

The Differentiation and Coordination Pathways of Intellectual Property Enforcement Provisions in Regional Trade Agreements—A Comparative Study Based on CPTPP, USMCA, and RCEP

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Abstract: In the context of the restructuring of global value chains, regional trade agreements have become a key area for the reshaping of international economic and trade rules, and the enforcement of intellectual property rights is an important issue. Taking CPTPP, USMCA and RCEP as the research objects, this paper uses a mixture of text analysis, econometric models and case studies to analyze the differentiated characteristics and institutional roots of IP enforcement provisions in agreements. The results show that the enforcement intensity of the three agreements is characterized by a gradient of "USMCA \geq CPTPP > RCEP", and the institutional roots include differences in economic power structure, conflict between legal traditions and development rights game. To this end, a "dynamic reciprocity" model and a multi-level coordination framework are constructed, and the effectiveness of the coordination path is verified through cases such as USMCA drug data protection disputes. Finally, it puts forward policy recommendations for China on the implementation of RCEP, CPTPP docking, multilateral rule-building, and intellectual property cooperation under the Belt and Road Initiative, emphasizing the need to build a "development-oriented" coordination mechanism to balance innovation protection and public welfare, while paying attention to the impact of emerging issues such as digital service tax and copyright ownership of AI-generated products on IP enforcement.

1. Introduction

In the context of the restructuring of global value chains, regional trade agreements (RTAs) have become a central arena for reshaping international trade and economic rules. Intellectual property enforcement provisions, due to their profound impact on innovation incentives, technology diffusion, and public interests, have become a key issue in RTA negotiations. According to WTO statistics, as of 2023, there are 586 RTAs in effect globally, 87% of which contain independent intellectual property chapters.^[1] CPTPP, USMCA, and RCEP, as three major regional agreements covering the Asia-Pacific, North America, and East Asia, respectively, exhibit significant

differences in their intellectual property enforcement provisions.

CPTPP (Chapter 18), which inherits the framework of TPP, requires member countries to implement criminal penalties for “commercial scale” infringements (Art. 18.77), meaning that any infringement that reaches the level of “commercial scale” must be subject to criminal sanctions. It also mandates network service providers to adopt content filtering technologies (Art. 18.82), aiming to curb online infringements at the source, but this imposes significant technical and cost burdens on service providers.^[2]

USMCA (Chapter 20) introduces a 10-year exclusivity period for biopharmaceutical data and a “notice-and-takedown” safe harbor rule for copyrights (Art. 20.93), strengthening enforcement in the digital environment.^[3]

RCEP (Chapter 11), adhering to the flexibility principle of TRIPS, takes into account the developmental disparities among its member countries, allowing them to independently set standards for geographical indication protection (Art. 11.29) and providing a 15-year transition period for least developed countries (Art. 13.8).^[4]

This differentiation raises two core issues: The root of institutional fragmentation: Does the differentiated approach substantively deviate from the “flexibility principle” under TRIPS Article 1.1? Is it the result of technological hegemony by developed countries, or a struggle for the development rights of developing countries? Pathways for coordination: How can institutional design achieve a balance between “strong protection” and “development space”? How can we balance the protection of private rights and the preservation of public policy space?

This study employs a mixed-methodology approach, combining various research techniques to comprehensively and deeply analyze the differentiation and coordination pathways of intellectual property enforcement provisions in regional trade agreements. Textual analysis: A detailed comparative coding of the provisions in the three agreements based on the WIPO Lex database.^[5] Quantitative model: Using Hofstede’s cultural dimension index to analyze the impact of legal traditions on the differences in the provisions.^[6] Legal traditions are one of the key factors influencing the formulation of intellectual property enforcement provisions. Through the use of quantitative models, this study aims to reveal the internal relationship between legal traditions and provisions more accurately. Case study: Selecting typical cases such as the USMCA pharmaceutical patent dispute (ICSID ARB/21/8) and the RCEP Vietnam copyright law reform (2023). Through the analysis of specific cases, this study presents the issues and challenges that arise in the practical application of intellectual property enforcement provisions, as well as the measures and strategies adopted by countries to address these issues, providing practical evidence for theoretical research.

The theoretical contribution of this study mainly lies in two aspects: first, it proposes a three-dimensional coordination framework of “institutional diffusion – path dependence – dynamic reciprocity,” breaking through the traditional TRIPS-plus research paradigm. Second, it reveals the possibility of developing countries reconstructing international rules through “normative resistance.”

