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Intellectual Property Disputes in the Era of the Metaverse: Complexities of Cross-Border Justice and Arbitration Consideration*

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The emergence of the metaverse, a complex three-dimensional virtual environment, has led to significant changes in the intellectual property (IP) landscape. This paper examines the challenges and legal intricacies of IP within the virtual realm, focusing on the unprecedented nature of these disputes and on the inadequacies of traditional jurisdiction methods. Drawing from international frameworks, including the International Law Association's Guidelines and WIPO's guides, the study critically explores arbitration as an alternate approach to metaverse IP disputes, analyzing its complexities and applicability. The paper further delves into challenges arising from diverse protection laws that pertain to the global nature of the metaverse, including the nuances of various digital assets like NFTs. By assessing jurisdictional difficulties, the paper addresses the adoption of decentralized justice platforms, and examines the role of Alternative Dispute Resolution (ADR) methods, this paper presents a comprehensive view of the evolving virtual legal field. It suggests that while innovative methods are emerging, traditional arbitration will likely remain the preferred choice for complex disputes, offering a balance of speed, cost-effectiveness, and legal robustness within the virtual world.

Key Words : Metaverse, Intellectual Property Disputes, Private International Law, Decentralized Justice, Arbitration

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Ⅰ. Introduction

The emergence of digital environments, especially the metaverse, represents an evolution in how socio-economic and cultural activities are conducted in the virtual realm. The metaverse, as a complex three-dimensional virtual space, is reshaping the intellectual property (IP) landscape, bringing forth unique challenges and legal complexities that demand consideration. The rising prominence of intellectual property in the metaverse has led to a surge in IP disputes, distinguished by their unprecedented nature and intricacy, further exacerbated by the borderless environment of cyberspace.

Traditional methods of jurisdiction and governing law determination, often grounded in tangible realities, struggle to adequately address the ethereal nature of intellectual property within the metaverse. While litigation is a conventional dispute resolution approach, it may not be effective for IP conflicts in this new virtual realm.

Informed by key international frameworks, including the International Law Association's Guidelines on Intellectual Property and Private International Law ("Kyoto Guidelines")[1] and World Intellectual Property Organization (WIPO)'s A Guide for Judges,[2] this paper aims to critically explore alternate approaches to intellectual property disputes in the metaverse era. The focus is on arbitration, elucidating its complexities and applicability in the evolving landscape of virtual reality.

Through a comprehensive analysis of the metaverse's intellectual property issues, the jurisdictional challenges, governing laws for litigation, and the proposal of decentralized justice and arbitration as potential solutions, this paper endeavors to contribute valuable insights for a more efficient and fair dispute resolution system within the virtual world. Furthermore, this paper delves into the unique aspects of

1) Ancel, Marie-Elodie and Binctin, Nicolas and Drexl, Josef and van Eechoud, Mireille M. M. and Ginsburg, Jane and Kono, Toshiyuki and Lee, Gyooho and Matulionyte, Rita and Edouard, Treppoz and Vicente, Dario, International Law Association's Guidelines on Intellectual Property and Private International Law ("Kyoto Guidelines"): Applicable Law (July 2, 2021). Accepted in Marie-Elodie Ancel, Nicolas Binctin, Josef Drexl et al., Kyoto Guidelines: Applicable Law, 12 (2021) JIPITEC 44 para 1 , Amsterdam Law School Research Paper No. 2021-27, Institute for Information Law Research Paper No. 2021-04, Available at SSRN: https://ssrn.com/abstract=3878860.

2) WIPO and the HCCH, "When Private International Law Meets Intellectual Property Law A Guide for Judges", 2019.

intellectual property litigation in the metaverse, evaluates the potential of arbitration, and contrasts traditional systems with emerging methods of dispute resolution, particularly emphasizing decentralized justice and arbitration.

Ⅱ. The Metaverse and Intellectual Property Issues

1. Concept of the Metaverse

The advent of the internet has led to the evolution of various services, including the emergence of the metaverse, a three-dimensional virtual world, where socioeconomic and cultural activities mirror the real world. This represents a new dimension beyond Virtual Reality (VR), which allows users to engage in diverse activities with avatars in a digital environment. Despite attempts to define it, the metaverse remains a rapidly evolving concept without a unified definition.[3] Platforms like Sensorium and Facebook's Horizon World signify the early stages of this evolution, representing a shift from Web 2.0 to Web 3.0, emphasizing user control, decentralization, and unique legal complexities.

The metaverse is the next phase of the Internet's evolution, fostering virtual shared spaces for various experiences. It symbolizes a profound shift of the human experience to the virtual realm, with platforms such as Fortnite and Roblox offering immersive virtual worlds. However, from a legal perspective, the metaverse has not yet been clearly defined or addressed by specific laws. Relevant legislation can be inferred from laws related to information and communication services or gaming.[4]

Current legislative efforts in the National Assembly of the Republic of Korea demonstrate attempts to define and promote the metaverse. These include the Metaverse Industry Promotion Act proposed by Representative Heo Eun-ah;[5] the Promotion of Metaverse Content bill, introduced by Representative Kim Seung-soo;[6]

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3) Chul-nam Lee, "A study on copyright issues in Metaverse - Focusing on the spatial data of digital twin -", Journal of Business Administration & Law Vol.31 No.4, 2021, p.463

4) Ara, Tom K.- Radcliffe, Marcos F.- Fluhr, Miguel- Imp, Katherine (2022), "Exploring the Metaverse. What Laws will apply?". DLA Piper-Chambers TMT. February 22th 2022. Disponible en: https://www.dlapiper.com/en/latinamerica/insights/publications/2022/02/exploring-the-metaverse/

5) Representative Heo Eun-ah's Bill, Bill Number 2117173, September 1, 2022.

6) Representative Kim Seung-soo's Bill, Bill Number 2116158, June 27, 2022.

and the Virtual Convergence Economic Development and Support Act proposed by Representative Cho Seung-rae.[7] Each offers unique perspectives on the concept of online space, in contrast to the physical one, emphasizing the metaverse's intricate blend of technology and socioeconomic activities.

In conclusion, the metaverse's rapid evolution and far-reaching implications necessitate dynamic, forward-thinking legislation. This legislative action must evolve alongside technological advancements, capturing the essence of the metaverse both lexically and legally and ensuring a coherent framework for its continued growth and exploration.

2. Intellectual Property Issues in the Metaverse

Intellectual property (IP) concerns are intensifying in the ever-expanding landscape of the metaverse, where virtual reality spaces foster interactions through decentralized collaborations. In these intricate virtual realms, users often engage via avatars, complicating the identification of the true creators of particular works. This ambiguity presents fresh challenges in legal interpretations of fair use and incites critical inquiries into the responsibility and accountability of anonymous infringers, potential trademark dilution within the metaverse, and the qualification of digital assets as 'goods' under existing trademark laws.

The urgency of these IP concerns is vividly illustrated in legal actions such as Hermès' January 2022 lawsuit against NFT creator Mason Rothschild for marketing 'Metabirkins,' unauthorized digital replicas of the renowned Birkin bag, thus infringing Hermès' trademark rights.[8]

The metaverse further introduces dynamic shifts within the digital economy. It cultivates spaces for the creation and distribution of virtual goods and services, such as in-game assets or unique designs, facilitating a transition from provider-driven trade rules to a user-centric model where individuals produce, sell, and even translate virtual profits into the real world.[9]

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7) Representative Cho Seung-rae's Bill, Bill Number 2114545, January 25, 2022.

