

Application and Impact of the Provisions on Technology Transfer in the Regional Agreement

Xiaochun Gao*

Liaoning University, Shenyang, 110136, China

*Email: G1803393775@outlook.com

ABSTRACT

In the context of the lagging legislation of international technology transfer and the lack of unified regulation, the WTO cannot effectively use the dispute settlement mechanism to resolve the related contradictions arising from technology transfer. Signing regional trade agreements has gradually become the main means to regulate and promote technology transfer. However, the developing countries that rely on "market for technology" are often in a passive position, facing the difficulties of signing regional clauses caused by the technology transfer barriers of developed countries and the imperfect means of technology circulation and protection of developing countries, and urgently need to put forward their own countermeasures. In particular, China needs to innovate the domestic technology transfer system through the standard regional trade agreement rules to help our country maintain a good regional trade partnership. By clarifying the application conditions and effects of regional trade agreements, this paper proposes to improve the universality of regional trade agreements from the perspective of international formulation of uniform regulations.

KEYWORDS

Technology Transfer; Regional Trade Agreement; Regional Clause.

1. INTRODUCTION

At present, the international legal regulation and legislation on technology transfer is relatively lagging behind, and it is still necessary to build a unified legal system in order to deal with and solve the legal problems arising from technology transfer. In reality, in terms of the signing of WTO technology transfer provisions, most WTO members expect to effectively deal with the legal dilemma in the implementation of technology transfer through the dispute settlement mechanism, but in the TRIPs Agreement and TRIMs agreement, The technology transfer clauses concerning restrictions and constraints contain overlapping, overlapping and contradictory contents [1]. It is unclear whether the rules for the implementation of technology transfer should be applied to investment agreements or trade agreements, so it is difficult to effectively use dispute settlement mechanism to solve legal issues related to technology transfer.

In view of this, this paper studies the legal environment and applicable conditions for the implementation of the provisions on technology transfer in regional agreements, the impact on signatory and non-signatory countries, and the current predicament of countries, including China, in signing regional agreements. Through the study of regional provisions, it is concluded to further improve the relevant regulations in China and put forward suggestions that are conducive to expanding the regional scope of the member countries of regional agreements and building unified international regulations on technology transfer.

2. REGIONAL PROVISIONS CAN BE IMPLEMENTED WITH APPLICABLE CONDITIONS AND LEGAL ENVIRONMENT

2.1. Development of Regional Provisions and Previous Concerns

According to WTO data, the first regional provisions signed can be traced back to 1958. In 1989, the US-Canada Free Trade Agreement came into effect, marking the shift of the United States from its opposition to regional trade and economic cooperation to its participation in the signing of agreements in its dominant region with the goal of obtaining more economic benefits. Later, Lawrence proposed for the first time the concepts of "shallow" and "deep" studies on the quality of trade agreements, and scholars proposed more strict and perfect new evaluation criteria for the signing of regional clauses. As one of the means to assess the level of opening-up and national strength of a country, regional clauses are the normative regional trade and investment behaviors of the signatory countries under the principles of equality and voluntariness, so as to reduce circulation barriers such as national trade and technical factors, and promote the economic interests and development of the signatory countries.

Former scholars have focused on RTAs, especially in the field of technology transfer. The first is the research on the influence of regional agreement on the development of technology industry. The other is to analyze and propose some suggestions on technology transfer barriers in regional agreements. But it is rare to analyze the similarities of the state's main body and the state's signing of regional clauses, so the dilemma is worth summing up and exploring.

2.2. Analysis of Applicable Conditions of Regional Clauses

The existing trade agreement rules need to meet the development requirements of all parties and face the difficulties of integration, which will further increase the difficulty of implementation [2]. The conditions for the entry into force of RTAs can be demonstrated from three aspects.

(1) Time effect. The entry into force of RTAs and their termination into force are determined by the signing of the national consultation agreement. The degree of freedom is relatively high and the signing efficiency is faster than other content.