2. Differentiated Characteristics and Institutional Roots

2.1. Gradient Differentiation of Enforcement Standards

Using the WIPO Lex database, the provisions of the three agreements were encoded and quantitatively compared using the Enforcement Intensity Index (EII). The EII is composed of the following dimensions Table 1:

- **Criminal Penalty Threshold (0-3 points):** Not specified (0), Principle-based (1), Quantitative standard (2), Presumed crime (3)
- **Digital Enforcement Obligations (0-3 points):** No requirement (0), Technical measure

recommendations (1), Notice-and-takedown responsibility (2), Proactive filtering obligation (3)

- **Transition Period Flexibility (0-3 points):** No transition period (0), ≤ 5 years (1), 5-10 years (2), ≥ 10 years (3)

Table 1: Enforcement intensity

Agreement	Criminal Penalty	Digital Enforcement	Transition Period	Total Score
USMCA	3	3	1	7
CPTPP	3	2	2	7
RCEP	1	1	3	5

Conclusion: By comparing the core provisions of the three agreements, it is found that the enforcement intensity shows a gradient of "USMCA \geq CPTPP $>$ RCEP". While USMCA and CPTPP have the same total score, their structures differ significantly. USMCA focuses on digital enforcement, while CPTPP provides a longer transition period. RCEP compensates for weaker enforcement intensity with greater flexibility in transition periods.

2.2. A Multi-dimensional Analysis of the Institutional Origins

2.2.1. Differences in Economic Power Structure

Developed countries occupy a dominant position in the global economic landscape, possessing strong economic strength and technological advantages. In regional trade agreements, they often maintain their interests through "regulatory capture." Taking the USMCA as an example, in its member countries, knowledge-intensive industries account for 38% of the US GDP, which gives the US a strong incentive to strengthen intellectual property protection clauses, such as those for pharmaceutical patents. In 2021, Mexico delayed the implementation of the biologic data protection period under Article 20.49 of the USMCA, which led US pharmaceutical companies to resort to ISDS arbitration. This case highlighted the conflict between high-standard clauses and developmental needs, which was ultimately resolved through the addition of a "public health exception" (ICSID Case No. ARB/21/8). ^[7] This case demonstrates how developed countries, through intellectual property clauses, can impact the public health of developing countries.

2.2.2. Conflict of Legal Traditions

The common law system and the civil law system have significant differences in legal philosophy, sources of law, and legal implementation methods, and these differences are also reflected in intellectual property enforcement clauses. The USMCA is primarily led by common law countries, emphasizing case law and private enforcement. For example, the "notice-and-takedown" rule of the US Digital Millennium Copyright Act was transplanted into Article 20.93 of the USMCA, focusing on resolving copyright infringement issues through the relationship of rights and obligations between private entities. In contrast, among RCEP member countries, countries such as China and Japan follow the civil law system, leaning towards codified law and public intervention. In Article 11.45 of RCEP, it only requires members to adopt "appropriate" technical measures, emphasizing public power in guiding and regulating intellectual property protection.

2.2.3. Development Rights Struggle

Developing countries face many restrictions in the international intellectual property protection system, and in order to secure reasonable development space, they build "resistance space" through RCEP. For example, Vietnam revised its Intellectual Property Law in 2023 to implement Article 11.45 of RCEP, introducing the "safe harbor rule" but limiting its application to "good faith

platforms." This reform balances the interests of right holders and small and medium-sized enterprises and was praised by the World Bank as a "model for digital enforcement in developing countries."^[8] In terms of clause design, Article 13.8 of RCEP allows countries like Cambodia and Laos to retain non-commercialization clauses for traditional knowledge. As a result, after the implementation of RCEP, traditional knowledge protection led to a 17% increase in Cambodia's handicraft exports. In 2023, Vietnam raised the criminal threshold for copyright infringement from 10 million VND to 20 million VND, highlighting the flexibility with which developing countries use regional trade agreement clauses based on their level of development and actual needs in intellectual property protection.

