Comparative Analysis of Intellectual Property Clauses of RCEP and CPTPP

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Abstract. As two of the most important free trade agreements in the world today, CPTPP is the most advanced and detailed in terms of intellectual property rules among international trade agreements so far, while RCEP is the most extensive agreement on intellectual property signed by China. Through the comparison and analysis of intellectual property clauses under these two agreements, it can be seen that the overall protection of RCEP is less than CPTPP. However, the level of RCEP rules tends to be more balanced to apply to countries at all stages of development. At present, the level of China's intellectual property rules is in line with RCEP. In order to realize the construction of a strong intellectual property country, we should first face up to the gap between the relevant domestic laws and the most advanced international level, and appropriately improve the patents and enforcement of intellectual property based on the relevant provisions of CPTPP. At the same time, China should play a leading role in the protection of genetic resources and strive for more voice for developing countries. Secondly, the Chinese government should strengthen administrative law enforcement and supervision. Moreover, China should increase its efforts to open up to the outside world and lead the construction of an international intellectual property system.

Keywords: Intellectual property, RCEP, CPTPP, comparative analysis.

1. Introduction

In the context of globalization, innovation is an important means to enhance a country's international competitiveness. Intellectual property is the institutional cornerstone to protect and stimulate innovation. Therefore, in the international multilateral economic and trade negotiations, intellectual property rights have always been the focus topic [1], occupying lots of space in many free trade agreements. Among these, the agreement that contains the most comprehensive, advanced and detailed intellectual property rules is the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). Although CPTPP has frozen 11 intellectual property clauses in the Trans-Pacific Partnership (TPP) [2], it is still the most informative chapter in CPTPP, representing a high level of international economic and trade rules on intellectual property. Among the free trade agreements signed by China, the most advanced and longest agreement on intellectual property is Regional Comprehensive Economic Partnership (RCEP) [3]. The intellectual property chapter not only covers traditional issues, but also reflects the latest development trends of issues.

Compared with CPTPP, there is still a certain gap in RCEP's intellectual property rules and standards. China officially applied to relevant organizations to join the CPTPP on September 16, 2021. As the core content of the CPTPP, intellectual property rules are bound to become one of the focal points of the negotiation. The existing judicial and administrative enforcement of intellectual property in China is very different from the western developed countries in terms of mechanism. Although the high standards of intellectual property rules in the RCEP reflect China's determination to continuously improve the intellectual property system, the gap with the CPTPP will still make it difficult for the negotiations to proceed smoothly. Therefore, in order to promote the improvement of the domestic intellectual property system and make it in line with the advanced international rules, it is necessary to compare and analyze the intellectual property clauses of the two agreements, RCEP and CPTPP, and conduct a deeper understanding to analyze the similarities and differences between these two. It is expected to provide a policy direction for China's institutional adjustment in the
implementation of the strategy of intellectual property power, and also to prejudge the conditions for China's entry into the CPTPP negotiation.

2. Comparative Analysis of Intellectual Property Clauses of RCEP and CPTPP

Regarding the definition of intellectual property, both RCEP and CPTPP directly follow the definition of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). There are seven categories of copyright and related rights, trademarks, geographical indications, industrial designs, patents, layout designs of integrated circuits and protection of undisclosed information included.

The similarities and differences between the two intellectual property clauses are as follows:

2.1. Based on TRIPS, RCEP is conservative and CPTPP is radical

It can be clearly seen from the general provisions that both RCEP and CPTPP have increased or decreased on the basis of TRIPS. Both agreements have deleted the most-favored-nation treatment, and added provisions such as public health. At the same time, they have a deeper understanding and expanded content on the terms such as objectives and national treatment.

