



## Conference Abstracts

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*Online Event*

# Conference Abstracts

## In Alphabetical Order by Surname (in Capital Letters)

**Muhammad Zaheer ABBAS, Faculty of Law, Queensland University of Technology**

*The Push for the TRIPS Waiver Proposal to Expedite Equitable Access: An Analysis of Arguments*

Situations like the COVID-19 outbreak require international solidarity and broader multilateral collaboration. The response to the COVID-19 pandemic was marked by unilateral nationalistic approaches, advanced purchase agreements, production restrictions and unequal access leading to international inequalities. Pharmaceutical and vaccine manufacturing corporations are inclined to continue their business-as-usual approach to intellectual property (IP) protection even during a pandemic. The routine application of IP protections restricts diversified global production and universal distribution of critically needed health technologies. IP protections bar national governments, especially in resource-poor countries, from adopting a comprehensive strategy to have timely, adequate, and affordable access to COVID-related health technologies as they can be subjected to court litigation and complaints under the WTO rules. In October 2020, India and South Africa submitted to the WTO TRIPS Council a proposal for a temporary waiver of certain provisions of the TRIPS Agreement. This paper provides an overview of the waiver proposal and analyses the evolution of the push for this proposal in light of formal and informal discussions at the WTO. This paper reviews key objections to the waiver proposal and responds to arguments put forward by some governments and patentee corporations against the waiver proposal. This paper argues that the proposed TRIPS waiver is critical for bringing an end to the pandemic by stimulating global manufacturing of and expediting equitable access to vaccines and other COVID-related health technologies.

**Kiyoshi ADACHI, National Graduate Institute for Policy Studies, Tokyo**

*The Patentability of Second and Subsequent Medical Uses in Asia's Patent Legislation*

The current COVID-19 pandemic has highlighted the importance of subsequent medical uses of known medical compositions as a number of medicines that are being tested to treat COVID-19 were originally developed to treat other illnesses. The decision whether second/subsequent medical uses of pharmaceuticals are patentable in any given jurisdiction is, however, one of the main exclusions available to countries as a 'flexibility' under the World Trade Organization's Agreement on Trade-related Aspects of Intellectual Property Rights (the TRIPS Agreement). This study examines, from a comparative law perspective, how jurisdictions across East, Southeast and South Asia deal with the issue of the patentability of second/subsequent medical uses. The study found a variety of approaches to the patentability of second medical uses across Asia. At one end of the spectrum, some countries adopted a blanket rule prohibiting the patentability of known compositions, largely on grounds that the invention lacks novelty. Other countries make clear that subsequent medical uses are patentable, in many instances as process patents or using some variation of a 'Swiss-type' claim, subject to certain restrictions and limitations that are often found in regulations or detailed administrative guidance. Still other jurisdictions take an ambivalent approach which does not make clear in their legislation whether second/subsequent medical uses of known medicaments are

patentable, and opts to deal with the issue flexibly through administrative circulars and the like. The issue is made more complicated by the fact that some countries in Asia have entered into free trade agreements that require the recognition of the potential patentability of second/ subsequent uses of known medical substances. This study comprises the final paper in a series of 3 comparative law studies on public health-related exceptions and exclusions to patent law in Asia. The first study, which was presented at IPIRA II in Indonesia, examined how jurisdictions across Asia have implemented the research exception and regulatory review exception to patent law, respectively. The second study, which was presented online in March 2021 at IPIRA III, looked at how the medical treatment exclusion was implemented in Asia. Together, these studies are designed to form a comprehensive examination of important public health-related exceptions and exclusions to patent law in Asia.

**Caleb ADELOWO, Faculty of Economic & Management Sciences, North-West University, Willie SIYANBOLA, Centre for Energy Research & Development, Obafemi Awolowo University, and Wumi SIYANBOLA, Management & Accounting Department, Obafemi Awolowo University**

*Empirical Assessment of Capabilities and Management Structure in the Nigeria's Technology Transfer Offices*

Technology transfer offices (TTOs) in universities and research centres (URCs) are the gateways that not only collate inventions and intellectual properties (IPs) from faculties and departments, but also promote access to new knowledge, innovations and foster university-industry collaborations. The performance of these offices depends largely on the quality and quantity of human resources, physical infrastructure, funding and operational guidelines (freedom to operate with minimum bureaucratic process). The management structure of the TTOs also matters, particularly in channeling office resources and sharing responsibilities towards achieving the goals of the TTOs. Recent analysis of these offices shows low outputs, despite that majority of them have operated for more than two decades. This article therefore examines how the management structure, capabilities and infrastructure within the TTOs contribute to the low outputs/performance. The study employs a cross-sectional research design, where primary data were collected, through questionnaire and interviews, from fourteen (14) selected TTOs between May and June 2019. The results show that majority of the heads of the TTOs have sound experience in relevant fields and acquired requisite training in intellectual property management. However, the offices are faced with weak staff strength, poor staff training and inadequate ICT facilities. The operational guidelines for the offices are either vague or non-existence, couple with poor funding which limits the level of interaction with host URCs and industry. There is also poor collaboration among the TTOs across the institutions, which limit their knowledge sharing potential. These challenges are exacerbated by poor funding and bureaucratic practices. The paper concludes with appropriate policy recommendations and framework for strengthening these offices for improved performance.

**Akshat AGRAWAL, Jindal Global School of Law, O.P. Jindal Global University**

*Waiving Windfalls: The Socio-Legal and Contextual justification of a "TRIPS Waiver" during the COVID-19 pandemic*

Distributive concerns in respect of IP, especially in the context of pharmaceuticals, are nothing new. The histories of inequity in bargaining towards a multilateral agreement as well as in its implementation has

been widely documented. However, with the COVID-19 pandemic, and its gruesome, rather focally visible, impact on access to health, there ought to be a shift in conversation beyond IP internalism, questioning the fundamental inequities which come with TRIPS. This paper goes on to highlight aspects of inequity in institutionalizing IP regimes across the world, and focuses on IP Gradualism, and the lack of it. It builds on narratives of capability building, the hypocrisy of transition periods, and its impact on the global political economy of IP institutions across nations. The paper is an attempt to defog the historical realities that have resulted in skewed capabilities, which are clearly being exposed during such a pandemic, leading to a situation where a part of the world, which was clearly not allowed to pursue sovereign self-determination for over centuries, is having to “beg” for a waiver of the same agreement which is the fundamental basis of situating this inequity, albeit to no effect.

The paper discusses the prolonged practice of “absorption” and imitative learning practiced by nations currently opposing the waiver, and uses time as a metric, to lay down certain realities that are important and ought not be ignored while debating the waiver, even at a diplomatic level. The primary normative point which the paper makes is that getting rid of this knowledge and capability divide, during these critical times, and in fact De-Colonizing IP, requires an alternate accent - where global trade ought to be looked at from the eyes of geo-historical attentiveness. The essence of distributive justice, especially in the grim situation that we face today, lies in realizing the importance of the historical context, i.e., this context of prolonged inability, not due to controllable forces or complacency or a lack of merit, but rather due to global acts of suppression, accounted for in history. As a corollary to this normative claim, this paper also discusses the practice of grating “Waivers” under the WTO Agreement to show as to how the debate around waiving TRIPS obligations should clearly be a “non-starter” given the historical situations and circumstances in which such waivers have been granted in the past. The legal limelight is on exposing the hypocrisy in the interpretation of “Exceptional Circumstances” under Article IX.3 of the WTO Agreement, further supporting the normative claims of inequity, need for context, and the fundamental restructuring of this global diplomatic regime. The final attempt of this paper is to harp upon the fact that the need of the hour is one of global solidarity, which cannot in fact be pragmatized unless one is forced to face these historical realities to consciously realize the context, and as I might as well say – the reasons, for the inequity that we see today. The context needs to be out there, and this paper is an attempt towards the same.

**Mohammad ALJORATLE, Faculty of Law, Albaath University, and Amal SHARBA, Faculty of Law, University of Damascus**

*The Arbitrability of Intellectual Property Disputes in France and Syria*

The world witnesses huge wave of cross-border trade transactions of intellectual property forms accompanied with several related IP disputes. Therefore, the need for more effective disputes resolution methods has increased. Accordingly, the issue of IP disputes resolution through arbitration has attracted the interest of global companies due to many reasons. Firstly, the ease and speed of its proceedings. Secondly, the confidentiality of arbitration deliberations. Finally, the role of the will of conflicting parties in selection the most qualified third party who will initial the amicable resolution process. This article focuses on the main features of arbitration legal systems in both Syria and France of IP disputes, each of these countries represents different judicial, legal, economic and social system. Thus, we found some controversial issues with regard to the IP disputes arbitration in these countries. Firstly, It is necessary to know the extent to which the national laws adopted the principles of UNCITRAL Model law. Secondly, what is the criterion in defining the international nature of these disputes? Thirdly, did these countries

stipulate certain conditions for recognition and enforcement of foreign arbitral awards? Finally, whether certain IP disputes should be adjudicated through arbitration or through courts? These are the questions the article proposes to tackle. This will help to find the most effective system in realm of IP dispute arbitration and what are the strengths and weakness of both systems. Moreover, giving suggestions for tackling shortages in both judicial and legal systems of Syria and France.

**Samuel ANDREWS, Prince Mohammad Bin Fahd University Al Khobar-Dammam**

*De-escalating the Copyright Originality Threshold: The Saudi Arabia's Vision into 2030*

After the Feist case in United States, the threshold for analyzing and conceptualizing copyright originality has been made somewhat clear with the standard bar put within a modicum of creativity. In both Civil and Common law legal systems there seems to be an agreement that the *Feist* doctrine of creative selection or intellectual creativity or creative choices, among several adopted phrases that implicates the *Feist* doctrine is the controlling jurisprudential approach to discovering the originality *sine qua non* of copyright. However, recent glamor for a change in creative jurisprudence and technological evolutions in the creative spaces have reinvigorated current legal discussions in this area. To capitalize on the contemporary technological and innovative occurrences, Saudi Arabia is embarking on a massive diversification of its revenue (Saudi Arabia vision2030) earning strategies from a single source of dependence on extractive resources and industries to include creative and innovation industrial sub-categories. Saudi Arabia's copyright laws consciously or unconsciously is primarily couched in the creative selection and creative choices language and themes. This paper seeks to analyze the Saudi's attempt in boosting creativity and innovation within its current legal and socioeconomic systems.

**P.S. ATHIRA, National University of Advanced Legal Studies, Kerala**

*Blockchains For Protection of Intellectual Property Rights: An Exploration*

"If the Blockchain has not shocked you yet, I guarantee it will shake you soon." The genesis of the term 'blockchain' in Computer sciences was as a way of describing a chain of data, structured to enable data-sharing between devices and networks. Today, it is hailed as the next big thing in computing. This evolution has great implications in every facet of human existence and has been termed as a 'quiet revolution'. The watershed moment in the history of cryptocurrencies occurred when Mr. Satoshi Nakamoto, the 'person' credited with the genesis of the cryptocurrency, Bitcoin as a blockchain in 2008.

Portrayed as 'part database, part development platform, part network enabler', a blockchain has inherent versatility that would enable it to evolve into diverse models depending on the need and the circumstances, especially in IP registration, management and administration. Specific areas that may benefit from this include inventor/creator identification, avenues for tamper-free proof of inventorship, quantification of the contribution by each inventor to the invention, aid in inventor remuneration as well as provision of safeguards against future disputes. Other uses may include a consensus protocol-based blockchain network for the protection of intellectual property rights through registration and maintenance of time stamped registries to determine priority. Further, in enforcement of IP rights, the use of smart contracts may enable control of online piracy, especially of copyrighted material as well as in prevention of circulation of counterfeit products through use of technologies such as RFID, digital tags or QR codes.

Presently, many entities employ Software-as-a-service (SaaS) model block chains for facilitation of customized uses. The employment of tailored blockchain applications in the registration and grant processes of intellectual property administration may enable transparency and accountability as well make the process easier and more democratic in its use by applicants. Further, these decentralized mechanisms may reduce the latency in the intellectual property grant process as well as fortify it from manipulation and tampering. While the possibilities seem endless, the adaptation of the technology must be preceded by development of comprehensive clarity and understanding of the mechanism, the designing architecture must be responsive to the needs of the IP system and above all be transparent and trustworthy.

**Miranda Risang AYU PALAR, Helitha MUCHTAR, Fenny WULANDARI, Siti NAILA and Meike FUADI, Universitas Padjadjaran**

*Environmental Sustainability and the Protection of Geographical Indication in Indonesia*

Indonesia is the second biggest mega biodiversity country in the world. Consequently, sustaining the environment is as important as protecting the environment-based products, especially products which are derived from natural resources. In this regard, Geographical Indication (GI) protection in Indonesia has been designed and practically able to protect some natural resource-based products. Coupled by the fact that in 2017, the Ministry of Environment and Forestry has endorsed a minister regulation specialized in protecting local wisdom associated with the protection and management of the environment that includes natural resources especially genetic resources, GI protection has become more promising not only to protect GI potential products, but also to sustain the geographical environments related to the products.

Several protected GIs in Indonesia, meanwhile, have been endangered by local government policies which are not supportive to the concern of sustaining the environment. The quality of Cilembu sweet potatoes protected GI, for example, has been deteriorating because the local government in Sumedang Regency allows developers to build houses and compounds which contaminate the soil and water in Cilembu plantation area.

So, the protection of GI in Indonesia should be developed not only to protect and rise the economic value of GI products, but also to sustain the geographical environment of GI products. Environmental sustainability should become an integral part of the Indonesian GI protection system. The question is, how to accommodate the environmental sustainability concern in the Indonesian GI protection system?

This paper tries to explore the most effective way to accommodate environmental sustainability concern in the Indonesian GI protection system. Qualitative data would be obtained from desk and virtual research. Analytic descriptive method would be used to explore the answers. Research in this paper is based on a hypothesis that the most effective way to accommodate environmental sustainability concern in the Indonesian GI protection system is not by adding the concern in the substantial requirements of GI protection which have been considerably rigid. Instead, environmental sustainability should be added as one of targets in the GI controlling plan substantiated in GI Product Specifications, in order to maintain the character and/or quality of the GI product that is predominantly influenced by the product's geographical environment.

**Arunabha BANERJEE and Manika SHARMA, National Law University, Jodhpur**

*AI and Personhood: Critical Analysis of Status of AI as an Inventor and Owner in Patents*

Can artificial intelligence (“AI”) invent a patentable product or process? If yes, can AI be vested with ownership of the patent granted to such product or process? The recent patent applications in multiple jurisdictions by Dr. Stephen Thaler, with the AI DABUS identified as the inventor, have propelled researchers to re-evaluate the AI’s status as an owner and inventor. Contrasting approaches have been adopted by different jurisdictions. While the South African Patent Office granted the patent to DABUS based on a formality examination under the Patent Cooperation Treaty, the Court of Appeal in UK refused to recognize DABUS as an inventor in *Thaler v. Comptroller General of Patents Trade Marks and Designs*. Patent laws worldwide are either silent or do not allow a non-natural person to be recognized as an inventor. That leaves us with two possibilities – either the laws are amended to confer on an AI both the status of an inventor and owner, or establish a split model where AI can be an inventor, but the ownership would be with the applicant, i.e., the creator of the AI who applies for a patent on the invention. But this creates a paradox. For AI to qualify as both the inventor and the owner, it must possess the legal personality to be motivated by the incentive and exploit the commercial benefits of the patent. Under the split model, the creator would need the authorization of the AI to apply for the patent or a pre invention assignment similar to employment contracts. If the AI does not have the required personhood to execute contracts, how will it authorise the applicant to file an application for a patent on its behalf? This paper aims to analyse the existence of legal personhood of AI as an inventor and owner of a patentable invention by addressing the following questions: 1) Whether the jurisprudential view of personhood under legal theory and property laws can justify grant of ownership and/or inventorship to an AI in patents, and 2) Based on the personhood parameters identified in question 1, can the current technological development in the AI space justify grant of ownership and/or inventorship to an AI in patents?

**Michal BARYCKI, Faculty of Law, Jagiellonian University**

*Issues Concerning the Transfer of the Right of Priority Regarding European Patent Applications*

The right of priority is one of the key-conditions to check while assessing patentability requirements (novelty and inventive step) in almost all national jurisdictions in the world. Although the European Patent Convention (“EPC”) contains plenty of rules governing the right of priority, there are no provisions in the EPC and in other international legal acts setting out any requirements regulating the transfer, nor determining the law governing such a transfer of the priority right. These matters are a subject of the judicial practise of the Boards of Appeal of the European Patent Office (“BoA”) and of national courts. The aim of the presentation is to discuss the different approaches and changes in conceptions on assignment of priority rights, revealed from the examination of the large BoA judicial practise, jointly with the relevant literature and commentaries to the EPC. The EPC was chosen as the main international legal act to be analysed as it contains a complete, self-contained code of rules on claiming priority for a European patent application. The priority right is considered as an independent, separable right from the right to apply for a patent. Additionally, this right is independent up and until it is invoked for one or more later applications to which it becomes an accessory. Although the BoA did not create any established jurisprudence as regards the national law generally applicable to the question of the transfer of the right of priority, the research indicated that decisions of the BoA applied the following conflict of laws in this context: the law of the country where the first application was filed (“*lex originis*”); the law of the country where the later application was filed

("lex loci protectionis"); the law of the country which is agreed upon in the relevant contract ("lex loci contractus"); the law of the country where at least one of the parties to the transfer has its residence ("lex domicilii"). The correctly carried out transfer of a priority is at utmost importance for non-European entrepreneurs willing to apply for a European patent in the future. If a transfer occurs between two legal jurisdictions, it does not necessarily mean, that it is valid in the light of the EPC. If an assignment does not follow the detailed guidelines set out by the BoA, it can play to the detriment of all other subsequent applicants, as such a mistake can be raised during the invalidity proceedings. Although there is a lack of assignment conditions of a priority in the EPC, a transfer is not free of requirements. Therefore, the business entities must follow the rules laid down in the BoA judicial practise if they want to validly claim the priority for a European patent in the future. The presentation will provide a comprehensive and clear review of the above issues analysed in the on-going PhD thesis. The presented results might be valuable not only for researchers based in Europe but also for everyone who is interested in the European Patent Law System.

**Saleena BASHEER, School of Law, Jamia Hamdard, New Delhi**

*Data Mining Exceptions: Fair Use or Fair Dealing*

The paper explores the challenges of data mining on copyright. Demos the technological and legal landscape girdling it. And moves to the real objective of the research, unwrapping the scope of existing fair use and fair dealing apparatus in achieving the ageless vision of progress of science. Data mining refers to extracting information from significant quantities of text or data with the help of advanced software technologies through statistical analysis. Its highly prevalent in diverse fields of research ranging from bio medical to humanities. However, copyright law poses no obstacle to TDM research as long as the corpus of text and data being analysed consists solely of public domain works. The rift arises the moment data mining software encroaches copyrighted literary works. It's here the well-established copyright balance between authors on one hand and users on the other tilts. Maintaining this balance since the invention of printing press was not luxurious for copyright law. Copyright laws across the globe is revisiting the traditional norms on author's rights and user rights. While the global AI leaders like Japan, Singapore, China and the United States currently provides broad exceptions permitting data mining, EU and many others are following the suit. This will be a critical, comparative, and analytical study on these developments in fair use over text and data mining in the international copyright regime.

**Daniel BENOLIEL and Michael GISHBOLINER, University of Haifa**

*Novelty Traps, Kiwis, and other Flightless Birds*

Novelty traps are a unique display of social loss due to patent policy. Novelty traps appear whenever a foreign patented technology (but even unpatented) amounting to prior art chills inventive activity locally. It occurs when the chilled local inventive activity could have otherwise diffused the foreign technology locally through adapting or adopting it by means of incremental innovation. Novelty traps are especially rampant in developing countries. In these countries, such diffusion rates are ever low, and foreign patentees regularly opt for not patenting and commercializing their inventions therein, adding to these countries' underdevelopment. Using the unique case of New Zealand's 2014 patent prior art reform, this article offers a first account of the chilling effect New Zealand's statutory patent reform has had on three charges. Namely, as novelty traps reduce local patenting activity, as they diminish the diffusion of



overseas technology, and finally, as novelty traps decrease the country's overall innovation productivity indices. The policy ramifications of these early findings are potentially radical as they question the efficiency of the standard of 'absolute novelty' in incentivizing inventive activity. That is, especially in underdeveloped countries where technology diffusion through incremental midlevel invention is critical. Therefore, it is probable that New Zealand's novelty traps intensify in developing countries where technology diffusion is costlier due to lower absorptive capacity.

**Tyrone BERGER, Deakin Law School, Deakin University**

*You Look Familiar? Impact of 3D Printing on Industrial Designs*

Industrial designs are no stranger to imitation or even fraud. For centuries, designers have had to fight off copycats from reproducing their designs, thus impersonating the creator of the design. However, that could all be about to change again with the advent of 3D printing technologies (or 'additive manufacturing'). Among the main concerns raised about 3D printing are whether copies of a design have been created without any authorisation from the registered owner. Design law in Australia is appropriate to discuss here as design protection focuses on the 'overall appearance' of a product resulting from one or more visual features. Yet, the overall impression requires an assessment made from the viewpoint of the 'familiar person'. This means that the relevant impression is gained by a familiar person, whether or not they are a user of the product to which the design relates. Moreover, the reference to overall impression requires consideration of the work as a whole, not just that part of the work bearing the particular visual features. Consequently, any minor variation of a larger work may have no effect on the overall appearance. For example, where a product has many visual features in common with a competing work, but one feature is different, a familiar person may not consider one feature of difference particularly noteworthy, assuming all other features to be of equal significance. This paper considers the extent to which the concept of the familiar person will impact 3D printing activity in Australia. Presently, there are no specific provisions within the *Designs Act 2003* (Cth) which refer to 3D printing or permitted activities associated with 3D printing. It then concludes with a brief discussion of the infringement provisions related to 3D printing and what lessons can be gained from recent developments.

**Nidhi BUCH, Gujarat National Law University**

*Where is the Authorized User? The Missing Piece in India's Geographical Indication Puzzle*

Geographical Indication (GI) is one of the forms of industrial properties as identified by WIPO. It is a kind of intellectual property that establishes a link between a product and its place of origin. Products like Darjeeling Tea, Basmati Rice and Pochampally Ikat are a few popular examples of registered GI from India. These products have made their mark in the global market due to the unique characteristics that are solely attributable to its place of origin. However, despite the availability of more than 370 GIs registered in India, which includes-collective monopoly, non-transferability, non-excludability, non-rivalry and perpetuity of rights as long as good-place-quality link is maintained, key challenges are involved in effective enforcement of GI protection. In order to achieve the object of this noble legislation, it is utmost important to bring mass awareness among the individuals related to manufacturing and production of GI registered products about the rights accrued if they register independently as authorized users.

In view of this, the paper focuses on the need of identifying the significant role of authorised user in realizing the exclusive rights granted by the GI Act. This paper takes a unique approach of understanding the Law on Geographical Indications, through the lens of authorized user as implemented in India. With the dual objectives of assessing the status of the authorised users along with the present count of registered authorised user as against the registered GIs in India, the paper will analyse how the goal of effective and adequate GI protection will remain unattained in absence of registration of maximum number of authorised users for registered GI products in India. Further, the work will try to explore and identify the existing policy initiatives by the Government for better implementation of law of GI. It will also comment on the shortcomings of the Law of Geographical Indications in this regard through available data and attempts to generate solutions to resolve the same in order to implement the law in its true spirit. This research will therefore provide a unique take on the GI Law as implemented in India with particular reference to registration of authorised users.

**Catharina Ria BUDININGSIH, Faculty of Law, Parhyangan Catholic University**

*The Policy of Government Use in Indonesia for Defeating Covid 19*

Government Use (GU) and Compulsory Licence are methods that can be used to gain access of patent-protected drugs in emergency situation. The general indicator of an emergency is the surge of price and shortage of supply that are jeopardizing the public health. From 2004 to 2012 the Indonesian government issued regulations regarding GU for 7 types of AIDS drugs. COVID-19 become a global public health crisis impacting both healthcare and economy including in Indonesia. To overcome this, in November 2021 the Indonesian government issued two government regulations of GU for Remdesivir and Favipiravir which are essential COVID-19 drugs. This is a notable policy achievement since not many countries have similar policy. It is hoped that Indonesia will be able to implement sustainable GU to achieve continues affordable access of COVID-19 drugs. For this reason, Indonesia must learn from the previous experience of implementing GU, which has not been able to produce AIDS drugs at low prices.

**Israel CEDILLO LAZCANO, Universidad de las Americas Puebla**

*Intellectual Property and the Value Chains of Money*

When we talk about money within legal scholarship, we tend to pay attention to the exercise of the *lex monetae* under the light of the Chartalist and the Mengerian theories, and to its functions as means of payment, unit of account and store of value. However, in this paper, I will argue that there is another view of the cathedral of money that has been (and is) relevant for the emergence, the innovation and the diffusion of monetary expressions, despite that one will not find it in most works on Banking Law. This view is structured around Intellectual Property Rights (IPRs). Why are IPRs relevant to understand money? Well, to answer this question, first, we have to understand that money does not emerge nor evolve in isolation. It has relied (and relies) on Global Value Chains that go from the very designs elaborated by authors, such as, Chris Costello to the patents that support the security features of banknotes and the very use of electronic money. Based on this, the first lesson that we are going to obtain from this proposal is that IPRs create trust building on consuetudinary elements that are common for a society following the definition of money provided by Darling J in *Moss v Hancock*. This certainly can be perceived in the announcement issued on 6 December, 2021 by the ECB on the redesign of euro banknotes by 2024, which will be used as a case of

analysis. The second and main lesson that we will present through this academic exercise is that, the relevance of IPRs will be highlighted in the context of the regulation and the diffusion of “cryptosets”. Following the content of documents, such as, the Principles on Operational Resilience published by the Bank for International Settlements, IPRs will be needed to put in practice Principles 2, 4 and 5, which are related to the mapping of interconnections within intermediaries and with third party service providers who could have and exercise moral and economic rights on elements, such as, the algorithmic codes that support certain assets like stablecoins and Central Bank Digital Currencies (CBDCs). Consequently, I am going to conclude that IPRs will be needed to create trust in throughout our monetary value chains -beyond the myths of decentralization and disintermediation that are employed to describe “cryptoassets”- and to avoid operational risks like those faced in contexts like the one described in *Banco de Portugal v Waterlow & Sons*.

**Gargi CHAKRABARTI, National Law University, Jodhpur**

*Effectiveness of Plant Variety Protection: A Concern for India and other South-East Asian Countries*

According to TRIPS Article 27.3(b) plant is protected by patent or sui generis model or by combination model. Essential biological process related to plant is excluded from patent. As per TRIPS mandate India adopted sui generis model and enacted Plant Variety Protection and Farmers’ Rights Act, 2001 (PVPFRA). Indian sub-continent and other South-East Asian countries are agricultural based countries where agricultural system is based on farmers and not on corporations. So the significance of breeders like UPOV or PVPA of USA is not emphasized in those countries. Jurisprudentially intellectual property protection used to attract investment for research & development (R&D) by providing incentives. Same theory is applicable for plant variety protection.

There is a need of huge R&D in plant variety field to meet the requirement created by rapid population growth and genetic erosion. In India and other South-East Asian countries traditional farmers’ agricultural practice is by trial-and-error method and mostly not the modern scientific methods. Now-a-days transgenic plants are introduced slowly in this field in these Asian countries, but they are kept out of mainstream patent in current trend as they are counted as non-patentable subject matter as essential biological process and/or gene patent. Sui generis model is emphasised for this plant variety protection. In India as per statutory provisions farmer rights and breeders rights are totally different, application procedure is also completely different, benefit sharing mechanism is introduced for plant varieties, compulsory licensing is introduced in the line of patent for plant varieties and compensation is also introduced to handle false claims. Each and every statutory provision includes farmers.

But participation of farmers and whether farmers can effectively enjoy the benefits of these provisions is highly questionable keeping in mind the socio-economic and awareness status of farmers of India and other South-East Asian countries. This article is going to analyze the statutory lacuna and the role of authorities in implementation of the statutory provisions and it will compare the situation among India and other South-East Asian countries. It will also analyze the practical position of PVPFRA; it will consider how to clarify the ambiguity regarding provisions related to protection of plant varieties; and will come up with tentative solutions and suggestions which will balance the public interest and effectiveness of intellectual property rights.

**Shambhu CHAKRABARTY and Souvik MUKHERJEE, Centre for Regulatory Studies Governance and Public Policy, WBNUJS**

*Protecting Traditional Cultural Expressions of Indigenous and Local Communities by Creating Exceptions in Model International Investment Treaties*

Cultural expressions have been an integral part of all human societies depicting human stories pertaining to faith, belief, and way of life. These cultural expressions evolved through verbatim storytelling, depicting expressions of emotion. The post-colonial era broke open the homogenous nature of states while the internet entangled the world through its web to a global village promoting the internationalization of trade, business and investment. The paper intends to protect cultural expressions of indigenous and local communities in respective jurisdictions and provide the opportunity to countries to protect such cultural expressions (Objective). Irrespective of international efforts and commitments, traditional cultural expressions have fallen short of developing a strong defence mechanism. The challenges and gaps must be bridged inter alia by providing exceptions in model investment treaties for cultural expressions. (Hypothesis). This paper tries to identify avenues to address the challenges brought forth by globalization in protecting cultural expressions in general and traditional cultural expressions in particular. It delves upon the question (Research Question) of incorporating cultural expressions in model investment treaties (MITs) of major jurisdictions? A Doctrinal study was undertaken to unravel the existing literature in this domain. Various international treaties and model treaties of major jurisdictions, including the Global South, have been studied. The measures taken by UNO, including WIPO, have also been considered in this study. (Methodology) The study reveals that most countries, including India, have not created measures to protect their cultural expressions in their model investment treaties. However, a ray of hope can be traced in the model investment treaty of Norway in Article 27 and Jamaica in Article 11, respectively, where the countries have created exceptions in their model investment treaties to protect cultural expressions in their respective jurisdictions. It is imperative to state that countries should take major steps to protect the cultural rights of their indigenous and local communities. Including an exception clause in MITs could go a long way to help achieve the purpose laid down in the UNSDGs, along with the protection of cultural rights of indigenous and tribal peoples. (Outcome and Findings)

**Ankita CHAKRABORTY, Delhi School of Economics, University of Delhi**

*The Role of Geographical Indications in Preserving Traditional Knowledge: Exploring Case Examples from India*

Geographical Indications (GIs), a constituent of Intellectual Property Rights, helps identify and preserve goods from a specific territorial origin. The Indian Registry at Chennai has classified Indian GIs into five categories among which Handicraft GIs and Agriculture GIs comprise almost 90% of the total.

**Objectives-**

- To understand the good-wise GI registrations in the country.
- To trace the tradition behind the genesis of GIs.
- To identify GIs both in the categories of Handicraft and Agriculture that speak of a strong legacy of its Traditional Knowledge.
- To identify the factors behind the inception and gradual development of Traditional Knowledge.
- To understand the recognition aspects, role, and extent of protection rendered by GIs.

This study thus aims to document and describe the importance of Traditional Knowledge for Handicraft creations and Agricultural produce and look into how Geographical Indications have given a unique spatial identity to them and aided in preserving the same.

**Avishek CHAKRABORTY, School of Law, CHRIST (Deemed to be University)**

*Copyright Protection of Digital Content through NFTs: One Step Forward or Two Steps Backward?*

The tussle between copyright owners and technology is an old one. Internet has become double edged sword in respect of legal protection of protected content in the digital world. It has been often contended that the statutory framework of copyright protection has failed to adapt and keep pace with the emerging technology. Consequently, owners of copyright protected content in the online medium have found themselves at a disadvantaged position as legal enforcement lagged far behind innovative infringement. To tackle this issue, different technological counter measures, such as digital rights management, cryptocurrency, blockchain technology, etc. have been developed. However, this friction between copyright protection and technological advancement has been manifested lately again in respect of copyright protection of digital content through non-fungible tokens (NFTs). There has been a sudden surge of interest in NFTs across the internet and many investors are purchasing NFTs for themselves. In recent years, NFTs are being linked to all types of creative works, including music albums, tweets, photographs and other digital media. NFTs have become crucial in rescuing digital creators by democratizing the actual experience in respect of a creative work. This sudden rise of use of NFTs has raised many ambiguities in respect of the rights associated with the copyright ownership of such digital content. When NFT is purchased, actually the cryptographic assets in the form of images, gifs, video, and any other form of digital art is bought. Here although the copyright for the digital content is owned by the purchaser, what is actually owned is a link to the digital art, if it is regulated by an agreement between the purchaser and the creator.

