codes. Using a predecessors' basis for innovations can be much easier and quicker. However, because of the TRIPS Agreement, the situation if the new software needs used programs these must be paid for. A large amount of money is needed for the licence or people should do exploit again those present programs for making the new one. This obstructs innovation and increases the cost of innovation. Moreover the copyright of software cord makes the software more expensive than before. The trade has been limited by the high cost.. The transfer of computer software also has been restricted by this provision. Often copyright of software cord is controlled by big monopolistic companies in Developed Countries. They hinder the development of computer software and transfer of computer software in Developing Countries by using their rights. The IP develops slowly in many developing countries and pirates are everywhere. For example, Microsoft sells WINDOWS XP at 399\$. This price might be reasonable for American consumers but in some developing countries the situation is different. In Thailand a person's annual income is about 7000\$, so the price of software at 399\$ in Thailand is equivalent to 3000\$ in America. (Chinabyte.com, 2004) It is inevitable that consumers flinch from the expensive software and even buy pirate copies in many developing countries.

3.2 The handicap by patents and undisclosed information

The provisions of Article 27 regulated the protection of patents.

"Patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced."

The provisions of Article 39 regulated the protection of undisclosed information.

"In the course of ensuring effective protection against unfair competition as provided in Article 10bis of the Paris Convention (1967), Members shall protect undisclosed information in accordance with paragraph 2 and data submitted to governments or governmental agencies in accordance with paragraph 3."

The said Agreement has set high standards of protection for patents and "undisclosed information" where under title-holders may retain their technologies or charge high royalties for allowing access to them.

A good example is provided by the case of a substitute to chlorofluorocarbons (CFCs). India has encountered difficulties in getting access to technology for HFC 134 A, which is considered the best available replacement for certain CFCs. That technology is covered by patents and trade secrets, and the companies that possess them are unwilling to transfer without majority control over the ownership of the Indian company. (Correa M.C. P33) (Correa M.C.)

Those provisions are just like shackles hindering the development of technology in Developing Countries. In some special cases, they not only influence the technology but also affect the public health.

Patents of medicine have an incredible effect in the world, because some medicines are needed by

thousands of people. As mentioned above, important patents have not been taken out by Developing Countries because of their underdeveloped economy and technology. Unfortunately most patents are controlled by Developed Countries to retain their status of monopoly and so it is very difficult and expensive to get licences for companies in Developing Countries. TRIPS has been criticized for failing to recognize that traditional forms of knowledge may need a different type of protection from that offered in prevailing intellectual property regimes. A more immediate problem has been raised by the need of poor countries, particularly in Africa, to have access to drugs for treating AIDS and other endemic diseases. For the most part, such drugs have patent protection and, as a result, their cost has been beyond the ability of such countries to pay. To take the example of AIDS medicine, there are 36 million AIDS patients in the world, 95% patients live in Developing Countries. In some African countries, as more than a quarter of the population is infected with AIDS, the average life-span of population has decreased 20 years. If medicines can be gotten in time, the death rate can be reduced dramatically. Nevertheless, the medicine which is produced by an American company is too expensive, because of the patent fee. Most of people from Developing Countries are not able to buy this kind of medicine. (He F.)

Protective patents have reduced the development of technology transfer from Developed Countries to Developing Countries, especially for products such as DVD Players and MP3. As such technology remains protected as intellectual property, the technology has not been transferred and thus remains the property of particular owners, controlled by them. Furthermore, it is not unknown for licence agreements to include provisions that accord ownership of local improvements to the original patent holder. This either allows for the capture of innovation or discourages it. Nevertheless, it is a commonplace assertion that without some form of intellectual property right protection patent holders will be unwilling to transfer technology at all. Thus even the limited leasing of technological innovation is an improvement where technology transfer has previously taken place.

There is a case for explanation. Two Chinese-based DVD manufacturers have filed a lawsuit against the 3C Patent Group in the United States, alleging that it violated US laws, leading to unfair competition. "If the two companies win the case, all Chinese DVD manufacturers will benefit," said Gao Wanjun, an official from the China Electronic Acoustic Equipment Association. But it will be a long and hard fight, he added. Patent fees of around US\$20 per unit are currently levied on manufacturers of Chinese DVD players, accounting for some 20 to 30 per cent of their production costs. However, US manufacturers' patent fees are much lower, only 3 to 5 per cent of their production costs. The high patent fees have hit Chinese DVD manufacturers hard, with exports of Chinese DVD players falling sharply last year. (Yu L., 2001) Originators? or companies from Developed Countries, which own patents just do things like this to destroy fair shares and achieve their purpose of monopoly or unfair competition with Developing Countries.

4. FAVOURABLE PROVISIONS FOR DEVELOPING COUNTRIES IN THE TRIPS

There are also some provisions to bring benefits to Developing Countries but they achieved their purpose or not?