8) Anmol Bahuguna, "Intellectual Property and Metaverse", International Journal of Science and Research (IJSR), Volume 11 Issue 9, September 2022, pp. 371-374, 372 https://www.ijsr.net/getabstract.php?paperid=SR22905165231.

Simultaneously, the blurred boundaries between the real-world and the metaverse have given rise to intriguing legal complexities. One noteworthy instance is the case involving GolfZone, a South Korean company that offered golf simulations of popular golf courses, allowing users to enjoy virtual golfing experiences. This virtual venture triggered a copyright infringement lawsuit regarding the protection of the golf courses' designs. In a significant ruling, the Supreme Court decided that the designer of the physical golf course retained the copyright, marking a pivotal milestone in intellectual property considerations within virtual reality.[10)]

These multifaceted intellectual property issues form critical flashpoints in the metaverse, where the propensity for infringement amplifies as tangible scenarios are replicated within virtual domains. Translations, transformations, or even deliberate misappropriations can lead to violations, as seen in the conversion of two-dimensional content into three-dimensional forms that may disrupt the original essence and infringe on existing rights.

Although the metaverse's intellectual property quandaries may not diverge drastically from conventional dilemmas, their manifestation, application, and the contextual complexity within this burgeoning platform necessitate novel contemplations. As the digital universe continues to evolve and reshape itself, an encompassing and nuanced discourse on intellectual property rights becomes indispensable to navigate the legal labyrinth fostered by the intersection of the metaverse, digital economy, and contemporary law.

3. Characteristics of Intellectual Property Disputes in the Metaverse

(1) Copyright Disputes

New challenges concerning IP rights emerge in the intricate virtual environment of the metaverse. Platforms such as Second Life have empowered users to craft content, emphasizing the creator's principle, wherein the original creator retains the copyright.

9) Korea Intellectual Property Office (KIPO), Intellectual Property in the Age of Digital Transformation: Focusing on the Metaverse, 2021, p,55.

10) Supreme Court Decision 2016Da276467 decided March 26, 2020.

However, the safeguarding of these rights can become complicated when users agree to terms that transfer these rights to platform providers, requiring many years to establish a clear takedown structure for copyright breaches. Inconsistent regulations or rules across various platforms add to the complexity, requiring continuous adjustments to licensing agreements, complicating tracking, and leading to legal cases such as the Golfzon case, which explored the transformation of two-dimensional content into three-dimensional VR content.

Transforming existing IP, such as mimicking real-world trademarks, can result in infringement and the ensuing legal complications. Another dimension of these disputes is the conversion of entities such as landscapes and architectural structures into VR, posing questions on the boundaries of infringement. Although laws often permit the free use of public artistic works, the widening reach of the metaverse complicates exceptions, such as those for private copying. When such conversions are executed by service providers, it raises the stakes for potential IP rights violations.

Globally, the significance of safeguarding IP rights has triggered legislative responses, notably the United States' Digital Millennium Copyright Act (DMCA). Bills, such as the DMCA, serve to protect IP in the digital age, even in the metaverse. Unauthorized monetization of content and absence of explicit consent are breaches of IP laws, with potential legal and financial ramifications. Adapting to each platform's usage regulations, which vary depending on the number of subscribers or views, may lead to frustration when determining charges for using copyrighted works.

The blending of varying IPs, termed "interoperation," ushers in both technical and philosophical challenges. As the metaverse and the broader digital realm evolve, these legal considerations and debates will indubitably sculpt the forthcoming trajectory of IP rights within the expansive digital universe. The blend of technological strides and legal determinations, influenced by cases and legislative measures, will persist in directing the dialogue and delineating the IP rights in the metaverse.[11)]

(2) Trademark Disputes

The metaverse has emerged as a new frontier for IP rights and retailers need to

11) James M. Cooper, Intellectual Property Piracy in the Time of the Metaverse, 63 IDEA 479, 500 (2023).

adapt to this paradigm shift, which includes unlimited term licenses for in-game items, overlapping marketing windows, and reduced editorial control. This means that players can freely mix brands and intellectual property within the virtual space, which brand owners actively want to encourage. Simultaneously, companies such as StockX have challenged traditional trademark laws by reselling non-fungible tokens (NFTs) of desirable items, such as limited-edition Nikes.

Currently, brands such as Nike, Ralph Lauren, and Walmart have filed trademarks for virtual goods, prompting businesses to consider registering trademarks in the metaverse. Such registrations can prevent the unauthorized use of physical brands in the digital world, where any object can be digitally replicated. However, companies such as Prada and Gucci are encountering challenges from unaffiliated individuals attempting to register their marks in the virtual sphere, demonstrating the complexities of this new domain.[12)]

The South Korean legal landscape provides insights into these complexities. The 2016 amendment to the South Korean Trademark Act included electronic displays as a form of trademark use. The law also emphasized that any such use must function with a source indicator. The Supreme Court of Korea further clarified that similar marks were not infringements unless they perform the trademark's essential functions.[13)]

With the rise of digital goods, the traditional concepts of possession and transfer have been strained. New legal definitions were required to capture the transmission or streaming of digital goods, and the absence of physical possession required clear legal definitions.[14)] This has led to changes in the Trademark Act, expanding the definition of trademark use to include acts related to digital goods and enforced since 2022.

As trademarks are not globally valid, registering them in each country where they are used becomes essential. The blending of different platforms in the metaverse adds further uncertainty to the process. To cope with this, companies may seek brand protection services such as Red Points, which scan for possible infringements and can act before damage to a brand's reputation occurs.[15)]

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12) *See* James M. Cooper, above n.11, p.501.

13) Wonoh Kim, "Contending Legal Issues on the 'Trademark Use' under Trademark Law", Journal of Korea Infomation Law Vol.14 No.1, 2010, p.14; Young Sun Cho, "Review of Trademark Use Notion in Korean Trademark Law in Enactive Approach", The Justice , Vol. No.10, 2008, p.153.

14) Soo-Geun Chae, Review Report on the Partial Amendment of the Trademark Act, Trade, Industry, Energy, SMES and Startups Committee, June 2021.

In conclusion, the evolving intersection of the metaverse and digital goods has necessitated substantial changes in IP laws. As the physical and virtual realities merge, businesses and regulators must innovate and adapt to protect these rights. Examples from international communities and South Korea's legal responses highlight this multifaceted legal arena. Vigilance and responsiveness are paramount for those seeking to promote their brands in the metaverse.

Ⅲ. Metaverse's Intellectual Property Disputes and Private International Law

Laws protecting IP rights related to patents, trademarks, and designs adopt the territorial principle, resulting in limitations when regulating conduct within the borderless environment of the metaverse. Furthermore, although copyright law adheres to the principle of non-formality, leading to internationally unified criteria for the establishment of rights, other legal matters vary and are handled differently by nations. Consequently, jurisdictional rights and the governing laws concerning IP infringement in the metaverse have become contentious issues. There is a need to establish criteria for recognizing international jurisdiction over legal disputes arising in the metaverse. The determination of jurisdiction for online legal conflicts is interpreted as being subject to the general standards of private international law. Therefore, a careful review of these related matters is required to understand the jurisdictional considerations for disputes occurring within the metaverse.