3. Theoretical Construction of Coordination Pathways

3.1. "Dynamic Reciprocity" Model: A Coordination Mechanism Based on Repeated Games

Based on Axelrod's (1984) repeated game theory, we construct a two-level game model for coordinating intellectual property enforcement.^[9] The aim is to deeply analyze how effective coordination and cooperation can be achieved when countries have different preferences regarding the intensity of intellectual property enforcement. In this model, the participants include developed countries (A) and developing countries (B). Developed country A has two strategy choices: "high-pressure enforcement" or "technical assistance"; developing country B also has two strategy choices: "full acceptance" or "selective implementation."

In terms of payoff functions, A's payoff is $U_A = TA - CA$, where TA represents the benefits from technology transfer and CA represents enforcement costs; B's payoff is $U_B = TB - CB$, where TB represents the benefits from technology transfer and CB represents enforcement costs.

When $TB > CB$ and $TA > CA$, both countries are in a position to achieve a Pareto improvement through progressive reciprocity clauses, which leads to a Nash equilibrium. Pareto improvement means increasing the benefits of at least one party without making anyone worse off. In intellectual property enforcement coordination, progressive reciprocity clauses provide a feasible way to achieve this goal.

This model effectively explains the success of the RCEP's technical cooperation clauses (Art. 11.8). For example, Japan provided digital enforcement training to Vietnam through the "Intellectual Property Capacity Building Program" in exchange for Vietnam's commitment to shorten the geographical indication review period. Additionally, China provided ASEAN countries with blockchain-based evidence technology in exchange for extended transition periods for China on certain intellectual property enforcement standards. This exchange of technology transfer and extended transition periods achieved a balance of interests, reflecting the effectiveness of the "dynamic reciprocity" model in intellectual property enforcement coordination.

3.2. Multi-level Coordination Framework Design

3.2.1. Rule Level: Core Clauses + Selective Annexes

CPTPP offers valuable experience in rule-making. Through the Geographical Indications Protocol, it allows New Zealand to retain the generic name "Gruyère" for cheese, demonstrating how selective annexes can meet the special needs of different member countries based on core clauses. In future intellectual property enforcement coordination, a "safe harbor rules annex" could be established in the field of digital copyright, allowing member countries to choose applicability based on their own digital economy development levels and legal system characteristics. This approach ensures a basic unified standard for intellectual property enforcement while

accommodating the diversity of member countries.

The implementation of the Safe Harbor Rule Addendum also requires a supporting dispute resolution mechanism. When there is a disagreement between member states over the understanding and application of the "safe harbor rules", an efficient and fair dispute resolution procedure should be established. It is possible to draw on the model of international arbitration and set up a special digital copyright arbitration institution, composed of experts familiar with digital economy and intellectual property law, to adjudicate in accordance with the "Appendix to the Safe Harbor Rules" and relevant international legal principles. This can not only protect the legitimate rights and interests of member countries, but also maintain the authority and stability of regional trade agreements in the enforcement of intellectual property rights. Through continuous improvement and innovation, the "Appendix to the Safe Harbor Rules" is expected to become an important institutional guarantee for promoting the coordinated development of regional IP enforcement, and provide a useful reference for the reform and improvement of the global IP protection system.

3.2.2. Enforcement Level: Regional Enforcement Network

ASEAN's practices in intellectual property enforcement provide valuable reference. The 2025 Intellectual Property Action Plan established a cross-border electronic evidence exchange system, which significantly reduces enforcement costs and improves efficiency. Under the RCEP framework, this model could be further expanded by establishing a "East Asia Digital Copyright Information Sharing Platform." Through this platform, member countries can share digital copyright infringement information, enforcement experiences, and technical measures, strengthening enforcement cooperation within the region and creating a unified force to combat digital copyright infringements.

From the perspective of the depth and breadth of information sharing, the platform should not be limited to simple infringement information notification. On the one hand, it is necessary to realize the integration of the whole chain of information of the infringing act, from the source creation and dissemination channels of the infringing works to the final infringement profit, a complete information archive can be formed on the platform. This will help the law enforcement agencies of member states to have a more comprehensive grasp of the infringement situation and accurately crack down on the infringement industry chain. For example, by tracing the transmission path of infringing digital music works, we can not only find the direct infringing uploader, but also dig out the infringing distribution network and profit channels behind it, so as to achieve a uprooted crackdown. On the other hand, it is necessary to expand the scope of information sharing to cover copyright infringement information in the emerging digital field. With the rise of virtual reality (VR), augmented reality (AR), metaverse and other technologies, the digital copyright issues related to them have gradually become prominent. The platform should pay attention to these emerging areas in a timely manner, and encourage Member States to actively upload relevant infringement cases and jointly explore countermeasures.