(2) Space effectiveness. Regional trade agreements, or regional clauses, show the characteristics of regionalization and regionalization in the scope of space and territory. The scope of effect is between the subjects of the signatory States.

(3) Effect on the signing entity. The contents of regional clauses that are conducive to reducing tariff barriers and promoting regional integration and trade development have binding effect on the main body of the countries that sign the regional clauses. However, although there are no restrictions and restrictions on non-signatory countries, it also has the effect that they cannot intervene to implement preferential clauses.

From a shallow perspective, the conditions for applying regional clauses are easy to understand. But the focus of bilateral, or even multiple, regional provisions is more in terms of countries providing the necessary support elements for technology transfer. In the process of technology transfer, the modalities and procedures for national selection of technology options, how to deal with the views of technology users and technology providers, and how to coordinate the relationship between different stakeholders are important policy messages. Technology policies do not exist in isolation and must be integrated with other national policy priorities [3].

2.3. Status of Development of Regional Clauses

As of April 25, 2024, the WTO official website data shows that the total number of RTA signatures has reached 608, of which 370 are valid clauses. Developed countries account for 85%, and their

technology transfer barriers are gradually formed, and the regional features of regional provisions are more and more obvious.

According to statistics, the proportion of developed countries has exceeded 50%, most of them have exceeded 60%, and even a small number of developed countries have accounted for 80%. Developed countries can enjoy absolute voice and dominance in global digital trade rules, which is inseparable from their perfect internal digital trade governance system [4]. Measures such as "grouping" and "isolation" taken by developed countries will form technology transfer barriers to developing countries and increase the difficulty for developing countries to enter into regional trade agreements

3. REGIONAL CLAUSES HAVE AN IMPACT ON DIFFERENT COUNTRIES AND AREAS

3.1. Impact of Regional Provisions

Accession to RTAs has both positive and negative effects on member and non-member countries. On the one hand, the inclusion of regional provisions will help to strengthen the flow of technology. Technologically developed regions can complement each other with the inflow of technologies [5]. For example, in green trade, low carbon technology, China joined RCEP, the agreement on technology transfer and other provisions signed, for our country to learn from, use the advanced technology of developed countries. High-end technologies offer tremendous opportunities to help achieve our carbon neutrality goals. But based on the impact of current regional agreements on technology transfer, from Josef Scharl Stiglitz's point of view, the current IPR regime overprotects the interests of knowledge owners and neglects social values, public interests, and monopolies created by IPR protection are not only bad for innovation. They are also inefficient and even less beneficial to developing countries [6].

From the perspective of trade creation and trade diversion, the signing of RTA can significantly increase the trade volume of the contracting parties, and the more integration of RTA, the more obvious this promotion is [7]. It is undeniable that the traditional trade barriers such as tariff barriers are gradually disintegrated under the signing of regional trade agreements, but from the perspective of technology transfer, the new technology transfer trade barriers have gradually become a new means of restricting trade. Take RCEP-related agreements as an example. The Philippines and Singapore are the main ASEAN countries. By strictly restricting the certification standards of technology and technology industries, and raising the standards for enterprises with high environmental pollution, the ASEAN countries form barriers to technology transfer and reduce technology transfer. This behavior is more likely to cause cooperation friction among member countries, which is not conducive to the effective implementation of RCEP. Furthermore, RTAs, as a comprehensive opening-up measure for The international economic cooperation, further deepen the formation of economies' comparative advantages in accordance with their own technological advantages, thus engaging in external technological trade restrictions and deepening embargoes, potentially making them more vulnerable to specific trade shocks [8].

3.2. Dilemma of Regional Clause Signing

When developing countries negotiate and sign regional clauses, they often face enormous pressure due to economic factors, policy distortions, domestic barriers, regional discrimination and protectionism. Signing of regional clauses is facing certain difficulties.

First, differentiated technology transfer clauses between major countries and regions are an important reason for the dilemma of regional signing. Both parties may have different intentions to formulate, implement, supervise, and maintain regional clauses. Each country formulates personalized technology transfer policies from the perspective of safeguarding its own rights and interests. Their

development strategies, institutional environment, and interest requirements conflict with those of the region. Therefore, whether the regional provisions can continue to function effectively is uncertain.