4.1 Compulsory licences

TRIPS permits drugs patents to be overridden in cases of national emergency, allowing countries to make generic drugs, but only for domestic consumption (Article 31[f]). This special right has been called the compulsory licence. This regulation is in order to avoid some monopolistic companies interpreting the Agreement unreasonably or in a manner that allowed it to be used to bully Developing Countries with a public health crisis. The compulsory licence was constituted to protect the poor countries in international trade——, but ironically the most constructive implementers are those rich countries, such

as Canada, United Kingdom and America. Reasons why the compulsory licence is unhelpful for those poor countries are that to use this licence they need to satisfy many conditions, including strong imitative activity, extensive market both home and abroad, the perfect management and juristical system and so on and so forth. Inevitably, these conditions have not been met by Developing Countries, so the compulsory licence is not really useful to help transfer developing technology.

4.2 The new regulation in Doha

Many of the countries most in need of the drugs do not have the ability to produce them. In August 2003, an agreement was reached which would allow countries producing generic copies of patented products under compulsory licence to export them. It can be argued that WTO has provided a useful international forum for such an agreement to be reached. (Davis J. P12) On the other, it has been noted that the agreement is hedged with a number of conditions, which may make it difficult to put into practice. The WTO members have debated this amendment, due to the argument between Developing Countries and Developed Countries; the result is as yet unknown. If the amendment of Article 31 will be like the suggestion from South Africa, Developing Countries would get benefits from this amendment; otherwise the amendment would become useless again.

4.3 The transitional periods

The TRIPS Agreement allowed transitional periods of five to ten years after TRIPS took effect to ensure compliance for Developing and Least Developed Countries (Article 65). A further provision has extended exemptions on pharmaceutical patent protection for least-developed countries until 2016. The provision of such periods was an important element in the delicate balance reached as the outcome of negotiations. They were included to allow Developing Countries time to elaborate and adopt the required legislation, and to design any other policies necessary to minimize the possible negative effects of new intellectual property rights rules. Is it really useful for Developing Countries to improve their technology? In my opinion, there are benefits but it is not enough to help Developing Countries improve and reduce the technology gap between countries.

A significant number of Developing Countries have not been able to adapt their legislation to the Agreement's minimum standards yet, and are unlikely to do so before the end of the general transitional period on 31 December 1999. Some Developing Countries have made substantial steps to implement the Agreement but have not been able to cover all areas or have not yet been able to reform enforcement-related rules.

4.4 The provision about helps technology transfer to least-developed country

In the Article 66.2 of the TRIPS Agreement, the provision is "Developed country members shall provide incentives to enterprises and institutions in their territories for the purpose of promoting and encouraging technology transfer to least-developed country members to enable them to create a sound and viable technological base." These measures are used to encourage the transfer of technology to Least-developed Countries. This sounds good and the provision used "shall" which means that Developed Countries must or have to implement the provision. However, the problem is that there are not any penalties if Developed Countries do not do these things. It is not stated how to implement them, and also there are no monitors to supervise those countries as they adopt those measures. So, yes, there is a provision to help Least-developed Countries get the development of technology, but it is difficult in practice.

Furthermore, some Developed Countries take advantage of the provisions for help with technology. For example, many Developing Countries or Least-developed Countries have a wealth of resources, which might be exploited by pharmaceutical companies in search of new products. These same countries may not, however, have the technical expertise or financial resources to develop these products domestically. Then the multinationals come and say that they can provide help with technical expertise

or financial resources. After that, this new product is developed but then the patent of this product belongs to the multinationals. Thus poor countries lose the opportunity to take advantage of their wealth of resources.

To sum up, it can be concluded that although there are some favourable provisions for Developing Countries in the TRIPS, these provisions only exist as sentences. They all have obvious defects, which have significantly reduced their effectiveness. Because of this, these provisions have not afforded protection for Developing Countries. Amendments are needed to ensure fair practice.

5. CONCLUSION

As the title said the TRIPS Agreement has not played a role in promoting development of technology for Developing Countries. The conflict is not resolved; many differences can be found. There are big differences in economies, living standard and technology development; those differences mean the TRIPS Agreement is not suitable for all situations; it is more suited to Developed Countries than Developing ones. The TRIPS Agreement has not really been used to promote the transfer of development of technology to Developing Countries. After analysing several main provisions, the conclusion can be made that the effect of TRIPS is to bring benefits to those who hold more patents, copyrights, undisclosed information and so on. Those benefits inevitably work against the interests of Developing Countries. So there is no help for them, only discouragement. This essay has indicated that there are also some provisions, which to help Developing Countries to promote the development of technology. However, putting those provisions into practice is problematical.

As intellectual property becomes ever more valuable so the drive for stronger rights to protect it becomes more intense. It is inevitable that the debate will remain central to how the law of intellectual property develops in the future. (Davis J P13) The TRIPS Agreement is a most important international law. Amendments should be made as soon as possible. At the WTO's Doha Meeting, this Agreement was also been focused on and many representatives from each country discussed the hot topics in this Agreement. The final outcome is not yet clear due to those heated arguments between countries. Developing Country Members and Least-developed Country Members have made progress but their power still does not balance with that of rich countries, although they have tried to reason with Developed Countries for their rights. It is possible that as a result of heated debates, there will be a more perfect TRIPS Agreement, which can achieve its object properly. The TRIPS Agreement will become a giant power to promote the development of technology transfer to Developing Countries, and encourage the technology to develop quicker and quicker.

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