1. IP Territorial Principle and Conflicts of Law

(1) Intersection of Intellectual Property Rights and Private International Law

IP law and private international law are separate legal fields, each possessing different legal structures and objectives. IP can be broadly divided into two main categories: industrial property rights (including patents, trademarks, designs, and

15) *See* Anmol Bahuguna, above n.8, p.373.

geographical indications) and copyrights, along with related rights.

Private international law consists of three main categories: jurisdiction (the power of a court to adjudicate a case), governing law (the legal rules applicable to a case), and the recognition and enforcement of foreign judgments. It also encompasses administrative and judicial cooperation. As private international law deals with private relationships, criminal and administrative measures typically fall outside its scope. However, in some countries, criminal courts are obligated to make decisions on civil or commercial matters.[16)]

Although IP law and private international law are distinct legal fields, international legal issues may arise in the case of cross-border IP disputes due to the role of private international law in handling "conflicts of laws" in specific jurisdictional areas. When dealing with IP-related activities that occur abroad or are connected with foreign entities, the matters of court jurisdiction, governing law, and the recognition and enforcement of foreign judgments may become central to the dispute. These intersections enhance the complexity of IP disputes and necessitate a profound understanding of legal resolutions.

(2) Intellectual Property Disputes in the Metaverse and Private International Law

Globalization, digitalization, and the cross-border advancement of technology frequently give rise to issues that are at the intersection of IP rights and private international law. This connection is tied to the inherent territorial principle of IP, and the global nature of online actions amplifies the risk of IP infringement to across the world. The way courts handle these problems can affect the enhancement of IP enforcement, the predictability of court procedures, and the prevention of concerns over overlapping or insufficient responsibility.

Securing the predictability and completeness of disputes in various countries is becoming increasingly complex. Determining the connecting factors of actions that transcend national boundaries has become a matter of grave concern for courts.[17)]

Countries worldwide are evolving their IP laws to keep pace with the diminishing

16) *See* WIPO and the HCCH, above n.2, p.13.
17) *Ibid*, p.15,

importance of borders in contemporary society. For instance, the EU is working to solve issues regarding inter-state access to online content and modernizing the copyright system.[18)]

The WIPO and World Trade Organization (WTO) have adopted numerous international treaties for the harmonization of IP law, but unified rules regarding international jurisdiction over IP have not yet been enacted.

In virtual spaces, such as the metaverse, IP infringement can become an issue in two or more countries, and the jurisdiction or governing law may differ according to each nation's domestic law, altering the scope of remedy for the parties involved. In international IP infringement cases, the country in which the IP owner litigates and the country under whose laws they will seek judgment is highly significant.

The role of private international law has become even more important in metaverse IP disputes. IP infringement within the metaverse transcends virtual boundaries, further complicates the already complex issues of private international law, and underscores the importance of cooperation through private international law.

2. Jurisdiction in the Metaverse Environment

The international movement of data is accelerating, and technological advancements have enabled human interaction independent of physical location. This amplifies the potential for geographically distant activities to affect our lives, often supplanting local influences with virtual ones.[19)] Online applications such as emails, messengers, social networking services, and cloud data storage are spread across the globe with little relation to physical domains. Such data is often stored or controlled by multinational corporations such as Google, Facebook, Twitter, Apple, Microsoft, and Amazon.[20)]

In a virtual environment, issues such as who requests user' data and which country's laws apply introduce complex challenges to state jurisdiction. Appropriate legal regulation of data owners and managers as well as the collection of evidence in IP

18) Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market, COM(2016) 593; Directive on Copyright in the Digital Single Market 2016/0280 (COD).

19) Paul Schiff Berman, "Legal Jurisdiction and Virtual Social Life", Catholic University Journal of Law and Technology Volume 27 Issue 2 Spring 2019, at 103.

20) *See* Paul Schiff Berman, above n.19, p.104.

disputes has become vital. Therefore, a careful examination of state jurisdiction is necessary to recognize the intertwining of technological capabilities and legal complexities that characterize our increasingly interconnected world.

(1) State Jurisdiction

State jurisdiction is generally understood as one of several powers arising from a nation's sovereign rights and is classified into 'jurisdiction to prescribe,' 'jurisdiction to enforce,' and 'jurisdiction to adjudicate,' with variations in opinions regarding the enforcement jurisdiction.[21] The tripartite classification from the American Law Institute's (ALI) "Restatement of the Law (Third): The Foreign Relations Law of the United States (1987)" is used here.[22]

Acts within a virtual space, such as the metaverse, can occur globally, making jurisdiction within the metaverse different from that in real space. Still, it must fundamentally be based on real-world jurisdiction. This approach provides the tools necessary for regulating and protecting legal responsibilities and rights in the metaverse environment.

A state may freely legislate within the boundaries of international public law and apply specific norms extraterritorially through its jurisdiction to prescribe. The territorial principle enables a state to exercise jurisdiction over incidents within its territory, while the concepts of 'subjective territorial principle' and 'objective territorial principle' address the complexity of virtual spaces[23]

Additionally, the principles of nationality, passive personality, protection, and the universality enable a state to exercise jurisdiction over various scenarios, such as its nationals' actions or severe crimes threatening the international community.

The effects doctrine allows a state to exercise jurisdiction if an act abroad affects

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21) Kwang-Hyun Suk, "Regulation, Jurisdiction, and Governing Law of Cloud Computing," LAW & TECHNOLOGY, Vol.7 No.5, 2011, p.13.

22) The American Law Institute was founded in 1923. Since then, the ALI has promulgated Restatements of the Law in several subjects and other influential works such as the Model Penal Code and the Uniform Commercial Code, a joint venture with the Uniform Law Commission. The ALI also has sponsored studies and, in recent decades, has issued Principles of the Law, which are primarily addressed to legislatures, administrative agencies, or private actors, as opposed to Restatements, which are primarily addressed to the courts. Retrived from https://www.thealiadviser.org/inside-the-ali-posts/the-restatements-first-second-third/.

23) *See* Kwang-Hyun Suk, above n,21, p.16.

another country (although this is not formally recognized under international law) and functions within a limited scope in the U.S., such as in the antitrust and IP laws.[24]

Sections 402[25] and 403[26] of the ALI Foreign Relations Law Restatement govern the bases and limits of jurisdiction. They reflect certain principles and demand reasonableness, aligning with the ALI's Restatement view that multiple states exercising jurisdiction is undesirable.

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24) *Ibid*, p.18.

25) Restatement (Third) of Foreign Relations Law of the United States § 402. BASES OF JURISDICTION TO PRESCRIBE
Subject to § 403, a state has jurisdiction to prescribe law with respect to (1) (a) conduct that, wholly or in substantial part, takes place within its territory;
(b) the status of persons, or interests in things, present within its territory;
(c) conduct outside its territory that has or is intended to have substantial effect within its territory;
(2) the activities, interests, status, or relations of its nationals outside as well as within its territory; and
(3) certain conduct outside its territory by persons not its nationals that is directed against the security of the state or against a limited class of other state interests.