The second point is that regional agreements generate new means of deterring national development. If developed countries want developing countries to actively participate in regional agreement signing and achieve the goal of the agreement, they must transfer technology to developing countries and provide financial support [9]. However, developed countries adopt different policies of "double standards" at home and abroad through "hidden means" to avoid fulfilling their commitments under the agreement. In April 2004, the European Commission announced its agreement to the "Technology Transfer Block Exemption". The purpose of the decree is to further encourage technology flows among enterprises and to share intellectual property rights. Different requirements of technology transfer are proposed for enterprises with direct competition relationship and those with non-competitor relationship. However, before the two companies can cooperate in technology sharing, the enterprise must present the reasons for sharing technology to the relevant authorities.

Third, the failure of developing countries to meet standards in terms of technology protection and censorship of their means of circulation is one of the major reasons for mistrust and barriers to technology transfer in developed countries. The speed of technology transfer and utilization is restricted by the access of countries lacking technological innovation capabilities. Developing countries fail to form a system to protect the interests of technology transferers, which greatly increases the risk of leakage of digital technology transfer in the course of trade and poses a threat to the data security of the countries transferring them. Therefore, the transferring country forms barriers to technology transfer to protect its rights and interests. For example, the EU has adopted a bill to clarify and inherit the "full protection principle" of GDPR from Directive 95. Through continuous improvement of legislation, the EU has specified the "whitelist" standard for countries where data flows to, and has strict requirements on the data protection capability of destination countries. From this point, it can be seen that developing countries want to add more regional provisions to achieve development, and they need to make certain of their own technical means Infrastructure guarantee construction. so as not to be helpless in the face of technology transfer barriers created by transferring countries. But the opportunity cost of signing RTAs for developing countries is far less than the cost of doing it alone and focusing on R & D.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1. Research Conclusions

This paper puts forward some suggestions for constructing a unified system of technology transfer from the perspective of how to standardize the development of regional agreements and improve the universal applicability. How to make use of its own advantages, improve its own international voice, contribute to the building of an international unified trade system, and lead other countries in the development of technology transfer trade are the actions that a big country with responsibility and responsibility should take. China should continue to support the international rule of law construction, support all the compliance actions taken by international and regional organizations, and at the same time, improve the quality of regional trade agreements, reform the relevant legislation and review procedures of domestic technology transfer, and promote the localized development of technology ownership. Under the leadership of the Party, we should promote high-level opening-up, institutional opening-up, promote digital economy construction, and contribute to the sustainable and high-quality development of technology transfer trade under the leadership of the Party while safeguarding national security and making good use of Internet trade in the new era. And how to deal with the international environment in China today, and put forward the suggestions for improving development. It applies equally to the development situations of other developing countries.

4.2. Suggestions on the Construction of Technology Transfer System in China

The complexity of technology transfer, which is non-linear, depends on a combination of factors, with technology transferring at different rates in different sectors, countries and regions, and its progress being driven by national policies, institutions, actors and international efforts. [10] Therefore, the following suggestions are made from the perspective of China's construction:

- (1) Our country actively standardizes the principle of regional terms technology transfer, reform the construction of domestic legal system, strengthen the construction of market-oriented technology transfer mechanism, actively participate in the process of regional terms signing, safeguard the national legitimate rights and interests and the international image, strengthen our country's right to speak in the international position.
- (2) Focus on the integration of economic and legal fields. By means of economic model, the optimal technology transfer restriction policy standard can be quantified and visualized. We should balance the need to open up free trade and safeguard national security interests.
- (3) Encourage domestic enterprises and their R & D activities through policy guidance and increase subsidies. Do well in local introduction and global innovation, and strengthen the ownership of local technology. According to the "National Technology Transfer System Construction Plan", it is urgent to cultivate comprehensive technology transfer talents. Form the university training system, thus enhance the country's comprehensive technical strength.

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