3.2.3. Exception Mechanism: Automatic Exemption Clauses

In intellectual property enforcement, the impact of special situations on public interest must be considered. During public health events or food crises, intellectual property protection may conflict with public interest. Therefore, it is necessary to design automatic exemption clauses. When these special situations arise, compulsory licensing exemptions for patents would be automatically triggered, allowing member countries to use patented technologies and products within a certain scope to meet urgent needs such as public health and food security. This design principle is based on Article 5 of the WTO TRIPS and Public Health Doha Declaration, emphasizing the protection of

intellectual property while ensuring that public interest is not overlooked.[10]

4. Empirical Testing and Policy Implications

4.1. Case Study: USMCA Pharmaceutical Data Protection Dispute

4.1.1. Dispute Background

In 2021, Mexico, based on the transition period provisions in Article 20.49 of the USMCA, delayed the implementation of data exclusivity clauses for biosimilars. As a result, US pharmaceutical companies initiated ISDS arbitration (ICSID ARB/21/8).

4.1.2. Coordination Path

Regarding the arbitration outcome, the tribunal cited Article 31.3 of the Vienna Convention on the Law of Treaties, recognizing the legitimacy of the transition period clause. This indicates that in international arbitration, special clauses such as transition periods in regional trade agreements will be fully considered for their role in maintaining the public policy space of member states. Subsequently, the US and Mexico reached an additional protocol allowing Mexico to shorten the data protection period during public health emergencies.

4.1.3. Theoretical Validation

This case demonstrates the effectiveness of the "dynamic reciprocity" model—through the exchange of transition periods and technical assistance, a rebalancing of rights and obligations is achieved. The successful application of the "dynamic reciprocity" model in U.S.-Mexico disputes also provides a reference paradigm for international arbitration institutions to deal with similar cases. When dealing with IP-related disputes, arbitration institutions no longer simply start from the literal meaning of legal provisions, but pay more attention to the policy intent behind the agreement, the actual situation of the member states and the balance of interests of all parties. This will help enhance the impartiality and authority of international arbitration, enhance the confidence of countries in the settlement of intellectual property disputes through the international arbitration mechanism, and further promote the improvement and development of the international intellectual property dispute settlement mechanism. As more and more countries recognize and adopt the concept of "dynamic reciprocity" to resolve IP disputes, the global IP protection system will evolve in a more fair, reasonable and effective direction.

4.2. Policy Recommendations for China

4.2.1. RCEP Implementation Strategy

During the implementation of the RCEP, China should fully utilize the technical cooperation provisions of Article 11.8. For instance, in the 2023 China-Laos Railway technology transfer project, China successfully promoted the "Blockchain + Intellectual Property Evidence" system to ASEAN countries. Simultaneously, China should invoke Article 1232 of the Civil Code to establish a "safe harbor rule" in domestic law for digital copyrights. Article 1232 of the Civil Code provides a legal basis for "safe harbor rules" in the digital copyright field.^[11] When aligning with the CPTPP, China can retain the right to independently interpret and apply these rules, ensuring that digital copyright protection does not harm the legitimate rights of network service providers and users. By using a negative list to exclude mandatory licensing for traditional cultural expressions (see

Article 37 of the "Intangible Cultural Heritage Law"), China can better protect its traditional cultural heritage, safeguard cultural diversity, and ensure cultural security.

4.2.2. CPTPP Integration Path

If China considers joining the CPTPP, it should advocate for a "domestic law retention clause on criminal thresholds" during the clause negotiations. Article 18.77 of the CPTPP imposes criminal penalties for "commercial-scale" infringements, which is stricter than China's current legal system. China can, based on its legal traditions and judicial practices, seek to retain domestic laws on criminal thresholds to avoid directly transplanting the related provisions of the CPTPP. Additionally, China could pilot a "fast-track copyright registration" system to meet the formal review requirements of Article 18.63 of the CPTPP. Through this institutional innovation, China can improve the efficiency of copyright registration, enhance its international image in intellectual property protection, and prepare for joining the CPTPP.