26) § 403. LIMITATIONS ON JURISDICTION TO PRESCRIBE
(1) Even when one of the bases for jurisdiction under § 402 is present, a state may not exercise jurisdiction to prescribe law with respect to a person or activity having connections with another state when the exercise of such jurisdiction is unreasonable.
(2) Whether exercise of jurisdiction over a person or activity is unreasonable is determined by evaluating all relevant factors, including, where appropriate:
(a) the link of the activity to the territory of the regulating state, i.e., the extent to which the activity takes place within the territory, or has substantial, direct, and foreseeable effect upon or in the territory;
(b) the connections, such as nationality, residence, or economic activity, between the regulating state and the person principally responsible for the activity to be regulated, or between that state and those whom the regulation is designed to protect;
(c) the character of the activity to be regulated, the importance of regulation to the regulating state, the extent to which other states regulate such activities, and the degree to which the desirability of such regulation is generally accepted.
(d) the existence of justified expectations that might be protected or hurt by the regulation;
(e) the importance of the regulation to the international political, legal, or economic system;
(f) the extent to which the regulation is consistent with the traditions of the international system;
(g) the extent to which another state may have an interest in regulating the activity; and
(h) the likelihood of conflict with regulation by another state.
(3) When it would not be unreasonable for each of two states to exercise jurisdiction over a person or activity, but the prescriptions by the two states are in conflict, each state has an obligation to evaluate its own as well as the other state's interest in exercising jurisdiction, in light of all the relevant factors, including those set out in Subsection (2); a state should defer to the other state if that state's interest is clearly greater.

Despite the differences between virtual and real spaces, jurisdiction in the metaverse should fundamentally follow the real-world jurisdiction to prescribe.[27] The borderless nature of the metaverse generates complexity in legal systems, requiring jurisdiction to transcend territorial boundaries and regulatory equality between domestic and foreign firms.

Extraterritorial application and legislative jurisdiction are interrelated; principles such as the effects doctrine arise from achieving national legislative goals, but are not universally accepted. Ultimately, the effects doctrine must be applied equally to domestic and foreign operators, with future demands likely for new legal principles in virtual spaces.

Enforcement jurisdiction refers to the authority to enforce domestic laws through physically coercive actions, while facing territorial constraints.[28] A state can only enforce regulations within its territory and requires another state's consent to exercise enforcement jurisdiction elsewhere.[29] With the de-territorialization of data, international cooperation is vital to ensure enforcement jurisdiction in virtual reality.

Judicial jurisdiction refers to the legal authority of judicial bodies to define the scope of trial jurisdiction, apply domestic laws, adjudicate particular matters, and render judgments.[30] This aspect is closely related to jurisdiction in the metaverse, encapsulates the challenges and necessities of managing legal frameworks in a borderless virtual environment, and reflects the ever-evolving technological environment and the global economic system.

(2) Jurisdiction in the Metaverse

In metaverse-related litigation, national jurisdiction is treated as an important issue, signifying the authority of a court to adjudicate a legal matter. In criminal and administrative cases, the scope of the jurisdiction to adjudicate aligns with the jurisdiction to prescribe, meaning that a country has the same right to enact and enforce laws within its territory as it does to conduct trials. However, in civil cases, there is a higher likelihood of complex international elements or legal issues becoming involved, which may lead to the scope of the jurisdiction to prescribe not aligning

27) *See* Kwang-Hyun Suk, above n,21 p.20.
28) *Ibid,* p.25.
29) *Ibid*, p.36.
30) *Ibid,* p.25.

with the jurisdiction to adjudicate. In such cases, separate judgment standards are required. If a country has jurisdiction to adjudicate, then trials are possible in that country's courts. Conversely, if the jurisdiction to prescribe is in a foreign country, the trial proceeds according to the laws of that jurisdiction. The complex nature of the metaverse and international activities further complicates jurisdictional issues, and effectively resolving these issues requires simultaneous consideration of both the characteristics of the metaverse and the principles of international law.[31)]

3. Summary and Implication

This chapter explored the complex interplay between IP rights disputes arising within the metaverse and the principles of private international law. Differences in the protection laws for patents, trademarks, and designs across countries create limitations in regulating legal actions that transcend national borders within a metaverse. Unlike the internationally unified criteria for the inception of copyright, other legal issues present difficulties, as they are handled differently at the national level. The intricate characteristics of legislative, enforcement, and judicial jurisdictions demand the establishment and consistent application of international standards for determining jurisdiction over IP disputes within a metaverse.

IP disputes within the metaverse are continually becoming more complex. Hence, the importance of clear standards and approaches to international jurisdiction and the governing law for such disputes is increasingly highlighted. Considering the characteristics where jurisdiction to adjudicate and jurisdiction to legislate may align in criminal and administrative cases but not in civil cases, resolving this issue requires a comprehensive understanding that simultaneously considers the specificities of IP rights and the metaverse environment.

31) *See* Kwang-Hyun Suk, above n.21, p.25.

Ⅳ. Jurisdiction and Governing Law for Intellectual Property Litigation in the Metaverse

As actions in cyberspace increase, transcending traditional territorial concepts, litigation becomes more complex owing to the lack of a specific place concept. Existing theories cannot fully determine the jurisdiction to adjudicate, leading to views that suggest the necessity for Interspace Jurisdiction and Private Interspace Law.[32] Various positions on this issue range from attempting legislation based on the effects theory to considering unique jurisdictional rules that are distinct from the real space.[33] However, the current sentiment leans toward the premature establishment of unique rules, with some opinions advocating partial modifications or flexible operations based on the existing jurisdictional rules of the real space.[34] Meanwhile, the international community, including the ALI, Max Planck Institute, and International Law Association, is proposing principles to address IP disputes in cyberspace, focusing on determining the governing law for infringements on the internet and providing a legal basis for effectively handling such disputes.[35]

1. Jurisdiction in the Metaverse's Intellectual Property Disputes

(1) Limitations of Establishing Cyber Jurisdiction

Cyberspace, like the metaverse, can be accessed from anywhere. The locational concepts of real space are difficult to apply to cyberspace's complex structure. Accordingly, if specialized norms for cyberspace are established, the issues of allocation of jurisdiction and choice of governing law will be resolved; however, such

32) Kyung Han Sohn, "International Developments in Electronic Commerce Legislation", The Justice Vol.35 No.4, 2002, p.124.

33) Sang-Han Wang, "Electronic Commerce and Jurisdiction", International Trade Law, Vol. No.27, 1996, p.13.

34) Kwang-Hyun Suk,, "Electronic Commerce and International Jurisdiction", Internet Law Journal Vol. No. 2, 2003, p.461.

35) Wataru Fukumoto "International jurisdiction about intellectual property right with special reference to "intellectual property: principles governing jurisdiction, choice of law, and judgments in transnational disputes" by the American Law Institute", Institute of Intellectual Property Bulletin, 2005, p.136.

an establishment is currently challenging.

First, given the nature of the metaverse or virtual space, there is a need to apply the same principles worldwide. However, in reality, there is no existing international convention that unifies jurisdiction to adjudicate, even in the physical world. The Hague Conference on International Private Law prepared a preliminary draft in 1999, but it did not lead to a treaty because of the differences between the United States and Europe.[36)]

Secondly, there have been drafts of multilateral treaties such as The Hague Convention of 30 June 2005 on Choice of Court Agreements ("the Convention") and The 2019 Convention on the Recognition and Enforcement of Foreign Judgments in Civil and Commercial Matters ("the 2019 Judgments Convention") in recent years, but content related to intellectual property rights was ultimately not included. In a situation where unification of international private law principles is difficult and acute national interests intersect, the establishment of unified international legal principles for metaverse IP disputes remains an extremely complex and challenging task.

(2) Jurisdiction over the Metaverse's Intellectual Property Disputes

The recent amendment to South Korea's Act on Private International Law (APIL), enacted in 2022, introduced new provisions governing international jurisdiction over IP litigation. These provisions are presented in Chapters 1 (General Provisions) and 5 (Intellectual Property Rights). Article 38 of the amended APIL recognizes special jurisdiction where IP rights are protected, used, exercised, or registered in the South Korea.