It is contended that use of NFTs exhibit a threat to the rights of copyright owners as there has been increasing instances where the works of the authors are being misappropriated and minted into an NFT without the requisite permission from the concerned copyright owner. Across the globe, several digital content creators have complained that digital copies of their works have been sold without their authorization through scam accounts. NFTs have raised concerns not only in respect of protected works, but also there have been reported incidents of people minting NFTs of works that are in public domains and such works are passed off as their own works. The critical concern which arises here is whether the moral rights of authors in the copyright expired works can be extended to their NFTs. This study intends to make an appraisal of the concerns raised by the copyright protection of digital content through NFTs and will aim at assessing whether this technology can offer effective protection of creative content in the digital world.

**Rudra CHANDRAN, National Law University, Jodhpur**

*Legal Implications of Gene Patenting: Are We Creating a Frankenstein?*

The patent refers to an exclusive right granted to an invention either product or process which involves an inventive step, novelty and something which is capable of industrial application. When in 1866 the Austrian botanist. Gregor Mendel discovered and explained the basic laws of heredity through his

experimentations in pea plants. But his experimentations were ignored. It was later in 1953, Dr J.D. Watson and Dr F.H.C. Crick discovered DNA and explained that the basis of life is found in DNA which is the form of a double helix. This quest for knowledge has led to understanding most basic form of life which is DNA and its double helical structure. In 1990, the Human Genome Project was established to identify all the genes in human DNA. In 2001, the draft map of the human genome was published, which at least partially identified the majority of the estimated 30,000- 40,000 human genes.

Gene patents rest on the boundary between the patentable and non-patentable inventions. Gene patents typically issue in one of four categories: “(1) *genes, in whole or in part, including claims to isolated nucleotide sequences*; (2) *proteins that the genes encode and their function in organisms*; (3) *vectors used for the transfer of genes from one organism to another*; and (4) *genetically modified cells or organisms, processes used for the making of genetically modified products, and the uses of genetic sequences or proteins for genetic tests*”. Yet more than 20 percent of the human genes are already patented which can cause biotechnology companies from asserting their exclusive right over such patents which can affect further research and inquiry. There are various concerns relating to gene patents, some of them are, the ethical and legal concerns of affecting the human dignity and privacy as well as affecting the free scientific inquiry, health of the person who has to undergo genetic therapies. It also can cause monopoly in the market which can cause market inefficiency. Many oppose gene patents on the ground of morality as it affects personal autonomy and human dignity. Genes have been given a sacred status as they carry the blueprint for life. Others argue on giving exclusivity being given as it might affect the patients suffering from similar genetic diseases. By thus inhibiting biomedical research, it sometimes prevents in coming up with potentially lifesaving cures. By proliferating gene patents, it can create patent thickets which can inhibit the biomedical research.

In this paper I would like to understand, major legal implications of gene patents in association with various laws existing in India. Research Methodology: This paper will aim to combine elements of doctrinal analyses and library-based research. To understand how the patent has been interpreted in India, I will collect all relevant Supreme Court decisions which have interpreted or applied Section 3 of the Patent Act. I will also collect important decisions of all High Courts of India, especially those by larger benches, which diametrically support or oppose my position. This paper depends on a comparative analysis of the gene patent system, we will also look at specific law and cases from other jurisdiction, especially SAARC countries.

**Michele CHEW, Xi'an Jiaotong Liverpool University**

#### *Futures and Intellectual Property*

As scientists engage in innovative research to solve global challenges, so do policies, business practices and institutions have to evolve to translate the innovations for actual usage by people on the ground. From the COVID-19 experience, challenges will emerge and bring with it disruptions. Thus, the question is not ‘what’ will be the next challenge or ‘what’ should be done when the disruption happens. The question lingering in the minds of decision makers is ‘when’ it will happen. The essence is to be prepared so that the disruptive impact is minimised. To this end, it is important to prepare the future generation with such skills to be prepared. In this case, in the context of innovation and intellectual property activities. This is a work-in-progress paper attempting to make the case to inject foresight into curriculum development or initiatives that will not only bring about greater awareness of intellectual property but also the practice of foresight.

Suggestions at the curriculum level and the initiatives proposed will be shared. Thoughts on the way to assess the benefit to students / participants will also be shared. It is hoped that the insights will lead to further research on ways to measure the societal impact of innovation related activities such as technology transfer, commercialisation and entrepreneurship.

**Sudipta DE SARKAR, School of Law, Kalinga Institute of Industrial Technology**

*Intellectual Property Policies and Technology Transfer of Publicly Funded Research in Indian Universities  
- Need for Reform and Facilitation*

Protection of IP rights, licensing, technology transfer, and commercialisation are presently the buzzwords active in the Indian technological education sector, with various policies and declarations of the Government of India and the states highlighting the importance of sharing the outcome of publicly funded research with external entities and allowing the public to reap the benefits of such innovation. Despite the absence of any specific statute or legislation in this regard, several Indian Universities have taken the lead and have begun actively patenting their inventions, and have taken measures to facilitate technology transfer by establishing Technology transfer offices, incubation and accelerator centres etc. However, such activity is limited to a handful of prominent and well funded Universities in the country, and many institutions are either struggling to enter into this phase of activity or is oblivious to such. This is compounded with the fact that there are many institutions which lack a common minimum IP policy and commercialization structure. It is a long felt need to specifically identify the technology transfer and outflow from funded research in public and private Universities in India, and also identify the implications of Intellectual property in course of such transfer and outflow, and to examine any correlation between laws and policies affecting intellectual property and the outflow and commercialization of technology created in Universities as a result of such funding. Indian Universities have a need for a more structured and strategic approach towards technology transfer and commercialization of its IP assets.

In this regard, the paper will: a) identify and analyse the roadblocks and obstructions faced by technical Universities with regard to IP protection of the outcome of Govt. funded research; b) examine the factors which will influence the institutions to revise their strategy towards technology transfer and commercialization of University IP assets; c) discuss the prospects and challenges of these institutions collaborating with the industry and commercialising their intellectual property; and d) suggest measures at developing and implementing a model IP policy, which will take into consideration the needs and requirements of the individual institutions.

**Lihini DE SILVA, Faculty of Law, General Sir John Kotelawala Defence University**

*State Intervention in the Protection of Geographical Indications in Sri Lanka*

Unlike any other intellectual property, State intervention in the protection of Geographical Indications (GIs) stand at a higher level. The aspects in which the State can intervene are diverse and may vary from initiating the GI registration process to scrutiny and examination of GIs. This research intends to evaluate to what extent the State should intervene in the protection of GIs in Sri Lanka. In this regard, the comparative study approach is adopted concerning the jurisdictions of Sri Lanka, European Union (EU) and India. Under the European system and in India scrutiny and examination of GIs is operated by the State.

Nevertheless, the European system reveals that the State intervention in the control mechanism of GIs has been declining after certification bodies have been introduced for the guarantee of quality. Moreover, the registration of GIs is initiated largely by the producers than by the State. In contrast, the Indian experience reveals that the State intervention in the protection of GIs is increasing. Particularly, in the registration of GIs, a rising development in the public intervention is noticed for which one possible reason could be the absence of strong producer organizations. The manifold government proprietors of GIs include State owned companies, religious organizations supported by the State, corporative societies, governmental enterprises and Boards and the Government of the States. Hence, while synthesizing the lessons that can be gained from EU and India, this research sheds light on the extent to which the State intervention should take place to benefit GI protection in Sri Lanka.

**Bahadır DEMİR, Ankara University Faculty of Law**

*In the Trademark License Agreement, the Mutual Rights and Obligations of the Parties*

The term license, originating from the Latin term "licet", means "permitted" or "allowed". In terms of the trade of goods and services symbolized by brands, large investments are required for creating a brand and for further recognition of the created brands. Due to these costs, the brand owner can avoid these costs, thanks to the fact that the trademark right is subject to the license agreement. With the licensing of the trademark right, the marketing of goods and services in different parts of the country and the world is provided more easily. Sometimes it is difficult for the brand owner to enter foreign markets due to local legal difficulties, and some restrictions and bureaucratic reasons. More importantly, according to the fact that local consumer needs in a foreign market or in a different region are not fully known (examined, researched), difficulties may be experienced in marketing process. Such difficulties can be easily overcome by licensing the brand.

In the trademark license agreement, the parties have mutual rights and obligations. The obligations of the parties may arise depending on the legal nature of the contract, as well as in the form of obligations that the parties will determine together within the framework of freedom of contract. A brand license agreement usually takes the form of an atypical agreement, in which the licensor undertakes to make use of the trademark rights owned by the licensee, and the licensee guarantees to pay a fee for it. On the other hand, it is not possible to say that the license agreements are constituted by a single right or a single obligation. Because the creation of a whole consisting of rights and obligations by contract determines the content of the license agreement.

In this context, the main obligation of the licensor is to ensure that the licensee benefits from the trademark right that is the subject of the license agreement. Within the framework of this obligation, the licensor must take measures to prevent the loss of the trademark right during the license agreement and to renew the protection period of the trademark if necessary. On the other hand, the main obligations of the licensee are the payment of the license fee and other fees related to the issuance of the license and the exercise of the right subject to the license. However, it is also possible that the license agreement is free of charge and there is no obligation to use it if a fixed price is agreed as in case of a simple license. Finally, the parties also have side obligations apart from these basic obligations.



*Bad Faith in Trademark Registration*

The world of trade is one of the fields that become a source of income for many people. Whether trade on a large scale conducted by domestic business actors and business actors from abroad, or small business actors. Consumers will choose goods that are believed to meet their needs. The choice of goods depends on trust in the manufacturer who produces the necessary goods. Trust arises because of the quality of the goods produced by the manufacturer. This arising trust is needed by the manufacturer; therefore, the manufacturer will provide characteristics or identity to the resulting product. This identity is realized by giving the name or brand to the resulting product. This is very important in the world of trade, because without its own name and identity, will be difficult for a product to be recognized by the public. The importance of the identity of a product makes business actors will try their best to protect the trade name or brand of the product owned. Unfortunately, many businesspeople are negligent in protecting the trade name or trademark for its products. That cause same trade name in the market become a dispute for the owners. Where there is a dispute, it requires a long process to solved. Therefore, it is natural for business actors, as early as possible to protect the trade name or brand used in the traded product. Similarities to the name of a product in the registration process result in the rejection of the application. Trade Mark and Geography Indications Law No. 20 of 2016 (UUMIG), in articles 20 and 21, mentions the similarity of a trademark to other trade mark owned by others or already registered, will caused the application being rejected due to bad faith.

In civil law known as the principle of good faith, which is contained in article 1338 paragraph 3 of the Civil Code, an *agreement must be implemented in good faith*", which means, in carrying out an agreement must be done in good faith. Concern to the se justice for the parties, as well as propriety and decency in addition to simply interpreting based on the writings of the agreement. Appraisement of the existence of similarities in a trademark not able done immediately. Though there is a possibility of similarities are not deliberate. The issues that will be discussed are which is meant bad faith in the brand registration process and does a similarity in the process is always bad faith. Normative research types, descriptive research properties, data types using primary and secondary data, how data collection is done with literature studies and interviews, qualitative data analysis, and conclusions are done with deductive logic. Bad faith in brand registration is a registration application that has similarities with a registered or well-known trademark, or registered Geographic Indication. Similarities in a brand or brand registration protests are not always due to bad faith, the factor of ignorance, inadvertency, and lack of understanding of the trademark law is a factor of the occurrence of trademark that have similarities or identic. To assess an equation required more analysis of the full appearance, pronunciation and concept of a trademark. It is also based on the principle of good faith that in looking at the agreement is not only based on what is written but also pays attention to propriety and decency.

*Right to Affordable Health Care and Pharmaceutical Patent in India: A Pre and Post Covid-19 Perspective*

TRIPS Agreement was the successful ideology for the effective implementation of IP system and adoption by respective states according to their own laws but difficult negotiation on the issue of pharmaceutical patent protection, which is seen to have an impact on access to medicines in India. However, TRIPS

Agreement provides limitations, exceptions and other flexibilities to promote access could be put into effective use by WTO members. Firstly, the existing study on 'Article 30 of TRIPS agreements', which mention or provide that "Do not unreasonably conflict with the exploitation of patent and do not unreasonably prejudice the interest of the patent holder, taking into the account of legitimate interest of third parties" so the issue raised that the researcher would be like to discourse here that, 'what kind of things would be include in the perspective of rescannable means should be taken by generic companies?' Secondly, when research made the comparison with the previous study which indicated that the India is being is major exporter in the field of medicines to the developing countries for access to medicines. Many studies have been mentioned or suggest the need of transfer technology, her the gap would like to mention that, to what extent, it would be effective for better availability and affordability of medicines and also it would be make the balance between right of patent holder and right to healthcare with regard to access to medicines? Thirdly, gap would like to mention here that, however in India, there is laws with regard to accessibility of health such as compulsory licensing, manufacturing capacities, and being a major exporter of generic drugs, so why it wouldn't have the solution for balancing approach between the healthcare for public interest and right to patent holder under patent law. Here the question raised that, why there is no better access and affordability to the public however we have provisions under Indian laws like Patent (Amendment) act 2005? What are the issues and challenges for effective mechanism of better accessibility and affordability of medicines? And, there is no clarity with regard to the compulsory licensing would be the operative substitute for the affordability of the patented drugs or medicines.

**Charu DUREJA, Rayat College of Law**

*Infringement Remedies provided in Indian Copyright Law Adequate to Deal with Cyberspace Challenges*

India's content consumption is moving online at a steady pace. About 95 per cent of Indian consumers listen to music via on-demand streaming. Consumers are also warming up to OTT platforms to access films and television series. Subscription to OTT platforms doubled in 2019. Their contribution to total digital segment revenues increased from 3.3 per cent in 2017 to 13 per cent in the same year. Wide internet penetration, low data prices, and a proliferation of smart phone users are responsible for this shift in consumer behavior. The Covid-19 pandemic has made the shift to digital an imperative and has rekindled numerous debates on copyright on the internet. None is at liberty to use the labor of the other for producing his work. The precise amount of knowledge, labor, judgment, or literary skill or that which the author of any book or other compilation must bestow upon the composition in order to acquire copyright in a work within the meaning of the Act cannot be defined precisely. Infringement of a copyright is a trespass on a private domain owned and occupied by the owner of the copyright, and, therefore, protected by law, and infringement of copyright, or piracy which is a synonymous term in this connection, consists in the doing by any person, without the consent of the owner of the copyright, of anything the sole right to do which is conferred by the statute on the owner of the copyright.

**Vehbi Umut ERKAN, Ankara University Faculty of Law**

*Multiple Damages in Turkish Law on Intellectual and Artistic Works*

Compensations are considered as sanctions against those who cause harm in the field of private law. However, in some cases, the courts may rule on a compensation, which has a punitive function, believing

that special legal sanctions involving penalties will provide the most appropriate solution. Multiple damages are often considered a form of punitive damages. However, it is also seen that punitive damages and multiple damages are separate from each other in some respects. Where stipulated by law, with the multiple damages, defendant is obliged to pay double or treble damages, which is up to two or three times actual or compensatory damages, meaning that multiple damages have an upper limit. Also, multiple damages have a general and special preventative role in tort law. By multiple damages, the plaintiff receives more than his actual loss, which can be considered as an award for the sake of public interest. When it is difficult for the plaintiff to prove the exact amount of the damage, the multiple damages also help by compensating two or three times of the proven loss. The regulations regarding multiple damages can be found in both Anglo-American and Continental European Legal systems. In this context, one of the regulations on multiple damages in Turkish Law, can be found in paragraphs 1 and 2 of Article 68 of the Turkish Law on Intellectual and Artistic Works.

According to the first paragraph of the article 68, which concerns the action for prevention of economic rights violation. According to the article, the right holders whose written permission was not obtained may claim up to three times amount of the actual damages, which can be calculated either by considering a similar licensing contract or under the provisions of this Law for the infringement of reproduction right and derivation of the work. The second paragraph regulates that if the copies have not been put up for sale, the right holder may claim the destruction of the reproduced copies, films, molds and similar devices enabling the reproduction or be surrendered to him in return for equitable remuneration, not exceeding their production cost or finally he may claim the payment of three times of the amount he would have demanded, if a contract had been concluded. According to the Law, the plaintiff may claim no more than three times the licensing fee he or she would have requested if the contract have been made, or fair price in case of violation of the rights arising from the work. The determination of the fee for the calculation of the damages belongs to the plaintiff, yet the plaintiff may choose between the contract price and the fair price options. In this paper, the aim of multiple damages will be explained and the approach of the Turkish Law on Intellectual and Artistic Works will be discussed.

**Lorenzo FERRUZZI, University of Bologna**

#### *ICO: An Alternative Source of Financing SMEs*

The Distributed Ledger Technologies (DLT) as the blockchain in the last year are increasingly used, as an alternative mechanism to traditional banking channels, to raise capital for small and medium-sized enterprises. Among the most innovative applications are the so-called Initial Coin Offerings (ICOs) which consist of the creation of digital tokens by start-up companies (often SMEs) and their distribution to investor, in exchange for fiat currency or other cryptocurrencies (like Bitcoin). This mechanism facilitates the exchange of value without the need for a trusted central authority or intermediary, like bank.

ICOs are generally viewed as similar to other financing methods, like the Initial Purchase Offer (IPOs), crowdfunding and venture capital. However, they actually differ from these mechanisms in several respects. In particular, with regard to the IPOs, both constitute public offering of instrument that recognize certain rights to the subscriber and are used as ways to raise financing for the issuing company. However the similarities are limited to the terminology because these two mechanisms are different at most level (e.g. the IPOs are generally used by already established company with a mature business proposition instead of the ICOs that are undertaken by start-ups).

For what concern the regulators' approach, some of the latter, such as ESMA, FCA, BaFin, and FINMA, have stated that on the basis of the relevant facts and circumstances each ICO shall be different and must be thoroughly evaluated in order to decide whether it falls or not within the scope of existing regulations. It is quite evident that a regulatory framework would also serve to mitigate some of the risks inherent in ICOs. This type of transaction entails considerable risks for investors and in terms of compliance with the law. The investor must take into account that, terms and conditions provided by the issuer are often insufficient, misleading and do not achieve a comparable level of transparency comparable to another regulated instrument. Moreover, this type of instruments is typically used in the start-up phase of the company, and as consequence the performance and development of the latter are unpredictable and, in any case, are subject to significant price fluctuations. For what concern the compliance with law, the ICOs are often susceptible to fraud, money laundering and terrorist financing.

**Nobuya FUKUGAWA, Graduate School of Engineering, Tohoku University**

*Effect of the Quality of Science and Innovation on Venture Finance: Evidence from University Spinoffs in Japan*

University spinoffs create radical innovation, leveraging their strong science base. Radical innovation entails uncertainty in commercialization, which calls for individuals and organizations that intermediate the gap between innovation and opportunity. This study examines the relationship among scientific productivity of academic researchers who invented core technology of university spinoffs, radicalness of the innovation, and type of investors supplying risk capital.

Databases of publications, patents, and university spinoffs are combined to create a dataset. Panel analysis reveals that the quality of science, measured by publications and forward citations of core academic researchers, positively affects patent quality. Scientific productivity positively affects venture financing in biotechnology. The radicalness of innovation, measured by technical quality of core patents, positively affects venture capital funding, which corroborates scout function of venture financing. Corporate venture capital involvement is not associated with patent quality, which contradicts to guide function. Lastly, venture financing does not affect scientific productivity. The results suggest that different entrepreneurial intermediaries support academic entrepreneurship using different information that signals the quality of university startups.

**Fernanda GALERA SOLER, University of São Paulo**

*How to Give the Proper Credits to Each Artwork?*

Giving credits, entitled as the paternity moral rights, is one of the bases of any copyright law, even in the common law system. The idea is to provide the author of each creation with the recognition to his efforts. As a way to warrant the author the proper identification to his work, the continental law theory explains that any creation is connected to its author, as a natural right or an expression of the author's personality. On the other hand, the common law understands that giving credits is the fair identification for any artwork. Because of this, any use of any creation or work should be followed by the author's identification. Even though this concept and practice seems simple to be followed, many people and institutions have difficulty

to understand which author, of any creation, should have his credits attributed. Because in some countries we have not only copyright protection but also related rights, there are some questions about which works and/or artworks need to be accredited and which the proper credit to each type of work is.

To direct the study, this analysis will focus on museums and their collections, as there are more works in these institutions than only fine art. Therefore, in some cases, even with an identification board on the wall, next to the fine art, some works require a better and/or complete identification. Thus, to avoid problems it is recommended that museums identify their works and authors' or owners' respective rights to comply with the national law and Berne Convention - the international treaty about copyright, which regulates the copyright system worldwide - and to prevent any claims regarding credits and the paternity moral rights.

**Jianmei GAO, Shanghai International College of Intellectual Property, Tongji University**

*Unleash Geographical Indications' Potential of Fostering Sustainable and Multi-functional Agriculture in China by Enhancing Public Interventions*

It has long been advertised that land concentration is needed to enable industrialization to ensure food security in China. However, another way out for Chinese small scale family farms is to develop value-added agriculture stressing sustainability and multi-functionalities as proposed by the European Union (EU) given that small farms have the potential to adopt sustainable production practices considering local specificities, which enables agriculture provides both quality foods and diverse ranges of public goods, e.g., climate change mitigation and adaptation, rural revitalization, and the preservation of local biophysical resources and cultural heritage.

According to the macroeconomic theory, the market alone cannot provide such kinds of public goods or deliver transparent information concerning the added values to consumers and thus, public intervention is needed. For example, the Common Agriculture Policy (CAP) in the EU as a kind of public intervention provides subsidy policies to reward farmers for their provision of public goods and certification regimes to reduce information asymmetries for consumers. Geographical Indications (GIs) connoting products' geographical origin and the *terroir*-based quality is one of such certification regimes. GI indirectly contributes to sustainable development given that it potentially requires local producers to adopt sustainable practices to guarantee product's typicity and some GIs could evoke an environmentally friendly profile among consumers. Still, it cannot be seen as a sustainable tool per se.

This article explores how to unleash GI's full potential in China in terms of fostering sustainable and multi-functional agriculture. Firstly, it proposes some sustainable principles that should be followed by GI producers. Then it points out that local producers cannot be incentivized to conduct sustainable practices due to three kinds of market failure problems. One refers to the fact that sustainable practices are more demanding and local producers cannot internalize the positive externalities (public good). The other is caused by the lack of transparent information concerning production activities' influence on local resources and the environment. The third one is caused by the collective nature of GIs, which, without proper management, contributes to the tragedy of the commons (e.g., compromised quality and the over-exploration of local resources). Finally, this article proposes three corresponding intervention measures to combat the mentioned problems to unleash GI's full potential in China.

**Lucky GEORGE and Ms RADHUKA, School of Excellence in Law, Tamil Nadu Dr. Ambedkar Law University**

*Trade Secret Protection and Vaccines: The Role of Drug Regulatory Authority*

The actual barrier in the case of vaccine is ‘less about intellectual property and more about knowledge transfer’. Moderna’s CEO reportedly stated that “*drug makers interested in manufacturing a similar mRNA vaccine would need to conduct the clinical trials, apply for authorization and then scale the manufacturing, which could take upward of 12 to 18 months.*” India and South Africa requested World Trade Organization for the waiver of intellectual property rights for COVID 19 vaccines for more accessibility of vaccines for developing countries. The proposal was supported by US concerning the waivers of intellectual property rights for COVID 19 vaccines has increased the probability of adoption of a TRIPS waiver decision in the WTO. But unfortunately, due to outbreak of highly transmissible strain of COVID 19 virus WTO TRIPS Council meets indefinite postponement.

The information related to safety and efficacy as well as the manufacturing process critical to facilitating the rapid diversification and scaling up of production submitted to regulatory authority is protected as confidential and trade secrets. In the TRIPS Agreement it is protected in Art 39 under the heading titled “Protection of Undisclosed Information”. The proposal of waive TRIPS obligations include a waiver of this clause of the Agreement.

The current approach of the multinational pharmaceutical industry to production and supply of vaccines is mainly premised on expanding internal capacity, establishing secretive contract manufacturing agreement with selected contractors and artificially constraining production and supply. There are many instances where industry turning down offers to help from other drug makers, including those from developing countries, to boost global manufacturing and supply. While vaccine manufacturing is a complex process, undoubtedly there is significant vaccine manufacturing experience among developing country manufacturers (as well as other manufacturer) beyond “Big Pharma”. However a major hurdle to the entry of non-originator vaccine manufacturers is the structure of the regulatory system and linked to that, the role of regulatory agencies in de facto protecting trade secret.

**Jayanta GHOSH, West Bengal National University of Juridical Sciences**

*Economic Growth to Employment Generation with implementation of Geographical Indication (GI): A socio-legal Analysis with special reference to West Bengal, India*

The approval of the GI by all nations means that India is only a few steps behind the United States in terms of worldwide recognition and its implementation towards commercialisation. Farmers, producers, and craftspeople, who make up the vast bulk of the population in the regions where GIs work, view GIs as intellectual assets to be shared with them. The evolution of Geographical Indication may be traced back to 1883 when the phrase “*appellation of origin*” (an indirect form of GI) emerged into the worldwide limelight. Although the term “*indications of source*” was used in the Paris Agreement under Industrial Property and Lisbon Agreement, it was not legally recognised; in other words, it contained only the remedies for the fraudulent use of the indications of source. With the emergence of the Trade-Related Aspects of Intellectual Property Rights Agreement (TRIPs), Geographical Indication got legal protection and a firm platform for safety.

The interpretation of the term GI was introduced in the TRIPs under Article 22.1 as "*Geographical indications are indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristics of the good is essentially attributable to its geographical origin.*" Reputation, quality and local Art is the sole relevant quality in things created in a given geographic place, and it is the only quality that matters. It is a matter of pride of the attributes of each of our goods, and its use of pride to propel forward in economic growth efforts. From economic growth to employment generation is the tram-card for the society. Between 2004 and 2020, a total of twenty-one registered GIs contributed to the pride and culture of the state of West Bengal, India. However, the primary question that has to be addressed is whether all can be used in a profitable manner or not. GIs are also known as Parisians, Lisbonians, and TRIPs participants across the world; nevertheless, these individuals are not recognised by existing laws, and as a consequence, laws that have gaps include things like the absence of licensure, the assignment of GIs, and the transfer of GIs. Because of difficulties such as these, it is preventing the commercialization of the product. It is presented in this research, which offers the findings and analysis of the financial effect of geographical indications in West Bengal, which was acquired through real-time data collecting and analysis. This research will collect all relevant information and then conduct a quantitative evaluation analysis in order to develop a feasible policy model for commercialization to aid in the development of employment generation.

**Rima GHOSH, West Bengal National University of Juridical Sciences**

*Entertainment Industry's Journey from Script to Screen, Aspect of Intellectual Property Rights*

A globally popular type of entertainment, going to the movies provides pure delight and an exciting and enjoyable kind of art. Making a movie is a long and laborious process that necessitates the participation of many people. Intellectual property rights permeate every aspect of the production, from the screenplay to the massive screen. Throughout the filming process, the film's concepts and ideas are protected under this right. In today's corporate and economic world, one of the important concessions is IPR. Over the last three decades, the expansion of intellectual property rights has been fueled by globalization and free market policies. There are several ways in which intellectual property rights can be registered to protect the uniqueness and creativity of its authors, while also assuring the wide distribution of legitimate work. Every year, it's one of the fastest-growing entertainment sectors in the world, producing pictures in a wide variety of languages. Based on the narrative and the music, every film delivers a distinct tale. Film and music composers have a tough time protecting their innovative ideas, which are often based on famous songs, from being ripped off and reworked without proper copyright protection.

The importance of intellectual property rights (IPR) in safeguarding new ideas makes this a crucial concern. Many of the song lyrics and tunings are being utilised in the future film, therefore the remix music is an essential topic to address in today's picture. Even when the lyrics of the song are being contested, there are many examples on a local, national, and even global scale. A final decision cannot be made until the matter is filed or, in some cases comes before the court in open forum. It doesn't have a finale, and it doesn't credit the song's true author. So the question has always been whether or not a remix music falls under the ambit of copyright. In many cases, a new film that uses a song from a previous film will share the ownership of the song's producer, but not the artist or the performer. The entertainment industry as well as other areas of the economy were protected by copyright and trademark. It is possible to copyright lyrics, music, dialogue, and scripts. In addition, trademarks play a significant role in the films. Using trademark law, movie studios

may assist their productions gain a distinct identity and brand their production house name. In addition to trademarks and registered symbols and logos, the title of the film might be safeguarded. Product placement in a film is a step closer than you may think to being weaved into the plot of a film to promote a certain brand. Thus, intellectual property rights (IPR) govern the entertainment industry. This research will also examine the impact of digital piracy on the content of movie scripts. When it comes to the entertainment sector, piracy has become a serious concern in the 21st century.

**Ruchika GHOSH, National University of Juridical Sciences**

*How Can Competition be Promoted in India in Case of Patented Pharmaceutical Drugs?*

In today's age of development, distances between people are reducing, increased automation is taking place and medicinal science has achieved wonders. Trade- Related Aspects of Intellectual Property Rights (TRIPS) was introduced as a part of the General Agreement on Tariffs and Trade to grant standardized Intellectual property rights across nations. The aim of competition policy in the country's economy is to ensure fair competition in the market by way of regulatory mechanisms. It is not intended to create restrictions or constrictions that may be detrimental to the growth of society. A compulsory license provides that the owner of a patent licenses the use of their rights against payment either set by law or determined through some form of adjudication or arbitration. Compulsory licenses are defined as "authorizations permitting a third party to make, use a product with authorization of the patent holder". The term is not defined in the TRIPS Agreement. However, it is provided for in Section 84 (1) of The Indian Patents Act, 1970.

During the course of the research, the questions that I aim to answer are: 1) Whether Compulsory Licensing can be used to promote competition in India in case of pharmaceutical drugs? 2) Can exclusive rights in the field of Patents be offered without stifling competition? 3) Whether Compulsory Licensing, as practised in India, is TRIPS Compliant? Does it promote "Public Health"? and 4) What is the interplay/ relationship between the Patent Act and the Competition Act? In 1970, the Drugs Price Control Order (DPCO) was also substantially revised. empowering it to fix and regulate the prices of essential bulk drugs and their formulations. It plays a vital role in directing the pharmaceutical industry's fortunes. Competition for the best price co- exists with price controls. Since 1955, the pharmaceutical prices have been controlled through the DPCOs under The Essential Commodities Act, 1955. The DPCO is an order issued by the Government, under Section 3 of The Essential Commodities Act, 1955. While initially, prices of a large number of drugs were controlled (370 through the DPCO in 1979), this was brought down systematically to 74 through DPCO, 1995. The DPCO, 2013, was also interpreted by National Pharmaceutical Pricing Authority (NPPA) in May 2014 to allow them to bring a large number of drugs outside of National List of Essential Medicines (NLEM) under price control for reasons of extraordinary circumstances or *public interest*. The issue of "public interest" is especially important in the case of Compulsory Licensing.

**Ella GORIAN, School of Law, Vladivostok State University of Economics and Service**

*Deployment of Artificial Intelligence in Finance and Banking: Russian and Singaporean Approaches*

There are two different approaches in regulation of AI deployment: the regulatory one (when a state prescribes the imperative regulations and controls the process of AI deployment as in Russia) and the self-



regulatory one (when a state envisages a certain framework of principles and expects both public and private sectors to participate in a rule-making process as in Singapore). In both cases states tend to regulate IP-related issues due to the risk of liability in a tort.

Since 2019 Russia implements the National strategy of development of AI 2030, which provides the legal definition of AI and AI technologies: it defines the AI technologies through the open list of processes where AI can be deployed (after listing the most promising modern AI processes the wording “promising methods” of AI has been used to enforce the possibility of including the other technologies that may appear in the future according to the Moore’s law). The specific regulation on AI deployment in finance and banking is still absent as well as on liability in a tort (e.g., which party is a tortfeasor – an operator or an author of AI tech). The regulations of Bank of Russia (the financial regulator) cover such aspects as protection of information systems, risk management and outsourcing. Although there are some federal acts to be applied to different aspects of AI deployment: on copyright and patent protection, on personal data protection, on information and cybersecurity, and on critical information infrastructure.