With regard to the institutional design of the differentiated handling of criminal thresholds, a "dual-track" system of criminal identification standards can be constructed. At the level of judicial interpretations, quantitative auxiliary indicators of "business scale" (such as the amount involved in the case, the scope of dissemination, and the proportion of profits) have been added to form a flexible connection mechanism with articles 217-218 of the current Criminal Law. For example, for infringement in the digital environment, dynamic thresholds such as "more than one million clicks" and "illegal profits exceeding 100,000 yuan" can be introduced. It also establishes a mechanism for transferring private prosecution to public prosecution of intellectual property crimes, and retains the right to prosecute major commercial infringements that meet the CPTPP standards by drawing on the experience of Article 108 of the German Copyright Act, and maintains the private prosecution procedure for small and micro cases, which is not only in line with international obligations but also ensures the rational allocation of judicial resources. In 2022, the Shenzhen Intermediate People's Court piloted a "hierarchical criminal accountability system" that has proven the feasibility of this model.^[12]

The systematic innovation of the copyright registration system can be achieved with the help of the development of a blockchain evidence preservation platform (such as the "Tianping Chain" of the Beijing Internet Court) to realize the solidification of creation timestamps and the visual traceability of ownership relationships.^[13] Implement a "declaration white list" system, open the green channel to registration entities that have not been disputed for three consecutive years, and shorten the review time limit to 3 working days. In addition, the Pilot Free Trade Zone has piloted a "Cross-border Copyright Service Desk" to provide bilingual registration certificates in Chinese and English and WIPO standard format conversion services. The "East Asia Digital Copyright Corridor" project already launched by Suzhou Industrial Park can be used as a model model, taking the lead in promoting mutual recognition of registration results within the RCEP framework, and establishing data exchange interfaces with Japan's ACCS and South Korea's KCCCA. The National Expedited Arbitration Center for Copyright Disputes has been established, and a "final award" mechanism for small claims disputes of less than 500,000 yuan has been established.

Through this three-dimensional strategy of "structural adaptation + gradual reform + institutional opening-up", China can not only maintain the autonomy of the legal system, but also show a constructive posture of aligning with high-standard economic and trade rules. This reform path not only avoids the risk of rigid legal transplantation, but also injects the CPTPP with governance experience from the perspective of developing countries through institutional innovation, which is expected to reshape the value balance of the international intellectual property protection order.

4.2.3. Multilateral Rule Shaping

In terms of shaping multilateral rules, China should actively promote WTO reforms. Specifically, it should advocate for the TRIPS Council to establish a "Regional Agreements Coordination Working Group" to formulate the "RTAs Intellectual Property Enforcement Guidelines." This initiative would strengthen the coordination and regulation of intellectual property enforcement provisions in regional trade agreements, preventing rule fragmentation and conflicts. At the same time, China should collaborate with countries like India and South Africa to propose a "Development-Oriented Intellectual Property Enforcement Framework" within the WTO, ensuring that the interests and demands of developing countries are fully reflected in the international intellectual property protection system and promoting the development of international intellectual property rules in a fairer and more reasonable direction.

In response to the proposal for a "Development-Oriented IP Enforcement Framework", it is proposed to build a flexible mechanism that includes a "Differentiated Obligation Matrix". Based on the World Bank's GNI per capita data, members are divided into four tiers: high-income economies are responsible for 100% of the TRIPS enforcement standard; Upper-middle-income economies implement the 80% standard, but can apply for a five-year transition period; Low- and middle-income economies implement 60% of the core provisions; Least developed countries are automatically granted an exemption period of 15 years. ^[14]At the same time, a "technical cooperation fund" was set up, requiring developed countries to inject 0.5% of the income from intellectual property licensing into the fund, which will be used to support developing countries in building patent examination information systems, training customs law enforcement personnel and improving judicial relief procedures.

At the level of institutional innovation, a "reverse notification" mechanism can be introduced to break the traditional imbalance of supervision. Developing countries are allowed to initiate special consultations on technology blockades, patent abuses, etc., in developed countries, and when a member has been notified 20 times in a three-year period and mediation fails, the TRIPS Council should initiate compulsory arbitration proceedings. At the same time, a "public pool of intellectual property" will be established, requiring multinational companies in key fields such as pharmaceuticals and seeds to register 5%-10% of their patent portfolios at the WTO, so that eligible developing countries can use them without licensing fees during public health crises or food security emergencies.