Of course, there are some obvious differences between RCEP and CPTPP. First of all, outside the provisions of TRIPS, the two interpret the target in different directions. RCEP proposes to "deepen economic integration", while CPTPP is inclined to "cultivate a competitive, open and efficient market". The second is the scope of intellectual property protection, RCEP stipulates that TRIPS shall prevail in the event of inconsistency between the two provisions. But in addition it can go beyond the requirements of TRIPS, again showing that the RCEP rules are still within the framework of TRIPS. In contrast, the CPTPP does not explicitly stipulate the scope of protection. But it mentions in some clauses that TRIPS "shall not be expanded or reduced". That is, if the remaining clauses conflict with TRIPS, the agreement shall prevail. It reflects the obvious "super TRIPS". It can be seen that after the intellectual property protection standards of TRIPS could not meet the interests of developed countries, they used their strong economic, technological and other strengths to transfer the negotiation platform. They propose higher standards of legal provisions in the regional trade agreements represented by CPTPP to capture more benefits [4].

Furthermore, on the basis of TRIPS's provisions on national treatment, RCEP and CPTPP have made more detailed explanations on intellectual property protection scope. RCEP doesn't limit scope. But CPTPP stipulates that only all categories of intellectual property covered by this chapter are limited. In other words, the Parties may not grant national treatment to the layout-designs of integrated circuits and the remaining specific provisions not covered in other sections. This regulation detracts from the protection and scope of national treatment. Thirdly, both agreements cover far more conventions than TRIPS. The total number of conventions covered by RCEP is relatively large, but its binding obligations are few, giving Parties greater choice and flexibility. In contrast, the number of CPTPP conventions is relatively small. But it requires mandatory accession and stricter standards, which is conducive to developed countries to safeguard broader intellectual property interests. Finally, CPTPP pays special attention to the protection of public health, while RCEP doesn't propose relevant high-standard provisions. This is due to the fact that public health is linked to original drug industry, patents and trade secrets. And the technological, pharmaceutical and innovation capabilities of developing countries, which occupy the majority of RCEP, are slightly behind. To a certain extent, relatively loose rules give developing countries enough space to advance innovation and speed up the acquisition and dissemination of technology, thereby shortening the gap with developed countries.

To sum up, when it comes to the innovation of the general provisions of TRIPS, RCEP takes into account the actual national conditions of the Parties and is relatively conservative, which reflects the limited "super TRIPS". The CPTPP is based on the high economic level of most Parties and implements higher standards to protect intellectual property and obtain more economic benefits, so the changes are more radical.
2.2. **In terms of the scope of topics, RCEP focuses on balance and CPTPP focuses on interest**

The topic can concisely describe the specific content of protection clauses. In terms of the order of topics, the structure of RCEP follows TRIPS, and the scope of its protection is limited within the TRIPS framework. And CPTPP slightly breaks through the TRIPS framework arrangement.

In terms of the scope of topics, the settings of the two agreements are generally similar. But there are new additions to TRIPS. Among them, the two agreements ignore the provisions on layout design of integrated circuits, aiming to pursue interests and protect information security. As shown in Table 2.1, the structure of RCEP is more detailed, adding four independent topics. Separate festivals for genetic resources, traditional knowledge and folklore can be described as a major novelty of RCEP, mainly because developing countries have played an active role here [5]. In contrast, CPTPP doesn’t have separate sections for the first three topics, but relevant provisions are scattered in other topics. In addition, CPTPP added the topic of Internet service providers, reflecting its member states' emphasis on the development and protection of intellectual property in the current era of digital technology. Developed countries have more advantages in the field of digital economy [6]. And the addition of this topic fully reflects the will of developed countries to safeguard their own interests. Although most of the content of this topic has been frozen, considering the possibility of restarting in the future, it can still reflect the level of CPTPP rules.