Singapore implements a worldwide acclaimed Model AI Governance Framework since 2019. The AI deployment regulation is also fragmented covering provisions on copyright and patenting, on competition and cybersecurity, and online protection. Certain sectors of the economy (e.g., finance and banking) are allowed to issue sector-specific regulations, so the Monetary Authority of Singapore issued the Principles to Promote Fairness, Ethics, Accountability and Transparency (FEAT) in the Use of Artificial Intelligence and Data Analytics in Singapore’s Financial Sector, which is used by financial operators while deploying AI technologies and data analytics in financial products and services. FEAT principles rule the conduct of financial operators: its violation is not a criminal offense and does not entail administrative sanctions, however, the degree of adherence to such guidelines affects the overall risk assessment for a financial operator.

In Russia as well as in Singapore the legal basis of AI deployment comprises numerous sector-oriented rules, but the special legal act on AI use is still missing. Only national financial regulators are responsible for AI deployment rule-making and the Singaporean one is a step ahead with its FEAT Principles, promoting the unified approach and minimizing risks emerging from the use of AI. Nevertheless, both jurisdictions still delay the regulation of IP issues of AI deployment, such as the margin and the parties of liability in a tort.

**Gaurav GOSWAMI, School of Law, University of Petroleum and Energy Studies**

*Protection of Plant Variety and Farmers Right Act, 2001 as a Tool for Achieving Food Security in India: An Analysis*

Goal 2 of Sustainable Development Goals (SDGs) is aimed to achieve double agricultural productivity and increased income for small scale food producers while ensuring sustainable food production systems by 2030 and also to maintain the genetic diversity of seeds, to promote access to fair and equitable sharing of benefits. India is a member of the UN Organisation is committed to the realisation of this SDG. For the realisation of this goal, an effective system for the encouragement of the development of new plant varieties is the need of the hour.

The International Union for the Protection of new varieties of Plants (UPOV) is entrusted with this mission of providing and promoting an effective system for plant variety protection. India is not a member of UPOV, the reason being it is believed that UPOV only promotes only industrialised farmers. Currently, India is a signatory and obliged to TRIPS and has taken the opportunity to legislate its own Protection of Plant Variety and Farmer's Rights Act, 2001 (PPV&FR/the Act). This paper aims to (i) Explore the reasons for the introduction of the Protection of Plant Variety and Farmer's Rights Act, 2001 in India (ii) Studies the difference of protection granted under UPOV and PPV&FR and (iii) Examine the role and effectiveness of the Act in achieving the sustainable development goals and food security in India.

**Massimiliano GRANIERI, University of Brescia**

*Ownership and Exploitation of User-generated Inventions*

Studies in innovation management have brought the attention on new ways firms innovate, very often involving end-users in generating content or technological contributions that are driven by the very desire to design products that match with their expectations and needs. In a digital environment, user-driven innovation is made available by the existence of technological platforms and internet connection, that make innovation a widespread, very decentralized, around-the-clock endeavor. Under the same architecture, typically the owner of the technological platform benefits from users' contributions, by internalizing such positive externalities into features of the products and services that are then made available back to users.

But user-driven innovation takes place also, and less visibly, within business-to-business relationships, in a variety of contractual arrangements, that go from licensing to subcontracting, from supply contracts to outsourcing. Contributors here are not necessarily end-users, but mostly companies that either use technology and technological products for manufacturing purposes or task other companies with development of solutions or manufacturing of products that incorporate inputs from the client. In a business-to-business setting, contributions can have several degrees of intensity and sometimes convey significant know-how from one party to another. Such inputs can be mere technical requirements, hard specifications, manufacturing layouts or more simply feedbacks on the use of a products that then are incorporated as improvements. In many circumstances, contributions can be valuable and, sometimes, even qualify for autonomous intellectual property protection under a number of doctrines.

By previously identifying contractual relationships where a business client can also become a contributor to develop or to improve the technology or the product of its counterpart, this paper aims at exploring whether intellectual property laws provide an allocative solution for contributions that could become the subject matter of autonomous intellectual property rights. Are there national legislations that introduced default rules indicating whether ownership of inputs stays with the provider or is attracted by the supplier? Or is this a topic that is typically left to private ordering? Intellectual property laws have occasionally answered these questions, but limitedly to employer-employee situations.

The topic is both interesting and timely. Since the open innovation paradigm has somehow twisted the relationship between parties and blurred the corporate boundaries, new forms of collaboration might need more investigation in view of understanding which rules apply to ownership and exploitation of user-generated innovation in business settings and which solutions are available to minimize transaction costs when parties negotiate around these issues.

**Shouvik GUHA, West Bengal National University of Juridical Sciences, India**

*The Curious Case of RAGHAV: Does the 'Art' in Artificial Intelligence Stand Ready to Enter the Indian Copyright Domain?*

In course of this paper, the author has tried to examine the case of RAGHAV, the AI-based painting app that has recently been granted recognition in India as the co-author of an artistic work protected by copyright. Using this as an example, the author has sought to explore the possibilities of according copyright protection to various categories of algorithmic creation brought forth into existence by different forms of AI, as well as to algorithms and AI themselves during the multiple stages of their development. Starting with a brief discussion about the ways in which AI learning is currently being contemplated by researchers, including deep learning, reinforced learning, and supervised/unsupervised/semi-supervised learning, the paper goes on to consider some of the definitions of AI that have been suggested by prominent global IP bodies, and then examine such definitions in the light of the provisions of the Copyright Act, 1957 in India. In this context, concepts discussed in the said Act, such as computer programmes, have been discussed and their relationship with algorithms has been looked into, especially in the context of the work generated by such programmes. The paper then delves into a jurisprudential discourse surrounding issues such as authorship and ownership of creation as considered under copyright law, and connects it with the training of AI and the mining of text and data used for training such AI. While doing so, some of the theoretical underpinnings of granting copyright protection to AI generated works have been carefully examined by the author, such as the sweat of the brow theory, the possibility of granting legal personhood to AI, and the 'humanity' of the creator entitled for copyright protection under the Indian intellectual property regime. Some of the alternatives to granting copyright protection to AI-generated works of art, which have been considered in the paper, include grant of partial benefit to the developers of the AI, as well as releasing the work in the public domain for the overall benefit of the society. Finally, some of the recommendations made the latest Parliamentary Standing Committee in India towards amending the copyright law in order to accommodate AI-generated works within its ambit, have also been analysed.

**Koray GÜVEN, Ankara University Faculty of Law**

*Characterization of 'Intellectual Property' in International Investment Agreements*

The concept of intellectual property (IP) has often been taken for granted in national laws, even in jurisdictions where no such legal is confronted in legislative texts. Partly attributable to the adoption of the term in the international legal framework, IP has been extensively employed as an umbrella term, spanning through not only traditional IP rights, but also more recent rights such as new plant varieties, trade secrets and even sui generis database right. During the last few decades, however, the term 'IP' has been employed also in other fora, apart from the international IP treaties. The IP has found a place for itself in international investment agreements (IIAs) and investment chapters of the free trade agreements (FTAs) since the inception of these agreements. Even though the references to IP in the IIAs is not a recent phenomenon, resort to these provisions by the investors in international investment arbitration have flourished rather recently. Once the concept of the 'protected investment' is defined in an IIA, in a way encompassing the IP, the first issue that arises is the meaning of this term, i.e. 'IP'. Relevance of an IP right is of crucial importance, since the claim of the investor cannot succeed, without establishing the existence of an IP right and therefore a 'protected investment'.

This paper argues that there are two consecutive stages that need to be elaborated in order to conclude whether a particular right/legal issue can be protected as an IP right under the IIAs. Employing the terminology of the conflict of laws approach, the first stage relates to the 'characterization' of IP rights, i.e. whether a particular right/legal issue can be qualified as an IP right. The second stage is the determination of the conditions of protection, scope, and exceptions/limitations with regard to this particular right. The second stage of this analysis has given rise to a substantial controversy, not only within scholarly discussions but also in awards rendered in several investor-state disputes signaling divergent outcomes. In these discussions, the pendulum swings between those who suggest the application of the domestic law of the host state and those who argue for an autonomous interpretation of the terms employed in the investment agreements. The first stage, i.e. characterization of the IP, however, has neither attracted any attention from scholarly commentaries, nor been explicitly elaborated and discussed in the investment arbitration awards.

It will be posited that the employment of the term 'IP' is not only attributable to purely doctrinal divergences between various legal systems, but instead is stamped by serious policy-making decisions underpinning the relevant conceptual framework of each national law and may bring about important implications pursuant to the meaning attached to the concept of the IP. It is going to be argued that an autonomous interpretation of the IP in international investment law is prone to overlook public sphere element attached to IP rights. Therefore, the characterization of the very concept of the 'IP right' should be conducted in accordance with the domestic law of the host state.

**Ananthu HARI & K.D. RAJU, Rajiv Gandhi School of Intellectual Property Law, IIT Kharagpur**

*Foodstuffs, Gastronationalism and Geographical Indications: A Study on the Surge of Culinary Diplomacy in Asia*

During the negotiation of the TRIPS Agreement, there was a strong divide between the European Union and the New World countries as to the nature of GI protection. The European Union favoured a higher GI protection standard in the TRIPS by advocating the nexus between products characteristics and their place of origin. At the same time, the New World countries, including the US, Australia, and Canada, strongly opposed the EU argument since they considered GI only as a subset of the trademark. In that scenario, higher GI protection standards are pushed through other means such as free trade agreements and soft diplomacy channels.

Gastronationalism is one such soft diplomacy channel through which some countries have promoted GI products recently. The concept of gastronationalism was first formulated by Michaela DeSoucey in her acclaimed thesis in 2010. According to her definition, gastronationalism is a concept that describes the use of food production, distribution, and consumption to create and sustain the emotive power of national attachment. Gastronationalism recognises food as one of the basic units of the collective identity of a nation. Thus, the concept serves dual purposes, such as strengthening the nation's soft diplomacy power and promoting the reputational link of products with local cultures. Over the last two decades, this new form of identity politics through food has gained momentum in Asia, with countries like Japan, South Korea, and Thailand championing culinary diplomacy in their trade relations.

China and the EU agreed on a bilateral agreement to protect GIs in November 2019, and the same was eventually signed on September 14, 2020. This landmark Agreement provides a higher level of protection and mutual market access for 100 GI products from each side in the first phase, followed by an additional

175 in the next step. Interestingly, China also signed a bilateral trade deal with the US on January 15, 2020, namely the 'US-China Phase One Deal.' The Phase One Deal set down specific regulatory measures, including a consultation mechanism before new GIs may be recognised for protection in the Chinese market. As a result, those EU GIs objectionable to the US could be brought under tighter scrutiny before qualifying for conservation in China. However, the experts believe that only a handful of EU GIs may be affected by the Phase One Agreement. In a Europe where consumers are quite sensitive to food's origin, the recent agreement will undoubtedly raise awareness and visibility of Chinese products. The agreement is also expected to reform China's domestic regulatory mechanism and contribute momentum to Asia's GI dynamics in general. This paper examines the concept and definitional framework of gastronationalism and its interlink with GI protection and associated developments. The paper's focus will be on the recent surge of using gastronationalism as a soft diplomacy tool by some Asian countries.

### **Noviana HARSIVI, National Agency for Research and Innovation**

#### *IP Management in Government Institution: Patent Commercialization Enhancement after Omnibus Law*

As a non-university government institution that produces the most patents in Indonesia, the National Agency for Research and Innovation faces many challenges concerning the commercialization of the patent. In 2021, the cumulative number of patents resulting from research activity by five institutions is 1,939. Indonesian Institute of Sciences ranks first, producing 1,297 patents accumulatively. More than ten percent of the inventions produced by Chemical Research Centers yet less than ten percent of the overall patents have been successfully commercialized. This causes concern, as the annual fee needs to be financed by the government. The government needs to start growing the commercialization of its patented products to lessen the budget burden caused by the annual fee. Before this day, several laws and regulations have been enacted to encourage a productive research climate.

So far, research trends in Indonesia have not been implemented by digging further into the needs of the market and industry, ensuing in research outcomes only ending up on prototypes or patent registrations. The government now has National Research Priorities and increases cooperation with the Industries. The government is also strengthening the Center for Technology Service as an element to encourage commercialization. So that later commercialization will become the foundation of profit and institutional financing will no longer depend entirely on the government. In addition to strengthening research infrastructure, the government also rewards researchers by issuing a ministerial regulation on the distribution of royalties. Minister of Finance regulation number 136 of 2021 concerning payment of patent royalties to inventors states that royalty payments to researchers with government official's status must be budgeted in the government budget.

This requires considerate planning so that the rights of researchers can be paid properly. This regulation aims to motivate researchers to continue to be productive. So that commercialization will continue to strengthen research. Omnibus Law is considered to be able to accelerate the downstream of research. This law gives special assignments to the Ministry of SOEs to carry out public benefit functions, and also to streamline research and innovation. This research also builds simple modeling of the impact of implementing laws and other government regulations on increasing the commercialization of existing patents in government institutions. The modeling can be used as a recommendation for policies regarding further commercialization.

**Hakan HASIRCI, Yeditepe University Faculty of Law**

*Exercising the Right of Lease and License as a Way of Debt Enforcement: The Practice of Law No. 6750 on Chattel Pledges in Commercial Affairs in Turkey*

As a rule, the intersection of intellectual property law and enforcement law is the payment of the debt by seizure and disposal of the IP that belongs to the debtor and paying the creditor according to the provisions of the Enforcement and Bankruptcy Code (EBC). However, The Law no. 6750 on Chattel Pledges in Commercial Affairs (CPCA) Art. 14 has brought a new, innovative and interesting solution to the debt enforcement practice that is connected to IP's.

According to Art. 14/1/c of CPCA, if a debt arising from the pledge of a chattel that is established according to the rules of CPCA is not paid, the pledgee may “*exercise the right of lease and license in assets that are not subject to the transfer*”. Same article exists in the Regulation on the Enforcement of CPCA (Regulation) Art. 41/2: “*Those whose ownership cannot be transferred from the assets listed in Article 5 of the CPCA may directly exercise the right of lease and license or make them use it to third parties. Once the licensing and leasing revenue reaches a level sufficient for debt, the right to lease and licensing expires*”

The goods on which the rental or license rights may be used will be the goods that are not suitable for the transfer of ownership. When CPCA Art. 5 is examined, it can be seen that these are the rights subject to intellectual and industrial property, trade titles, business names and right to tenancy. In accordance with CPCA Art. 14/1/c, the exercise of the right to rent or license will continue until the rental or license income reaches the level sufficient for debt; after the income reaches this level, the right to rent and license will also expire, as the right to receive and, accordingly, the right to pawn will be eliminated (Regulation Art. 41/2).

The purpose of this presentation is to introduce this fairly new and innovative debt enforcement system and to demonstrate its advantages and disadvantages. Within this scope, it will be discussed first how debt enforcement on IP's takes place within the framework of the EBC. Then, the innovation that CPCA has brought in this regard will be discussed, problems that arise or may arise in practice will be addressed and solutions will be presented.

**Jiong HE, East China University of Political Science and Law**

*Rules of Technology Transfer under the EU-China Comprehensive Agreement on Investment*

The EU-China Comprehensive Agreement on Investment (CAI), which was concluded in December 2020, has established a new mechanism for technology cooperation between EU and China. According to the CAI, China has committed to a great level of market access for EU investors, which will bring more incentives for EU investors to invest in China. Despite that the ratification of the CAI has been indefinitely suspended due to diplomatic conflicts, yet the CAI is still of tremendous value. In recent years, China already signed bilateral investment treaties with many EU member states. Since China and EU countries have determined to further strengthen the economic relationships, even if the CAI cannot be ratified, it will still be a valuable and practical reference for the further upgrade of the bilateral investment treaties between China and EU member states.

Regarding the issue of technology transfer, the rules under the EU-China CAI consist of the prohibition of several types of investment requirements that compel technology transfer. The first prohibition is the requirement to transfer technology to a joint venture partner. The second prohibition is the prohibition to interfere in contractual freedom in technology licensing. The third rule is the protection of confidential business information collected by administrative bodies from unauthorized disclosure.

What's more important is that the EU-China CAI stipulates not only the prohibition for any forced technology transfer ordered by the Chinese government, but also specific rules for judicial relief, including improving the fairness of process in solving technology transfer disputes. According to the rules, when EU investors find that any Chinese company is abusing its dominant position or other illegal activities during the cooperation, they are encouraged to seek relief via administrative complaint, judicial litigation, arbitration and mediation, in accordance with internationally accepted rules. As a result, the WIPO ADR services, particularly the services provided by the WIPO Shanghai Center for Arbitration and Mediation will enjoy this opportunity to play a more significant role in solving IP disputes between European and Chinese parties.

**Imad IBRAHIM, College of Law, University of Qatar**

*Overview of Export Restrictions on COVID-19 Vaccines and their Components*

Trade policy instruments, mainly tariff and non-tariff measures either facilitating or restricting trade, have been used by various governments since the emergence of COVID-19. To avoid suffering the same fate as HIV medicines, which in the past reached developing countries at a later stage than developed countries, the international community established the COVAX task force, led by the World Health Organization (WHO) and involving various other actors, to ensure equitable access to COVID-19 vaccines and ingredients. Nonetheless, this initiative is facing various obstacles because of vaccine nationalism, vaccine diplomacy, and shortages in supplies. In particular, vaccine nationalism, in the form of export restrictions on COVID-19 vaccines and ingredients that were imposed and in some cases are still in force, has affected the process of vaccinating populations in developing and least developing countries. Countries or blocs imposing export restrictions include the United States (US), India, and the European Union (EU). Such restrictions are problematic, as only a very few (mainly developed) countries (Ireland, Belgium, France, Great Britain, the US, the Netherlands, Italy, India, Germany, and Canada) are exporting vaccines. Vaccine production and exportation require an extremely sophisticated supply chain consisting of: 1) the drug discovery and development process; 2) mass production; 3) distribution and administration; and 4) reverse logistics. This Insight will summarize current export restrictions and analyze the legality of these restrictions in the general framework of World Trade Organization (WTO) law.

**Alina IRAMINA, University of Glasgow School of Law**

*Copyright Governance by Algorithms: Rules and Standards on Algorithmic Transparency*

Transparency is a key term in discussions involving governance. It is almost a cliché of modern governance. Within copyright, transparency is a common term in legal instruments addressing competition rules and business practices involving copyright collective management organisations (CMOs). However, in recent years, it has also become a key term in discussions involving copyright in the digital environment. Following

debates on platforms regulation and artificial intelligence, currently under discussion in the EU, the UK and in many parts of the world, more transparency, especially from online platforms, has also become a demand of copyright users and creators in this new platform economy, where creative content is a fundamental asset and the employment of algorithms influences directly on how this content is produced, distributed and accessed online.

Different purposes and different standards encompass the concept of transparency. Despite the fact that transparency is an ambiguous concept that can be defined and implemented in different forms depending on the objectives that are expected, in general, it is meant to enable different parties to assess their rights and obligations correctly and make well-informed decisions. It creates the foundation for good governance, or at least this is what many business groups and politicians advocate in order to oppose to further regulation. When the term is mentioned in discussions on copyright and related rights, it usually involves expressions such as the need of ‘greater transparency’ or ‘increasing transparency’, without a clear definition of what this means exactly in practice. Therefore, it is necessary further research to better understand the role of transparency within copyright governance by algorithms and to provide guidelines and suggestions regarding its adoption and implementation for users, creators, platforms and governments, which can be reflected or not in the law.

For this purpose, the first question to be addressed and that will be the main object of this paper is: which are the legal and non-legal rules and standards transparency usually involve in the context of copyright and algorithmic governance? Considering the limited-copyright legislation that expressly provides for transparency rules in the use of algorithms, in this paper, laws, regulations and other instruments and measures that address algorithmic transparency, such as the EU General Data Protection Regulation, The EU Copyright Directive in the Digital Single Market, the EU Digital Services Act package, and the UK Online Safety Bill, are analysed.

In conclusion, drawing on the concepts of social and public transparency developed by Etzioni (2010), the objective of this paper is to present a general overview of current transparency rules and standards involving copyright and algorithmic governance in order to explore not only the necessity, but also possible new regulatory approaches to ensure more transparency in the use of algorithms to filter, block, demote, rank, sort, classify and recommend copyright content on online platforms.

**Taruna JAKHAR, Institute of Law Nirma University**

*Artificial Intelligence Personhood: Beyond the Anthropocentric Approach*

This research work intends to explore the legal boundaries of copyright law in the wake of Artificial Intelligence (AI) technology development. The Anthropocentric approach of correlating creativity with humans only is the disability in Intellectual Property Laws (IP). The question arises if one could conceptualize alternative models of agency and accountability in the copyright domain that could possibly distance itself from the existing anthropocentric models. The research extends to establish AI personhood as it is reflecting human like performances in creating works, capable of holding copyright protection as per the copyright regulations. These growing capabilities of AI presses question with respect to AI holding copyright authorship. But the vagueness surrounding ‘personhood’ and ‘agency’ in the domain of AI will render ambiguous the notions of right(s) and liability.



The research looks forward to theorizing AI authorship under normative standards of Copyright Law. This will lead to finding parallels between granting copyright ownership to humans and authorship to AI. The view of the American writer Joyce Carol Oates regarding creative work could open a new analytical possibility. Oates compares creative work and scientific work, stating that both should be considered communal efforts. A work of art or a scientific invention is not merely the outcome of individual effort(s). Both are attempts by an individual to give voice to many voices; an attempt that synthesises and explores and analyses (*The Creative Code* 15). Even though all creative and scientific efforts have subtle and acknowledged influences of ‘others’, copyright is the prerogative of an individual or a group of individuals. When it comes to a machine, the question of copyright is not determined in a manner similar to granting copyright to individuals.

The research majorly focuses on two questions of ‘who’ and ‘what’ -- with respect to AI authorship and standard of creativity, if made applicable to AI created works.

**Ansar Mahmood JASPAL, Ministry of Higher Education, Research, and Innovation (Oman), and Hajar AL.BLOUSHI, University of Turin**

#### *Role of Academia Industry Collaboration in IP Development*

Intellectual Property is considered backbone of every successful economy and WIPO Development Agenda is an initiative to ensure development in development country members. In order to benefit from WIPO Development Agenda creativity and protection of Intellectual Property Rights are core issues which needs to be addressed by providing resources and implementing IP Policies. Developing member states face a lot of hurdles including but not limited to capital that hamper their efforts to keep pace with the developmental progress in developed world.

University Industry (U-I) collaboration can be a successful tool to overcome these difficulties as Academia have tools and expertise while Industries have financial resources and opportunities to benefit from developed Intellectual prosperities by exploring and utilizing the same. Academia y-Industry join ventures will not only open doors for new inventions but also would be helpful for the success of WIPO Development Agenda. Academia needs fund to continue their Research as most of the universities depend on Governmental grants which are often not enough to meet their Research requirements. Universities are not corporate bodies hence they are not in a position of commercializing and exploring their patents. The main advantage of U-I collaboration is that a target based research shall be in place to deal with real challenges faced by industries. Furthermore, U-I collaboration will be lessening financial pressures on academia and they will concentrated on Research and Development projects while utilizing available and resources in right directions without fear of repetition of research works.

The Research Council of Oman (TRC) have taken initiative by providing a platform (EJAAD) for Academia Industry collaboration that works as an enabler or marketplace that connects Academic Research and know how to industry needs and vice versa. EJAAD is a successfully adopted U-I Model based on virtual collaboration membership to connect the Industry, Academia and Government in energy-related research and innovation activities.

**Sanaz JAVADI FARAHZADI, Doctoral Researcher, Switzerland**

*Role and Involvement of Women in Intellectual Property System Closing the Gender Gap in Innovation and Creativity*

Women and men should have equal conditions for recognizing their full potential to contribute to economic, social and cultural development all around the world. Gender equality is, therefore, the equal treasuring by society of the similarities and the differences of men and women, and the roles they play in society. Intellectual Property system objective is to generate incentives for creativity and innovation not only for the benefit of creators, but also for public benefit. However global evidence and assessment by different UN agencies such as WIPO, academia and research centers such as Institute for Women's Policy Research has proved that IP system has failed to engage or recognize all creators from all genders. Yet the benefits of intellectual property are not always equally shared across globe and are unfortunately less accessible to women. Contribution and involvement of women in IP system is basically a two facet matter, from policy side, not enough focus and support has been devoted to promoting the role and involvement of women in innovation and creativity and from another side and specially in developing and least developed countries, women are not aware of their own rights and how they can benefit from IP system to improve their business competitiveness, promote their products and services and contribute into the regional economic development.

The purpose of IP system is to encourage and develop innovation and creativity, which in turn helps improve the quality of our lives. When most people think of IP, inventions in various fields of science, technology, engineering or mathematics come to mind, but IP goes far beyond patented inventions and includes other types of exclusive rights such as trademarks, copyrights, geographical indications, industrial designs, so-called traditional knowledge, to mention only a few. Across all sectors, communities and societies, women's leadership has a positive impact. However, in spite of years of emphasis on the positive impact of involvement of women in society as a whole, women still have remained underrepresented in public life and economy activities. Indigenous women are even more side-lined in this regard, facing additional challenges in improving their economic situation. Still considerable work remains to be done to fully understand the root causes and scope of gender disparities in IP system all around the world especially in developing and least developed countries and also to promote gender equality and diversity in the innovative and creative sectors. Various solutions may help to bridge the gender gap as a whole and also in IP system such as awareness raising, education, online campaigns and networking among women, policymaking and allocating funding for business development, innovation enhancement as well as improving entrepreneurship opportunities for all with a gender lens.

**Ajoy JOSE, Padvamatl MANCHIKANTI and Tapas BANDYOPADHYAY, Rajiv Gandhi School of IP Law, IIT Kharagpur**

*Evolutionary Aspects of Traditional Medicinal Knowledge from the Multilateral Perspective*

Health is not just a state subject, it is a global subject. There is a growing relevance of indigenous use of traditional resources which forms the importance of Traditional Medicinal Knowledge. The urgent need to look at Traditional Medicinal Knowledge is also an international interest with the global spread of epidemics and pandemic. The aim of this paper is to analyse the evolutionary aspects of Traditional Medicinal Knowledge and in what ways it has gained prominence from the multilateral perspective. It can be divided

into three distinct phases: Growth of indigenous rights, Measures and contribution of UN specialized agencies specifically to Traditional Medicinal Knowledge and current challenges.

Protection of Traditional Medicinal Knowledge is a matter of growing concern and the role of international forums is indispensable to ensure such protection. In this paper, authors will discuss the measures international forums have taken for the protection of traditional medicinal knowledge. The Intellectual Property Rights regime frequently clashes with Traditional Medicinal Knowledge principles, as well as related morality and ethics among knowledge-holder societies. Local communities and farmers have become part of the global arena of monopolisation and propertisation in the modern world because of the involvement of corporate entities, science and legislation. Industrially exploited natural resources must be recognized in regard to the cultural and ecological context in which their uses have expanded. This will definitely aid in understanding their interaction with Traditional Medicinal Knowledge and communities.

**Naazima KAMARDEEN, Department of Commercial Law, Faculty of Law, University of Colombo**

*Compulsory Licensing and Access to Health in the Post-COVID Era*

Developing nations had been concerned about the dampening effect of strict intellectual property laws on access to generic drugs even before the TRIPs Agreement came into being. This is because a large number of the world's poor rely on generic drugs as an affordable option to branded drugs, which are often very expensive as they reflect the costs of research and development in addition to manufacturing costs and profits. The Doha Declaration offered some respite to members of the WTO, as it allowed greater flexibility in deciding on using the compulsory licensing mechanism provided for in Article 31 of the TRIPs Agreement. These flexibilities were later incorporated into the TRIPs Agreement in its first amendment, termed now as Article 31bis.

However, with the outbreak of the COVID 19 pandemic, the limits of compulsory licensing are also being acknowledged, as vaccines are yet to be patented in the developing nations. Many of the vaccines are still being produced in the laboratories of the developed nations, and are being either sold, or gifted to developing nations under various welfare programmes initiated primarily by the World Health Organisation. Both these initiatives have resulted in delays in vaccination in developing and least-developed nations. This has led to a global discussion on whether the patent system has promoted global inequity in the access to life-saving medicines. The restrictions imposed by the Paris Agreement, which have been reinforced by the TRIPs Agreement, prevent compulsory licenses from being granted for up to three years from the grant of the patent, making it virtually impossible for the compulsory licensing regime to be used meaningfully in a health crisis.

Against this backdrop, this paper will seek to analyse the role of compulsory licensing in promoting access to health, in the specific context of the COVID 19 pandemic. It will identify the global patent regime currently in operation, examine the options available to WTO members in terms of compulsory licensing, identify the right and access to health, and analyse the role of the current IP regime in facilitating the right to health of people in developing nations. It will conclude with recommendations on how the IP regime may be improved to ensure greater equity in this area.

## **Ataul KARIM, Munich IP Law Center**

### *Internal Limits of IP: Why Data Sharing for Text and Data Mining should be Legal?*

Major theoretical and philosophical approaches are heavily concentrated to justify the intellectual property (IP) as a system. In turn, less focus has been dedicated to explore the internal building blocks of IP framework which not only justify IP as a system but also could place self-restrictions. Fixing scope and areas of protection for IP by internal settings is as much important as justifying the IP system by explaining its legal coverage. However, question remains: what could be the basic premise of 'internal limit of IP'? IP, as a system, is ordinarily based on some core principles and goals which guide the framing of the rules for specific branches of IP. For example, the basic principle of patent is to protect novel inventions and copyright is to safeguard the creative expressions, the goals of both the fields are to advance knowledge and technologies respectively.

Premised on general principle and goals, each field of IP has adopted and developed its own rules and regulations. Copyright, for instance, protects the original expressions not the ideas and covers the specific subjects or scope of protection, limited duration, exceptions and limitations. Categorically, similar analogy can be drawn for other branches of IP as well. Thus, the general principles of IP together with specific rules and regulations in any branch have ordinarily demarcated the area of legal coverage. Similarly, on the other side of same coin, they have either expressly or impliedly set the limits of IP system. This contribution attempts to build an alternative conceptual approach in order to develop a fresh outlook on data sharing for text and data mining research under copyright and database legal regimes.

## **Parineet KAUR, Indian Society of International Law**

### *Changing Dynamics of the Relationship between IP Law and Competition Law: Special Focus on Copyright Law*

The possible conflict between Intellectual Property Rights (IPRs) and Competition Law arises from the goals they seek to promote, where the IP owner is incentivized by giving monopoly rights for a limited period and Competition Law goes against this principle by curtailing abusive monopolies and enhancing market conditions by increasing choices and fair competition in the market. Since these two branches do converge or diverge at some point, leads to immediate inference of their overlap and the need for IP Law to be interpreted in the light of doctrine of freedom of competition in the market and envisage their probable conflict and complimentary role.

Since, the dichotomy and similarity between IP and competition invariably exists in the application of these laws, this study will analyze the various grounds where this interface exists so as to effectively face the contemporary challenges that this phenomenon has brought. Despite the existence of niceties and complex complexities in the interface of both the laws, they have however managed to reconcile the conflicting interests and attain the best possible middle path in order to guarantee the critical objective of common good. The author thus, proposes to explore this relationship between IPRs particularly Copyright Law and Competition Law with the key task to appreciate the existence of IPR minimizing its anticompetitive effects and the societal objectives it is intended to endorse.

**Jakub KEPINSKI, Adam Mickiewicz University**

*Who Can be an Author or Inventor?*

An author is an individual who has made a creative contribution to the work. Only a person (a human being) can be the author, because only humans can perform creative activities of an individual nature. It does not matter whether the creator is a child or an adult. There may also be more than one author of a work. In the case where there is a co-author or co-authors, they are entitled to a joint copyright to a given work.

The author cannot be a machine or an animal. This position has not been a subject of controversy. However, there is now increasing debate as to whether this should indeed be the case. With the development of AI, many new opportunities have become available. AI creates books, images, and other creations previously reserved only for humans. In my presentation I would like to present the problem of authorship and try to propose some solutions. I hope that the raised issue will meet with interest of the participants.

**Al Hanisham KHALID, School of Law, Universiti Utara Malaysia**

*Traditional Knowledge, Indigenous Knowledge and Traditional Cultural Expression in Intellectual Property Governance and Sustainable Development Goal*

The upward trend, in terms of governance and economic allocation, the new melding of biological and digital technology is regulated by intellectual property rights. Intellectual property is sometimes viewed as a mechanism for inequitably distributing rights to knowledge, commonly at the cost of indigenous or local knowledge forms and their holders. As a result, intellectual property has become a point of reference for a variety of issues. Almost every one of those issue connections—for example, human rights, international health, food security, biodiversity, and the environment and involves in domains of traditional knowledge, indigenous knowledge, and traditional cultural expression (TK-IK-TCE) and their custodians. In some sense, TK-IK-TCE is not a stand-alone intellectual property-related concern, as food security in comparison. However, the interaction or conflict between intellectual property and TK-IK-TCE, as well as the dialectical approach of indigenous knowledge stakeholders to intellectual property, shape the outcomes of virtually all the diverse issue linkages inherent in the dynamics of intellectual property, global governance, and sustainable development.