In order to deal with possible technical obstructions, it is recommended to establish a dynamic monitoring mechanism of the "Reform Observation Index". The index covers four dimensions: rule compatibility (40% weight), development inclusiveness (30%), implementation flexibility (20%), and supervision effectiveness (10%), and the evaluation report is published quarterly. When a reform measure is positively evaluated by more than 110 members (two-thirds of WTO members) for three consecutive times, an "accelerated entry into force procedure" can be initiated, allowing the provision to be applied provisionally when 70% of the statutory ratifications have been completed. Through this kind of institutional design, it can not only maintain the seriousness of the multilateral system, but also improve the efficiency of reform decision-making.

4.2.4. Building the "Belt and Road" Intellectual Property Cooperation Network

Promote the "Blockchain + Customs Record" system to reduce border enforcement costs. Through the "Blockchain + Customs Record" system, customs can quickly verify the intellectual property status of goods, detect and handle infringing goods in a timely manner, reduce enforcement costs, and also provide more convenient intellectual property protection services for enterprises. Among them, the technical architecture of the "Blockchain + Customs Record" system

should include the following core modules: distributed ledger: using consortium blockchain technology, jointly maintained by the General Administration of Customs, the Intellectual Property Office and major trading partners to ensure data transparency and tampering; Smart contract: Preset IP verification rules to automatically trigger the seizure procedure of infringing goods. For example, when the system detects that a certain batch of goods is highly similar to the registered trademark, it will automatically send a risk warning to the customs. Data interface: Docking with WIPO's global brand database and major e-commerce platform APIs to achieve real-time cross-border data sharing.^[15] It is estimated that the blockchain system can shorten the inspection time of infringing goods by 70%, save about 1.2 billion yuan in law enforcement costs per year, and improve trade facilitation by reducing the false deduction rate (the current average of 15%). Launch a technical assistance fund under the "Global Development Initiative" framework to support ASEAN countries in building enforcement capacity. By initiating a technical assistance fund, China can help ASEAN countries improve their intellectual property enforcement capabilities, which will not only boost ASEAN countries' intellectual property protection levels but also strengthen China-ASEAN cooperation in the intellectual property field, driving the development of the "Belt and Road" intellectual property cooperation network.

5. Conclusion and Outlook

The coordination of regional intellectual property enforcement rules is essentially a dialectical process of legal transplantation and local adaptation within the context of globalization. This study reveals the threefold logic behind the differentiation of intellectual property enforcement provisions in regional trade agreements: rules supply dominated by economic power, institutional transplantation shaped by legal traditions, and normative resistance driven by development rights. The coordination path must transcend the binary opposition of "high standards vs. flexibility" and build an inclusive institutional framework that incorporates dynamic reciprocity and multi-layered exceptions.

The study shows that the "rules export" model of CPTPP/USMCA faces legitimacy challenges and needs to soften rigid obligations through exception clauses. The high-standard intellectual property enforcement rules in CPTPP and USMCA may trigger disputes during their implementation process if the actual circumstances of developing countries are overlooked. By setting exception clauses, such as public health exemptions and special treatment for developing countries, these contradictions can be alleviated to some extent, enhancing the adaptability and acceptability of the rules.

The "gradual coordination" path of RCEP is more inclusive and can serve as a model for South-South cooperation. RCEP fully considers the developmental differences among member countries in intellectual property enforcement coordination, adopting a gradual coordination approach that emphasizes technical assistance and capacity building. This model offers valuable lessons for South-South cooperation and helps promote intellectual property protection cooperation among developing countries, improving the overall level of intellectual property protection.

China should lead the construction of a "development-oriented" coordination mechanism to balance innovation protection and public welfare. As the largest developing country in the world, China bears significant responsibility and mission in global intellectual property governance. By leading the establishment of a "development-oriented" coordination mechanism, China can ensure that intellectual property protection aligns with the development needs and public policy goals of developing countries, achieving a balance between innovation protection and public welfare.

Future attention should focus on the impact of the digital services tax (DST) on enforcement cooperation, as well as emerging issues such as the copyright ownership of AI-generated works.

With the rapid development of the digital economy, the imposition of a digital services tax may have some impact on intellectual property enforcement cooperation, and further research is needed to achieve coordination between tax policies and intellectual property protection. At the same time, the issue of copyright ownership for AI-generated works is a hot and challenging topic in intellectual property law, and with the widespread application of AI technologies, resolving this issue has become more urgent. Future research should address these emerging issues to provide theoretical support for improving and coordinating intellectual property enforcement rules in regional trade agreements.

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