**Table 1. Comparison of topics in intellectual property chapters of RCEP and CPTPP**

<table>
<thead>
<tr>
<th>Classification</th>
<th>RCEP</th>
<th>CPTPP</th>
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<tbody>
<tr>
<td>Part 1 General Provisions and Basic Principles</td>
<td>Section 1 General Provisions and Basic Principles</td>
<td>Section A General Provisions and Basic Principles</td>
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<td>Section 2 Copyright and Related Rights</td>
<td>Section H Copyright and Related Rights</td>
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<td>Section 3 Trademarks</td>
<td>Section C Trademarks</td>
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<td>Section 4 Geographical Indications</td>
<td>Section E Geographical Indications</td>
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<td></td>
<td>Section 5 Patents</td>
<td>Section F Patents and Undisclosed Tests or Other Data</td>
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<td>Section 6 Industrial Design</td>
<td>Section G Industrial Design</td>
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<td>Section 7 Genetic Resources, Traditional Knowledge and Folklore</td>
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<td></td>
<td>Section 8 Unfair Competition</td>
<td>Section D Country Name</td>
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<td>Section 9 Country Name</td>
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<tr>
<td>Part 2 Criteria for the Effect, Scope and Use of Intellectual Property</td>
<td>Section 10 Enforcement of Intellectual Property Rights</td>
<td>Section I Enforcement</td>
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<td>Part 3 Enforcement of Intellectual Property Rights</td>
<td>Section 11 Cooperation and Consultation</td>
<td>Section B Cooperation</td>
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<td>Part 4 Acquisition and Maintenance of Intellectual Property Rights and Related Procedures between the Parties</td>
<td>Section 12 Transparency</td>
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<tr>
<td>Part 5 Prevention and Settlement of Disputes</td>
<td>Section 13 Transition Period and Technical Assistance</td>
<td>Section K Final Provisions</td>
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<tr>
<td>Part 6 Transitional Arrangements</td>
<td>Section 14 Procedural Matters</td>
<td>Section J Internet Service Providers</td>
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Regarding the protection of undisclosed experimental or other data, there is no relevant content in RCEP. Only Article 56 stipulates that protection should be provided under TRIPS. The standards are relatively high and it’s difficult for countries with lower economic development levels to achieve the same standard. Therefore, no provision is beneficial to carry out appropriate economic cooperation among the Parties. And it reflects inclusiveness of RCEP. CPTPP jointly establishes a section on this content with patents, and granted data exclusive rights to pharmaceuticals and agricultural chemicals, which is a manifestation of extending patent rights [7]. Since about one-half of CPTPP Parties are
developed countries, excluding the least developed countries, the overall level of economic development is relatively high. So it is in their interest to implement high standards of undisclosed information protection.

Therefore, it can be seen from the scope of the topics that RCEP focuses on the balance of rights and obligations among the Parties, and abandons some high-standard regulations, reflecting inclusiveness and development orientation. While CPTPP pays more attention to the interests and competitive advantages of developed countries. And the scope of intellectual property protection is wider. The requirements and level of the rules proposed are higher. It can better reflect the competitiveness and interest orientation of various countries.

2.3. In terms of industrial property rights rules, RCEP is more detailed and CPTPP is more rigorous

2.3.1 Patents

Both RCEP and CPTPP define patentable subject matter, exceptions to granting rights, and refusal to grant patent rights. The differences between the two are as follows:

RCEP states that patents should not be discriminated against based on technical field, location of invention. This is an important manifestation of "non-discrimination principle", which aims to promote fair and just exchanges and cooperation and deepen ties between the Parties. In this way, some patents of disadvantaged developing countries can be protected to promote technological innovation and achieve a virtuous circle. CPTPP has no relevant regulations. But it explains the principle of patent application first, and focuses on maintaining the order of patent registration and use. In terms of review and registration procedures, RCEP is relatively complete. But the steps of CPTPP are scattered in various clauses, which are more detailed and have higher standards.

RCEP encourages Parties to use patent electronic filing system, which speeds up the application speed and efficiency. It also requires the introduction of international patent classification system to facilitate patent approval and management. CPTPP’s provisions on the patent grace period are more specific, enhancing the transparency of patent application process and tending to protect legitimate rights and interests of patent applicants. Furthermore, the publication of the RCEP patent application is more detailed. CPTPP only requires disclosure of information content, which once again reflects the importance of transparency. In addition, RCEP doesn’t provide for protection of undisclosed testing or other data of agrochemical and pharmaceutical. And some of CPTPP’s provisions for the latter are also overly demanding, and were frozen during the negotiation of the rest of the countries to form the CPTPP after the United States withdrew from TPP. But there are still some provisions that can be enforced, so it still has protective effect.