This paper aims to highlight the issues of plight among indigenous people in Malaysia as they are the minorities within minority communities. In contrast to empirical research, doctrinal approach which is library-based focusing on reading and analysis of the primary and secondary materials will be applied throughout this study. It is the contention of this paper to promote better wellbeing of indigenous communities in Malaysia.

**Dennis KHONG, Multimedia University**

*The Challenges of Implementing Fair Use in Malaysian Copyright Law*

In 2012, Malaysia amended its Copyright Act 1987 by converting one of its fair dealing exception to one which essentially operates like the American Fair Use doctrine. This amendment came at the heels of a High Court decision explaining the difference between the English fair dealing approach, which the Malaysian

Copyright Act adopted, and the American fair use doctrine. Although the amendment did not call the exception 'fair use', but instead retained the phrase 'fair dealing', the fact that the same four conditions in the American Copyright Act on fair use were duplicated verbatim points to the conclusion that the amendment has the effect of transforming the previously fair dealing exception into a fair use exception. Earlier in 2004, pursuant to the US-Singapore Free Trade Agreement, the Singaporean Copyright Act of 1987 was similarly amended to incorporate a fair use exception.

Despite in effect having a fair use doctrine in Malaysian copyright law, there has not been to date any court decisions applying this provision. In fact, copyright cases in Malaysia raising any copyright exception is few and far in between. This contrasts with the American situation where many copyright cases raised and argued on the fair use doctrine, one of the the most recent ones being the dispute between Oracle Inc and Google Inc regarding the latter's copying of Java's declaration codes in Google's implementation of Java for its Android platform.

Fair use being an open-ended exception is both a boon and a bane to copyright users and content creators. The applicability of the fair use doctrine to a particular situation is indeterminate until a court of last appeal pronounces an ultimatum opinion. Interestingly, legal transplant may play a greater role, such as by referring to American copyright decisions. In fact, an invisible legal transplant of the fair use doctrine has been on-going for a very long time when the local practices of users and industry mirror those in the United States due to the latter's dominance in information technology. One such example is the recognition that there is no copyright in the structure of programming languages and user interfaces, stemming from the *Lotus Development Corporation v Borland International Inc* decision. Another is the tacit acceptance of video cassette recorders (VCR) in the Malaysian market following the *Sony Corporation of America v Universal City Studios Inc* decision.

This paper examines the challenges of implementing this new fair use doctrine in Malaysian copyright law. It argues that the time has come to embrace American decisions on fair use as a guide to similar practices in Malaysia. Notwithstanding the fact that Malaysian judges are free to interpret and make decisions concerning fair use in copyright disputes before them, the need for harmonisation of global practices in the field of technology calls for a closer examination of the fair use doctrine in other jurisdictions.

**Mariana KINJO, Nagoya University**

#### *Discussions on Non-fungible Tokens and Copyright*

The interest regarding NFTs (non-fungible tokens) was explosive during 2021, bringing the worlds of art, finance and technology together to endorse the new-found asset. In reality, NFTs are still not considered an asset per se, but rather a representation of an asset through a token created based on standards such as the ERC-721 and smart contracts. This technologically intricate but simple idea has been empowering many online creators, who see the advent of blockchain technology as a possible answer to the creative community's needs on the internet.

The purchase of an NFT does not automatically grant the underlying copyright of the purchased object. In fact, it does not even grant ownership over the artwork itself, but rather to a set of information (metadata) that is linked to the copyrighted content. In most current legal frameworks, the transaction follows contractual terms, either in the form of a traditional contract and/or smart contracts, but the purchaser mostly

relies on whether the applicable national law considers that the transfer of the NFT also means the transfer of ownership, and perhaps some of the rights related to copyright.

On the other hand, if the applicable laws of the country do not grant some form of exclusive right, the work or copy attached to the NFT will still be available for third parties without infringement of the NFT purchaser's rights. In that sense, the use and trade of NFTs creates a demand for a new model of monetizing intellectual property (IP), but IP rights related to them are still limited and unclear. If properly run, blockchain and NFTs can be a powerful tool to bring security policies and enforcement to a new level. But if NFTs are not currently subject to protection of the law in most cases, why are they still being intensively bought and sold? The reason underlies in the coding of agreements. Buyers and sellers are mostly relying on security provided by the coding of the NFT and standard terms like the "nifty license".

As most countries are still trying to have a better understanding of what blockchain is and its potential, this discussion intends to focus on the current regulations in Japan and the European Union (EU) and how stakeholders have been dealing with the transfer of ownership rights and copyrights of works attached to NFTs. Japan is widely known as a hub for cryptocurrencies trading in Asia, is one of the biggest consumer markets for games, has a growing NFT marketplace for artworks, and has a well-developed system of IP rights. In that same sense, the European Union has also established the EU Blockchain Observatory & Forum, which is trying to boost the European market by developing a blockchain ecosystem within the EU, also helping to raise awareness of the potentials of the new technology. The EU is also among the biggest consumer markets for games and artworks as well, and has also good IP policies and enforcement safeguards.

**Fennieka KRISTIANO, President University**

*Unfair Competition on Franchising Business in the Convenience Stores: Case of Seven Eleven in Indonesia*

An Indonesian company who obtained the license as the master franchisee from the USA, to open the convenience stores, known as Seven Eleven. As a master franchisee, this company never do sub-franchising to the third parties. The total stores which were running by the master franchisee is more than 100 stores. The more rapid business competition, encouraging business actors to strengthen their business' networks, one way is through a franchise business. The more stores run by this master franchisee, the more similar convenience stores are intimidated, and it creates an unfair business competition. Most of them are not as capable as the master franchisee of Seven Eleven, in term of the resources wise. The purpose of this research is to explore the potential unfair competition between the Seven Eleven in Indonesia and other similar brands and businesses.

**Abhijeet KUMAR, Centre for Commercial Law Studies, Queen Mary University of London**

*Limitations of IP in Protecting Indigenous Products and Practices*

The initial plan of action while making a demand of legislative protection for an unprotected subject matter often begins with examination of existing legal regimes in their ability to extend protection to such subject matters. Only in absence of such possibility, the State enacts separate legislation, which could either be new, with its jurisprudence, or *sui generis* to any existing legal system. Intellectual property is the legal regime

that protects subject-matters like songs, dance, poetries, stories, crafts, designs, recipes, processes, confidential information etc. It does so by creating a bundle of rights for intellectual creations meeting the eligibility criteria stipulated in respective legislation concerning these subject-matters.

Demands of indigenous communities for the protection of their cultural heritages have been handled with a similar *modus operandi*. The primary demands of protection and reclaiming of ancestral lands were, comparatively, easier legal issues, following established principles of human rights and property jurisprudence, and were thus protected similarly. However, the issues of intangible cultural heritages, which includes folk music, art, lore, poetries, songs, dresses and designs, potteries and other consumable products, along with sacred rituals and practices (being referred to as Indigenous Products and Practices or IPP in this research), have been argued to be considered as the subject matter of intellectual property regimes, because of their obvious relatability with the existing subject matters.

While several international agencies have recognised and acknowledged the importance of the protection of IPP, a binding instrument is still awaited to be formed. The WIPO Inter-Governmental Committee (IGC), which started negotiations for creating an international instrument for the protection of IPP by segregating them into TK, TCEs and GRs, is far from being concluded as well. In a situation of this void, some countries took proactive measures, based on the aforesaid arguments, by protecting IPP, or some aspects of it, through existing intellectual property regimes.

This research critically examines the subject-matter based segregation of IPPs into different categories and highlights the limitations of the IP regime in providing adequate protection for IPPs. It also proposes the need to look beyond IP for creating a unique bundle of rights for enabling owner communities.

**Abhishek KUMAR, Faculty of Law, University of Allahabad**

#### *Access to Medicine in India through Government Regulated Schemes*

India with around 1.35 billion population is the second most populous country in the world in which around 30 percent of total population lived below poverty line. The World Health Organisation estimates that in 2015, an estimated 8 per cent of the Indian population had been pushed below the poverty line by high out-of-pocket payments for health care as spending on medicines accounted for more than 75% of total out-of-pocket health spending among households incurring any out-of-pocket health spending. In India, it has repeatedly been highlighted and voices been raised from different forums that there is an acute need for public expenditure to be increased towards ensuring affordability and accessibility of drugs.

The Indian Government has launched two schemes which can be hailed as milestones in providing access to medicine to the masses. The first scheme known as ‘Jan Aushadhi Scheme’ was launched in 2008 with the objective of making generic medicines available at affordable prices. Through this scheme, medical stores known as ‘Jan Aushadhi Stores’(JAKs) were opened in at least every district of country for selling generic medicines to the patients which are far cheaper in comparison to their branded counterparts. The second scheme was launched by the Government called as ‘AMRIT’ which stands for Affordable Medicines and Reliable Implants for Treatment with the objective to reduce the out-of-pocket expenditure especially through pharmacies. Under this scheme, AMRIT retail pharmacy network was established which offers more than 5200 drugs, implants, surgical disposables and other consumables at average discounts up to 60% of Maximum Retail Price (MRP). The distinction between the Jan Aushadhi Kendra and Amrit Pharmacy



is that the JAKs can sell only generic medicines whereas Amrit Pharmacy sells branded medicines on a price which is fixed and regulated by the Government.

In this paper, the author has made an attempt to critically examine through comparative empirical data and secondary data that how far these schemes have succeeded in achieving its objectives and what difficulties are being faced for providing access to medicine at an affordable price. In this paper, a small sample size of two representative categories have been selected which mainly comprised of all the Jan Aushadhi Kendra chemists and patients in governments hospitals in the city of Prayagraj, India. A large number of factors can be said to determine the success to these Government sponsored schemes which include awareness among patients about generic medicines and their efficacy, quality of generic medicines, the willingness among doctors to prescribe and adherence to laws/regulations with respect to medicines.

**Hohyun LEE, Hongik University**

*Study on OTT Copyright Conflict in Korea--Focusing on the Dispute Cases Between KOMCA and the OTTs*

In 2021, Netflix's original content 'Squid Game', made in Korea, gained worldwide popularity, and global OTTs such as Disney Plus and AppleTV launched service in Korea. Korea's broadcasting market has traditionally been centered on terrestrial and cable PPs, but OTT's influence is growing. Currently, the OTT usage rate is about 67%, and this figure is expected to continue to increase. Not only global companies but also native OTTs are starting the service, and the OTT market is constantly developing, but the dispute that started when KOMCA (KOREA Music Copyright Association) sent a legal certificate to domestic OTT operators in July 2020 is still ongoing.

A superficial reason in the dispute between KOMCA and OTT concerns the collection rate for music copyrights. Based on the precedent of contracts with 10 domestic and foreign OTTs and the report published by CISAC, KOMCA suggested 2.5%. However, according to the 'broadcast retransmission service' regulations applied to broadcasters' internet service, the OTTs suggested 0.625%. In the end, between the two claims, the Ministry of Culture decided to gradually increase the rate from 1.5% this year to 1.9995% for 5 years, but the OTTs did not accept this, and in October 2021, KOMCA sued OTT for violating the copyright Act.

In this study, the course and aspects of disputes between KOMCA and OTTs are summarized. It also aims to identify the root causes of conflicts along with apparent issues and to find solutions. OTT broadly refers to Internet-based video services, but the current status of OTT under Korean copyright Act is ambiguous, so what rights should be defined and what level of license price should be set.

In particular, for native OTT services, LIVE streaming and VOD services are mixed depending on the operator. In this regard, KOMCA treats OTT the same as transmission service, and OTT operators are not narrowing their differences in claiming that their actions are the same as broadcasters providing VOD and LIVE services through their own webpages. It is time to discuss how to revise the OTT service according to copyright Act and whether or not it is necessary to re-establish the existing concepts.

**Valeriy LISITSA, Novosibirsk State University**

*Applicable Law to Foreign Investments into IP and Digital Rights on the Internet*

The legal treatment and protection of foreign investments into IP, digital and other property rights are performed on both international and national law levels. They include a lot of bilateral investment treaties which usually provide a broad concept of an investment (comprising any tangible and intangible, movable or immovable property, including IP and digital rights) and establish a number of legal guarantees to foreign investors. In transnational investment disputes *lex voluntatis* is recognized to be the key rule for defining applicable law. In the absence of such an agreement, it is to be the law of a host state, including its rules on the conflict of laws (Article 42 (1) of ICSID Convention) as the law of the state to which an investment relation is most closely connected.

Meanwhile, in case of IP infringements applicable law is defined otherwise. As usual it is *lex loci protectionis*, which can be found in both international and domestic IP laws (Article 5 (2) of the Berne Convention, Article 8 of EU Regulation (Rome II), Article 1120 (1) of the Civil Code of Kazakhstan, etc.). *Lex voluntatis*, *lex loci actus*, *lex loci originis* can be also sought. However, the application of such rules might face to the problem of determination of place of IP infringement on the Internet.

A similar challenge arises in case of investing into other intangible assets (digital financial assets, cryptocurrencies, etc.) with the use of informational technologies on the Internet. Moreover, such new objects existing only in the digital sphere are now not governed at all or just so little on the international and national law levels. It is worth to highlight the experience of Russia, where the special federal law “On Attraction of Investments with the Use of Investment Platforms ...” was adopted in 2019. It established the legal framework of functioning different participants, such as investors, investment host companies, operators of investment platforms, as well as the order of appearance and implementation of digital rights recognized as a type of property rights. In this respect some new legal instruments were introduced (contract on acquiring a digital right, contract on investing with the use of investment platform, etc.), which might be implemented in other jurisdictions.

However, in the scope of private international law it is deemed to develop special rules designed for IP and other intangible assets existing only within informational systems on the Internet. They are more likely to be similar to non-documentary securities represented in the form of list of records kept by their authorized registrar. Based on the general principle of the closest connection, the applicable law to such cases is argued to be the law of the place, where the register of appropriate rights is conducted regardless of the nationality of an operator of the informational system. It can be the country, in which the registrar shall be licensed or registered by the authorized governmental body in accordance with the rules of law of its state.

**Thomas LU, National Sun Yat-Sen University**

*An Investigation of When an English Word Mark Is Weak*

This empirical research delves into the following research question: in what situation does a judge determines whether an English word is strong or weak? The origin of the question comes from the preliminary study of literature review and precedents. The study reveals that judges and academic discussions have not provided a solid and persuasive explanation about how to objectively determine

whether an English word mark is strong or weak. Thus, it is difficult to predict the result of the U.S trademark infringement lawsuit. With this question in mind, this research collected and hand-coded different types of data from judicial cases and other online free sources about the English words and the trademark database from U.S government. After cleaning and sorting all the data above, we now have 200 data in our dataset. By using decision tree to analyze these 200 data, we found three things: 1. Coined words are not necessarily strong. 2. Even the word(s) are short, jurisdictions and judges' presiding years have their own orientations. 3. Longer words covering several product or service categories does not help the strength.

**Nicola LUCCHI, Universitat Pompeu Fabra, Enrico BONADIO, City Law School, University of London, and Magali CONTARDI, University of Alicante**

### *Extending GI Protection in and Beyond the European Union*

The European Union protects geographical indications (GIs) in relation to food and agricultural products, particularly those whose characteristics are linked to the soil and local conditions, and which are produced using specific production methods. The extent of this protection has recently been criticized, in particular for the Court of Justice of the European Union's (CJEU) broad interpretation of the concept of "evocation". Indeed, under EU law, the owners of GI have the right to prevent others from using their signs not only to confuse consumers as to the geographical origin of the product, but also merely to evoke and recall such names to consumers. However, in *Queso Manchego* (C-614/17), *Morbier* (C-490/19) and *Champanillo* (C-783/19), the CJEU appears to have extended this protection further. The presentation will focus on these cases.

As already mentioned, the protection of geographical indications is at the heart of European agricultural and food policy. However, other countries, particularly in the so-called New World (i.e., the former colonies of European countries), do not provide the same strong protection to geographical names as the EU. The US, Canada and other countries, for example, do protect geographical signs, but they do so through trademark law, which is based on a "first come, first served" rule. This has led to conflicts between European wine, cheese and ham producers and local competitors in the New World. The presentation will shed light on these conflicts. One of the arguments put forward by New World countries is that these "terms" often do not denote anything, but only describe the product itself (e.g. the average consumer in the US does not know that "Parmigiano" is the famous cheese produced in the Italian town of Parma) and that therefore the EU's attempt to recapture designations that have become common in these states is a protectionist measure aimed at monopolising descriptive terms and signs to the detriment of competition and consumers. From a European perspective, this is perceived as unfair behaviour aimed at abusing the reputation of the brands and heritage of European food and agricultural products.

The talk will thus look at the struggle between the New World, which takes a minimalist approach to the protection of geographical names, and the Old World, especially Europe, which advocates strong protection - not only at home but also in other states through bilateral trade or economic partnership agreements. Indeed, the EU has consistently sought to improve the protection of its geographical names, moving from the WTO arena (where the two-decade debate on reform of the TRIPS geographical indications regime was unsuccessful) to a variety of bilateral agreements, ranging from stand-alone geographical indications agreements to sectoral agreements providing for mutual recognition and protection of names for wines or spirits. Notably, in recent years the EU has concluded comprehensive agreements with other nations that include a chapter on geographical indications, including Canada (CETA), South Korea and Japan.

## **Le MA, East China University of Political Science and Law**

### *Anti ASI over SEPs Dispute: A Way Out?*

As disputes over Standard Essential Patents (SEPs) licensing boost globally, parties involved resort to court decision over FRAND terms in different territories. Despite the patent territoriality, proceedings in different jurisdictions could be interconnected, or even interplayed. Given the parallel proceedings and the probable effect to the licensing negotiation thereof, both parties choose to request anti-suit injunction (ASI) from the court which may be friendlier to the SEPs holder or the licensing seeker. However, given ASI as a means to address the contradiction between internal jurisdictions in case law system, the extension of ASI to international scenario as well as use by courts in other law systems give rise to global concerns or even controversies. The issuance of ASI from one particular court and ASI thereto from an exterior court, so called AASI, appears negotiation tactics rather than a necessary judicial proceeding. In addition, it ends up with a competition among different jurisdictions to be a more favored choice to certain party, *inter alia* SEP holder. Nevertheless, when it comes to specific case, further observations on criteria for issuing ASI or AASI are needed. The issuance of ASI in *Samsung v. Ericsson* and *Huawei v. Conversant* by Wuhan Intermediate Court and Supreme People's Court respectively is to be discussed in this sense.

## **Manjula MALLEPALLI, School of Law, Mahindra University**

### *Impact of Digital Technologies on World Trade and Regulatory Framework*

The technological advancements and digitalization have changed the world behavior on the facets of social, commercial, political, financial and economic relations. The digital revolution has paved the way for new way of doing business which has reduced time and cost of the cross border commercial transactions. The Covid-19 pandemic situation has emphasized on the significance of digitalized world where many of the service-oriented industries have carried on their business without much hindrance during the lockdown. It is observed that 65 percent of customer interactions are digital and 41 percent of the interactions between customers and North American companies were digital. By using the internet technologies, the new entrepreneurial ventures are born global. As the technology has allowed the countries to have borderless transactions and where the economies are interrelated, interdependent and integrated this has given rise to the complex issues of regulatory mechanism.

As per the Mckinsey report eighty six percent of technological based startups are having cross-border operations. Nine hundred million people have international connections on social media, and three hundred and sixty million people take part in cross-border e-commerce. Over a decade, global flows have raised world GDP by at least by ten percent; this value totaled \$7.8 trillion in 2014 alone. Data flows now account for a larger share of this impact than global trade in goods. Digital commerce already accounts for roughly twenty percent of global trade and is projected to increase to twenty five percent by 2025 and by 2030, Artificial Intelligence (AI) could create additional global economic activity of around US \$13 trillion. In this context it is imperative to analyze the challenges of AI to align with the global trade governance.

The digital globalization has created a lacuna in the regulatory framework as the policy making procedure has become more complex. The technological innovation has always challenged the regulatory framework as the nation states are not adept in framing the policies and legal systems in tandem with the technological growth. IoT, Big Data, Deep Learning and AI are the enablers of digital transformation across many

industries which have reshaped real world we live in, with self-driving cars, digital assistants, robo-advisors, and automated legal practices etc. AI technology has posed a newer challenge not just in the intellectual property rights but also human rights. There are number of anomalies when it comes to the regulation of IPR within AI for instance the ownership of patent and copyright and great concerns over the infringement issues and the penalties involved.

Thus, this paper attempts to demonstrate the challenges of the Artificial Intelligence and how the nation states are adopting the measures to synchronize the domestic legal framework with the world trade regulatory regime with regards to TRIPs Agreement (the Patents, Copyrights, Trademarks), GATS, Cybersecurity and Human rights; and E-Commerce Agreement at WTO.

**Manisha MANASWINI, KIIT School of Law, KIIT University Odisha**

*Evaluating Plausible Methods of Intellectual Property Management for Protection of Traditional Cultural Expressions in Cultural Festivals of India*

India's culture is ingeniously diverse to such an extent that it is impossible for one to narrow it down to only one basic feature. The culture of India while possessing of great amount of variety, is also visually exquisite, traditionally rooted and intrinsically brilliant. Festival doesn't only mean merry making and celebration, in fact essential display of values, tradition and culture is also its other meaning.

The Cultural Festivals of India celebrate these rich and diverse cultures by bringing together time honored customs and rituals and modern creativity in the form of dance, music, visual arts, theater, film, crafts and many more. Performers and participants are the lifeblood of such festivals and communicate through their skills as a way of crafting their social world and making some meaning of it. It is they who draw public interest and build up the reputation of festival by presenting their skills. Their skills are also very vital for their cultural distinctiveness and it also provides economic opportunities for themselves, their families and their communities. The varied skills of the performers giving a snapshot of their community's identity can also be termed as Traditional Cultural Expression (TCE).

The accelerating advancement in the communication technologies i.e. satellite, cable, broadband and mobile internet, have revolutionized broadcast coverage of different cultural festivals and enabled billions of people around the world to take part in the spectacle and excitement of major cultural events. The development especially in the field of sound and audio-visual recording, broadcasting, cable television and cinematography may lead to improper exploitation of the cultural heritage of a community or state. Expressions are being commercialized through such means in a world-wide scale without giving due respect to the cultural and economic interests of the communities in which they originate and even without granting any share in the returns from such exploitation to the people who are the owners or authors of their expressions. It is also seen that for the purpose of commercialization, expressions are often distorted so as to correspond what is believed to be better for marketing them.

The researcher wants to stress upon the fact that 'Protection' is not the same as 'preservation' or 'safeguarding' of the TCEs. Preservation or safeguarding generally refers to the identification, documentation, transmission, revitalization and promotion of the cultural heritage in order to ensure its longevity by continued use and transmission or in other words to make it evergreen. The main purpose of providing protection is to ensure that the TCEs do not extinguish and are maintained and promoted

throughout. Moreover, the researcher being an Odissi performer has deeply felt the issues and is bothered by the same. Having practically experienced the issues, she strives to analyze the issue and adequacy of the existing legal mechanism.

**Henny MARLYNA, Universitas Indonesia**

*Non-Use as the Ground of Cancellation of a Trademark: Case Study in Indonesia*

Non-use is One of the common grounds used to cancel a registered trademark. According to Article 5 c of the Paris Convention, the registration of a trademark may be cancelled only after a reasonable period unless the owner can prove of using the trademark. Article 19 of the TRIPS Agreement defines the unreasonable period as an uninterrupted period of at least three years. In Indonesia there is no requirement for the trademark owner to commence use of submit declaration of use to the Directorate General of Intellectual Property. However, The Indonesian Law No. 20 of 2016 on Marks and Geographical Indication provided third interested party to file a cancellation lawsuit against a registered trademark by arguing that the trademark has not been used for 3 (three) consecutive years in trade of goods and/or services from the date of registration or of the last use, unless there is an acceptable exception.

Nonetheless the law does not provide any other information on what is meant by non-use and the date of last use. Therefore, it is interesting to examine how court settle the issues based on the cases brought to the court. This article will study 6 Supreme Court decision on the cancellation lawsuit arguing non-use.

**Althaf MARSOOF, Nanyang Business School, Nanyang Technological University**

*~~Consumer~~ Machine Confusion?*

Imagine a world entirely driven by Artificial Intelligence (AI) and Internet of Things (IoT) in which devices speak to each other and make meaningful decisions to make our lives more efficient and convenient so that the *human mind* can be put to use for things that truly matter. Such a world might still sound fictional but in my view is not too far away. We are already seeing smart fridges that incorporate sensors so that when your milk runs out, a new carton of milk is delivered right to your doorstep—nearly all aspects of the transaction, such as selection of goods, the actual purchase and payment, is done through automated means without the involvement of humans. Scale this up a notch—we might find entire homes, offices, restaurants, hospitals, organisations and businesses delegating the task of managing supplies and stock to machines that benefit from AI and IoT.

What might be the role of trademark law in a world like this? This is the question I would like to pose in this paper. For centuries, the key function of trademarks has been to guarantee the origin of goods or services to which they are attached. Such a guarantee promotes an efficient market by reducing consumer search costs. Indeed, when traders use marks in ways that confuse consumers, trademark law provides a remedy to aggrieved trademark proprietors. The very basis for an action for trademark infringement is ‘consumer confusion.’ But in a world where machines make purchasing decisions on predefined parameters set by their human users, which might include preferences for particular brands of goods or services, we may need to rethink the role of trademark law.

One possibility, of course, is that since machines have taken over, there is nothing that could possibly go wrong—in that all machine-driven transactions will end in a satisfied human consumer receiving authentic products for their use. But what if machines can be fooled? What if machines can be misled? What if machines, just as humans, can become victim to counterfeiting? Even assuming that ‘track and trace’ systems can be used along with blockchain technology to verify the authenticity of a particular product listed for sale on a particular online store or platform, what if devious traders can circumvent such measures and pass off counterfeit products as genuine ones? And when this happens, what should be the response of trademark law? In this paper, I posit that trademark law will continue to play an important role but not in the conventional ways it has functioned so far. We may need to replace the notion of consumer confusion with one of ‘machine confusion’ and focus on developing technology protection measures or TPMs for trademarks.

**Dwi MARTINI, University of Mataram**

*Indonesia's Paten Law: Adat Communities' Welfare Enhancement Perspective*

In 2016 Indonesia's government enacted the new Patent law. One of the crucial points of this law is the involvement of Adat (Indonesia's generic term for indigenous) communities to determine access and benefit sharing in the utilization of Genetic Resources (GR) and Traditional Knowledge (TK) by outsider. This article elaborates Patent law in Indonesia and its implication toward welfare enhancement of Adat communities as the holder of GR and TK. Article 26 stated that there is an obligation to mention the source of origin in patent description if an invention is using or related to GR and TK. However, it does not arrange particular benefit sharing mechanism as it regulates under a separate government regulation and refers to international norms such as The Nagoya Protocol. Thus, the communities entitled to claim their GR and TK as well as to negotiate their desired forms of benefit sharing which suitable the most for their economic, social and cultural enhancement. Despite the remaining problems in implementation stage, this arrangement is in accordance with national development direction that is the local potential-based welfare enhancement.

**Tri Rusti MAYDRAWATI, Faculty of Law, Hang Tuah University**

*Implementation of Favipiravir and Remdesivir Drugs as Patents Efforts to Fulfill the Healing Needs of the Indonesian Community due to the Covid-19 Pandemic*

In an effort to meet the medical needs for access to drugs and vaccines for the community Indonesia, the Government of Indonesia has issued two presidential decrees (Perpres) No 100 of 2021 on the implementation of patents by government for the drugs Remdesivir and Presidential Decree number 101 of 2021 concerning the application of patents by the government on drugs Favipiravir. Both types of drugs are quite effective for treating Covid-19 and currently both are still protected by patents. Indonesia's interest in applying drug patents This is mainly to fulfill the rights of its citizens, especially in the health sector as part of human rights. This week's spike in cases led to a need drug Keep going increase, added again Body Supervisor Drug and Food (BPOM) issue emergency clearance the use of Avigen whose generic drug is Favipiravir as a treatment for COVID-19. Both types of drugs are quite effective for treating Covid-19 and currently both are still protected by patents. Indonesia's interest in applying drug patents This is mainly to fulfill the rights of its citizens, especially in the health sector as part of human rights. This week's spike in

cases led to a need drug Keep going increase, added again Body Supervisor Drug and Food (BPOM) issue emergency clearance the use of Avigen whose generic drug is Favipiravir as a treatment for COVID-19. This has resulted in the drug being sought after by many people the general public, causing prices to soar. The problem is how is the implementation of drug patents for the drugs Favipiravir and Remdesivir in fulfill the healing of the community due to the Covid-19 pandemic, is the implementation of drug patents? is a form of waiver of exclusive rights of patents and whether large imports or large production. Generic drugs can cause problems related to the protection of Property Rights Intellectuals in particular owner and patent holders. This research method uses Study normative juridical. Discussion and findings include regulation at the national level and internationally, the existence of a waiver in the application of IPR, the use of compulsory licenses by the state without causing loss to the owner and patent holder, including the implementation of drug patents for which is based on interests and benefits globally, including for society who need to recover their health due to Covid-19.

**Prachi MISHRA & Monica KHAROLA, ICFAI University**

#### *Domain Name Disputes in Cyberspace*

The emergence of electronic commerce has led to the facilitation and expansion of business entities in cyberspace. However, a business cannot directly enter cyberspace without an identity. Domain Name System was introduced as a replacement for all traditional digital IP addresses. Domain name rights disputes, which fill up as a source - distinctive capacity in cyberspace, as a trademark, emerge at the heart of this convergence between global trademark law and the Internet. Trademark infringement in cyberspace can take the form of linking and framing, metatags, trademark dilution, etc. The trademark and the domain name, although they look alike, are distinct but both related. Sometimes well-known trademark is used as domain names by hoaxes in order to mislead customers. This act is known as "cybersquatting".

This paper deals with the legal lacunas in dealing in respect to domain name disputes. One of the issues with resolving a domain name and trademark dispute is jurisdiction because the internet knows no boundaries. Asking which court to bring the matter to, whether the court's decision will be binding on parties registered in two different countries. In addition, the paper analyses the evolution of the legal framework to combat Domain Name Disputes and, based on the analysis of this evolution, the paper concludes with recommendations for the development of strategies for the prevention, detection and tracking of cybersquatters to prevent Domain Name Disputes.

**Anuja MISRA, Maharashtra National Law University**

#### *Climate Change and the Need for Transfer of Green Technology Vis-A-Vis IPR Concerns*

Climate change is one of the most pertinent environmental problems that the world faces today. As much as it is pertinent, it requires immediate attention. Human involvement has had such an adverse effect on the environment that it is nearly impossible to restore it to what it was. Industrialisation and urbanisation have definitely made our lives simpler in many ways with the advent of technology and the creation of more job opportunities for men and women around the world, but it has nevertheless created problems, the impact of which is severely felt today. It is therefore time that these issues are addressed with much seriousness so as to come up with a likeable outcome which provides for a cleaner earth to live in.



Green technology is the best solution which gives us the hope to not only mitigate the effects of climate change but also reverse them to some extent. As discussed before, considering the limited amount of natural resources present on the earth, it is very important that the remaining are used judiciously so as ensure that they not only last our lifetime but also are preserved for the coming generations. This is the concept of sustainable development. Green technology helps us achieve the same. As all nations are rushing towards economic development, the demand for climate friendly technology rises. However, in this pursuit of procuring these technologies, nations face many obstacles for example trade barriers or deterrence due to costs owing to intellectual property rights. That to maintain a balance between these cost-prohibitive technologies and the requirement of technology transfer is the need of the hour. The paper shall delve into the related concepts and the significance of technology transfer in this regard.