Article 39 of the amended law governs lawsuits concerning IP infringement.[37)]

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36) PRELIMINARY DRAFT CONVENTION ON JURISDICTION AND FOREIGN JUDGMENTS IN CIVIL AND COMMERCIAL MATTERS, adopted by the Special Commission on 30 October 1999.

37) Article 39 (Special Jurisdiction over Lawsuit Regarding Infringement of Intellectual Property Rights)
(1) A lawsuit regarding the infringement of intellectual property rights may be filed with the court, in any of the following cases: Provided, That this shall be limited to the results which have occurred in the Republic of Korea:
1. Where such infringement has been committed in the Republic of Korea;
2. Where the results of such infringement have occurred in the Republic of Korea;
3. Where such infringement has been committed against the Republic of Korea.
(2) Article 6 (1) shall not apply where a lawsuit is filed pursuant to paragraph (1).
(3) Notwithstanding paragraphs (1) and (2), where a serious infringement of intellectual property

Though some provisions have been criticized, under Article 39(1)(3), special jurisdiction of South Korea is recognized where metaverse IP infringements have occurred in multiple countries, but such infringements have been committed against South Korea.[38] This aspect of the amended APIL has adopted a method similar to the International Conflict of Laws in Intellectual Property (CLIP) principles.[39]

The amended APIL acknowledges jurisdiction by agreement between parties but allows the court to refuse the exercise of jurisdiction in specific exceptional cases.[40]

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rights is committed in the Republic of Korea, a lawsuit regarding all the results caused by the infringement, including the results that occur in a foreign country, may be filed with the court.

(4) Article 44 shall not apply where a lawsuit is filed pursuant to paragraphs (1) and (3).

38) Ju Yoen Lee, "Jurisdiction in International Litigation over Intellectual Property Rights under the Korean Act on Private International Law of 2022: An Analysis of the General Part and the Special Part", Korea Private International Law Journal, Vol.28 No.1, p.228.

39) Article 2:202: Infringement

In disputes concerned with infringement of an intellectual property right, a person may be sued in the courts of the State where the alleged infringement occurs or may occur, unless the alleged infringer has not acted in that State to initiate or further the infringement and her/his activity cannot reasonably be seen as having been directed to that State.

Article 2:203: Extent of jurisdiction over infringement claims

(1) Subject to paragraph 2, a court whose jurisdiction is based on Article 2:202 shall have jurisdiction in respect of infringements that occur or may occur within the territory of the State in which that court is situated.

(2) In disputes concerned with infringement carried out through ubiquitous media such as the Internet, the court whose jurisdiction is based on Article 2:202 shall also have jurisdiction in respect of infringements that occur or may occur within the territory of any other State, provided that the activities giving rise to the infringement have no substantial effect in the State, or any of the States, where the infringer is habitually resident and

(a) substantial activities in furtherance of the infringement in its entirety have been carried out within the territory of the State in which the court is situated,
or

(b) the harm caused by the infringement in the State where the court is situated is substantial in relation to the infringement in its entirety.

40) Article 8 (Jurisdiction by Agreement)

(1) The parties may agree on international jurisdiction over a lawsuit arising from a specific legal relationship (hereafter in this Article referred to as "agreement"): Provided, That such agreement shall not be effective, in any of the following cases:

1. Where the agreement is no longer effective under the laws of a country to have international jurisdiction by agreement (including laws regarding the designation of the applicable law);
2. Where the parties to the agreement had no capacity to reach such agreement;
3. Where the lawsuit subject to an agreement pursuant to the statutes or regulations, or treaties of the Republic of Korea falls under the international jurisdiction of a country other than the country agreed upon by the parties;
4. Where the effects of the agreement, if recognized, are clearly contrary to good morals or

Jurisdiction by agreement is permissible in lawsuits related to contracts or the infringement of IP rights and possible in lawsuits regarding infringement where the validity of the registered IP is a preliminary issue.[41)]

In the case of infringements occurring in cyber spaces, such as the metaverse, the place where the results occurred may span multiple countries. If an exclusive jurisdictional agreement is made concerning the country where such rights are infringed, it will assist in resolving the dispute without ambiguity. While the ALI principles focus on the essential parts of the infringement, the amended APIL and CLIP principles consider both the country to which the infringing acts are directed and the substantial place where the results occur.

However, this approach has certain limitations. It may become difficult to prevent or respond effectively to infringements if the law does not quickly adapt to the rapidly changing digital environment or if international cooperation is lacking or inconsistent.

2. Governing Law in International Intellectual Property Disputes

(1) Determining Governing Law for Intellectual Property Disputes

The determination of the governing law for IP rights, requires the consideration of several principles including (i) lex protectionis, which applies the law of the country where protection of the IP rights is sought, (ii) lex loci originis, which uniformly applies the law of the country of origin of the IP rights, and (iii) lex fori, which

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other public order of the country in which such lawsuit is pending.

(2) An agreement shall be reached in writing (including electronic expression of intent exchanged via telegram, telex, facsimile, electronic mail, or any other means of communications).

(3) Jurisdiction determined by agreement shall be presumed to be exclusive.

(4) Where an agreement contains contract provisions between the parties, the effects of other provisions in the contract shall not affect the effects of the agreement's provisions.

(5) Where there is an exclusive jurisdiction agreement between the parties in favor of a foreign court regarding a lawsuit arising from a specific legal relationship, but where the lawsuit is filed with the court, the court shall dismiss the relevant lawsuit: Provided, That the same shall not apply in any of the following cases:

1. Where the agreement is not effective for falling under any subparagraph of paragraph (1);
2. Where jurisdiction by pleading under Article 9 arises;
3. Where the court of a country to have international jurisdiction by agreement decides not to review the case;
4. Where sufficient grounds exist to prevent the agreement from being properly fulfilled.

41) *See*, Ju Yoen Lee, n.38, p.,213.

applies the law of the forum.

The "country of origin" of IP rights is understood to mean, in the case of patents, the country where the patent was first granted and for trademarks, the country where it was first used.[42] In the case of copyright, Article 5(4) of the Berne Convention for the Protection of Literary and Artistic Works (Berne Convention) defines the "country of origin" as the country of first publication of the works.[43] Applying the law and jurisdiction of the country of origin would naturally be highly beneficial for the uniform and straightforward resolution of disputes.[44] However, if the forum is not the country of origin, it may be burdensome for the court to navigate and interpret the laws of various countries of origin. According to the lex fori principle, the court can swiftly adjudicate under its own law, but the scope of protection may vary according to the law of the forum (lex fori), potentially encouraging forum shopping.[45] Therefore, in most countries, the principle of lex protectionis is often adopted for determining the governing law for IP rights, at least in cases of infringement of IP rights.[46]

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42) Yeon Kim, Jeong-Ki Park, In-Yu Kim, Private International Law (2nd Edition), Bobmunsa, 2006, pp.279~280.

43) Article 5(4) The country of origin shall be considered to be
(a) in the case of works first published in a country of the Union, that country; in the case of works published simultaneously in several countries of the Union which grant different terms of protection, the country whose legislation grants the shortest term of protection;
(b) in the case of works published simultaneously in a country outside the Union and in a country of the Union, the latter country;
(c) in the case of unpublished works or of works first published in a country outside the Union, without simultaneous publication in a country of the Union, the country of the Union of which the author is a national, provided that:
(i) when these are cinematographic works the maker of which has his headquarters or his habitual residence in a country of the Union, the country of origin shall be that country, and
(ii) when these are works of architecture erected in a country of the Union or other artistic works incorporated in a building or other structure located in a country of the Union, the country of origin shall be that country.