In terms of patent protection, coupled with undisclosed experiments or data, it’s clear that CPTPP has deeper protection and higher requirements. The advantage of RCEP is the clearly structure.

2.3.2 Trademarks

RCEP and CPTPP have expanded the scope of protection of trademarks in TRIPS, emphasizing that sound can be registered trademarks. The two agreements also pay attention to the protection of well-known trademarks. The protection of certification marks and collective marks is basically same in the two agreements. And similar provisions are made on trademark registration, examination system and electronic system. The two also protect domain names, which contributes to the protection of Internet intellectual property.

The differences between RCEP and CPTPP mainly lie in the protection scope of trademarks and the basic flow of various procedural matters. Firstly, RCEP reiterates which marks can constitute trademarks, while CPTPP does not. But it emphasizes that smell trademarks can also be registered, which further expands the scope of objects of trademark protection. Secondly, CPTPP emphasizes that grouping should be based on the nice classification and similarity can’t be judged on this basis, which RCEP doesn’t address. The provisions of CPTPP make the identification of trademark types clearer and provide convenience for trademark retrieval and management. Thirdly, regarding the
trademark registration process, RCEP stipulates that before trademark registration, the Parties should provide opportunities for trademark-related actions. The trademark registration is more stringent. However, the separation of process in CPTPP is slightly different from RCEP. Fourthly, in the protection of well-known trademarks, if the well-known trademark of a Party is confused with other trademarks, RCEP stipulates that the Parties can seek protection from judicial organs, while CPTPP does not mention. But the scope of protection has been expanded. Fifthly, RCEP strengthens the crackdown on applications for registration of malicious trademarks, allowing the same trademark registration application to involve multiple categories of goods and services. This is important to maintain the order of trademark registration and protecting legitimate rights and interests of trademark holders. It also reduces the occurrence of trademark infringement to a certain extent. But CPTPP only proposes a specific period of trademark protection.

It can be seen that in terms of trademark protection, the protection degree of RCEP is close to CPTPP. The difference is mainly reflected in the different emphases. Generally speaking, the regulations of RCEP are more detailed, and the requirements of CPTPP are slightly higher.

2.3.3 Industrial designs and unfair competition

Regarding industrial design, RCEP and CPTPP have basically same protection content. The difference is that RCEP has made procedural regulations on the prior art information of designs and registration or authorization and application of industrial designs on the Internet, and requires the introduction of International Industrial Design Classification System. And CPTPP is more concerned about the design of industrial products. Regarding unfair competition, although CPTPP does not have a separate section, it has basically corresponding clauses. Both RCEP and CPTPP require the Parties to effectively prevent unfair competition and protect undisclosed information in accordance with the Paris Convention. And CPTPP requires the Parties to provide criminal procedures and penalties for specific acts, while RCEP does not. RCEP's penalties for infringements are less relevant to the criminal aspect.

2.4. In terms of other entities stipulate, RCEP is more advanced and CPTPP is more standard

2.4.1 Copyright and related rights

RCEP and CPTPP provide basic rights of reproduction, communication to the public and related rights, encouraging Parties to establish collective management organizations, which can overcome the difficulty of obtaining authorization from a large number of rights holders one by one in reality.

While two agreements protect related rights, RCEP only protects part and doesn’t explicitly provide for broadcasting or recording of unfixed performances. CPTPP stipulates more specific related rights. It protects more rights and has a wider scope. CPTPP also emphasizes in reproduction right that it can’t be infringed in electronic form. Due to the extremely rapid dissemination of electronic information in Internet and the lack of rules leading to no relevant agency to review and filter, copyright and trademark rights can easily be inadvertently infringed. This move can reduce the infringement of Internet intellectual property and better protect the relevant intellectual property in today's digital environment.

Second, RCEP provides for the protection of broadcasting organizations rights, and pays attention to the protection of satellite signals carrying encrypted programs. TPP has more comprehensive and strict regulations on the protection of satellite and cable signals carrying encrypted programs. But CPTPP froze relevant regulations and didn’t clearly stipulate the exclusive rights of broadcasting organizations. Obviously, this regulation is a concentrated expression of the will of the United States. And it was frozen after the United States withdrew from the TPP.