**Khadijah MOHAMED, School of Law, Universiti Utara Malaysia**

*Managing University Intellectual Property Commercialization and Conflict of Interest*

Innovation, and knowledge transfer, including the commercialization of intellectual property (IP), have become a key mission of universities worldwide in recent years. Universities are aware of the importance of their research outcomes to be adopted and used for the benefit of society and to help the innovation ecosystems. In Malaysia, the IP commercialization landscape is currently in its developmental phase with a vital role largely contributed by the public universities and research institutions. In facilitating the commercialization of their R&D outputs, the public universities have established Technology Transfer Offices (TTOs) to enable them to provide support to academic researchers and to enhance connections with industries. However, a recent report by the World Bank Group states that these TTOs are relatively new and lack the know-how and expertise on IP rights, technology transfer management, and technology evaluation mechanisms. Some TTOs are small and understaffed with relevant personnel such as those with a legal or business background. In certain situations, the researchers themselves have to manage the processes without having the required knowledge and expertise. There has also been an increasing recognition of the potential issues surrounding conflict of interest when IP is commercialized from the universities. For example, IP commercialization of university research in the form of licensing, patents, and spinoffs can generate financial gain to both the institution, and the employees personally. This paper aims to discuss the situations that can give rise to these conflicts and how to manage them based on the relevant provisions currently in force in Malaysia

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**MP Ram MOHAN and Aditya GUPTA, Indian Institute of Management, Ahmadabad**

*Mutation of the Trademark Doctrine: Analysing Standard of Use to Reconcile Trademark Protections with Constitutional Safeguards*

Trademark law has expanded from its core function of mitigating confusion about marketing signals to covering matters such as dilution and disparagement. The core of the trademark doctrine has polymorphed from its origins in consumer welfare to protecting the reputation and goodwill associated with the commercial exploitation of a mark. The trademark doctrine has potentially traversed from protecting the purely *signaling* function to policing the expressive discourse by use of a company's trademark. The

expansion of such a protectionist stance can increase pressure on the relationship between constitutional protections and trademark monopoly. With their ability to curb the expressive function of trademarks, the expanded remit of trademark law can be cited to suppress public discourse.

This situation is further complicated by the unique nature of trademarks, where unlike patents and copyrights, unanticipated fair use finds limited protection within the trademark regulatory framework. With digitisation, costs associated with imitation and reproduction have decreased considerably, and an artistic, political, and humorous iteration of unauthorised trademark usage has assumed significance. The often unclear difference between commercial, communicative and expressive use of trademarks has become even more obscure. This interaction between multiple legal regimes can be reconciled only by identifying what is the manner of ‘use’ sought to be protected by trademark law. Tracing the *scope of use* protected by the expanded remit of trademark law, we propose to reconcile the possible inconsistencies and repugnancies between the scope of the trademark doctrine and constitutional limitations. However, the statutory language delineating the *standard of use* is not consistent across different jurisdictions. For example, the American law employs the phrase “*use in commerce*,” the Canadian law prescribes “*used in relation to wares*,” while the Indian Law uses the phrase “*use in course of trade*.”

The authors divide this study in two phases: the first phase would be limited to studying Indian trademark law and would take an incremental approach to studying trademark *use* by attempting to create a *trademark protection spectrum*. The two ends of the spectrum would be occupied by *trademark parodies* and *secondary unauthorized use in a commercial manner*. Substantively dealing with the intersection of trademark protections and constitutional limitations, the study would also investigate requirements and qualifications for a secondary use to incrementally move from one end of the spectrum to the other. The final report would be structured in a way to educate marketing and advertising strategies by attempting to draw reasonably clear demarcations between infringement, disparagement, comparative advertising, satire, and parodying.

**John Joshua MONTANEZ, Bicol State College of Applied Sciences and Technology**

*Intellectual Property Issues on Artificial Intelligence: An Overview Based on Current Philippine Intellectual Property Landscape*

The verge of Artificial Intelligence and its application in the Philippine industries and government agencies is evident. This paper aims to present the intellectual property issues brought by Artificial Intelligence in the Philippine intellectual property landscape. Moreover, the paper dwells on the authorship and ownership that Artificial Intelligence may produce. The Intellectual Property Office of the Philippines (IPOPHL) is the sole agency in the Philippines that manages the protection of intellectual properties, including advancement in technologies such as Artificial Intelligence, Internet-of-Things, and Robotics. The Philippine patent examiners use the guidelines for examining information communication technology and computer-implemented inventions (ICT and CII Guidelines) to assess the subject matter eligibility of invention in the filled with information communication technology and computer-implemented invention. Document analysis and cases study were the research methodologies used in this paper. The intellectual properties, i.e., patent, utility model, industrial design, copyright, trademark, and trade secrets, were analyzed congruently with existing laws and policy guidelines on Artificial Intelligence through said research methodologies. It is noticeable that the concept of Artificial Intelligence and its derivatives and applications is not explicitly included in the Intellectual Property Code of the Philippines. Therefore, substantial provisions regarding

Artificial Intelligence must be included in the Philippines' intellectual property code, which will strike a balance among the government and the concerned stakeholders.

**Mohammad MORADI, International Law Institute Pars Ara Futurists, and Hossein BORZOUEE, Research Center of the Ministry of Oil of Iran**

*Development of Intellectual Property Rights Security System*

Protecting the intellectual property rights has been one of the main concerns of businesses, however; the concerns of entrepreneurs and traders have been alleviated by creation of international conventions and also recognition of intellectual property rights. But nowadays this concern is not completely resolved yet, forgetting to renew a trademark registration certificate, not knowing the legal protections in other countries domestic laws are examples which may lead to irreparable damages.

The multiplicity of conventions and the variety of legal protections have confused entrepreneurs and businessmen, moreover; their recourse to lawyers in their own countries has not been able to fully address their concerns. Observing a real need in the legal process of protecting the intellectual property rights of business units, we designed a system based on purpose, prevention of lawsuits and legal problems. After 3 years of activity in Iran Science and Technology Park, we finally reached to a scientific and practical approach so that we can analyze the legal complications and problems of a business unit in a defined and specific cycle and then fix them. The "Intellectual Property Rights Security System" operates in three steps. First, this approach identifies and looks for legal gaps related to intellectual property of the business unit, and is a scientific report identifies the problems. Then it eliminates those identified problems and finally, it provides the necessary support for the unit in order to solve the identified problems.

This process of identification, repair and legal care in businesses has prevented legal problems for businesses, so they can pursue their activity with more legal security. Promoting a healthy trading environment without concerns and also reducing legal cases in the domestic and international judicial system is one of the primary goals of this system.

**Sangeetha MURALI, Ramaiah College of Law, Karnataka State Law University**

*Ownership of Geographical Indications in India: A Critical Discourse into the Legal Nuances and Post Registration Trends.*

Geographical Indications are versatile from the other forms of intellectual property rights for a multitude of reasons. They have the potential for the revival of rural economies, protection of traditional knowledge and cultural expressions, prospects to promote sustainable development and its characteristics as a public property of the producers is well known. The Indian legal system for registration and protection of geographical indications grants exclusive rights regarding the use to the 'authorised users' in essence an umbrella term including the producers, manufacturers, dealers etc depending on the nature of the geographical indication tagged goods. But, being a collective property the ownership of geographical indications is accorded only to associations of producers/persons or an organisation or authority established by or under law, which represents the interest or stake of the producers of the GI. There is an unassailable link of the majority of the geographical indications in India with rural/indigenous/marginalised

communities. They often lack adequate knowledge and resources to proceed with the registration mechanism as prescribed by the law. In such instances, government departments or agencies step in as the application in the status of “registered proprietors” to facilitate the process of registration and comply with other legal formalities. The majority of the geographical indications registered in India are thus represented by the government bodies rather than the associations/organisations of producers.

The paper will focus on the trends in determining the status of entities as the legitimate owner of geographical indications and the criteria for determining their eligibility for representing the interests of producers. The paper will also include a comparative appraisal into the fulfilment of post-registration requirements, establishing quality control mechanisms etc in case of geographical indications held by the government entities and the association/organisation of producers etc.

**Nadia NAIM, Aston University**

*Islamic Finance as a Catalyst for an Islamic Law Based Intellectual Property Model*

The purpose of this paper is to assess how Islamic finance can act as a vehicle to enhance the current intellectual property rights regimes in Islamic countries. Islamic finance has developed within the constraints of sharia law and has been a growth sector for the global financial market. This paper will identify the main principles of Islamic finance that can enhance intellectual property protection. The main sharia compliant areas to be considered are; musharaka, mudaraba, murabaha, takaful, istisna, ijara, salam and sukuk.

The paper will outline the founding principles of Islamic finance, the governance of sharia boards, different frameworks of sharia-compliant investment products and the impact of intellectual property rights on the varying Islamic finance investment tools. Further, the paper will discuss an integrated approach to intellectual property rights which learns lessons from the Islamic finance sector in relation to infrastructure, regulation and sharia compliance.

The lessons learnt from Islamic finance will inform the overall framework of recommendations for an Islamic based intellectual property model. The use of Islamic finance as a vehicle to promote better intellectual property rights in terms of defining a new intellectual property approach is novel. It is aimed at spearheading further research in this area. In essence an Islamic intellectual property based regime can be developed to provide alternative intellectual property products, similar to how the Islamic finance industry has developed sharia compliant banking.

**Tran Van NAM, National Economics University**

*Determining Criteria in Technology Valuation through the Analytic Hierarchy Process: A Case Study in Vietnam*

Technology valuation is considered as one of the important criteria in the process of commercialization and technology transfer. In fact, when applying valuation methods, for each valuation method, there are many assumptions set out in the calculation, leading to valuation results that depend on these criteria. This article presents very first serious efforts to analyse the Analytic Hierarchy Process (AHP) and its initiation in

Vietnam. The Analytic Hierarchy Process is a weight calculation method applied to evaluate the importance of each factor affecting to technology valuation.

However, the Analytic Hierarchy Process has only been applied to valuation work in a few countries in recent years. In Vietnam so far, there has been no research on Analytic Hierarchy Process in technology valuation; the results of this study are expected to be a breakthrough for the application of the Analytic Hierarchy Process in technology valuation. In this study, the research team uses Saaty's AHP to analyze and identify criteria affecting technology valuation in the current conditions of Vietnam.

**Theresia NARWADAN and Muchtar LABETUBUN, Pattimura University, and Fransiscus KANDUNMNAS, De La Salle Catholic University**

*The Opportunity of Kisar Weaving to Become an Object of Geographical Indication Protection, based on Law 20/2016 concerning Marks and Geographical Indications*

The object of research in this paper is ikat weaving which has been done with non-machine looms for generations on Kisar Island, Southwest Moluccas Regency, Moluccas Province, Indonesia. This research is a normative legal research with legal materials in the form of primary legal materials in the form of Law Number 20 year 2016 concerning trademarks and geographical indications, and secondary legal materials, the approach used is a legal approach, and a case approach. Documentation techniques were used to collect legal materials, and were analyzed qualitatively.

Geographical indications are common property rights, not individual property rights. This means that all people in the relevant area have the right to use it in trade. The period of protection for geographical indications is not limited, as long as the area concerned can maintain the reputation, quality, and characteristics on which the protection of geographical indications is based. In order to maintain the existence of a geographical indication, it requires strong efforts from the Regional Government and the community to protect it. The benefits of protecting geographical indications are: first, preserving and promoting local goods and/or products in accordance with local traditions. Second, guarantee the quality of geographically indicated products as genuine products so as to give confidence to consumers. Third, foster local communities, support coordination, and strengthen fellow rights-holder organizations in order to create, provide, and strengthen the image of the product's name and reputation. Completeness of documents and registration of geographical indications is very important to protect local communities.

The conclusion obtained from this research is that the period of protection is not limited as long as an area can still maintain the advantages and uniqueness of its products, as well as the demand for detailed geographical indication registration documents, resulting in the need for assistance for the surrounding community in registering and defending the rights to their geographical indications.

**Rashmi NEGI, Jagran School of Law**

*After Effects of Grant of GI Tags and Reason for Lack of Expected Economic Boom in Himalayan Regions.*

A study for approaching the subject of Geographical Indications already given in the Himalayan state Uttarakhand, India. Through this research I wish to focus on the various economic effects on the working

classes of the Garhwali and the Kumaoni communities of Uttarakhand after grant of Geographical Indication Tags. As Geographical Indications are known to bring about mass economic upliftment of the communities associated with the subjects of any Geographical Indication what is lacking is a thorough study of the aftereffects in the Himalayan regions owing to the hard to reach high altitudes and lack of substantial funding. In the case of Geographical Indications granted to the state of Uttarakhand it has been a rather late development. It has also come to my observation that many researchers not being aware of the culture of the state misconstrue many aspects of the economic changes related to the culture of the state. It is also a missed opportunity as lack of expediency on the part of our people for coming ahead and getting Geographical Indications registered in due course of time and same articles being registered by other neighboring states like Himachal and Jammu and Kashmir. Through this Research I would like to bring to fore the various reasons which have caused the delay in Registration of Geographical Indications. Additional benefit of me undertaking thus research is that me being of Garhwali heritage there is going to be a better understanding of the cultural aspect of the study.

Seven products in total of Uttarakhand have been granted GI tags, namely: Kumaon's Chura Oil, Munsiyari Rajma, Bhotia Dance, Aipan, Ringal Craft, Copper Products and Thulma. But there are still many things that should be granted GI tags also many GI tags granted to the neighbouring countries and neighbouring Indian States are cultivated / produced in Uttarakhand. What remains a mystery is that what is stopping the ultimate benefit of granting of GI tags to reach the masses in remote terrains of Uttarakhand.

It has been an assumption that mere granting of GI tags is going to grant best outcomes. There is no study to show that there could be some ancillary reasons which will cause expedient growth in the economic growth of society post granting of Geographical Indicators. It will not be an understatement to say that there is hardly any suggestions for any measures to be undertaken post granting of Geographical Indicators which will make it better for the society to move in pace with the fast changing world of Geographical Indicators. There are many reasons like regional politics, illiteracy, cultural gap, lack of trust of local community on outsiders, etcetera, which not only hinders the society from registering for Geographical Indicators but also causes delay/lack in the economic improvement even after getting the much-needed Geographical Indicators. This is a realistic approach to study the effect of Geographical Indicators registration.

**Hang NGUYEN, School of Law, University of Eastern Finland**

*The Impacts of Protection of Intellectual Property Rights to Food Safety Requirements under Vietnam and EU Laws*

Foodborne diseases are caused by consuming contaminated food or beverages. The growing public health problem caused by foodborne diseases has multi impacts on the socioeconomic worldwide. Not only the health care system but also the economy and society have been challenged by foodborne diseases. The development of the global food chains put countries in a bigger challenge when their legal systems are confronted with the compliance requirements after participating in the new-generation free trade agreements. The food safety requirements become more significant ever since, especially in the need of harmonizing the regulations among countries. Many legal tools have been designed and employed to control and minimize the risk of having food fraud, yet food poisoning incidents occur still.

This research analyzes regulations of geographical indications, certification marks, collective marks, and plant varieties in relation to food safety regulations in Vietnam and the EU. If the protection of intellectual property rights is well performed, it helps to lessen the risk of food fraud and foodborne diseases.

**Phan Quoc NGUYEN, Vietnam National University**

*Patent Commercialization Law in the Comparative View between Vietnam and Russia*

Invention plays a very crucial role in innovation and development process. Patent not only promotes innovation but also facilitates technology transfer. The reasonable exploitation of this asset helps raising income for enterprises, contributing to economic growth, and fostering national competition capacity. In recent years, our State has been focusing on improving patent system, in particular on patent exploitation via improving Law on Intellectual Property and other relevant specific laws. With the same socialist system as Vietnam, former Soviet Union earlier and Russia now, set up own patent system. As one country with leading scientific and technological potentials, especially for military forces, Prusse Tsar set up patent system in 19<sup>th</sup> century. However, in 1917, Soviet Union changed this patent system a lot. Till 1991, Russia built a new patent system. However, the results from patent exploitation of both Vietnam and Russia are still limited, not commensurate with potentials.

There are many reasons to explain the limitation but one of the most important reasons is the deficiencies of relevant legal rules. This paper will first explain the notion of invention/patent, the importance of patent, then study patent systems of both countries to analyze, compare their current status of relevant laws. Finally, based on the differences and similarities from their patent systems, the papers will propose some recommendations to improve existing legal rules on intellectual property of Vietnam while the Law on Intellectual Property of Vietnam is modified.

**Saad NUSRULLAH, Punjab University Law College**

*Intellectual Property and Shariah-A Non-Western Perspective*

Shariah law did not regulate intellectual property rights per se by having detailed and precise rules, such as in the case of spiritual duties or inheritance. However, the different sources of law in Shariah contain many rules which help in determining the link between intellectual property and Islamic law. Muslims believe that all property belongs to Allah (s.w.t). The private owner of property acts as a trustee or agent for Allah (s.w.t), the ultimate owner. Nevertheless, Islam cherishes the inviolability of private property. The Qur'an states: And do not eat up Your property among yourselves for vanities, nor use it As bait for the judges, With intent that ye may Eat up wrongfully and knowingly A little of (other) people's property. Prophet Muhammad (PBUH) in his farewell pilgrimage said 'No property of a Muslim is lawful to his brother except what he gives him from the goodness of his heart, so do not wrong yourselves.

Shariah, thus, takes a middle way between communal property rights and personal rights and property based on Western ideas, English and North American, in particular. As to the recognition of intellectual property as specie of property, most schools of law in Shariah are in agreement about this issue. The exception is the Hanafi School which varies on how it thinks of property. This is primarily the result of a disagreement about the proper criterion for what could be considered mal (money). This work focuses on Intellectual Property

on the premise of Sharia-Islamic law. It specially analysis how intellectual property rights are perceived under Shariah law.

This work further analysis how concept of intellectual property rights evolved in Shariah. The main findings of this work are: In Shariah law, which is followed by the Muslims around the world, intellectual property is recognized by most schools as there are various legal concepts in Islam that justifies the protection of intellectual property protection such as protection of personal rights, property rights and moral rights among others.

**Amanda ODELL-WEST, University of Manchester**

*Innovating in Adversity: PGT-A and the Challenge of Embryo Mosaicism*

We show how widespread uptake of the controversial, developmental procedure preimplantation genetic testing for aneuploidies (PGT-A) exemplifies the tension between the need for those working with infertility to innovate, clinical freedom and the responsibility these factors impose. It is argued that the clinician's duty to disclose material risks to her patient requires information-giving about embryo mosaicism i.e. detection in human blastocysts of >2 cell lines with different chromosomes. The phenomenon has ushered in a range of difficult clinical and diagnostic dilemmas for clinicians. Considering the highly commercial context in which much fertility treatment is offered, the current state of scientific knowledge about embryo mosaicism and inadequate clinical guidance, this paper argues for a concerted approach to ensure patients receiving IVF treatment are better informed to make a decision whether to choose PGT-A.

**Rami OLWAN, University of Southern Queensland**

*Is the New Federal Copyright Law No 38 of 2021 Adequate and Sufficient to Promote a Digital Economy in the UAE?*

The presentation provides a brief overview of the new *Federal Law No 38 of 2021 on Author's Rights and Neighbouring Rights* that will come into effect on 2 January 2022 abolishing the *Federal Law No 7 of 2002 on Author's Rights and Neighbouring Rights*, as amended.

It critiques the law and discusses its suitability to promote the use and adoption of digital and frontier technologies in the UAE such as Artificial Intelligence (AI), blockchain, and big data. It provides suggestions and recommendations to reform the law to meet the ambitious agenda of the UAE to be one of the most innovative nations in accordance with the UAE Centennial 2071.

**Khin Thinn Thinn OO, Researcher, Myanmar**

*Myanmar Trademark Law 2019: A Critical and Comparative Study*

Trademark protection is becoming an important matter and it may be promoted by promulgating the Trademark Law. Trademark Law is needed for the development of international trade as well as national economy. Nearly all members of TRIPs Agreement have already established Trademark Law. As Myanmar



is a member of TRIPs, Myanmar has obligation to comply with the provisions of TRIPs. Besides, Myanmar has also obligation to indirectly observe other related international agreements as stated by TRIPs' provisions. And then, Myanmar is a member of the WIPO as well as ASEAN.

Before 2019, there is no specific law for trademark protection. Trademark right can be recognized by declaration of the ownership of trademark. Trademark right is indirectly protected by the existing laws such as Myanmar Penal Code, Specific Relief Act, Sea Custom Act and Merchandise Marks. Moreover, the trademark with a reputation or goodwill is protected by passing off action. But, current practice cannot give the effective protection.

In 2019, Myanmar enacted the Trademark Law which makes a step forward for Myanmar's trademark protection system. The Trademark Law can significantly change to the current process of trademark registration and protection in Myanmar. Myanmar will have new system that the registered trademark will be recorded and published to the public. The Trademark Law covers the protection of trademarks, service mark, well-known marks, collective mark, certification mark, geographical indications and trade names. Some provisions of the Trademark Law is unclear. This law is mostly relating to the protection of trademark, service mark and well-known mark. But, there is no clear procedure of recognition and protection of well-known mark, collective mark, certification mark and trade names. The trademark right can also be protected by unfair competition. So, the forms of act of unfair competition should be added. Trademark Law 2019 will be come into force on the date which is prescribed in the notification issued by the President. This is a transitional period to change old system to new system. Before coming into force, some of the provisions of Trademark Law are needed to change in line with International Rules for effectively enforce in practice.

The aim of this research is to describe some significant points of this law and to discuss some suggestions which are in line with the provisions of International Conventions and Agreements. This research also compares with the provisions of Trademark Law 2019 and the provisions of International Convention relating to protection of trademark. As the protection of trademarks in Myanmar is fairly in its infancy stage, Myanmar is gradually going through further development. Myanmar must set up a program to improve the legislative system for enforcing trademark right in line with TRIPs Agreement. Further, it is important that legislative improvement will enable both judiciary and administrative bodies to award damages and expenses to right holders, and to provide for adequate border measures.

### **Lilliia OPRYSK, University of Bergen**

#### *Embedding of Freely Available Digital Content as an Infringement of Copyright under the EU law: CJEU Judgment in VG Bild-Kunst*

The VG Bild-Kunst case on framing a lawfully available copyright-protected work on a different website is the latest CJEU's judgment concerning linking. The Court dealt with the issue of boundaries of copyright protection in respect of internet linking, where it constitutes secondary communication, relying on a previously authorized communication of a work by the copyright holder. The judgment illustrates the need for a flexible approach to what constitutes a communication requiring copyright holder's consent. Following the decision, framing constitutes an act falling under the exclusive right only if it circumvents measures adopted by the copyright holder to prevent such framing. This work-in-progress paper looks at the implications of the judgment, both when it comes to interpreting the scope of the communication to the

public right under the EU law and the consequences for online intermediaries hosting copyright-protected content.

**Selin ÖZDEN MERHACI, Ankara University Faculty of Law**

*The Regime of Standard Essential Patents Licensing in Turkey -A Comment on the Turkish Competition Board's Decision*

Standard essential patents (SEPs) were not controversial in Turkey until the dispute over SEPs, between one of Turkey's largest technology manufacturers *VESTEL* and *Koninklijke Philips N.V. (PHILIPS)* became an issue. Previously, *VESTEL* and *PHILIPS* settled an infringement dispute, which was brought to a German court. However, as a result of *VESTEL*'s application to the Competition Board of Turkish Competition Authority, the issue has become controversial in terms of Turkish law.

On 26.12.2019, Competition Board held that *PHILIPS* was holding the dominant position in the market by its declared SEPs to ETSI and abused its dominant position by discriminating the equal players in the market by applying different standards during the SEP licensing process. This is the first decision about SEPs and FRAND licensing in Turkey.

In the decision, Board decided that contrary to the essence of FRAND licensing, *PHILIPS* refused “applying to a third independent party for price determination” before taking the conflict to the court. *PHILIPS* did not act transparently in the determination of licensing fees and reversed the general burden of proof by adding a clause on assertion of contract invalidity. Board declared that *Philips* had to follow principle of transparency and announce the licensing fees in order to be deemed to have acted in FRAND terms. Board ruled on an administrative sanction to *PHILIPS* by holding that it abused its dominant position directly or indirectly by asserting different conditions to the buyers in equal positions.

After that decision, *PHILIPS* filed an appeal to the administrative court, which acts as the board of appeal for the decisions of the Competition Board. In 03.06.2021, the court reversed the decision with a reference to the *Huawei v ZTE* decision of the Court of Justice of the European Union (*CJEU*). In its decision, the court stated that it is not possible to interpret that the reference to an independent third party for the determination of license fees is mandatory according to the *Huawei* decision.

In this paper, decisions of the Competition Board and the administrative court will be explained and discussed in the light of the *Huawei v ZTE* decision of the *CJEU* in order to explain the Turkish authorities' approach on SEP licensing.

**Justyna OŻEGALSKA-TRYBALSKA, Faculty of Law, Jagiellonian University**

*Should European Patent Law Adopt a New Exemption for Interoperability and Decompilation of Computer Programs?*

The prospect of implementing a new European patent system with unitary effect in the European Union refreshes discussions on the provisions of the Agreement on the Unified Patent Court (UPC) related to the enforcement and acts not conferred by unitary patents. Among the known exceptions to patent infringement listed in Article 27 of the UPC, new forms of patent limitations provided in the UPC may raise concerns. It

regards the proposal for an exception indicated in Article 27 (k) covering activities of a legal user of a computer program performed for the purpose decompilation and interoperability according to the rules provided in the Directive 2009/24/EC on the legal protection of computer programs.

The paper aims to investigate the justification and reasons behind introducing an exception to the infringement of a patent which, according to the express wording of the European Patent Convention and national regulations, cannot be granted for computer programs. It also attempts to identify the problems and possible risks of the migration of such exception from copyright law to patent law and discuss the future of a new exception from infringement not only for unitary, but also national patents.

**Zehra ÖZKAN ÜNER, Ankara University Faculty of Law**

*Using Trademarks in Keyword Advertising in Turkish Law: Focusing on Double Identity Cases*

The emergence and the development of the internet challenges trademark law as well as the other categories of IP law. One of the issues arising from this development is whether using a third party's trademark in keyword advertising constitutes trademark infringement. The aim of the paper is to determine the problems in keyword advertising and to find solutions focusing on double identity cases.

While EU law doesn't regulate this issue, a clear provision dealing with it was introduced in Turkish law in 2009. The provision which was added to article 7 about the rights conferred by the trademark is preserved in the new Industrial Property Code enacted in 2016. While article 7/2 determines the types of uses in relation to goods or services; art. 7/3 contains a list of the types of conduct that may be prohibited by the trademark proprietor, as in EU law. According to new provision, article 7/3 (d): "*Using an identical or similar sign in internet media as the domain name, the router code, the keyword, or in similar manner with a commercial impression provided that the person using the sign has no right or legal affiliation for the use of that sign*" may be prohibited if the sign is used in a commercial area.

Although this provision seems to handle the issue at the first glance, it's systematic and the implementation of it raises some questions and problems. The first one is whether article 7/2 should be taken into account when implementing article 7/3. Until now, courts have not explicitly listed and explained the conditions of the infringement and have not mentioned this question in keyword advertising cases. Furthermore, the elements of the advertisement including the heading, the URL, and the text of the advertisement have not been referred to in most of the decisions. The second question is whether solely using a sign identical to the trademark for the same kind of goods or services constitutes infringement even if the trademark is not mentioned in the advertisement. In Turkish law, adversely affecting the functions of the trademark is not required for infringement in double identity cases. Therefore, as long as the other conditions set forth in article 7/3(d) are met, it constitutes trademark infringement if the use does not correspond to one of the limitations of the trademark.

This practice is criticized, and the adopting of the approach of CJEU is discussed in the literature. However, I believe that there is one another way: When the use is perceived as offering an alternative to the goods or services covered by the trademark which can be accepted as a fair and free competition, this use may be considered a right or a legitimate interest of the advertiser in the context of article 7/3 (d). Thus, the negative results of the prohibitive approach can be eliminated.

**Ayyappan PALANISSAMY, Modern College of Business and Science**

*Digital Environment and Copyright Piracy in the Gcc – A Developmental Perspective*

Copyright Piracy is in the fore front in the changing face of technology and its advancements. There has been a surge in the last few decades which has resulted proliferation of cyber piracy in the digital environment. At regional and international levels, regulations were in place based on international ties, but enforcement of rights infringement has been weak due to technicalities and jurisdictional issues which include cross border cases. This research paper discusses the legislative enactments and regulations governing online piracy and the effects and implications in the GCC States. The paper further explains the effect of laws and whether they reflect the current needs of the networked information in society veraciously.

**Michael PALMEDO, American University Washington College of Law**

*A Novel Dataset Measuring Change in Copyright Exceptions*

Copyrights grant creators long periods of market exclusivity during which they or their agents have the exclusive right to reproduce and distribute their works. However, copyright exceptions limit their scope and strength. The laws on both copyright protection and copyright exceptions vary substantially from one country to the next. This working paper introduces a novel, survey-based dataset that describes changes to 24 countries' laws on copyright exceptions over time. To explore the data, I construct two indices from subsets of the dataset; one that focus on exceptions related to ICT technologies and another that focuses on educational uses. The indices show that copyright exceptions have grown stronger since 1990, and that wealthier countries tend to have stronger exceptions than poorer ones. Initial empirical tests suggest that exceptions related to ICT technologies are stronger in countries with larger ICT sectors, and exceptions for educational uses are stronger in countries with higher educational attainments. Both types of exceptions are negatively associated with the share of GDP produced by the copyright-producing industries. Countries have stronger exceptions when they have entered into trade agreements with the U.S., though bilateral American pressure to strengthen copyright protection is associated with weaker exceptions related to ICT technologies.

**Disha PANDE, Parul Institute of Law, Parul University**

*Intellectual Property Rights and Artificial Intelligence: The Future Ahead*

AI is the umbrella term for tasks that can be performed by computers/machines without the need for human intervention. AI systems are maturing to levels where not only there is no need for human intervention but also where the AI systems give creative output. Example, Google owned AI Company DeepMind generates music. The areas of fastest growth in AI are Deep learning and Robotics while AI patenting has seen fastest growth in Transportation Industry. The top five applicants in AI patenting are IBM (US), Microsoft (US), Toshiba (Japan), Samsung (South Korea) and NEC (Japan). The Chinese academy of sciences (CAS) is leading university in filing AI based patents. There are several questions that are left unanswered when it comes to IP rights of an AI. A question of Intellectual Property (IP) protection in AI-based inventions is who owns the rights? Can an AI come up with an inventive step? The invention belongs to that human or to

the employer of that human. Even according to the patent legislations of many countries, only the inventor who is a human being gets patent rights. If AI is being used as tool to make the invention, then the person using that tool – in this case AI – is the inventor and the owner of the invention. Mere ownership of the tool will not qualify the person for the ownership. An AI invention in which there is no human intervention, the question arises if a machine can file for a patent. If “a machine” cannot file for the patent then does it fall in public domain?

UKIPO (UK patent Office), USPTO (US patent Office), EPO (European Patent Office) have stated that AI cannot be an inventor in patent applications. An inventor has to explicitly indicate in the patent application that he is the inventor. An application for patent expressly specifies the name of the invention, name and address of the applicant and other matters. Therefore, legal provisions imply that only natural persons can be an inventor. However, there is the possibility of creating legal subject status for AI. There is no obvious barrier, legal or otherwise, to recognising AI as an inventor. The developers of AI can enjoy the rights granted by patent protection. Patent protection rights can also be granted to the owner of the AI invention. The existing IP laws which include Patent and Copyright laws must accommodate the AI-driven innovations which also include AI ethics, data security and privacy. Another question is that of joint inventorship. Can AI share a joint internship with a human? AI is playing increasing role in technology. It is considered only right that the owner of the invention should declare the use of AI application. For AI inventions, the issue of ownership is not clear. Can we say that the persons who contribute financially to the AI inventions are the owners or the persons who own the AI equipment are the owners? What about those who help develop AI algorithm? Should they not benefit from patent protection? Patent protection requires full disclosure on part of the applicant. The rationale of full disclosure is very difficult to apply for AI –inventions. Computer programs generally are protected by copyright. Laws on copyright should give clear guidelines as to whether the computer programs that are incorporated in AI attract copyright protection. Intellectual property laws should give guidelines in cases of infringement. In the traditional patent system, infringement is easier to detect but with AI, infringement is not easy to detect because so much information is not disclosed and can be likened to a “black box”. There is a question as to who would take the liability if AI infringes an intellectual property. AI has also started to sing and even paint now but the question remains can AI own copyright over its original work.

WIPO is playing a very important role in formulating intellectual property policy beginning with the question if AI inventions need IP incentives. A forum called “The WIPO conversation on Intellectual Property and Artificial Intelligence” was established, the first session of which was held in September 2019. these laws must be defined to single out AI inventions that are not worth granting IP protection.