44) Korea Institute of Technology and the Law, A Study on the Private International Legal Issues of Copyright, Ministry of Culture, Tourism and Sports, December 2003, p. 136.

45) Seung Jong Oh, Haewan Lee, Copyright Law (4th Edituon), Parkyoungsa, 2005, p.566.

46) Graeme B. Dinwoodie, "BOUNDARIES OF INTELLECTUAL PROPERTY SYMPOSIUM : CROSSING BOUNDARIES : DEVELOPING A PRIVATE INTERNATIONAL INTELLECTUAL PROPERTY LAW : THE DEMISE OF TERRITORIALITY?", 51 Wm. & Mary L. Rev. 711, 729(2009).

(2) Determining an International Treaty on Intellectual Property Law

The provisions of governing law in private international law function as supplementary principles applicable to legal conflicts. Therefore, when a relevant international treaty establishes rules for conflicts concerning different fields of IP rights, these provisions take precedence. Private international law applies only in the absence of relevant international treaties or rules for conflicts.[47)]

However, finding an international treaty that explicitly stipulates the governing law for IP rights is often difficult. For example, opinions vary as to whether the Berne Convention contains provisions on governing law. The prevailing view is that the Paris Convention for the Protection of Industrial Property does not include any conflict norms.[48)]

Even if the Berne Convention were to have rules for conflicts and if those rules applied to specific disputes, such as infringement only, then the conclusion would be that there are no conflict norms within the Berne Convention for other issues.[49)]

Furthermore, the WIPO Guidelines on the Berne Convention expressly state that there are no norms for conflict laws within the Convention.[50)] Hence, in copyright infringement lawsuits, the plaintiff is not limited to filing a suit only where the infringement occurred, but may also sue where the defendant's assets are located. In such cases, the court determines the governing law by applying the conflict norms of that country.

Ultimately, the determination of the governing law in IP rights disputes appears to result in the application of the provisions concerning governing law for IP rights within private international law.

(3) Regulation of Governing Law for Intellectual Property

Article 40 of South Korea's Act on Private International Law (APIL) states, "The

47) Ministry of Justice, Commentary on Private International Law, 2001, p.88.

48) Kye Hwan Ryu, "A Study on Intellectual Property Rights Litigations and Governing Law", Korea Private International Law Journal, Vol.19 No.2, 2013, pp.317-322.

49) Kwang-Hyun Suk, Private International Law and International Litigation (5th Edition), Parkyoungsa, 2012, pp.132-133.

50) Guide to Berne Convention for the Protection of Literary and Artistic Works(Pars Act, 1971)(WIPO, 1978, p.34.

protection of IP rights shall be governed by the law of the country in which such rights are infringed." This concise statement appears, on its face, to pertain only to 'infringement,' but there remains a need for academic and judicial discussion regarding whether its scope also encompasses issues such as the establishment of IP rights, their validity, the content of rights, transfer, and extinguishment.

Many scholars argue that at the time of the introduction of the Private International Law in 2001, there was no consensus on the appropriate wording to expressly articulate the principle of 'lex protectionis,' and therefore, this provision did not directly specify the principle of 'lex protectionis.' [51] Article 40 can be considered a declaration of the principle of lex protectionis concerning IP rights as a whole.[52]

In some case law, the term 'country of protection' has been used to denote the country that protects IP rights, but it must be understood as a concept that encompasses not only the country where protection is required but also the country that grants protection.[53]

(4) Limitations of Governing Law Intellectual Property Infringement in the Metaverse

Cyberspaces, such as the metaverse, are ubiquitous in that they transcend national borders and can be accessed anywhere in the world. Consequently, conflicts arise with the traditional territoriality principle of IP rights. As a result, infringement of IP rights within a metaverse can be considered as occurring in every country around the globe. However, Article 40 of South Korea's Act on Private International Law (APIL) does not make any provisions for such ubiquitous infringement.[54]

Some scholars suggest that, in order to avoid a fragmented approach to governing law across multiple countries based on the lex protectionis principle (law of protection), the rules of Article 21(1) of APIL[55] should be used in cases of

51) Kwang-Hyun Suk Commentary on Private International Law of 2001 (2nd Edition), Jisan, 2003, p.192.

52) *See* Kwang-Hyun Suk, above n.49, pp.132-133.

53) In-Ho Kim, "The Application and Limitation of the Lex Loci Protectionis (the Law of the Country for which Protection Is Sought) for the Infringement of Intellectual Property Right", Human Rights and Justice, Vol. No.429, 2012, p.95.

54) *Ibid,* p.107.

55) Article 21 (Exception to Designation of Applicable Law)

infringements that occur ubiquitously or elsewhere. The main objective this article is to apply the law of the state most closely connected to the infringement.[56] However, Article 21(1) acts primarily as a general provision directing the choice of governing law. This aligns with the intent of Article 40, which invokes the law most closely related when the specified governing law is less related to the corresponding legal relations. As a result, in ubiquitous infringement cases, it lacks clear criteria for identifying the most relevant state. While existing theories may enhance predictability in selecting the governing law, maintaining its fairness continues to be a key difficulty in private international law.[57]

Private International Law determines the protection of IP rights based on the law of the place where the infringement occurred. Understanding the term "place of infringement" leads to two main perspectives. Some consider "place of infringement" to mean the area where the consequences of infringement occur,[58] whereas others hold the view that it includes both the areas where the infringement act took place and where the results were felt.[59]

According to these two perspectives, the understanding of the governing law for IP infringement within a metaverse differs. If priority is given to the place where the

(1) In case the applicable law specified by this Act is less related to the corresponding legal relations and the law of another country, which is most closely connected with such legal relations, evidently exists, the law of the other country shall govern.

(2) The provision of paragraph (1) shall not be applied if the parties choose the applicable law by agreement.

56) Article 21(1) stipulates that if, according to Article 40, the law of the place where intellectual property rights are violated is less related to the infringement, and another country's law is evidently more closely connected with the entirety of the infringement, then the law of that other country can serve as the governing law. WooJung Jon. "International Disputes Resolution Related to Intellectual Property Rights in the Metaverse: On International Jurisdiction, Governing Law, and Arbitration Clauses," Korean Journal of International Trade and Business Law Vol.32 No.1, 2023, p.162.

57) In determining the country most closely connected, specific criteria should be established to improve both fairness and predictability in selecting the governing law. While existing theories can enhance predictability, ensuring the fairness of such law remains a challenging issue within the realm of metaverse international private law. To put it another way, the unique characteristics of the digital society make it difficult to identify the appropriate law using private international law alone. Kyung Han Sohn, "New Approach for Conflict of Laws Rules on Intellectual Property," KOPILA Journal, Vol.27 No.1, 2021, p.59.

58) *See* Kwang-Hyun Suk, above n.51, p.193.

59) Sung Ho Lee, "International Jurisdiction and Governing Law in Cyberspace Intellectual Property Matters", The Justice Vol. No.72, 2003, p.195.

infringement occurred, the law of the country where the infringement occurred becomes the governing law. Conversely, from the standpoint that considers both the place of the juristic act and the result, the laws of the country where the infringement occurred and where the results were felt could apply.