Furthermore, with regard to the management of collective organizations, RCEP stipulates that the Parties shall commit themselves to establishing appropriate organizations responsible for management and operation, and attach importance to the cooperation between their respective collective management organizations. CPTPP proposes a reporting mechanism. But the level of protection and emphasis is less than RCEP. Collective organization management is a new clause
based on the current new stage of economic and technological development. The leading operation of RCEP here helps developing countries to actively participate in and lead the formulation of international rules and express the reasonable demands of developing countries based on their national conditions. In addition, RCEP proposes technical protection measures (TPMs) and rights management information (RMI). But these provisions are mostly soft obligations, leaving a lot of room for interpretation. In practice, it often depends on the implementation level and strength of each party. The relevant provisions of the TPP have also been frozen, thus reducing the protection of the CPTPP. Finally, for the above provisions, RCEP stipulates that the Parties can provide appropriate limitations and exceptions in accordance with their laws and regulations. Taking into account the different economic development levels and legal norms of each party, the help and remedies that can be provided are also different, while CPTPP does not consider this problem.

To sum up, under the condition that some high-standard clauses of CPTPP are frozen, RCEP's protection of copyright and related rights is slightly better than CPTPP. But if these terms are unfrozen, the CPTPP will have greater protection and more reasonable splitting of content.

### 2.4.2 Geographical indications

RCEP and CPTPP stipulate that the Parties should protect trademarks through trademarks or other legal means. And the administrative procedures, the protection date of geographical indications and so on are generally similar.

Through comparison, it is known that RCEP has more detailed protection of geographical indications, ensures that there are sufficient and effective methods to protect geographical indications in local laws and regulations. Countries with relatively backward economic level and intellectual property protection level should try their best to improve relevant domestic laws to meet the requirements, so as to realize effective protection of geographical indications. Secondly, regarding the domestic administrative procedures for protection of geographical indications, some of the details of two agreements are different. CPTPP has higher requirements and its provisions on objection and cancellation are more specific. The reasons for rejecting protection are more sufficient, including situation of trademark confusion. It also has more provisions, which involve procedural rules, such as provisions that allow interested Parties to file lawsuits. The content of RCEP is relatively thin and needs to be supplemented in future revisions. Moreover, with regard to the protection of geographical indications under unconcluded international agreements, CPTPP is more detailed, requiring the Parties to provide details to public on the Internet, explaining the content of the details, and a reasonable period of time for objections.

It can be seen that RCEP and CPTPP have the same level of protection of geographical indications. The two agreements have their own priorities. The former protection content is more detailed, but the latter is more rigorous and imposes higher requirements on the Parties.

### 2.4.3 Genetic resources, traditional knowledge, and folklore

This content has a separate chapter in RCEP. CPTPP has no independent chapter. Its content is reflected in Article 18.16 of Section B, cooperation in the field of traditional knowledge. Compared with RCEP, it has fewer protection objects and does not include folklore.

Both RCEP and CPTPP attach importance to patent quality examination of traditional knowledge such as genetic resources. But the requirements are different. RCEP specifies "commitment" and CPTPP specifies "effort" and requires high quality. Second, RCEP allows "the Parties may institute appropriate measures to protect", stating that "appropriate means" doesn’t necessarily include its intellectual property system. This provision broadens the scope of protection measures, and the Parties can formulate appropriate measures to strengthen the protection of genetic resources outside the framework of the intellectual property system. CPTPP does not specify. With words such as "appropriate measures may be instituted", "committed to", "endeavors", etc., these intellectual property provisions determine the direction of intellectual property protection with soft law and soft obligations, and do not provide obligation of binding force and enforcement for the Parties [8]. This also shows that the intellectual property protection system for genetic resources and other contents is
not yet mature. And countries need to strengthen their attention and protection in this regard. RCEP also emphasizes the development of measures to provide protection for genetic resources and to inform stakeholders and other Parties of disclosure requirements regarding the source or origin of genetic resources. The CPTPP only proposes that the Parties should cooperate to improve understanding of genetic resources and traditional knowledge associated with genetic resources. It can be seen that RCEP pays more attention to the protection of genetic resources, which is also due to the persistence of China and ASEAN.