**Jacob George PANICKASSERIL, School of Law, Bennett University**

*States as Friend or Foe: A Study of Interventions in Multilateral Interpretations of IPRs in WTO Disputes by Member States*

The globalization of intellectual property rights has evolved from State granted private monopoly rights particular to respective jurisdictions to a minimum standards approach advocated by international legal texts such as the TRIPS Agreement and beyond through TRIPS-Plus standards in non-WTO free trade agreements. This has also raised debates as the locus of intellectual property rights as merely an isolated property right or a right with consequences in diverse fields such as public health, culture, innovation, market competition amongst others. Deliberations on such interpretations occurs at the international level

through disputes raised which involve States at the WTO and other forums. The dispute settlement mechanism of the WTO in particular has been described as the crown jewel of the multilateral trading system due to its emphasis on rule of law-based adjudication of disputes which favour time bound procedures for adjudication and enforcement. Initial predictions of developed States taking advantage of the multilateral system which favoured such States in the past have been belied through the numerous disputes which have taken place at the WTO. What has received little academic attention is the critical analysis of the TRIPS Agreement particularly from an empirical perspective on the factors affecting dispute settlement between Member States which influence the interpretation of intellectual property rights. The TRIPS Agreement in particular has seen extremely few disputes after the Doha Declaration of 2001 and alternative dispute settlement forums such as the ICSID and the PCA have been preferred due to perceived advantages. The paper seeks to examine the effect of interventions in the disputes from third party Member States which shape the discourse of intellectual property rights.

**Frank PHAM, Pham Lam PLLC, and Ansar Mahmood JASPAL, Ministry of Higher Education, Research, and Innovation (Oman)**

*Pharmaceutical Anti-Trust and Intellectual Property Issues*

The pharmaceutical industry is a matter of high priority for many competition authorities worldwide, whose intervention to tackle anticompetitive behavior or prevent mergers from lessening competition contributes to achieving a wider political ambition of providing patients' access to innovative and affordable medicines. Pharmaceutical antitrust cases are highly complex because they involve the interplay of three overlapping regulatory schemes: the *antitrust laws*—which are designed to protect competition by punishing certain types of anticompetitive behavior; the *patent laws*—which grant inventors exclusive rights to market their products for a limited time<sup>8</sup> as a trade-off in recognition of the considerable costs and risks incurred to develop new products; and the federal *food and drug laws*—which focus on safety and efficacy issues associated with the use of new drugs in humans. Although courts and regulators once considered the antitrust and intellectual property laws to directly conflict, they now regard these laws as *complementary* regimes that benefit the public through different methods. This presentation will review current IP issues of pharmaceutical antitrust, including reverse payment (pay-to-delay) agreement, applicable legislation, and recent legal developments across jurisdictions.

**Deva PRASAD, Indian Institute of Management, Kozhikode**

*An Analysis of Personality Rights and Digital Identity Rights in India*

The image rights in India have evolved with the help of judicial decisions about personality rights. The personality rights of celebrities and famous personalities such as film and sports stars are acknowledged in the Indian legal framework. The recognition of the personality rights of celebrities was due to the pro-active approach adopted by the judiciary in the Indian context.

Apart from the evolution of personality rights, it is pertinent to note that the exponential rise in internet-commerce and social media has led to the need to deliberate on digital identity rights. The increasing significance of data protection globally has impacted the regulatory framework in India, with the government proposing to enact a personal data protection bill. The Supreme Court of India, in 2017, by a

landmark decision *K S Puttuswamy v Union of India* had declared the right to privacy as a fundamental right and emphasized the importance of information privacy. These developments further propagate the need for deliberations regarding digital identity rights emerging from the right to informational privacy.

In this background, the paper explores the existing personality right jurisprudence and attempts to highlight the emergence of concern regarding digital identity rights. The article argues that while personality rights are now well acknowledged in the Indian intellectual property jurisprudence, (especially post-ICC Development (*International*) *Ltd. v. Arvee Enterprises*, Delhi High Court 2003) digital identity rights would be a new challenge. In a data-driven digital age, where the data has commercial value, the state and private corporate entities may stake a claim for the right to use big data collected from users. The rights of the individual to claim any right under intellectual property rights would be an essential concern to be analyzed. In the Indian context, the need for a pertinent legal framework clarifying the contours of image and identity right is significant. While particular forms of digital identity rights, such as the right to be forgotten, have been acknowledged in India, the larger question of evolving a clear legal framework of digital identity right remains. The questions relating to issues of deep fakes, criminal law and ethical issues relating to digital identity rights in Indian context are highlighted in the paper.

## **B. PRIYA, Government Law College, Namakkal**

### *Farmers' Rights vs. Plant Breeders' Rights – A Legal Preview on Indian IPR Competitive Regime*

Agriculture, life breathe of Indian economy is industrialised by trade globalisation. The seed serving as foundation of agriculture is targeted by the corporate sectors in the form of Intellectual property rights. Like two sides of coin, Intellectual Property rights stimulate agricultural research essential for nation's economic development but it may act as a barrier for the traditional agricultural practice of farmers. The contractual arrangements between farmers and IP owners restricts the rights of farmers to preserve seeds for the future harvest. The sub-licence agreements of seed companies like Mahyco Monsanto Biotech private limited with clauses based on Exploiting Trait fee, Selective license and Exclusive supply paves way for monopolisation of private companies in seed sectors. This situation may drive farmers to search for seeds at huge cost instead of saving the seeds for future harvest. The Protection of Plant Varieties and Farmers Rights Act of 2014 (PPVFA) makes a sui-generis attempt to balance the rights of farmers and breeders for fulfilling the basic food needs of huge population. This article attempts to make descriptive study on anti-competitive clauses in sub-license agreements, comparative analysis on rights of Farmers and Plant breeders and legal preview on the protection afforded by the Protection of Plant Varieties and Farmers Rights Act of 2014 (PPVFA).

## **Endang PURWANINGSIH, YARSI University**

### *Innovation and IPR Concerns for Export-Oriented Products*

Micro, small, and medium enterprises (MSMEs) and their products are at the economic foundations of Indonesian society. They make local products that are simply packaged and produced using local wisdom with limited production development. This empirical juridical research therefore aims to investigate the potential for MSMEs to develop in terms of legal entity and legal product, industrial design, and trademark registration, as well as the use of digital marketing, with the ultimate goal of being able to export into overseas markets. This normative empirical study applied a participatory research approach, a statute

approach, and a sociological approach. The subjects for this research were micro, small, and medium enterprises (MSMEs) in Indonesia, specifically in Central Java, West Java, and the Special Region of Yogyakarta. The results show that in order to prepare MSMEs' to become export-oriented, it is necessary to first motivate and educate them, establish policies that support their legality and export governance, increase product quality through innovation, digitalization and standardization, improve branding and design, and assistance from stakeholders is very needed. This could involve central and local governments, the Cooperatives and SMEs Service, the Trade Service, the Agriculture Service, the Industry Service, the Tourism and Creative Economy Service, and other non-government organizations like MSME associations, notaries, and academics.

**Piergiuseppe PUSCEDDU, University of Tilburg**

*Intellectual Property and International Political Economy. Using International Relations Theories to understand State Behaviour in Pharmaceutical and Technology Matters*

The aim of this paper is to contextualise Intellectual Property (IP) within International Political Economy (IPE), in an attempt to connect it with International Relations (IR) theories. I start from the methodological assumption that IP is not a discipline in a vacuum, but rather an object that can be approached, studied and understood holistically and from a multidisciplinary angle. It is an article of faith that IP is a driving element of economic and social development, and can be pivotal in stimulating the growth of relevant industry sectors such as, for example, pharmaceuticals and technology. Nevertheless, this leaves unaddressed how IP connects with IPE and how IR may inform the way in which countries interact with each other, which has relevant outcomes in terms of policy making and scenario planning. Starting from these considerations, my narrative is organised as follows.

First, I provide a taxonomy of the main objects of interest for IPE, in particular globalization, governance and development. Second, I discuss the main IR theories, which can be understood as a set of assumptions and propositions that, as a whole, inform the appraisal, understanding and response of States to factors relevant to international political ecosystem. International Relations theories are relevant because they enable to explain and foresee State approach to intellectual property negotiations and compliance. This paves the way to discuss two important instances where IR can help to better the understanding of State behaviour in IP matters: pharmaceuticals and telecommunication technology patents. Both instances differ sharply, in terms of underlying theoretical and practical considerations, and State response.

Pharmaceuticals have been the theatre of a fierce clash between developing and developed countries, and where IP protection has met human rights narratives; eventually it has been the venue where enforcement has shifted from the trade arena to the international investment law arena. Nevertheless, developing countries have been able to advance their propositions, in particular with regard to the interconnection of IP with public health, often leveraging the role of international institutions such as the World Trade Organization (WTO). On the other hand, telecommunication technology is the venue where a trade war between great powers is taking place, and where IP is often weaponised and securitised to pursue strategic national interest. The discourse, in this regard, is fractured between techno-nationalist and techno-globalist approaches to IP matters, which eventually translates into emphasizing States' competition or cooperation, respectively. The analysis of these two instances leads to a conclusion where I will provide observations and policy considerations.



**Ria PUTRI, Faculty of Law, Universitas Lampung**

*Should We Consider the Communal Intellectual Property Right as the Answer of Intellectual Property Regime Hegemony? An Indonesian Perspective*

Intellectual Property Rights (IPR) propose as economic growth tool for the state but in some extent the fact that the developed nations domination on IPR ownership undermine the value offered by IPR and also usually privately owned by an individual/s, moreover for the innovation driven IPR applications. Giving the sense that the value will not reach the community in general therefore its spark debate, pro and cons against IPR in developing countries including Indonesia. Since the global economy, becoming more driven by knowledge, creativity and technology, Indonesia cannot neglect IPR as part of its domestic economy system. Instead of being sceptics against the IPR, Indonesia needs to find a new strategy to get advantage from it.

The recent dynamic of IPR is development of communal IPR. The communal IPR globally cover 4 types which are Traditional Cultural Expression (TCE), Traditional Knowledge (TK) Geographical Indication (GI), and Genetic Resources (GR). The 4 rights considers as a tool to protect rights which are not owned, monetized and valued by only an individual/s but owned by the community/state. Indonesia also starts to encourage the communal IPR to maximize its origin nature potentials. It considers as a bridge to close the gap against developed nations. Rather than head-to-head in innovation competitions it will be better to push its own strength potentials in IP. However, it's still too early to sum up that the communal rights will be the answer whether IPR will bring advantage impacts in economic growth for Indonesia in the future. Therefore, this article using literature approach will elaborate the advantage and the challenge of communal IPR in elevating the beneficial of IPR in Indonesia.

**Ziyan QIU, Nagoya University**

*Towards a Pro-patent Future in China: Introduction of Punitive Damages and New Challenges*

The tradition Chinese legal system concerning damages has aligned itself with Art. 45 of the TRIPs Agreement. Generally speaking, right holders are entitled to claim damages adequate to compensate for the injury they have suffered, with three methods available for determining damages, namely, the lost profits, the infringer's profits and reasonable royalties. Besides, statutory damages function as the last resort when neither of the aforementioned methods is applicable. However, the judicial practice in China has aroused growing concerns about the lack of effectiveness of intellectual property (IP) rights enforcement, due to difficulties of proving damages and insufficiency of compensation, as well as the surge of egregious infringement cases. Therefore, in 2020, a number of legislation revisions were made to improve the tradition damages system, among which the introduction of punitive damages is most essential. Specially speaking, Art. 71 of Patent Act and Art. 54 of Copyright Act has newly provided that, punitive damages up to five times the basis amount determined by the aforementioned methods may be rendered, in the case of a deliberate infringement with serious circumstances. (Before that, punitive damages have been permitted in Trademark Act and Unfair Competition Prevention Act respectively since 2013 and 2019.) Furthermore, the codification of Art. 1185 in Civil Code has symbolized the full-scale establishment of punitive damages system concerning IP infringements. Such comprehensive changes are driven by the legislative purpose to

construct a damages system whose main function is to provide adequate compensation while punishing infringement as its minor role. Thus, China is gradually heading towards a pro-patent era.

Nevertheless, with the introduction of punitive damages comes along new challenges. Firstly, as to the legal requirements of applying punitive damages, inconsistency exists when describing the subjective state of minds. That is, trademark law and unfair competition prevention law requires “egregious” state of minds while others use the word “deliberate”. Whatever the description is, it is unclear how courts should determine the punishable mental states, as there lacks specific judicial interpretation and scholars hold different views on whether constructive knowledge should be taken into consideration. Secondly, as to the calculation of punitive damages, although the judicial interpretation promulgated on 2 March 2021 has made clear that a reasonable multiple of the licence fee may also be used as the basis for calculation, concerns are that such idea will result in overcompensation and is unfair to infringers since multiplying licence fee already entails a quasi-punitive effect. Last but not least, how to avoid potential deterrent effects on inventive activities is also under discussion.

This study first introduces the legislation of punitive damages in IP fields in 2020, its objects and policy concerns. Later, it analyzes the challenges faced by current patent system based on an empirical study. Finally, through comparative study of the legal systems in the US and Japan, it aims to make several proposals to tackle the aforementioned problems.

**Laina RAFIANTI, Faculty of Law, Universitas Padjadjaran**

*Creative Industry in West Java: Improving Local Culinary*

West Java is known for its fertile land, abundant natural resources and good food. Twenty-seven regencies and cities in West Java, each region has its unique food. Some of these local foods have been inscribed as National Intangible Cultural Heritage in Indonesia. Culinary can also consider as Indication of Source or Geographical Indication originated from a region. In Indonesia, through the Regulation of the Minister of Law and Human Rights of the Republic of Indonesia Number 13 of 2017 on Communal Intellectual Property Data, typical culinary can be categorized into Traditional Knowledge. This inscription and data registration do not necessarily make the community prosperous. This paper was created to improve the community's welfare through a creative industry that can be made based on local culinary.

The methods used for this study are descriptive, comparative analysis of regulations and conducting comparative studies of best practices from other countries. The theory used in this research is the theory of the law of development initiated by Mochtar Kusumaatmadja. This theory studies that the law is not merely a principle and rule but an institution and a process for realizing legal purposes.

Through this writing, it is expected that the spirit of conducting research and making writings about Indonesian culinary that highlight local cultural values is increasingly being done to support ICH inscription. In addition, the objective of West Java culinary development through the creative industry to improve the community's welfare is expected to be achieved.

**Mas RAHMAH, Faculty of Law, Universitas Airlangga**

*Patent Protection and Access to Vaccines: Government Use as Solution for Covid-19 Vaccine Inequity and Increasing Vaccine Supply in Indonesia*

The pandemic has not stopped yet and a world without COVID-19 will not be possible until everyone has equal access to vaccines. However, the paper observes that the inequitable access to vaccines has been a despicable issue during the pandemic when the rich countries are getting the majority of vaccines, with many poorer countries struggling to vaccinate a small number of citizens. In this view, the paper highlights that 'vaccine nationalism' policy and patent protection worsen the inequity of vaccines. The paper argues that vaccine nationalism leads some nations to give already inoculated citizens a booster vaccine, rather than prioritizing doses for unvaccinated people in poorer countries. While patent protection allows the patent holders to exercise their exclusivity by freely decide how vaccines are approved to use, made, or sold by whom, when or where which leads to inequitable access to vaccines and limited vaccines production. To address the problems, the article suggest that government can use the Patent flexibilities, which simply permit government to produce, import, and export vaccines, under government-use licenses. This scheme will likely provide solution for vaccines equity and increasing supply of vaccines.

**K.D. RAJU, Rajiv Gandhi School of IP, IIT Kharagpur**

*Standard Essential Patent War in India: The Emerging Jurisprudence and Implications for Developing Countries*

Intellectual property protection is an inevitable evil of liberalization and open economies of this century. However, it is not a new concept, and the first patent was granted in England in 1331 to John Kempe. Nevertheless, the evidence is available for individual grants to discover new things in ancient Greece in 500 BC. It is formalized with the Paris Convention for the Protection of Industrial Property 1883. Paris Convention provides broader protection of patents, trademarks, copyrights, designs, geographical indications, and repression of unfair competition.

Fighting unfair competition (tying, excessive pricing, refusal to license, etc.) in the market is the job of competition law. When the technology had developed faster, intellectual property protection was also made stricter through the Trade-Related Aspects of Intellectual Property Rights (TRIPs) Agreement as a part of the World Trade Organization (WTO) since 1995. Intellectual property rights provide a monopoly for a limited period for the patent owner to exploit the rights. If such monopoly rights are abused, the competition law will restrict such abuse through various actions. Intellectual property licensing is an accessible mode of transfer of technology in developing countries. But the cost of technology is prohibitive, and the technology holders' demand for high royalties made it impossible for developing countries to have the latest technologies. India is in the nascent stage of dealing with technology-related competition law cases.

This paper deals with a survey of such interfaces between intellectual property protection and competition law involved disputes in India and the emerging jurisprudence, especially in the new technologies like telecom and the emerging concepts like standard-essential patents (SEPs). It is argued that a healthy relationship between intellectual property protection and competition law will be good for the Indian market, where much of the technologies are not transferred to the local industry so far.

**Giovanni Maria RICCIO, University of Salerno**

*Street Art and Cultural Heritage: A Comparative Analysis*

The paper is focused on street art and cultural heritage, discussing the relation between private and public (or rather, collective) rules. The analysis will start from the taxonomy of street art and the differences with public arts, underlining the peculiarities of this form of artistic expression and how these peculiarities affect the legal scenario. The analysis will be made comparing the US legislative approach, as well as the American case-law, with some European (UK, Italy) and Asian (India, Malaysia) legal experiences.

Preliminarily, the paper analyzes the copyright issues of street art and their “coexistence” between intellectual property rules and the protection granted by international entities such as UNESCO. In fact, the legal issues of street art will be scrutinized, starting from a private law perspective through the legal recognition of mural and street art, and then including the importance of collective interests in this context. In particular, it will be questioned how copyright (moral rights) may limit the possibility of the public administrations of removing/destroying the works and, on the other side, which role should be recognized, in the choice of the works to be preserved, to the people (inhabitants) that live in the areas where these works are displayed. Finally, the aspect of restoration of street art will be taken into account, analyzing the role of the authors in this process and whether moral rights may be infringed by the activities and the interventions on the original works.

**Philip C. ROGERS, Travers Department of Political Science, University of California Berkley and Mortara Center for International Studies, Georgetown University**

*File it Under Industrial Policy? How Chinese 5G SEP Filings Advance or Frustrate Techno-Nationalist Ambitions*

Chinese patent filings have exploded alongside their designation as a policy metric in state industrial plans. Subsidies for patent filings, patent grants, and contributions to international standard setting have likewise amplified questions about Chinese patent quality while intensifying concerns over the state’s push for global leadership in digital technologies. Do patent filings in this policy context facilitate broader state aspirations, and what gatekeeping role does the Chinese patent office play as the process unfolds? This article approaches these questions by examining patent data for technologies that Chinese companies have declared as essential to meeting international 5G technology standards, a state-emphasized technology for which key Chinese companies are major global players and for which patent strategies are shaped as much by international forces as domestic ones.

Noting key factors that can make standard essential patent fundamentally different from patents more generally, it begins by investigating whether the timing of these patent filings is consistent with observations in prior research that points to general patent filing surges at the end of the year that respond to annual quotas but increase the likelihood of junk patents. On this foundation it further analyzes the timing of patent publications, patent grants, and declaration of essentiality to discern potential IP strategies among firms and the treatment of 5G technology at China’s patent office. It concludes by discussing these empirics in the context of high-quality patents as a predicate for international standard essentiality on the one hand and the incentive for firms— Chinese and otherwise— to over declare standard essentiality on the other. This

research accordingly contributes to debates over the efficacy of China's intellectual property policy by assessing outcomes it promotes in a strategically critical technology sector.

**Subhash Chandra ROY, Chanakya National Law University**

*Universalisation of Intellectual Property Rights for Human Development: An Appraisal with Reference to Human Rights Jurisprudence*

The Intellectual Property is the creation of human mind. It is in the form of industrial as well as community property. Since property is rights in a thing, hence the creator acquires the rights by investing labor skill and judgement. The creators are authorized by law to use, license, and sell, in order to exploit the fruit of their investment. The TRIPS agreements as well as all domestic legislations approve and protect the rights of the creators. But the domestic legislations on intellectual properties do protect the interest of society for the benefits arising out of it and promote further research. However, the IP owners have no absolute rights in their creation, nor should it be. More so the Universal Declaration on Human Rights (UDHR) under Article 27.2 deal with the rights of all mankind as "everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author." Article 19 of the International Covenant on Civil and Political Rights, 1966 (ICCPR), Article 15 of the International Covenant on Economic, Social and Cultural Rights, 1966 (ICESCR), the Vienna Declaration and Program of Action, 1993 (VDPA), do confirm and protect the Intellectual creation as human rights. Whereas the declaration on human duties and responsibility (DHDR), 1998 does talk about the duties of individual towards mankind but 'missing the sharing principles of intellectual property' with the common mass, the society. Of course, the votaries of IPRs will oppose the move 'IP LEFT' jurisprudence for all mankind as without personal interest and monetary gain, none would like to create, hence protection and monopoly is essential with reference to Labor theories and Universal Human Rights Instruments (UHRI). But the 'human development and standard of living' (HDSL) is the biggest concern of all the countries of the world. The private rights in IPR is promoting creation, invention and innovation, but at the same time it is loaded with the risk of infringement and litigations within the prescribed period of time. Although there is provision for compulsory licenses for public purposes, yet it is seldom used. The strong rules and regulation usurp the Human Rights of Society (HRS) as per Roscoe Poundian Philosophy of Social Engineering. Hence the IP requires to move towards nationalization and universalization of all IPs for social interest and human development. It is possible through the state funding research, one-time lucrative award/reward for creation and allotment of IP to the industries and people in need.

Here the researcher proposes to study the socio-oriented IP policy towards invention and innovation for the recognition of 'Human Rights of Society' and 'Human Development'.

**Royal RAJ S, Tamil Nadu National Law University, Tiruchirappalli**

*Benefit Sharing Provisions under the Biodiversity Act, 2002 – Grace or Entitlement?*

The debate surrounding the benefit sharing claim was reopened by the landmark case *Divya Pharmacy v. Union of India* (2018 SCC Online Utt 1035) as decided by the Uttarakhand High Court on 21<sup>st</sup> December 2018. It was the contention of the petitioner that the demand for Fair and Equitable Benefit Sharing (hereinafter FEBS) by the Uttarakhand Biodiversity Board (hereinafter UBB) was bad in law. Their

arguments stem forth from a conjoint reading of Section 2(c), Section 3, Section 4, Sections 19, 20 and 21 of the Biological Diversity Act, 2002. A literal understanding of the provisions indicated above leads one to find a demarcation between Indian companies and foreign entities. By virtue of Section 3, foreign companies must get '*prior approval*' from the National Biodiversity Authority for making use of the biological resources, and Indian companies must provide '*prior intimation*' to the concerned State Biodiversity Authority. The counsel for the petitioner argued that the FEBS is only for foreign entities subject to their approval under Section 19 and 29, wherein the terms and conditions would stipulate benefit sharing and for Indian companies, (like the petitioner's company, Divya pharmacy) prior intimation to State Biodiversity Board alone would suffice. However, the High Court went on to do a purposive interpretation in light of the objectives of the Biodiversity Act, 2002, Benefit Sharing guidelines, 2014, Rio Declaration, Nagoya Protocol and Johannesburg Declaration and came to a conclusion that the demand of FEBS by UBB on Divya Pharmacy was legitimate and there is no dichotomy between Indian and foreign entities with regard to the aspect of benefit sharing.

Even though the High Court gave a green signal for the State Biodiversity Board to demand FEBS from the petitioner, the next obvious question is how much share the benefit claimers can receive? The answer lies in the Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014. Regulation 4 in specific has fixed the Benefit sharing component as 0.1% for annual gross ex-factory sale price upto Rs. 1,00,00,000), 0.2 % for Rs. 1,00,00,001 to 3,00,00,000 and 0.5 % , for Rs. 3,00,00,000 and above. The paltry benefit sharing is seriously a matter of concern and it seems as if the benefit sharing is provided to the claimers as an *ex-gratia* payment. There was the Draft Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2019 but even that didn't remedy or rather address the problem either. It's time to realize the fact that the benefit claimers are not in need of grace to receive the meagre sum as determined by the regulations. But, it is certainly a matter of right for the conservers of biological resources to be suitably rewarded for all their work in conserving the rich biodiversity.

At this backdrop, the researcher will analyse the efficacy of the benefit sharing regulations in the Indian context.

### **Niharika SALAR, NALSAR University of Law**

#### *Fast Fashion v/s Traditional Artists Rights within the Legal Intellectual Property Regime: The case for Empirical Evidence-based Findings*

Netflix's recent American show *Never Have I Ever* has a peculiar scene. The male protagonist is dressed in a patterned t-shirt which is strikingly similar to a classic Indian tie-dye method of fabric decoration called Bandhini.

One amongst the many heritage knowledge in India, local artisans proudly passed on their craftwork to their children, and wearers and collectors passed the cloth as an heirloom, a treasurable keepsake. However, the last decade witnessed the exponential growth of what has come to be known as "fast fashion"- retail brands producing inexpensive knock-offs of runway trends, traditional designs and fostering a culture of consumption where affordable and trendy clothes are bought and discarded in quick succession. Social media fuels the demand for fast fashion through influencers, easy e-commerce, and a culture of 'dressing up' for social media.

Intellectual Property (IP) Laws, as they stand today, do not recognise apparel as specific subject matter. Rather the law adopts a fragmented approach to protecting various aspects of fashion as a creative industry through various methods like trademarks and design protection. But fashion is also a cultural phenomenon which, among other things, finds its roots in indigenous communities and traditional art. The central debate engaging IP scholars concerns whether traditional art and culture can – or should – be subject to legal protection that allows for its exclusion from the public domain. Some scholars argue that granting legal protection to traditional knowledge and culture, either under IP law or sui generis protection, is vital in order to recognize and respect the heritage and values of often marginalized and vulnerable indigenous peoples. Such rights are constantly challenged by the new wave of use and throw fashion. In addition to being an economic driver, the manner in which fashion is protected has a deep impact on protection of Traditional Knowledge (TK) and Traditional Community Expression (TCE) in communities that have safeguarded them for centuries and the overall sustainability of the industry.

Despite having IP mechanisms like TKs and Geographical Indications (GI) in place, faster production of cheaper copies appears to impact traditional artists' rights. Often, even the biggest aficionados of handlooms and handicrafts are unable to differentiate between genuine handmade products and factory-made replicas. This is possible due to a lack of substantial IP protection as these laws and policies are made in vacuum without valid inputs and empirical evidence from actual stakeholders, like the artisans themselves. As per a study, the net result is that even when artisans can earn a living by producing contemporary versions, most do not wish for their children to follow in their footsteps. This goes against the practice of passing on this art lineage, once a matter of pride.

Therefore, an integrated, holistic and interdisciplinary approach to the issues of traditional art is what this research paper aims to bring to understand the law from a socio-cultural perspective. With this in the background, this paper aims to conduct a socio-legal study into the impact of fast fashion on traditional weavers, with a view to propose the optimal protection that the law should extend.

**Annamma SAMUEL, Gujarat National Law University**

*Copyright Protection for Contemporary Art and Street Art*

Art has been an archaic form of expression. Every new movement of art arises by rebelling against the traditional norms of the movement that preceded it. They also find new mediums and modes of expression to depict the changing phases of society, politics and consumerism. It is most difficult to regulate under law due to the ebbing and confluence of mediums it undergoes. As the art movement in India rages on, it becomes necessary to study the art protection laws across other jurisdictions to hatch a regulatory framework, especially for contemporary art and street art which are two fields of expression that are trickier than others. Copyright law is responsible for both promoting and hindering creativity. The past few decades have seen some dynamic advancements in mediums of expression that have drastically changed the creative outputs that require protection. Copyright is fascinatingly, an automatic right that is secured by the creator of the art, as long as the work is fixed in a tangible medium. It is important to note that the conceptions of what art connotes keep expanding. It is also important to understand the latest facet of contemporary art: digital art and the economical vantages and challenges that non fungible tokens invoke. Thus, keeping up with the essence of the works, it becomes imminent that the law governing them must provide a contemporarily adapting protection.

**Luz SANCHEZ, University of Murcia**

*Paradigm Shift in Global Patent Law as a Consequence of Artificial Intelligence. Focusing on the State of the Art*

There are numerous examples that illustrate how Artificial Intelligent Agents (AIAs) have already contributed in a real way to the inventive process. In any event, human assisted by Artificial Intelligence (AI), or AI acting autonomously, both scenarios reach the same conclusion: much more complex results than those performed by the human being alone; obtained faster and in greater quantity. Consequently, this new reality brings two possibilities: 1) to publish all the results, then becoming public domain, thus provoking that the ceiling of the state of the art is increasingly high for a human; 2) to protect those results -ex. through a patent filing-, consequently achieving an elevation of the state of the art well above that reached by humans. This second possibility also entails that many of results, despite being protected, are not properly exploited or their practical potential is not even considered. Regarding the first alternative, “*All prior Art*” or “*All the Claims*” should be mentioned as examples of such algorithms whose main aim is to create as many results as possible in order to make them public, thus, democratizing ideas and avoiding patent trolls. Although most of the results generated are meaningless, the cost of creating and publishing them computationally is almost zero, therefore, in case one result is valid it will increase the level of knowledge to be considered when evaluating novelty or non-obviousness in a patent application. Therefore, it is necessary to review many traditional concepts of the current patent system, especially the one referred to the “state of the art”, since this institution serves as a key element for a patent grant.

**Suleimenov Nariman SAPAROVICH, Caspian Public University**

*Legal Regulation of Live Streaming on the Internet*

Streaming today is a popular area that not only allows you to make money, but also brings popularity for streamer and a source of knowledge, skills and just good mood for the audience. However, due to the peculiarities of streaming, it is always, in one way or another, associated with copyright, related rights and other institutions of intellectual property. Despite the fact that streaming is by no means a new phenomenon, there are still various aspects that are either poorly regulated or not regulated at all in some countries. In my work, I would like to consider the following: a) the subject of streaming and its regulation; b) whether is there a need for special rules of legal regulation or general rules can regulate these issues; and c) compare the existing legal regulation of streaming in different countries. Overall, the questions considered in this study include considering the issues of copyright regulation on the Internet.

**Viktoriia SAVINA, Plekhanov Russian University of Economics**

*Legal Issues of Using AI Technology to Modify Humans*

The issues of legal regulation of new technologies for human improvement have acquired particular relevance: exoskeletons have already become widespread; prosthetics and transplantation of organs have become our reality. Humanity, however, does not seek to stop at this, we are looking for new ways to make up for those “weaknesses” and “imperfections” that are inherent in us by nature. One of these methods is technology that allows to improve the mental abilities of a person or to influence his perception of the world



around him. The recent news about the metaverse by Mark Zuckerberg, a virtual social space, into which a person can enter with the help of a digital avatar, confirms this. With the help of digital technologies, a person wants to overcome spatio-temporal, physical and mechanical barriers: an avatar is, in fact, a virtual "body" of any shape, endowed with unlimited possibilities of movement in time and space.

On the other hand, there are technologies that can make robots look like humans. Special gloves designed for Meta allow you to physically sense various objects in virtual reality, and the digit sensor, attached to the fingertips of the robot arm, helps AI researchers train them to "feel", interact with other objects. The self-reproduction of robots is also becoming a part of our reality. Introduced back in 2020 by American scientists, xenobots (living machines made from embryonic frog cel) can now spontaneously reproduce themselves. In fact, this is completely new way of reproduction: "adult" xenobots collect individual cells, holding them together, and after a few days the collected "babies" turn into full-scale xenobots with the help of artificial intelligence. Recently a device was tested that makes it possible to translate the thoughts of a paralyzed person into text with an amazing accuracy - 94%. It is not far from the technology of translating thought into text to the reverse process, and here great prospects open up not only in teaching, but also in the "programming" of a person.

Another approach to modification is biomechanics. Modern medicine and technology make it possible to implant various technical devices made of metal, plastic, polymer materials into the human body. 3D printing technologies have been improved so much that it has become possible to print human organs and tissues on a 3D printer. In agricultural production, hybrids of plants and animals have begun to be actively used, which bears fruit in the form of high yields, the synthesis of useful substances in them, protection from diseases and pests, etc. The creation of chimeric organisms, consisting of cells with different genotypes, has already become a reality.

Therefore, a seditious thought naturally arises - why not use modern digital technologies in order, for example, to correct errors in the human genome? The artificial intelligence system is able to read the genetic code and develop optimal combinations of genes that meet the needs of the "customer". We are going to analyze perspectives and risks of this approach.