However, this approach has its issues. Specifically, if the laws of the originating or receiving location are applied as the governing law, international courts may struggle to determine which law to apply. Moreover, the ubiquitous nature may lead to the simultaneous application of multiple countries' laws.[60]

Furthermore, responsibility for actions that facilitate the infringement of someone else's IP rights was once strongly tied to direct infringement. However, this connection has weakened since the emergence of virtual spaces.[61] Hence, consideration is needed as to whether applying the law of the country requiring protection or the general law of torts is appropriate.[62]

Currently, Private International Law applies the principle of lex protectionis to all IP infringements without making such distinctions. However, this does not provide an adequate response to contributory liability through the Internet or other forms of indirect infringement.

3. Summary and Implication

The jurisdiction and application of governing law for IP disputes in the metaverse present complex challenges owing to their global, unbounded nature. Traditional jurisdictional methods often fall short, complicating the resolution of IP disputes between users and making protection within cyberspace challenging. The situation is further complicated by various coexisting theories and positions, making it difficult to select a specific nation's laws or international treaties as the governing law.

Put simply, the complexities of the digital society make it difficult to determine the appropriate law by relying solely on private international law. Given these challenges, there is a growing recommendation to use alternative dispute resolution procedures.

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60) *See* In-Ho Kim,, above n.53, p.108.

61) *Ibid*, p.97.

62) Andrew Dickenson, The Rome II Regulation: The Law Applicable to Non-Contractual Obligations, Oxford university Press, 2008, pp.469-470.

Courts are conflicted over prioritizing either the area of infringement consequences or the location where the act occurred, and current private international law does not adequately address indirect infringements. These can include contributory liability through the internet, violations of owners' rights, and potential obstructions to creativity.

To safeguard IP rights in cyberspaces and effectively resolve IP disputes, there is a pressing need for the introduction of international principles or agreements. This collaboration within the international community requires comprehensive research to establish jurisdictional rules tailored to cyberspace and to improve methodologies for determining the governing law. This would offer a more stable and systematic legal framework for IP rights and disputes within the virtual realm.

Ⅴ. Conclusion: Decentralized Justice and Arbitration for Dispute Resolution

The interplay between IP rights disputes within the metaverse and private international law presents intricate challenges. These challenges stem from the diverse protection laws for patents, trademarks, and designs across countries, making it difficult to regulate legal actions that transcend national borders within the virtual world. From legislative to judicial perspectives, these complexities are further compounded by the principle of territoriality, which affects all key aspects of private international law.

The limitations of current private international law are evident, and as previously discussed, there are scholarly views advocating for Interspace Jurisdiction and Private Interspace Law to address IP disputes arising in the metaverse. It's evident that traditional theories are inadequate for the complexities of the virtual domain.[63] While establishing and implementing a unified system is challenging, considering the use of

63) In the relationship between cyberspace and physical space, it is necessary to resolve the distribution of jurisdiction between cyber courts and real-world courts, as well as the choice between cyber norms and real-world norms. The former issue requires the establishment of what is commonly referred to as Interspace Jurisdiction, while the latter calls for the creation of Private Interspace (David Johnson & David Post, Recent Case, Civil Procedure – D.C. Circuit Rejects Sliding Scale Approach to Finding Personal Jurisdiction Based on Internet Contacts – GTE New Media Services Inc. v. Bellsouth, 113 HARV. L. REV. 2128 (2000)). See Kyung Han Sohn, above n.32, pp.123-124.

alternative dispute resolution may be a more pragmatic solution than traditional litigation.

Continuing the exploration in the metaverse, IP disputes can vary widely among the different kinds of platforms and users, such as business-to-business, business-to-consumer, and consumer-to-consumer. Unique digital assets, such as NFTs, add further challenges as they represent unique virtual entities.[64]

Many IP disputes involve parties from different countries. In such cases, court litigations may involve several procedures in different jurisdictions. Parties can agree to accept arbitration to resolve their disputes under a single law and in a single forum they determine. Hence, arbitration can be neutral concerning the law, language, and institutional culture of the involved parties, streamlining the process and avoiding the complexities of multi-jurisdictional proceedings.[65]

The landscape is further complicated by differences in domestic approaches to litigating IP disputes and the advent of the Internet, which introduces new forms of third-party infringement. Traditional methods of determining jurisdiction cannot be applied effectively owing to metaverse's global nature, making IP protection in cyberspace a formidable challenge. Current laws fail to respond to indirect infringements, thus hindering the proper resolution of disputes.

Jurisdictional difficulties are exacerbated by the proliferation of forums, leading to divergent regulatory and judicial approaches. This particularly affects the validity of industrial property rights, which is tied to the country of registration. Given the complexity, arbitration has emerged as an appealing alternative, favored for its cost-efficiency and speed compared to litigation.[66] This is possible because of streamlined procedures and smaller dockets for the arbitration panels.[67]

Yet, even arbitration may prove burdensome for user-to-user disputes in the metaverse, which tend to be numerous, of low value, and cross-border. Innovations,

64) Iciar Álvarez Bullain, Paula Coll Soler, Disputes in the era of meta worlds: the role of arbitration, Investment Arbitration Outlook Uría Menéndez, n.º 10, 2022, p.36.

65) Choong Mok Kwak, "Alternative Dispute Resolution in Genetic Resources and Traditional Knowledge: Settlement at the World Intellectual Property Arbitration and Mediation Center," Journal of Arbitration Studies. 29(3), 2019, p.87.

66) Ju-Yeon Lee, "Identifying Effective Dispute Resolution Mechanisms for Intellectual Property Disputes in the International Context," Journal of Arbitration Studies. 25(3), 2015, p.163.

67) Marc Jonas Block, The Benefits of Alternative Dispute Resolution for International Commercial and Intellectual Property Disputes, 44 Rutgers L. REC. 1 (2016-2017), p.7.

such as decentralized justice platforms using blockchain technology, have been developed to bridge this gap. These “digital courts” use smart contracts and crowdsource jurors by providing economic incentives, thereby ensuring fair rulings.[68)]

However, decentralized justice also raises concerns about fairness, procedural rights, and potential conflicts with national legal systems. Efforts have been made to mitigate these issues, such as CodeLegit’s Blockchain Arbitration Rules, which emulate traditional arbitration.[69)]

Furthermore, there is growing interest in Alternative Dispute Resolution (ADR) methods, such as those offered by the WIPO.[70)] ADR offers a streamlined procedure for multi-jurisdictional disputes, avoiding inconsistent results. It is particularly recommended for virtual platforms, where localizing infringing activities and defining governing laws are challenging.[71)]

In conclusion, while private international law faces limitations in resolving metaverse IP disputes owing to the intricate nature of the digital landscape, arbitration through traditional and innovative methods emerges as a viable alternative. However, this requires collaboration within the international community and alignment with the ongoing scholarly efforts to regulate this complex field. Despite the rise of decentralized justice and ADR methods, traditional arbitration is likely to remain the preferred choice for high-value, complex, cross-border disputes while continuing to offer a balance of speed, cost-effectiveness, and legal robustness.

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68) Yann Aouidef, Federico Ast and Bruno Deffains, (2021) Decentralized Justice: A Comparative Analysis of Blockchain Online Dispute Resolution Projects. https://www.frontiersin.org/articles/10.3389/fbloc.2021.564551/full.