In general, there is not yet a high degree of consensus on the protection of this topic. RCEP is the first agreement to provide in an international treaty that "appropriate measures may be instituted" to protect such not yet institutionalized intellectual property. Compared with developed countries, the genetic resources of developing countries are relatively complete and abundant. And it is in line with national conditions to attach importance to the protection of this issue [9]. The determination of this topic is an important step for developing countries to begin to change the international rules of intellectual property to be dominated by developed countries. It reflects the demands of developing countries for the right to speak in international intellectual property governance, and also reflects the rise of status of developing countries in the international area.

2.5. In terms of law enforcement and procedural regulations, RCEP is looser and CPTPP is more comprehensive

2.5.1 Enforcement of intellectual property rights

RCEP and CPTPP have basically the same provisions on general obligations. The following are some of the more significant differences between RCEP and CPTPP. First, with regard to copyright procedures, the scope of CPTPP presumption is wider, and the scope of intellectual property rights it protects is also broader. Second, regarding civil and administrative procedures, CPTPP additionally stipulates conditions for implementation of injunction, the infringement of copyright and related rights, and the compensation system for counterfeiting trademarks, and stipulates expert fees. The content is far richer than RCEP. Third, with regard to criminal procedures, CPTPP analyzes labeling or packaging to determine applicable penalties, and provides broader protection of trade secrets, as well as criminal procedures for violations and penalty. RCEP doesn’t provide criminal penalties. With the frequent occurrence of intellectual property infringement, the criminal provisions of CPTPP can warn infringers, reduce infringements to a certain extent, and provide a favorable environment for development and innovation of intellectual property. Obviously, CPTPP has stricter protection of the above content than RCEP, with stronger enforcement and more mature regulations. However, almost all of the enforcement provisions of CPTPP are beneficial to the right holder, while RCEP shows the characteristics of taking into account both rights and obligations [5].

2.5.2 Cooperation and consultation

RCEP and CPTPP promote cooperation in protection of intellectual property between patent offices. RCEP emphasizes that capabilities of some Parties in the field of intellectual property are quite heterogeneous, which is a reflection of large differences in economic levels and capabilities of countries. Therefore, the requirements of some clauses are lower than those of CPTPP. CPTPP is only mentioned in the preamble, and not mentioned in the intellectual property chapter. RCEP also emphasizes cooperation in management of protection system for new varieties of plants. CPTPP specifically explains the scope of the subject cooperation and the content of the patent cooperation, and also made provisions on the public domain.

2.5.3 Transition periods and technical assistance

During the transition period, RCEP does not separately provide for the entry into force of the intellectual property chapter, but presents the transition period for each country in Annex I. In contrast, CPTPP does not provide a special transition period for the least developed countries, and only provides a transition period for some categories of intellectual property in some countries, which is directly listed in the final clause in the form of a list. Regarding technical assistance, RCEP lists the
specific content in Annex II. This is an important guarantee condition for developing countries to achieve the smooth realization of their development interests in the future [9]. RCEP chooses to allocate limited resources to the Parties according to their needs, which improves the efficiency of technical assistance and reduces losses. Technical assistance enables developing countries, especially the least developed countries, to obtain advanced technologies more conveniently, improve the business environment, and promote the division of labor in trade, thereby achieving substantial fairness in trade [10]. It will also further promote the domestic economic transformation of developing countries, thereby enhancing international status. CPTPP only mentions that the subject cooperation includes technical assistance to developing countries in article 18.13 in Section B Cooperation, and does not stipulate specific assistance measures. This is also a manifestation of developed countries pursuing the maximization of their own interests, without taking into account the differences in the overall national conditions of the Parties.