**Mayeree SENGUPTA, Indian Institute of Management, Kashipur**

#### *Congratulatory Advertising and Intellectual Property Issues*

Advertising through different means such as print, digital medium, or more traditional appendages such as billboards have been the established ways of brand promotion. Celebrity endorsements have also been used to further brand promotions and publicise products and services. However, when celebrities' names or images are used in advertisements of non-related brands, veiled in the ruse of congratulatory messages, it leads to intellectual property concerns. Unauthorised commercial exploitation of celebrity persona, identity, or any such distinct attribute vide unrelated brand promotional adverts has an economic motivation which infringes the celebrity's rights and often the rights of the brands endorsed by the celebrities. Most often the congratulatory adverts infringe the right to regulate the commercial use of one's identity and the value associated with the intellectual property of the brand and the persona. This piece explores contentious intellectual property issues arising out of congratulatory adverts in recent past vide case studies and relevant jurisprudence.

**Vera SEVASTIANOVA, Hanken School of Economics**

*Trademarks, Voice Shopping, and Freedom of Choice – What is the Role of Trademark Law in the Age of Automated Commerce?*

We are living in the world of artificial intelligence (AI) that is penetrating many aspects of our routine, including shopping. Digital voice assistants, like Amazon's Alexa, are bright manifestations of the AI-based tools, that help shape modern commerce by adding a voice shopping option (the new term was even coined – voice-commerce). With other AI-led examples, such as product recommendations and chat bots, voice assistants change the way consumers perceive brands. In the voice shopping environment, brands (or trademarks, in legal terms) can be only pronounced by the assistant's voice with no use of visuals, and in the future, consumers may receive "perfect" purchasing options from these assistants without naming any brand at all. In a perfect setting, this might lead to a significant reduction of search costs thanks to the shopping architecture, not trademarks as source-identifiers; however, concerns rise over how consumer freedom of choice and, relatedly, consumer autonomy will be affected. These concerns are particularly acute in a real world setting in which big platforms – owners of voice assistants – try to manipulate people's choices, thus causing an increase in consumer search costs.

This paper looks at trademark law in the era of AI-powered commerce with the use of digital voice assistants through the lenses of consumer freedom of choice. The paper will remind about the trademark function theory developed in the European Union as well as the trademarks' search costs rationale (the strongest theoretical perspective to trademarks up to these days) and consumer behavior approach in trademark law, and answer to the following question will be proposed: does trademark law have anything to offer to protect freedom of choice in the new shopping setting? The paper will analyze interactions between trademark law and technological advances used in shopping – in other words, two types of constraints on people's behavior will be under discussion, i.e., trademark law as legal norms and voice-shopping as architecture of life. Already now, it seems that the new architecture of shopping in the form of AI-based voice assistants, related to powerful e-commerce platforms and big data behind them, are influencing people's lives in a significant way and posing questions for the role of law in this situation. The paper will conclude that while trademark cannot solve the rising problem of limitations in consumer freedom of choice, the EU trademark law with its discourse on buying options, or alternatives (see *Google France* and *Interflora* cases), gives a hint in what direction to move, for it implies consumer freedom of choice through convenient shortcuts to product origin. A better choice architecture with visible trademarks and other types of transparency in consumer-oriented information might make the new voice-shopping environment (and automated shopping setting in general) a more sustainable matter, guaranteeing freedom of choice that is vital to individuals and liberal societies.

**Owais Hassan SHAIKH, Shaheed Zulfiqar Ali Bhutto University of Law**

*IP in the Metaverse*

Humanity has come a long way from Neal Stephenson's first use of the term 'Metaverse' in his punk novel *Snow Crash*. It is now widely understood to be the next big thing in our digital lives, partly thanks to Mr. Zuckerberg of *Meta*, the reincarnated *Facebook*. Metaverse, created and embellished by content creators, will provide unprecedented immersive experience to users. At the same time being the 'other world,' nothing

in the Metaverse will be natural. Hence, this core or fundamental characteristic of the Metaverse means: Metaverse is IP! And it will be important for all types of IP including the contemporary ones: patents, copyrights, trademarks and designs. Life in the Metaverse is further enabled by the recent digital advancements in instant distribution of rights and online payments in the form of Fungible (cryptocurrencies) and Non-Fungible Tokens (NFTs). The latter is considered to be essential to establish and transfer ownership and license use of the Metaverse content. This presentation explores the centrality of IP in the conceptualization of Metaverse specially the continued appropriateness of legacy IP laws, content ownership and use, private international law of IP including determination of jurisdiction and applicable law, appropriateness of NFTs to establish ownership and last, but not the least, the social/access issues Metaverse may pose to the inhabitants of the *realverse*.

**Parvathi SHAJI, Department of Law, University of Kerala**

*The Question of Green Technology Transfer and whether Compulsory Licensing is a Solution?*

As the technology revolution progresses, so does society's drive to continually increase comfort and consumer lifestyles, which is currently supported by an industry that emits greenhouse gases and is harmful to the environment in other ways. To stop causing these harmful impacts, we would have to change our lives and regress our consumer-based culture in the first alternative. This could also indicate a reversal in the growth of our way of life. This reduction in human activity, on the other hand, appears unlikely to gain popular support, and we would have to rely on the kindness and charity of a whole consumer-based society, which appears to be impossible. If we wanted to enforce it, there would be a considerable risk of "environmental tyranny," which would be unlikely to succeed anyhow. To enable the entire population to quickly transition to primarily using environmentally sound technologies ("EST"), we must encourage innovation, promote their distribution to consumers, and ensure that such technology is transferred to people and countries that lack the financial resources to invest in research and development. Only worldwide cooperation on this issue can provide a significant enough influence to genuinely have a good impact on the environment and global warming. This is why all countries should have access to green technology. Developing nations, in particular, require assistance from wealthy countries since they are more vulnerable to global warming due to a lack of resources to adapt to climatic and environmental changes. On the other hand, there are reasons to believe that, when utilised properly, IPRs can be a powerful tool for spreading climate change adaptation and mitigation technology. Both sides have strong arguments, and one of the primary research concerns in this study is the influence of IPRs on green technology transfer. The paper will try to analyse the significance of the development and diffusion of green technologies. The study tries to evaluate the essentiality of the process of green technology transfer and compulsory licensing.

**Ajay K. SHARMA and Dipa DUBE, IIT Kharagpur**

*A Comparative Study of Criminal Enforcement of Trademark Counterfeiting in India, Malaysia, & Indonesia*

The wide employment of criminal law to protect IP raises the question of how criminal law intersects with IP law because the intellectual property violation is very different. The proprietor of IP will likely rely on civil remedies for passing-off, trademark infringement, and so forth. Because the relevant criminal provisions have developed in a piecemeal fashion, which has produced less than satisfactory results in the

past. In certain specific cases, IP law goes beyond the scope of private right regime to become a public policy that has a direct impact on public interests. These are the cases where IP rights violations hamper the socio-economic health of the respective nations, as they involve transnational organized criminal networks generating huge monetary benefits out of such illegal activities of counterfeiting. Moreover, IP scholars frequently perceive criminal enforcement entering into the domain of private law as an intrusion or, alternatively, as too technical, since it involves more procedural aspects rather than the fundamental theoretical questions. Against this backdrop, present research will analyze the intersection of criminal law and IP law through a blend of analytical and empirical methods. This blend will enable to, first, situate the criminal law discussion in the domain of IP rights and to explain how far the elements of crime may be identified in IP violations, particularly ‘trademark counterfeiting’ such that the criminal sanctions are justified. Second, the nature of IP crimes, as a form of economic offence as distinguished from traditional offences, will be drawn. In this regard, the comparison of legal provisions of India, Malaysia and Indonesia as well as the most recent international developments will be undertaken, to show the trend towards criminal enforcement as the best possible protection for legitimate businesses and consumers.

**Dilip SHARMA, ICFAI Law School, IFHE, Hyderabad**

*Keyword Advertising and Trademark Infringement*

In the present era of digitalization, internet has become an integral part of our lives. In recent years, companies have started adopting digital advertisement as an important tool for marketing their products. One such popular method used by the companies for online advertisement of their product is ‘*Keyword Advertising*’ which displays their product/website based on the keywords searched by the users. Search engines like Google, Yahoo and Bing etc. provide the feature of keyword advertising at an additional cost/bid to provide more visibility to bidding company’s product based on the keywords entered by the consumer. These search engines earn huge revenue by selling the popular keywords to advertising/sponsoring companies through bidding. But sometimes, the advertising companies mischievously purchase their competitor’s trademark as a keyword for advertising their product which leads to the issue of trademark infringement. This may raise a reasonable doubt in the mind of the consumers and may mislead them to other website/product thereby causing loss/damages to the actual trademark owner. In the case of *Make My Trip (India) Private Limited v. Happy Easy Go India Private Limited*, HappyEasyGo intentionally bid and used ‘MakeMyTrip’ (the name of a popular competitor’s website) as a keyword which displays their website next to Makemytrip’s website. Such incidents may lead to the violation of registered proprietor’s trademark rights. Hence, this paper will examine the issue of trademark infringement caused by the companies using competitor’s trademark as a keyword for the advertisement their product/website. The paper will also discuss the issue of search engine’s liability like Google and Yahoo in such cases. The author will conclude the paper with his suggestions to address the existing issue after analysing the relevant laws and decided cases in various jurisdictions across the globe.

**Kiran SHARMA, School of Law Galgotias University**

*3D Printing and IP Laws: Advantages and Challenges*

In several disciplines, including medical, 3D printing is leading to tremendous improvements. Bioprinting is a method of creating human tissue-like structures using a 3D printer and living cells. These tissue-like

structures allow researchers to test medications and conduct clinical trials without having to use real people. If a patient requires an organ transplant, many scientists are now seeking to employ 3D printing to build new organs from the patient's own cells. 3D printing, also known as "additive manufacturing" in some circles, is the process of building three-dimensional things by layering materials such as plastic, rubber, or metal. A digital model, usually a computer-aided design (CAD) file, is used to "print" the actual product. CAD files can be made in a variety of ways, including scanning an object or designing the file from scratch. But what are the implications of this quickly changing and potentially transformational technology for intellectual property (IP)? For organisations that rely on innovation, 3D printing has a lot of potential benefits. 3D printing, in particular, allows them to cut costs when creating, designing, and testing new items, as well as upgrading existing ones. They no longer need to pay for expensive prototypes because 3D printers can quickly and cheaply produce several iterations of complicated elements in-house. Virtually every aspect of IP law is affected by 3D printing technology, including copyright, patent law, design law, and even geographical indicators. The questions here is, can IP rules accommodate such a broad technology in their existing form, or do they need to be reformed? Is current intellectual property law sufficient to safeguard persons involved in 3D printing processes and the items they create? Or, similar to the arrangements in existence in some jurisdictions for database protection, might it make sense to consider creating sui generis right for 3D printing to address emerging challenges?

**Manoj SHARMA, College of Science and Technology, Royal University of Bhutan**

*Incorporating IP Knowledge for Engineering Students in Bhutan*

Intellectual Property has been one of the recent concepts in engineering education in Bhutan. The work to understand and develop this concept started in 2018, after the start of the development of the Technology and Innovation Support Centre (TISC) at the College of Science and Technology, Royal University of Bhutan. Today at least six faculty from different programmes of engineering have been trained in Intellectual Property Rights from the Swedish Intellectual Property Office. The team is currently trying to understand and working on incorporation of the Intellectual property law in the field of engineering education and applications. Currently students are made aware on the IP situations and training on rights such as Copy rights, Industrial design, Patent and trademark are being provided. Students are also made aware on IP rights as part of the overall entrepreneurship development and to promote innovation and creativity among the engineering students, students are taught on the Patent classification and patent data base searches. The paper will discuss on the development of TISC centre and the methods used in the awareness of the IPR at College of Science and Technology, Bhutan with the current state of the students' attitude towards Intellectual Property Rights.

**Rudra SHARMA, National Law College (Nepal) and Purbanchal University**

*Nepal's Graduation to Developing Country and IPR Compliance*

The Permanent Mission of Nepal to the United Nations, New York dated 26 February 2021 mentions that a Committee of the United Nations has recommended Nepal's graduation from Least Developed Country (LDC) to developing country. The press release also states that "Nepal will continue to have access to all LDC-specific support measures until 2026. The preparatory period of five years is given to provide adequate time for a smooth transition during which Nepal would be enabling itself to offset the loss of support

measures exclusive to the LDCs." Later, the 40th plenary of the 76th Session of the United Nations General Assembly endorsed the graduation of Nepal.

The above being the situation, how Nepal will maintain the standards of IPR compliance in the days to come? Generally, least developed or developing countries fear a few things when they need to upgrade the standards of IPR compliance. They are price increase many products including pharmaceuticals, security of their natural resources and bio diversity etc. On the other side, governments in developing countries may want to increase the standards of IPR compliance in their country to attract foreign and domestic investment. The society as a whole need to be aware about the benefits by complying with IPR.

At this time, Nepal needs to look at the flexibilities available in terms of complying with intellectual property. How far the flexibility of Article 66 of the TRIPS agreement can be extended? How Nepal can use other flexibilities? We may look into Articles 15 and 27 of the TRIPS agreement for sustentative measures on the flexibilities. We also need to look into the enforcement mechanism how IPR can be protected to maintain certain standards. We may also look into other international instruments beyond TRIPS and other emerging regime of intellectual property.

Nepal does not have adequate enforcement mechanism for IPR compliance into the standard international community may want it. But, Nepal is trying its best. The graduation towards developing country has been an important occasion to discuss once again about the standard of IPR compliance in Nepal. It can also be an opportunity to improve IPR regime of Nepal. The location of Nepal between two big economies of the world India and China has its special importance in the global landscape. If Nepal cannot maintain appropriate standards of IPR compliance it can directly affect India and China. Therefore, IPR compliance mechanism in Nepal is not directly related to Nepal rather it is directly related to global community vis-à-vis India and China. This, we need to consider Nepal's graduation to developing country and standards of IPR compliance.

**Seemantani SHARMA, University of Technology, Sydney**

*Comparative Analysis of Legal Concerns of Ballet and Bharatanatyam Dancers: A Performers' Rights Perspective*

The proposed talk will present the empirical findings on the legal concerns of Australian ballet dancers and Indian Bharatanatyam dancers in relation to their dance performances. The primary reason for adopting the Rome Convention for the Protection of Performers, Producers of Phonograms and Broadcasting Organisations in 1961 was to protect performers (especially sound performers) against the unauthorised recording and broadcasting of their live performances. Further, the WIPO Performers and Phonograms Treaty (WPPT) was adopted in 1996 to update the rights of audio performers and phonogram producers suited for the digital environment. The WPPT has been hailed as a victory for performers' rights as it grants audio performers the making available right, a robust right of remuneration, and moral rights. Moreover, the Beijing Treaty on Audiovisual Performers (BTAP) was adopted in 2012 to recognise the exclusive rights of audio-visual performers in their performances. It has granted mandatory equitable remuneration rights to audio-visual performers for the first time. Similarly, the Australian and the Indian performers' rights regime was adopted in 1989 and 1994 respectively to comply with the Rome Convention and the TRIPS Agreement respectively.

The Australian and the Indian performers' rights regime has undergone sea changes since their adoption in 1989 and 1994 respectively. For example, the Australian performers' rights regime was amended in 2004 to grant moral rights to performers for the first time. Further, the Indian performers' rights regime was amended in 2012 to grant exclusive rights to performers and to grant statutory royalties to performers whenever their performances are exploited commercially. Despite the extensive rights granted to performers under the international and the national performers' rights regime, studies suggest that performers in general hesitate to assert their legal rights possibly due to time and resource constraints. Further, they seem to be more concerned about sustenance and livelihood issues.

The proposed presentation will take Australian ballet dancers and Indian Bharatanatyam dancers as case-studies to examine whether they have any legal concerns in relation to their dance performances. It is based on the survey and the interviews which the researcher conducted as part of her doctoral project. The aim of the doctoral project is to examine whether a performers' rights regime (specifically the right of remuneration) could improve the financial status of Australian ballet dancers and Indian Bharatanatyam dancers by providing them with a sustainable source of income.

**Sajid SHEIKH and Gunjan DESHPANDE, Maharashtra National Law University, Mumbai**

*Digital Copyright Infringement and Privacy*

Digitalization has enabled information being transferred from beyond the horizon within seconds to any part of the world. That leaves copyright in a vulnerable position, susceptible to infringement. Due to the massive information being replicated instantaneously, it makes finding copyright infringement like finding needle in the haystack. The issues faced under digital infringement include the use of work without the permission of the owner, peer to peer sharing (P2P), commercialization of the work without author's permission, amongst others. This requires specialized awareness about existence and enforcement of copyright in the digital environment. Secondly, the authors explore the tussle of privacy and piracy in the light of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 (India) as the guidelines requires the intermediaries to suo-motto detect infringement. This undoubtedly puts the privacy of an individual, which is fundamental, in a sensitive position. The authors extrapolate that boundaries of public and private rights are being blurred and that should not be done at the cost of privacy of an individual. Thirdly, due to personal data intensive applications being in the public domain, there are a lot of ethical and legal conflicts between the companies and individuals over tracking, saving and use of personal data. It is impossible to attend to these issues without a tailor made personal data protection legislation. Fourthly, an important aspect of copyright has been public access. Balancing the aspect of public access and protection of work in digital environment is hereby recommended by revisiting protection term.

**Rujita SHENOY, National Law University Odisha**

*Patenting Gene Editing Technology: Problems and Perspectives*

The development of another potentially ground-breaking, foundational technique – the CRISPR-Cas9 'gene-editing' technique CRISPR-Cas9 stands for Clustered Regularly Interspaced Short Palindromic Repeats – CRISPR-associated (nuclease number) 9 had far reaching application in various sectors like personalized medicine diagnostics therapeutic development agriculture etc. Patents on CRISPER Cas-9 has

created an heated debate on granting such patents on foundational technologies may create hindrance for access to such basic techniques, as it has wide applications in different field. More than 45 patents have been granted in United States as well as in Europe patents have been filed in countries like Europe Australia, China including India. The paper examines its patent eligibility and patentability. Also explores the impact of such patents on further innovation in this field and the stand taken by India in this regard. In case of gene editing technology there are ethical regulations applicable, to allow any sort of application like designing babies. The laws and regulations applicable in case of gene editing inventions will be analyzed to address the ethical concerns.

**Bhavisha SHETH, Marwadi University**

*State of Intellectual Property Rights in the Indian Biotechnology Policies and Entrepreneurship Ecosystem*

India ranks 46th and 40th on the Global Innovation Index and International Intellectual Property Index, respectively. “Indian biotech sector is likely to become \$100 billion in size by 2025 growing at 14.7 per cent year-on-year, according to Invest India — the national investment promotion and facilitation agency” was quoted by Shri Piyush Goyal, Minister of Commerce and Industry. India is among the top 12 markets for biotechnology globally with around 3 per cent share in the global market for biotechnology. Intellectual property comprises of a very essential component in business concerning biotechnology. Patents are vital assets for most markets that biotechnology entrepreneurs expect to enter, particularly human therapeutics and diagnostics. The Indian process patent regime was brought about by The Patents Act, 1970. As per the WIPO statistics database, the number of resident patent filings have increased steadily in past 10 years, however they are much less compared to the foreign filings. In India, process as well as products are patentable, provide they satisfy the criteria of patentability. However, Indian expertise in development of processes requires much attention, which can be sufficed and strengthened by pragmatic and active role of academia in research. The conducive policy ecosystem has paved way for improved state of biotechnology-based entrepreneurship in the country, however, there is still much room for improvement, in various ways. This paper discusses, the state of IPR in Indian biotechnology policy and regulatory framework, some issues in patent regime and other IPRs as well as certain policy suggestions towards improving the current scenario, to further India towards harnessing the maximum bio-intellectual potential of the country for becoming globally competitive and self-reliant.

**Neelesh SHUKLA, Institute of Law, Nirma University**

*Interplay of ‘Intellectual Property Rights’ with ‘Right to Repair’ and its Impact on Global Environment*

Most electronic devices have a micro-processing chip these days. Mobile phones, computers, Refrigerators, TVs, Cars, Coffeemakers, Water Purifiers, printers and many more are imbedded with a microcomputers with ingrained software. With the increase in complexity of technology, these devices and appliances are becoming more software controlled and hence making the repair process for these devices more difficult each day. However, this difficulty is not a result of the inherent complexity of the repair process, but because the manufacturers don’t want you to open “*their*” devices and conduct the repair by yourself, including the secondary market repairs. Manufacturers mostly use the “Digital Rights Management” (DRM) software to protect “*their*” devices and virtually “lock” the users from conducting even the basic repairs.



Issues start to arise when a customer claims, that (s)he is the *absolute owner* of the goods (s)he has purchased legally. Most manufacturers claim that the consumer owns the hardware, *but the software is owned by the manufacturer and the consumer is just the licensee*. Indian Copyright Act, 1957 makes it illegal for anyone to circumvent the ‘protection technologies’ that controls the access to copyright works, including these imbedded softwares. Manufacturers often use IP laws to inhibit the consumers to open the device and repair it themselves. Making a device less repairable and then creating a *planned obsolesce* increases the e-waste generated each year.

The idea of ‘sustainable development’ calls for changes in the manners in which we satisfy our needs. In the existing times when the quantum of e-waste is increasing every day, the idea of “*take-make-dispose*” is not an option. In the last four to five decades, to meet the rising demands, industries have molded themselves in such a manner to sell more sustainable products. Eco-design, Eco-efficiency, sustainable products, sustainable product service system and very recent one, the circular economy, are the kind of approaches which are adopted by the industries. According to UN’s Global E-waste Monitor report 2020, there is more than 53 million tons of E-waste generated around world. In spite of 66% of the world is governed by the E-waste management laws, only 17% of this e-waste is recycled every year. India, being the 3<sup>rd</sup> largest e-waste producer in the world, accounts for 3.2 million tons of E-waste.

In spite of some measures/directives, like BEE Rating, and some achievements in energy saving by making the products more energy efficient, we are still far from retaining a promising environment for the future generations. Imbibed in the idea of ‘Circular Economy’ is the concept of elimination of waste and to push more and more towards the closed cycle through technical cascade. Technical cascades refer to: cycles of reuse, reconditioning, repair, remanufacture, and recycle. This means that at the end of the life of a product or appliance, rather than dumping it, it keeps going in the cycle which postpones its final disposal in the landfills. Indeed the ideas like circular economy would be helpful in managing the E-waste; but there always lies a carbon footprint with each device we produce or we recycle. Thus, repair seems to be the most desirable of all in the group and recycling should be considered to be the last resort. The more a products remains in the cycle without recycling and with just some minor repairs, the more value is extracted from the materials invested initially. If we need to follow the route as provided by the idea of ‘circular economy’ and sustainable development, *product repair should be made fundamental*. Every user should have the capacity and option to get their product repaired before considering for replacement. This gives rise to a relatively new concept called a “Right to Repair”, which many customers claim to be their “Consumer Right”.

The researcher, in this research, would analyze, among other things, if the IP laws are levitating ‘economic development’ at the cost of ‘environmental degradations’ by discouraging the ‘Repair culture’ and encouraging the ‘use-and-throw’ culture. Secondly, are IP laws providing the manufacturers a corporate stranglehold over the consumer so that they could prefer profit over people.

**Alaknanda SINGH, Amity Law School, Amity University**

#### *Luxury Brands and Trademark Protection in India*

Global trade and business have created opportunities for brands to explore the international market. In the emerging market of India, there is an increase in demand for luxury brands in different product categories including perfumes, clothing, accessories, footwear, and other products. This is also attributable to the fact

of changing tastes and preferences of the consumers. Luxury brands are unique in terms of quality, appearance, feel, and brand message, making them distinctive and more appealing than other brands in the market. The brand marketing strategy of luxury brands focuses on connecting with the consumers emotionally and psychologically. Production, sale, and distribution of counterfeits or cheap substitutes of luxury brands is a violation of the legal rights of trademark owners. The sale of such inferior quality products which are identical or similar looking to the authentic luxury brands is increasing due to high competition, easy money-making, and even consumer demand in some cases. In the Indian market, it is seen that cheap counterfeits or sophisticated counterfeits are easily available in street shops and online shopping platforms. The sale of a cheaper version of a high-end luxury brand does not necessarily cause harm to the goodwill or profit of brand owners in all cases, especially when the consumers know about the source or origin of the product and intentionally buy such products. Rather it allows average consumers in developing countries, who generally cannot afford to buy high-end brands to get the satisfaction and joy of owning a luxury-like product at a cheaper cost. However, the consequences and effects of the sale of counterfeit luxury items in developing countries are dependent on many factors such as market size, type of consumers, government policy, goodwill, and reputation of brands and marketing strategies. Counterfeits are also produced to freeride on the reputation of original brands rather than to benefit consumers. It is imperative in such scenarios to understand and analyze the scope of luxury brand protection in India based on current reports, data, and judicial outcomes.

**Kshitij SINGH, Faculty of Law, University of Delhi**

*Precision Medicine, Patents and the Pandemic: The Innovation Conundrum*

Precision medicine, also termed personalised medicine, tailored medicine, stratified medicine being the new wave in medical care and healthcare, exhibit great potential for providing a more precise and targeted treatment. COVID-19 pandemic enables precision medicine and precision healthcare to develop itself to complement the traditional medical and public health approaches to prevent and control. In the COVID-19 pandemic, a wide range of gene sequencing continues. It could help reduce COVID-19 cases and decrease morbidity and mortality. Those involved in creating the value chain of precision medicine consider IP a crucial factor in encouraging innovation in this field. The importance of patents in the diagnostic industry has gained importance in the COVID-19 pandemic period as accurate; quick and affordable testing is crucial to limit the spread of COVID-19. Innovative diagnostic technologies are pertinent to respond to the current and future pandemic, and patents might play a vital role to encourage innovation in this field.

The patentability of inventions covered under precision medicine such as diagnostic tools and methods, biomarkers and genetic sequences remained contentious, given the persisting uncertainty in judicial decisions and legislative and regulatory framework over the same world over. Countries vary in their approaches to such inventions, e.g., *in vivo* and *in vitro* diagnostic methods are not patentable in India as per the patent law and rule. In contrast, *in vitro* diagnostic methods are patentable in the EU. In the United States, the jurisprudence on diagnostic methods and genetic inventions developed through judicial decisions vary. *AMP v. USPTO*, *Mayo v. Prometheus*, *Ariosa v. Sequenom* decisions tightened up the patentable subject matter criterion to exclude naturally occurring genes and diagnostic methods.

At the same time, *Vanda Pharmaceuticals v. West-Ward Pharmaceuticals* and *Illumina v. Ariosa* signal a qualified situation, narrowing down the scope of the product of nature criterion if the subject matter exhibits something more to the already existing product of nature. It indicates that the success of a diagnostic method

claim depends on clever drafting of the claim. Patent proponents believe that the uncertainty about the patentability of diagnostic methods would hamper innovation in this field. Members of Congress in the USA are pushing for radical changes in patent law that “allow corporations to have exclusive rights over genes, connections between genomes and disease, and other products and laws of nature.” While the patent opponents and other stakeholders raise their concern that these efforts would impede the sharing and accessibility of technology and adversely impact the innovation

Patents over genomic technologies have increased in the COVID-19 period, e.g., Illumina, a market leader in gene sequencing technologies, registered significant growth in R&D and patent filing. However, since precision medicine involves the application of IT tools and data-driven research, access to data is another challenge that is crucial for innovation. Therefore, an open and collaborative approach to research is pertinent in cases of pandemics. It is noteworthy that at the outbreak of the COVID-19, China sequenced the viral genome and released that data enabling the laboratories globally to develop their tests to diagnose patients for COVID. Against this backdrop, the present paper analyses the correlation between patents, precision medicine and the COVID-19 pandemic and its impact on innovation.

**Sonal SINGH, National Law University Odisha**

*Access to Legislative and Judicial Documents: Understanding the Related Copyright Issues*

The issue of copyright in legal and judicial documents is not a new one. The issue has been previously widely discussed regarding copyright in judgments, legislations, law reports, head notes etc. While it is established that the statutory content of legislation is uncopyrightable, this paper explores the interplay of copyright law and the edicts of government doctrine. Edicts of government refer to the annotations incorporated by the legislature into the Acts or Codes passed by it. The edict of the government doctrine denies copyright to all official expositions of law.

The doctrine was validated by the US Supreme Court in several cases of the nineteenth century. Though the doctrine has never been directly recognized in the express wording of the copyright statute, yet it is firmly rooted in and justified on the foundational principles of copyright law. *Firstly*, copyrightable authorship does not extend to official announcements of law. Authorship requires personalization, which is an attribute antithetical to official pronouncements of law, which are generated in an impersonal and ex officio manner. *Secondly*, all edicts of government, as legal tests, are methods of operation, rendering them uncopyrightable. *Thirdly*, authentic statements of law entail the merger of idea and expression in so far as the expression underlying the edicts of government are capable of being expressed in only a limited number of ways in order to preserve its authenticity.

The paper dwells into *Georgia, et al., v. Public Resource Org. Inc.*, wherein the government edict doctrine was reconsidered in the light of foundational principles of copyright law and related precedents. The paper then considers the Indian law on copyright relating to legislative and judicial documents. The objective is to consider the adequacy of the Indian law in ensuring access to legal materials- legislations and judgments and to determine whether there is a need for adoption of the government edict doctrine in India.

**Vandana SINGH, USLLS, GGSIP University**

*Geographical Indications and Handicraft Industry in India: Way Ahead for Development of Artisans*

India is a diverse country, comprising of various groups of people coming from varying cultures, religions and ethnicities. With this rich cultural heritage in the country, we possess an enormous stock of handicrafts. The intellectual property protection to handicrafts is usually secured with the help of obtaining Geographical Indication (GI) tags, which vest protection upon the groups of artisans or producers of the particular handicraft, functioning within a specific geographical area. GI constitutes a unique Intellectual property (IP) protection mechanism, which holds a special significance in the cases of handicrafts.

With this paper, the authors endeavor to provide a detailed account of GI protection for Handicrafts in India, including its history and gradual evolution and also to crack open the shell of issues pertaining to it, when coupled with this unique IP protection. It shall also discuss about the economic implications of GI protection, and the benefits of securing registration under the same. With this paper, the readers would be enabled in grasping a better hold and understanding over the intricacies of the issues prevailing in India and would also be able to look further into the effective ways to address these issues with the adoption of more sound and practical approaches, which the authors shall recommend.

**Parul SINHA, Department of Legal Studies, LCIT College of Commerce and Science**

*Corporate Appropriation of Traditional Trade Identities: Need to Protect under Ethos of Intellectual Property*

India is a land of contrast where both modern and traditional economies co-exist in which each has distinct identity and reputation acquired over a long period of time. This has a direct effect on taste and preferences of consumers with regard to goods and services which drive economic activities. For example, traditional eateries or Dhabas are equally popular among all sections of society whether rural or urban. Similarly, traditional tradesman such as cobblers (mochi) or tea vendors (chaiwaala) are identities which are associates with traditional economy which enjoy the trust and confidence of millions of people in various parts of country. However, these trade identities are not sufficiently protected under trademark act or IP legislation and are vulnerable to exploitation by large corporations. The corporation tries to capture the market by appropriating trade identities of traditional economy. While such identities cannot be shown per se to have economic value, nevertheless the appropriation of traditional trade identities give corporations a significant advantage to increase profits with the added use of capital intensive technologies. It is to be noted that traditional businesses purely rely on their core identity to attract consumers while on the other hand corporations have all the available resources to create and market new product and services without infringing into the domain of traditional trade identities. The usage of such trade identities for profit making by corporations destroys the good will of traditional business built over a long period of time and unfortunately causes irreparable damage to the community. Against this background, the aim of this paper is to examine the deliberate efforts by corporates to misappropriate the traditional trade identities for their own capital gain. The paper will also look into the necessity to protect trade identities and to promote creativity and originality among corporations. Moreover, the lack of a comprehensive legislation pertaining to trade identities has been a matter of concern. It is imperative, in a global economy, to ascertain and analyse the nature of protection required for traditional trade identities. Thus, the paper explores these issues and argues that legislative protection needs to be provided for traditional trade identities which are deeply

entrenched since antiquity. Lastly, there is an urgent necessity for the formulation of new policies to effectively prevent the appropriation of traditional trade identities.

**Priyanka SONOWAL, Alliance School of Law, Alliance University**

*Comparative Analysis of Pre-Granted and Post-Granted Geographical Indication in India, EU and the US*

Geographical Indications indicates goods or products which originate in a particular region or country where the characteristics, reputation of the goods or products are attributable to that region or country. When products or goods get the GI tag, they are instilled with the value that these products originate from a particular region. In India, GI is being regulated by the Geographical Indications Act, 1999 and Geographical Indications of Goods (Registration and Protection) Rules, 2002. As India is known for its culture and cultivation methods, India as a country is one of the finest and the biggest examples, goods are attributable to those places from which they originate. For example, when we think of muga silk, the first thing which comes to our mind is Assam or Indians in North pick Banarasi silk while in South, Indians go for Kanchipuram silk. When it comes to the customer satisfaction regarding a GI product or good, it is always the place of origin which plays a very vital role. The main lacuna which exists in the GI Act, 1999 is that even though it is regulated well, its post registration stage needs to be checked. When it comes to the granting of registration to a GI product, it follows the procedural stage but post-registration stage is very substantive where more administrative and authoritative work is being required. The Indian GI regime is being compared with that of the US and EU regime in this paper.