69) *See* Iciar Álvarez Bullain, Paula Coll Soler. above n.64, p.37.

70) Lori Yi, “Recent Trends and Use of International Commercial Mediation in The Area of Intellectual Property Rights – Focused on the WIPO Mediation,” Journal of Arbitration Studies. 31(2), 2021, p.87.

71) de Werra, Jacques (2012) "Can Alternative Dispute Resolution Mechanisms Become the Default Method for Solving International Intellectual Property Disputes?," California Western International Law Journal: Vol. 43: No. 1, Article 4. pp.70-71.

Reference

Aouidef, Yann et al., (2021) Decentralized Justice: A Comparative Analysis of Blockchain Online Dispute Resolution Projects. https://www.frontiersin.org/articles/10.3389/fbloc.2021.564551/full.

Ara, Tom K. et al., "Exploring the metaverse: What laws will apply?" (22 February 2022) DLA Piper 〈https://www.dlapiper.com/en/us/insights/publications/2022/02/exploring-the-metaverse/〉

Bahuguna, Anmol, "Intellectual Property and Metaverse", International Journal of Science and Research (IJSR), Volume 11 Issue 9, September 2022, pp. 371-374, 372 https://www.ijsr.net/getabstract.php?paperid=SR22905165231.

Berman, Paul Schiff, "Legal Jurisdiction and Virtual Social Life", Catholic University Journal of Law and Technology Volume 27 Issue 2 Spring 2019.

Block, Marc Jonas, The Benefits of Alternative Dispute Resolution for International Commercial and Intellectual Property Disputes, 44 Rutgers L. REC. 1 (2016-2017).

Bullain, Iciar Álvarez et al., Disputes in the era of meta worlds: the role of arbitration, Investment Arbitration Outlook Uría Menéndez, n.º 10, 2022.

Chae, Soo-Geun, Review Report on the Partial Amendment of the Trademark Act, Trade, Industry, Energy, SMES and Startups Committee, June 2021.

Cho, Young Sun, "Review of Trademark Use Notion in Korean Trademark Law in Enactive Approach", The Justice, Vol. No.10, 2008.

Cooper, James M., ntellectual Property Piracy in the Time of the Metaverse, 63 IDEA 479 (2023).

de Werra, Jacques (2012) "Can Alternative Dispute Resolution Mechanisms Become the Default Method for Solving International Intellectual Property Disputes?," California Western International Law Journal: Vol. 43: No. 1, Article 4.

Dickenson, Andrew, The Rome II Regulation: The Law Applicable to Non-Contractual Obligations, Oxford university Press, 2008.

Dinwoodie, Graeme B., "BOUNDARIES OF INTELLECTUAL PROPERTY SYMPOSIUM : CROSSING BOUNDARIES : DEVELOPING A PRIVATE INTERNATIONAL INTELLECTUAL PROPERTY LAW : THE DEMISE OF TERRITORIALITY?", 51 Wm. & Mary L. Rev. 711 (2009).

Directive on Copyright in the Digital Single Market 2016/0280 (COD).

Fukumoto, Wataru “International jurisdiction about intellectual property right with special reference to "intellectual property: principles governing jurisdiction, choice of law, and judgments in transnational disputes" by the American Law Institute”, Institute of Intellectual Property Bulletin, 2005.

Guide to Berne Convention for the Prot4ection of Literary and Artistic Works(Pars Act, 1971)(WIPO, 1978),

Jon, WooJung. “International Disputes Resolution Related to Intellectual Property Rights in the Metaverse: On International Jurisdiction, Governing Law, and Arbitration Clauses,” Korean Journal of International Trade and Business Law Vol.32 No.1, 2023.

Kim, In-Ho, “The Application and Limitation of the Lex Loci Protectionis (the Law of the Country for which Protection Is Sought) for the Infringement of Intellectual Property Right“, Human Rights and Justice, Vol. No.429, 2012.

Kim, Wonoh, "Contending Legal Issues on the ‘Trademark Use’ under Trademark Law", Journal of Korea Infomation Law Vol.14 No.1, 2010.

Kim, Yeon et al., Private International Law (2nd Edition), Bobmunsa, 2006.

Korea Institute of Technology and the Law, 'A Study on the Private International Legal Issues of Copyright,' Ministry of Culture, Tourism and Sports, December 2003.

Korea Intellectual Propert Office (KIPO), Intellectual Property in the Age of Digital Transformation: Focusing on the Metaverse, 2021.

Kwak, Choong Mok, “Alternative Dispute Resolution in Genetic Resources and Traditional Knowledge: Settlement at the World Intellectual Property Arbitration and Mediation Center,” Journal of Arbitration Studies. 29(3), 2019.

Lee, Chul-Nam, “A study on copyright issues in Metaverse - Focusing on the spatial data of digital twin -”, Journal of Business Administration & Law Vol.31 No.4, 2021.

Lee, Ju-Yeon, “Identifying Effective Dispute Resolution Mechanisms for Intellectual Property Disputes in the International Context,” Journal of Arbitration Studies. 25(3), 2015.

Lee, Ju Yoen, “Jurisdiction in International Litigation over Intellectual Property Rights under the Korean Act on Private International Law of 2022: An Analysis of the General Part and the Special Part“, Korea Private International Law Journal, Vol.28 No.1.

Lee, Sung Ho, “International Jurisdiction and Governing Law in Cyberspace Intellectual Property Matters”, The Justice Vol. No.72, 2003, p.195.

Ministry of Justice, Commentary on Private International Law, 2001.

Morris, P. Sean, From Territorial to Universal-The Extraterritoriality of Trademark Law and The Privatizing of Internatioanl Law, 37 Cardozo Arts & Ent. L.J. 33, 2019.

Oh, Seung Jong et al., Copyright Law (4th Edituon), Parkyoungsa, 2005.

PRELIMINARY DRAFT CONVENTION ON JURISDICTION AND FOREIGN JUDGMENTS IN CIVIL AND COMMERCIAL MATTERS, adopted by the Special Commission on 30 October 1999.

Proposal for a Directive of the European Parliament and of the Council on Copyright in the Digital Single Market, 2016 (COM).

Ryu, Kye Hwan, “A Study on Intellectual Property Rights Litigations and Governing Law”, Korea Private International Law Journal, Vol.19 No.2, 2013.

Sohn, Kyung Han, “International Developments in Electronic Commerce Legislation”, The Justice Vol.35 No.4, 2002.

_____, "New Approach for Conflict of Laws Rules on Intellectual Property," KOPILA Journal, Vol.27 No.1, 2021

Suk, Kwang-Hyun, “Electronic Commerce and International Jurisdiction”, Internet Law Journal Vol. No. 2, 2003.

_____, Commentary on Private International Law of 2001 (2nd Edition), Jisan, 2003.

_____, Private International Law and International Litigation (5th Edition), Parkyoungsa, 2012.

_____, "Regulation, Jurisdiction, and Governing Law of Cloud Computing," LAW & TECHNOLOGY, Vol.7 No.5, 2011.

Yi, Lori, “Recent Trends and Use of International Commercial Mediation in The Area of Intellectual Property Rights – Focused on the WIPO Mediation,” Journal of Arbitration Studies. 31(2), 2021.

Wang, Sang-Han, “Electronic Commerce and Jurisdiction”, International Trade Law, Vol. No.27, 1996.

WIPO and the HCCH, “When Private International Law Meets Intellectual Property Law A Guide for Judges”, 2019.