3. China's response strategy

China's intellectual property system started late, so there is a gap with the highest international level. Under such circumstances, China's right to speak in intellectual property is low. The intellectual property protection system still has problems of inadequate protection of intellectual property infringement and weak enforcement [11]. To some extent, it hinders technological innovation and economic growth [12]. Until 2008, when the state implemented the intellectual property strategy, China began to embark on a road of intellectual property development with Chinese characteristics. Then the intellectual property business developed rapidly, and the comprehensive strength increased significantly. Up to now, the legal provisions in field of intellectual property in China have been relatively complete. And the development speed has been extremely fast. At present, China has achieved the construction of a great intellectual property country, but it is still far from being a powerful intellectual property country. Therefore, China should take measures to strengthen the protection of intellectual property and provide policy directions for the implementation of the strategy of intellectual property power.

3.1. Improve intellectual property system

Through the comparison and analysis of intellectual property clauses under the RCEP and CPTPP agreements, it can be known that the overall protection of intellectual property of RCEP is not as strong as that of CPTPP. China has now joined the RCEP, and the RCEP has come into effect. Therefore, at this stage, China should take RCEP as an opportunity to gradually improve the domestic intellectual property system and the legal system in related fields, and appropriately benchmark the standards of CPTPP and even the expired TPP to improve infringement and illegal costs, creating a good business environment, aiming at building a strong intellectual property country, and realizing the transformation from "Made in China" to "Created in China".

For example, China's current Copyright Law is basically similar to RCEP requirements. In addition, the protection of satellite signals carrying encrypted programs can be strengthened, the protection period of copyright and related rights can be extended, and more stringent provisions of TPMs and RMI can be established. Although there are currently no such requirements for joining the CPTPP, if these clauses can be implemented, they will certainly play an important role in the protection of intellectual property and the innovation of the system, and promote the construction of an innovative country in China. The scope of trademarks protected by China's Trademark Law and RCEP does not include odor trademarks, while the Singapore Trademark Law Treaty and CPTPP have stipulated the registration and protection of odor trademarks. China should keep up with the international pace, and also include the smell trademark into the trademark law for protection. China's Patent Law should promote the establishment of rapid examination procedures to further accelerate the speed of patent applications and improve efficiency. In particular, the protection of undisclosed test or other data of
agricultural chemicals and pharmaceuticals should be increased to promote the rapid development of related industries.

Legislation should also emphasize the use and the diffusion of intellectual property [13], rather than just static protection, in order to promote innovation-driven development strategies and build an innovative powerhouse [14]. Taking the CPTPP as a benchmark, build a complete and well-structured intellectual property legal system [15], accelerate the protection of intellectual property in new fields such as artificial intelligence and big data, and at the same time further strengthen the protection, expand its scope of protection, and make it compatible with the economy, to adapt to the level of scientific and technological development, and promote the harmonious development of the economy and society.

3.2. Strengthen law enforcement

In 2019, in the Opinions on Strengthening Intellectual Property Protection, China put forward the requirements of strengthening civil and criminal judicial protection, increasing administrative penalties and law enforcement supervision, and implementing the classification and supervision of market entities' credit in order to promote the formation of a unified and fair legal environment.

The administrative protection of intellectual property is characterized by simple procedures, high efficiency and low cost. At the same time, there are shortcomings such as insufficient transparency and insufficient supervision [16]. Due to the short time and little experience of China's establishment of intellectual property system, despite the continuous improvement of relevant rules, there are still large differences in the administrative law enforcement capabilities of different regions. And the overall strength is not comparable to that of western developed countries [17]. With the rapid development of intellectual property and modern high-tech, block chain, Internet, artificial intelligence and other infringement phenomena emerge one after another. This new type of intellectual property infringement is more concealed than the previous traditional model, which requires law enforcement officers to pay more attention and strengthen law enforcement.

Therefore, China should increase the punishment of infringement and counterfeiting, strengthen the law enforcement, standardize the administrative law enforcement behavior, and improve the law enforcement means with the times. It is also necessary to carry out hierarchical and classified supervision with the help of government or third-party agencies to strengthen administrative supervision [18]. In addition, a unified standard for intellectual property administrative enforcement and judicial adjudication should be established. And the linking mechanism between administrative enforcement and the judiciary should be improved. If necessary, criminal penalties can be expanded based on national conditions to better protect intellectual property.

3.3. Lead the development of international intellectual property system

International protection of intellectual property is also constantly evolving. TPP set aside 22 provisions that led to the establishment of CPTPP, 11 of which were related to intellectual property and were of a high standard. It can be seen from this that the current international environment's demands for intellectual property are more inclined to balanced development. However, the development of today's international intellectual property system is in a deadlock, with active regional development and insufficient driving force for multilateral development. On the whole, the global governance of intellectual property has the trend of unilateralization and fragmentation. Each country uses various trade agreements to consolidate intellectual property advantages while restricting the development of foreign countries [19]. However, due to the different development needs of different countries, the governance of intellectual property has formed two distinct paths: developed countries expand their competitive advantages in trade by strengthening intellectual property protection standards to achieve their own interests and development needs. On the contrary, developing countries tend to build a fair and just intellectual property system in order to take into account the different economic development capabilities of each country.
As the world's second largest economy and one of the countries with the fastest-growing intellectual property system, China's economic and technological capabilities have grown rapidly, and the international influence is also gradually increasing. However, China is still in a weak position in terms of voice and international recognition in the global governance of intellectual property. Therefore in international environment, China should use bilateral and multilateral dialogue and cooperation mechanisms to coordinate international cooperation in field of intellectual property, and accelerate construction of a new international cooperation pattern of "four-sided linkage and coordinated advancement" with the help of intellectual property cooperation with countries along the "Belt and Road", in order to further increase the intensity of opening to outside world. The intellectual property rules in regionalization and globalization agreements such as RCEP should be made more balanced so that can be applied to countries with different levels of development in international context, getting the support of other developing countries to safeguard reasonable interests of developing countries, promote the common development and progress of developing countries and provide a new paradigm for the construction of international intellectual property system. It should also actively participate in the construction and reform of a new or der for the international protection of intellectual property and the global governance system of intellectual property, and promote the reform of bilateral and multilateral trading systems and cooperative innovation, so as to strengthen China's leadership and innovation in the field of international intellectual property, and grasp the dominance of intellectual property rules.

4. Epilogue

In the field of intellectual property, due to the different overall strengths and development stages of RCEP and CPTPP Parties, the content of RCEP and CPTPP have their own emphases. And their rules and forms have their own characteristics. RCEP innovates and revises the framework of TRIPS, taking into account the different legal systems and economic development levels of Parties, and is inclusive and balanced as a whole, with more specific provisions. CPTPP represents a high level of international economic and trade rules. It's mainly based on the rationality and rigor of the regulations. Its regulations have a wider protection scope and stricter enforcement requirements, which are beneficial to the Parties to promote innovation, pursue interests, and promote the economic development of countries. However, CPTPP places too much emphasis on the interests of developed countries and cannot take into account the Parties in the region. Countries with relatively backward national strength can only passively accept the rules that are not beneficial to themselves.

Comparing the two, when the frozen clauses are not applicable, the rules of RCEP on copyright, trademark, geographical indication and other issues are basically close to the level of CPTPP. And the content is similar to it. For genetic resources, traditional knowledge and folklore, RCEP has a higher level of protection and a leadership position. However, there is still a big gap between RCEP and CPTPP in terms of administrative law enforcement and judicial construction such as patent issues and enforcement of intellectual property rights. Therefore, China should seize the opportunity of the US withdrawal from the TPP, coordinate both domestic and international situations, and take RCEP as an opportunity to improve the domestic intellectual property system. Taking the CPTPP as a benchmark, further strengthen the protection of the intellectual property system, and strive to successfully join the CPTPP at an early date. At the same time, starting from the issues of genetic resources, traditional knowledge and folklore, actively participate in and lead the construction and reform of the global intellectual property governance system, and strengthen China's voice and international recognition in the field of intellectual property.

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