Why the US Regime? Indian IP legal system is very similar to that of the US and the US has been complaining of the poor protection and enforcement of IP protection in India. This paper will also cover on how India can rectify its lacunas from the US legal system. Why the EU Regime? Because there are about 4,914 GIs in the EU and the policies of the EU are being followed by many common law countries. India is being considered a sleeping beauty even though the country has many prominent GIs, it is still lagging behind and until and unless a proper streamlined strategy is being adopted, the ongoing and the future registrations will have no sustainability. The reason being is that with the existing laws providing complete protection to the GI registrations come with many problems. There is no denying of the fact that even though there is abundance of literature which is available relating to granting of protection to GI in India but there is no study which is available for the granting of protection of GI in pre and post registration process. This paper will do a comparative analysis between India, US and the EU and what can India learn from the US and the EU regimes as there is a lacuna which exists in the present GI system. A report was being presented under the chairmanship of Mr. V. Vijayasai Reddy by the Department Related Parliamentary Standing Committee on Commerce before Rajya Sabha on the Review of the Intellectual Property Rights Regime in India on 23<sup>rd</sup> July, 2021 which highlighted the issues related to GI post registration.

**Reeta SONY, Jawaharlal Nehru University**

*Traditional Medicinal Knowledge, Sub-Continental Cuisine and Intellectual Property: India's Quest for Self-Reliance in the Cultivation of Asafoetida or Hing*

Asafoetida or *Hing* or *Perunkayam*, scientifically known as *Ferula asafoetida* is a spice that has been widely used as traditional medicine, a nutrient rich taste enhancing *curry* ingredient and natural food preservative

in the Indian sub-continent for centuries. Asafoetida's pharmacological effectiveness in the treatment and prevention of several gastrointestinal, cardiac and neurological related ailments and added benefits has made it possibly the most common ingredient spice in Indian cuisine. With a strong sulfurous odour, Asafoetida is extracted as a gum resin from the *Ferula* plant's taproots that are endemic to Central Asia. As a result India has been annually importing 1200 tonnes of raw asafoetida worth USD 100 million from Afghanistan, Iran and Uzbekistan. India's Council for Scientific and Industrial Research (CSIR) – Institute of Himalayan Bioresource Technology had in October 2020 took up the cultivation of asafoetida for the first time since the last thirty years at the dry cold region of Lahaul valley in the Himalayas using the seeds from Iran following due 'import permit' through the Indian Council for Agricultural Research (ICAR) – National Bureau of Plant Genetic Resources in 2018. The paper shall research into the multidisciplinary role of traditional medicinal knowledge of asafoetida and its Intellectual Property (IP) from the perspective of International Conventions in financially securing agricultural interests, improving of livelihood and increased farm income of the Himalayan farmers through the import of Iranian Asafoetida seeds which would result in the indigenous production of improved varieties of Indian Asafoetida leading to self-reliance. The paper shall also analyze the role played by IP in regional trade, development and cultural interconnectivity.

**Belendra SOORYA, Faculty of Law, General Sir John Kotelawala Defence University**

*Domain Name Dispute Resolution in Sri Lanka - A Comparative Study with the Indian Jurisprudence*

A domain name is an address where Internet users can access the website of a business entity. Domain names are assets, crucially important to the very DNA of a brand. With the shift of customer activity moving online, domain names have become a primary element of a business plan. In the course of events, legal disputes on a domain name can arise such as conflicting interest disputes, 'pawning off' disputes, competitor disputes, cybersquatting or domain name hijacking, cyber griping, or parody disputes, etc. Concerning the domain name policy in Sri Lanka, it appears to be a restrictive approach; therefore, it may be misused by the infringers. The study attempts to analyze the effectiveness of our existing resolution mechanisms on the disputes related to the Domain names in the Sri Lanka context. This paper identifies the major drawbacks arisen in the Sri Lankan context due to the absence of a specific legal framework to the disputes related to the domain names. As a comparative study, the research investigates the arrangements proposed by the Indian jurisprudence. In addition, international standards such as Uniform Domain Name Dispute Policy implemented by ICAAN also adhered to the context.

**Charu SRIVASTAVA, School of Law, University of Petroleum & Energy Studies**

*Limitations on the Copyrights of an Owner/Author of a Cinematograph film in India, The US and Germany*

The effectiveness of any law is dependent upon its ability to accommodate and anticipate diverse situations that exist or might arise in the future. The doctrine of equity lays down the foundation of looking at a dispute with all possible perspectives to reach a reasonable, just and fair judgement. Copyright law is not an exception; the very subject matter of the law demands a balance between the rights of the creator and the potential user so that creativity and growth are not stagnated by the strict implementation of the rights.

The paper presents and analysis of a few exceptions concerning the cinematograph film or the work incorporated therein in the context of limitations on the rights of the owners of the film and the works incorporated therein. The paper begins with a discussion on the exceptions provided under the international conventions particularly the Berne Convention and the TRIPS. The discussion then shifts to the exceptions existing in the domestic laws of India, the US and Germany for comparative analysis. The analysis and the comparison is studied specifically in the context of three acts only: the use of films for private use/personal use; educational exceptions applicable to the use of films and criticism, comment, review and parody of films as an exception. The objective is to present the analysis of the laws and case laws and highlight the best practices in the respective jurisprudences.

**Preeti SHRIVASTAVA, Muscat College**

*Awareness, Perception and Attitude towards Intellectual Property Rights (IPR) among Undergraduate Students in Oman: Are they ready yet?*

Sultanate of Oman has taken many steps and efforts to improvise Intellectual Property and Copyrights laws over the years and is working in lines with WTO's IP guidelines. IPR awareness, knowledge and implications are not only for the Industry but also for the Academia. Universities and Colleges are promoting and supporting young creative minds to foster economic growth and this creativity of the students has to be nurtured and protected as well. All HEIs in Oman have IPR policy which is the requirement from Oman government as well as Oman Academic Accreditation Authority (OAAA). Various seminars and workshops are also organised by HEIs from time to time to spread the awareness of IPR. But how far the undergraduate students are actually aware and serious about the importance of IPR issues is still a debatable topic and area which needs to be explored. Do the students actually understand their IPR rights and know that there are provisions to protect their innovative ideas and products? This is the pertinent question which needs to be answered, if we have the goal of becoming Innovative Country.

Students are the potential future knowledge workers or entrepreneurs. Giving them a strong base and correct understanding of IPR, respect for creators and appropriate usage of IPR systems is critical. Hence, there is a need to study and understand the awareness, attitude and perception of undergraduate students related to IPR aspects. The study will have quantitative approach and this research has a target of sample size as 300 undergraduate students from 8 colleges across Muscat region in Oman. Data analysis through SPSS will be analysed. The findings and the recommendations of the study will help the stakeholders to develop creative steps for robust mechanism or framework which may be used by the HEIs to further strengthen their quest for Innovation culture and awareness about IPR. The study will also contribute to the body of knowledge and will pave way for further related studies pertaining to Oman and GCC.

**German STALKER, Centre for Intellectual Property, San Andres University & Maria Carolina RUBIO, Attorney**

*Copyright and Freedom of Speech in Digital Environments. The TikTok Case*

Freedom of expression is a fundamental right. Copyright, for its part, protects creators that their works are not reproduced without their authorization. In this article We will analyze the intersections between both rights in the digital environment. In particular, on user-generated content platforms in which the works

shared can be interpreted as a manifestation of the creator's right to freedom of expression, which can be automatically censored for infringing copyright in general under the terms of the DMCA. We analyze *TikTok* as a platform used by Z generation not only for fun, but also for create valuable content that expresses the political ideas that will shape the future of the global community. These users eventually may find its rights threatened by the platform's algorithm that automatically take down the content to protect the property rights of owners. In particular, in this paper we explore the implications of notice and take down system and ask if it is efficient solution in the fragile context of Latin American democracies where freedom of expression represents the ability of citizens to hold public servants accountable.

**Andrea STAZI & Riccardo JOVINE, European University of Rome**

*Food Traceability in the EU, the US and China: A Comparative and Technological Analysis*

The issue of traceability in the food sector lies within the framework of a multiplicity of principles ranging from product identification to data recording, information integration, and accessibility. Traceability responds to a recent need for market and consumer protection which has driven and is still driving policies of major world powers in the food industry and beyond, such as the European Union, the United States of America, and the People's Republic of China.

In this paper, such countries are taken as models for comparative purposes. In a multidisciplinary context such as food regulation, scientific, economic, legal and technological challenges arise. Thus, on the one hand, food regulation builds upon the concepts of coexistence, right to know, and precautionary principle. On the other hand, innovation through emerging technologies such as blockchain foreshadows new organizational models for a more effective management of traceability systems within the food supply chain.

**P. Sree SUDHA, Damodaram Sanjivayya National Law University**

*Indian Jurisprudence on Standard Essential Patents (SEPs)*

The concept of Standard Essential Patents (SEPs) is new to India. It became part of Patent lawyers and court's vocabulary about three years back when Ericsson sought to enforce its SEP's against a local Indian handset manufacturer, Micromax that essentially imports phones from China. The Indian Patent does not contain any special provisions with respect to SEP's. In general, the Patent Act does not lay down any specific criteria or terms & conditions to be complied when licensing a technology. Thus determination of the terms like pricing value etc. is purely based on the market demand of technology and thus is very subjective in nature differing from case to case. The situation does become different in case of SEP where a patented technology becomes a market standard. Thus Patentee is required to license the technology on terms that Friendly, Reasonable and Non-discriminatory popularly known as FRAND terms. Often Licensee would allege that Patentee is exploiting its dominant position to demand royalty that is not based on FRAND terms. Thus in most SEP cases the court's role is to ensure that the holder of a Standard Essential Patent (SEP) does not abuse the dominant market position it has gained from widespread adoption of a voluntary technical standard. The basic idea behind the patent system is to reconcile the interaction between patents which are primarily 'private' and 'exclusive' as against standards which are meant to be 'public' and 'nonexclusive'.



There is seen the crossing point between the competition law and Patent law. The competition law aims to prevent the stockpiling of market power while patent law grants monopoly rights. The Competition Commission of India, (which is a govt. Constituted body with judicial powers) was formed with the objective to create and sustain fair competition in the economy that will provide a 'level playing field' to the producers and make the markets work for the welfare of the consumers. The Competition Act 2002 is based on the principle that competition is desirable for the progress of technology with the parallel aim of dealing with issues like "abuse of dominant position" and "anti-competitive agreement". The recent SEP litigation cases are the result of overlapping ambit between patent law and the competition law. The jurisprudence related to SEPs and related injunction is still in evolutionary stage, it would be worth noting the decision in the pending cases that will ultimately shape India's FRAND jurisprudence and also would help in determining important issues namely whether competition commission has jurisdiction to decide the royalty rates in SEP licensing agreement, injunctive relief and whether there would be any guideline which could maintain a balance between the exclusive rights of patentee along with the public interest.

The objective of this paper is to analyse the SEP cases so far have been brought by involves Ericsson against Micromax, Gionee, Intex and recently against Xiaomi and in some cases, Ericsson was able to obtain injunction order against some of these parties.

**Ranggalawe SUGIRI, Universitas Indonesia Faculty of Law**

*The Challenges of Managing IP of Traditional Ikat Textile: Case Study of Geographical Indication and Trademarks of Tenun Gringsing Bali*

Tenun Gringsing Bali, is one of the oldest traditional handwoven textile of Bali produced by Bali Aga Communities at Tenganan Village, Karangasem Region, Bali. These textiles were considered as sacred textiles used by Bali Aga Community (Community that existed before the arrival of Hindu Tradition from India) to perform traditional religion rituals, and also used by Balinese for several religion ceremonies. To preserve and protect the traditions of Tenun Gringsing, government of Indonesia assist Tenganan Community to gain Geographical Indications protection few years ago. Nowadays the Organizations of Tenun Gringsing Community (MPIG) assist producers of Tenun Gringsing textile in performing product's standard while advocating consumers for the uniqueness and value of tenun gringsing produced by Community. As pandemic happen from 2020, the community faced challenges in producing and marketing the products also in performing rituals and traditions of Tenun Gringsing and religion ceremonies. This situation trigger us to conduct research and community engagement program to find ways in supporting MPIG in managing community IP assets while enhancing Tenun Gringsing producer's capacity in managing their IP assets and conserving their Traditional Cultural Expression.

**Mafruza SULTANA, South Asian University**

*Terrorism and Investment, Intellectual Property Rights (Innovation): The Connection Roots and Challenges*

Technology and security threats are two major topics of debate in today's globalized society. There are various reasons why terrorism is seen as one of the most essential issues for growth, particularly in the area

of innovation, which is the focus of this study. The impact of terrorism on technology advancement through foreign investment will be discussed in this study. Terrorism, according to academics, stifles investor confidence and reduces projected returns on invested capital, prompting investors to relocate their investments to another country. As a result, a country's stock of productive capital and flow of productivity in technology enhancement is reduced. This eventually leads to a scarcity of productive foreign capital and jeopardizes the ability to obtain high-quality technology from other countries. Terrorism is a bigger issue in emerging countries than it is in developed countries. Scholars argue that the negative effect of terrorism on innovation disappears for developed countries. The reason is that developed countries provide higher investor protection which increases the investor confidence to invest in innovation activities. While FDI and technology transfer facilitates the use of upgraded technologies, which helps to increase productivity and fosters innovation.

For the development of innovation and technology sector states need to reduce terrorism risk and stronger institutions such as legal protection of intellectual property rights. Because investor want stronger institutional settings (IPR protection) to protect their technological investment that help to build investor confidence, provide support, security, incentives, and reduce uncertainty.

Although there are number of papers that have examined the effect of terrorism on various economic issues, research on effect of terrorism on investment and innovation; consequently, on IPR regime is very rare. This paper will argue how this three are connected and impacted.

**Darshana SUMANADASA, Faculty of Law, University of Colombo**

#### *Side Effects of Trade Secrecy in COVID-19 Vaccines*

COVID-19 has brought an unprecedented dilemma to the human civilization and as of now vaccines *inter alia* have been recognized as an effective way to control the effect of the disease. COVID-19 vaccines revitalize the long-standing debate as to how intellectual property law should strike a balance between exclusive IP rights of vaccine-innovators and manufacturers on the one hand and public interest on the other. It is doubtful as to whether the global IP law regime could establish an equilibrium which concerns with the public at large against a backdrop the vaccine manufactures meticulously guard their IP assets through a layered approach comprises patents and trade secrecy. Unlike in single molecule drugs, pharmaceutical companies are increasingly relied on trade secrecy to protect biologic drugs such as COVID-19 vaccine. This paper argues that such a reliance on trade secrets may lead to far reaching repercussions when the world is facing a global health crisis, by which more than 5 million people lost their lives while more than 250 million have been infected. Having explored how trade secrets protection is used by the pharmaceutical industry, in particular in protecting COVID-19 vaccines, this paper argues such a protection may impact on public interest based on three arguments. First, it explains how trade secrets protection affects follow-on innovations or biosimilars and secondly, it argues protecting valuable knowledge as trade secrets may impact meaningful technology transfers and collaborations. Thirdly, this paper argues that public interest is further hindered by the trade secrets exceptions such as reverse engineering due to the impracticability of reverse engineering of biologics given their complexity. Whereas India and South Africa requested to World Trade Organisation to waive the IP rights related to COVID-19 enshrined in the Agreement on the Trade Related Aspects of Intellectual Property Rights (TRIPS), it is yet to be considered and implemented by the WTO. Even if this proposal is accepted by the WTO, it may bring negative effects as it discourages present

and future scientists, innovators and manufacturers working on more effective cure for COVID-19. Thus, this research proposes to introduce ‘compulsion in the public interest’ as a trade secret exception.

**Corinne TAN, Nanyang Technological University**

*Regulating Tik Tok – What Comes Next after Self and Co-regulation?*

There are growing concerns that the use of content on video-focused social networking service Tik Tok infringes copyright laws. In this paper, I examine copyright laws in selected jurisdictions that would apply to the creative use of content on Tik Tok, as well as the ways in which the platform Tik Tok purports to minimise the risks of copyright infringement via its terms of service and technological features. I also consider the efforts made to co-regulate Tik Tok, as well as the limitations on regulation posed by emerging user norms. I assess if the existing modes of regulation are adequate and propose further solutions in regulating a platform such as Tik Tok.

**Ufuk TEKIN, Faculty of Law, Eskişehir Osmangazi University**

*NFTs as Capital in Joint Stock Companies under Turkish Law*

Non-fungible token is a secure certificate that represents an entitlement its owner has to usually a digital or physical asset (such as artwork or music) or experience, and protected by blockchain technology. NFTs have a financial value, which increases over time as the blockchain becomes more and more popular with people. Recently, these tokens have started to be brought to joint stock companies as capital. The values that can be contributed to joint stock companies as capital are regulated in art. 127 of the Turkish Commercial Code No. 6102 (TCC; Turkish Official Journal, Date: 14.2.2011, No. 27846). According to the first paragraph of this provision, as capital to commercial companies, unless otherwise provided in the code; money, claims, negotiable instruments and shares of capital companies; intellectual property rights; movables and all kinds of immovables; benefit and usage rights of movable and immovables; personal labor; commercial reputation; commercial enterprises; legally used values such as transferable electronic media, domains, names and signs; mining licenses and other rights with economic value; all kinds of transferable and cash value can be brought.

In this study, I will focus on whether NFTs can be brought to a joint stock company, and if so, which of the rights specified in art.127 of TCC will be included. In this framework, it will be emphasized that the NFTs that are promised to be brought to the company are not brought to the company and the capital investment debt is not fulfilled. Finally, evaluations will be made about the principle of capital protection.

**Saliltorn THONGMEENSUK, Thailand Development Research Institute**

*The Evaluation of Patent Linkage Impacts on the Access to Medicines in Thailand*

Patent on medicines is considered one of the most debatable issues in free trade agreement negotiations, especially when it comes to patent linkage. For decades, Thailand has participated in a series of bilateral and plurilateral trade agreement negotiations with other countries, including the United States. These

negotiations require Thailand to enhance its protection system beyond the minimum standards provided by the Agreement on Trade-Related Aspects of Intellectual Property Rights of the World Trade Organization (TRIPS Agreement) by incorporating patent linkage into the national system. However, due to lack of understanding of the system and uncertainty as to how to mitigate its impacts on the access to medicine, the negotiations have not yet accomplished.

Even though the TRIPS Agreement does not provide any provision concerning the connection of drug registration with its patent rights, the mechanism was initially pioneered by the United States where the system was acknowledged by the Hatch Waxman Act. Up to the present, patent linkage provisions have been included principally in the trade agreements between the United States and its trading partners. Given this, the grave concern about the effects of patent linkage on public health has grown as it may substantially delay the entrants of generic drugs and may lead to growing number of patent evergreening.

In Thailand, a patent linkage system has not yet been adopted. However, the recent acts of concerning government bodies display favorable development towards patent linkage implementation. For instance, the Department of Intellectual Property (DIP) has proposed amendments to the Patent Act to support the future implementation of the patent linkage mechanism. Nevertheless, many organizations, such as National Health Commission and Thailand Consumers Council, have actively voiced their concerns about implementing the patent linkage system in Thailand while expressing their opposition to Thailand becoming parties to various FTAs. Moreover, since patent linkage requires the FDA traditionally tasked with safeness, efficacy and quality regulation to perform patent enforcement, the Thai FDA might not have sufficient expertise and resources to perform such a duty.

As Thailand may soon introduce the system as trade-offs for market access under future trade agreements, the deep understanding of the patent linkage system and the evaluation of its impacts on public health are essential to prepare the necessary arrangements in the country.

This research seeks to provide a deep comprehension of the nature and challenges of the patent linkage mechanism by drawing the implementation experiences from the United States, South Korea and Singapore and to assess the impacts of the patent linkage introduction in Thailand. Ultimately, this research offers the suggestions on the Thailand's FTA strategies with regard to patent linkage provisions under the current trend leaning towards regionalism, rather than multilateralism. Moreover, it provides the policy recommendations on whether and how the systems should be established, together with the means to alleviate the delay of the market entry of the generic drugs in the domestic market, which may be caused by patent linkage introduction.

**Kuhu TIWARI, Rajiv Gandhi School of Intellectual Property Law, Indian Institute of Technology Kharagpur**

*Analysing The Paradox of Advertising Pharmaceutical Trademarks: A Tool for Persuasion or Information?*

Trademarks performs a vital function of source identification and differentiation, when attached to a marketable product. It informs the consumers about its features, thereby reducing their search cost and also facilitates the market efficiency. However, in the pharmaceutical industry where consumers (patients), due to lack of technical knowledge the consumers have virtually no choice that they can meaningfully exercise. There the trademarks may play a powerful role in informing or influencing the consumers. In this reference

it is relevant to recall the famous contract law case, *Carlill v. Carbolic Smoke Ball Co.*, that reflects the dark version of pharmaceutical advertising. Where, Mrs. Carlill successfully claimed the reward as advertised by the Carbolic Smoke Ball Co. that offered a reward of £100 to “*anyone who contracted influenza, colds, or any diseases caused by taking cold after using the ball three times daily for two weeks, in accord with the printed directions supplied with each ball.*” She contracted influenza in spite of consuming the smoke balls and claimed the reward and rest is history. This case of the year 1892 showcase a perfect example of influence through persuasive advertisement on consumer’s choice.

With the time though such advertisements are strictly regulated, new advertising practices have been evolved that utilises the conventional and non-convectional features of product and its packaging as trademarks, for example the purple pill launched and advertised by the AstraZeneca under the trademark Prilosec® and the later release of Nexium® under the same therapeutic area, also the diamond shape along with blue colour of the pill advertised widely by Pfizer for its trademarked drug Viagra®.

The expanded use of trademarks leads to the creation of multiple brands that made the industry highly competitive with respect to brands. Hence, it’s not just the name but also other unrelated attributes that are served to the consumers through the advertisements. The regulation related to pharmaceutical advertising differs in different jurisdictions, where normally prescription drugs are only advertised to the physicians and over-the-counter drugs are advertised directly to the consumers. In this way advertising is an aid when it is an informative advertisement or, but it may even mislead the consumers with the persuasive advertisings. It is important to identify and regulated such forms of advertisements.

In this context it is important to regulate the persuasive advertisements, especially for the products that have direct implication on consumers’ health. As, an incorrect persuasion may even lead to the serious consequences. Thereby, the paper aims to identify the different forms of advertisement strategies adopted by pharmaceutical companies and its impact on consumers’ choice, through a comparative analysis of the advertising regulations.

### **Hannibal TRAVIS, Florida International University**

#### *Gig Economy Due Process: An Enforceable Right Not to Be Innovated” Into Poverty*

More and more people are dependent on websites for their livelihoods. Stable employment as journalists, musicians, professors, bookstore clerks, and even as taxi drivers has become more difficult to find, leaving the “precariat” scrambling for “gigs” facilitated by Web giants with billions of users apiece. Social media influencers, bloggers, auction sellers and dropshipping entrepreneurs, side hustlers, and delivery drivers face instant ruin if they are deplatformed or demonetized by a website that has no equivalent, notably GAFA or Google, Apple, Facebook, and Amazon. Websites, however, claim a variety of statutory and constitutional entitlements to delete “user” accounts and “content” at will, and even to evade their own public promises and terms of service. Arbitrary deplatforming and demonetization are being defended as essential parts of online “innovation” and “U.S. competitiveness.”

There is a groundswell of support for a domain-specific law that would prohibit harmful denials of equitable access to a digital platform’s prime spaces of visibility and profitability. In the U.S. Congress, there are a variety of proposals for the separation of platforms and commerce, the refinement of monopolization or merger doctrine, and greater enforcement of existing competition and consumer protection laws.

Meanwhile, we witness the extension of net neutrality principles to dominant Internet platforms by the European Court of Justice in the Google Shopping matter, in articles 5 and 6 of the European Digital Markets Act (DMA), and to the creation of a right to a reasonable account termination by the Digital Services Act (DSA). Even the conservative former head of antitrust enforcement at the U.S. Department of Justice, Makan Delrahim, argued that to save “merits-based competition” in an era of Big Data and sophisticated algorithms, the United States needs a “hybrid public-private rulemaking body” to protect products, services, and user accounts from anticompetitive or ideological “discrimination.”

While the DMA and DSA may ensure fairer treatment of Europeans, other nations may need a new agency or a reform of competition law to guarantee that everyone is entitled to a level playing field in the digital age. The paper considers whether such an agency or reform could exist alongside the First Amendment to the U.S. Constitution and comparable provisions in the constitutions and regional covenants of other nations. It analyzes precedents supporting (1) a classification of denial of open access to public accommodations as conduct not entitled to absolute protection as “speech,” and (2) principles of statutory construction that should limit the immunity of “conduits” and “computer services” for unfair conduct. Among other original contributions, it draws connections between U.S. constitutional and statutory doctrines relating to shared spaces and the teachings of international human rights bodies relating to the responsibilities of private actors. A draft paper will be ready by December 30, 2021 for distribution to interested attendees.

**Hetvi TRIVEDI, Gujarat National Law University**

*Atmanirbhar Bharat, a Digital Revolution & Handloom Heritage - Assessing Social Justice Aspects of India's IP Regime*

Intellectual Property Rights in the form of Geographical Indications have managed to build certain recognition for handlooms in the frame of India's traditional knowledge however the buck must not end here. As much as the local communities' economic rights are upheld through GI tagging of the handlooms, their social, cultural and human rights must receive equal attention by which the traditional knowledge can be perpetually protected. Afterall, the idea is to bring benefits not only to the communities where the knowledge has originated but also to uphold the social function of IP protection which is to promote the progress of arts and sciences to society's benefits.

Precarious as it is, a balance must be found between IPR and human rights by cultivating distinct law-policy measures so that the entire body of traditional knowledge in handlooms can survive with a clear strategic vision of growth and longevity. This approach assumes a heightened significance today as several industries including the handlooms require to be guarded against shocks like the latest pandemic.

Specifically speaking, the handloom industry of India which listed in the unorganized sector as the second-highest employment generator received an unexpected jolt as COVID-19 brought the entire world to a stop. Riddled with multiple challenges, the pre-pandemic state of the industry was not any less pitiable, adding to which the pandemic put a question on the very existence of its stakeholders. Looking at the condition then the government of India announced *Atmanirbhar Bharat Abhiyaan* or Self-Reliant India, with an aim to encourage economic growth by self-reliance. Alongside this, there came a surge in digitization of goods and services which brought consumers and businesses together on the online medium.

This research paper aims to understand whether the social function of IP has achieved the targeted inclusion and empowerment of handloom weavers with the *Atmanirbhar Bharat Abhiyaan* and the digital revolution in marketing and sales. Research will be conducted through Tangaliya handloom weavers from Gujarat, India. The origin of Tangaliya handloom dates back 700 years and it is among the first to be honoured with the GI tag in Gujarat. Interestingly, its growth trajectory post GI registration does not speak greatly of India's IP law-policy implementation. This makes Tangaliya handloom an apt subject to understand the transformation envisaged under Self-Reliant India during the pandemic.

To evaluate the social justice and human rights aspects of IP law and policy in India, this paper will review Tangaliya handloom's journey from grassroots to digital. In drawing conclusions from the study, this paper will attempt to initiate a discourse on modifications to India and Gujarat's law and policy scenario to improve the overall protection of its traditional knowledge and cultural heritage.

**Chimdessa Fekadu TSEGA, Chinese University of Hong Kong**

*Patent Harmonization in Africa: Potential Roles of AfCFTA*

As multilateral rule-based system is being challenged across the globe with the proliferation of protectionist national movements, Africa is moving toward deeper economic and political integration. The adoption of a continental wide single market area in the form of the African Continental Free Trade Area (AfCFTA) and the consequent negotiations to adopt relevant Protocols toward its realization are meant to deepen integration and alleviate Africa's dependence on the global regime. A *sine qua none* of successful integration is legal harmonization, a series of activities intended to reduce the differences between the laws and policies of two or more jurisdictions. Legal harmonization, however, is a multifaceted project that takes different forms, employs multiple methodologies, and adopts various transposition and application tools depending on the purpose of the process.

Available research takes legal harmonization for regional integration for granted without evaluating its normative claims. Even in those instances, the relevant studies are limited to the discussion of European legal harmonization under the auspices of the European Union (EU). With respect to patents in particular, legal harmonization is examined through the lens of advanced economies without taking into account the interests and peculiarities of less developed countries. There is a paucity of studies on legal harmonization in less developed and the least integrated regions, such as sub-Saharan Africa. This article bridges the research gap by investigating the desirability and feasibility of legal harmonization of various patent protection legislations in Africa. To this end, the study utilizes doctrinal, case study, and empirical research methods to determine the appropriate modalities and tools of legal harmonization for a harmonized African patent system.

The article starts by introducing the notion of harmonization, its modalities and rationales. It argues that claims for legal harmonization must be taken with a healthy skepticism. Subsequently, the study applies the claims of legal harmonization to intellectual property rights in general and patents in particular. Next, the article will look at the current patent harmonization efforts in Africa (ARIPO and PAIPO) and the ongoing negotiation of IP protocol within the framework of the AfCFTA. The article concludes by indicating the potential roles of the AfCFTA as a harmonizing tool in Africa.

**Mahatab UDDIN, University of Southern Denmark and University of Guelph**

*Interfaces of Intellectual Property Rights and Competition Law for Transfer of Environmentally Sound Technologies*

Battling against climate change - 'a common concern of humankind' is the utmost global challenge of this century and Environmentally Sound Technologies (ESTs) are the main tools of this battle. This article examines the juxtaposed role of Intellectual Property Rights (IPRs) and competition laws in facilitating wide-scale innovation and transfer of ESTs in developing and least developed countries. While adoption of suitable IPR regime can facilitate innovation and transfer of ESTs to the developing and least developed countries, some of these countries can facilitate innovation and transfer of ESTs through using TRIPS' flexibilities like 'compulsory licensing'.

Competition laws can also facilitate innovation and transfer of ESTs through expanding ESTs market by way of preventing abuse of IPRs, for which countries' competition laws should include guidelines preventing abuse of IPRs licensing agreement. Based on above-stated arguments, this paper will particularly examine whether the current state of relevant national IPRs and competition laws can facilitate transfer of ESTs in Bangladesh, which is considered as one of the most climate change affected countries of the world.

**Adithya VARIATH, Maharashtra National Law University Mumbai**

*TWAIL and Decolonising Intellectual Property Law for Protecting Traditional Knowledge in the Global South*

With the international institutionalization of the intellectual property (hereafter 'IP') framework, minimum standards of protection of IP were an effort to harmonize and create a liberal order for innovation. However, the functioning of the international regime and politics amongst its stakeholders has exposed the inherent structural defects of the global system and how it has also created an argute form of inequality in the global economic order. Scholars have critiqued TRIPS Agreement as a reposition of Eurocentrism. Third World Approaches to Intellectual Property Rights perceives IP as a mechanism that advances the interests of particular groups and nations at the expense of others and by underwriting domestic IP claims. For the global south, innovation in IP is also an effort to integrate indigenous knowledge into mainstream economic and legal order. In third world countries, IP has the socio-economic potential to enhance participatory development processes within the local communities. The values of the global south have been least prioritized by the profit-oriented IP market players. In the era of the internationalization of IP, indigenous expressions have to find a place in global discussions and policymaking. Like, the Traditional Knowledge has restored biodiversity; however, its protection ecosystem is weak with many gaps. Considering the present challenges like the inextricable nexus of climate change and biodiversity loss, traditional knowledge should become a central theme for IP protection. The paper focuses on decolonizing IP and how mainstreaming niche IP regimes like Traditional Knowledge can disrupt Eurocentric hegemonies and methodologies. The paper emphasizes how third world countries can utilize the potential of indigeneity to influence policymaking in IP at the global level. The paper also sketches how the control of, access to and utilization of biodiversity can be enhanced through restructuring the modalities of Traditional Knowledge. The paper also examines the element of sovereignty in international IP regimes to re-model the global harmonization of Intellectual property protections through bringing in pluralistic protection modalities for regulating access to the knowledge and resources of indigenous and local communities. This process of



decolonisation begins with the restructuring of the national laws which can advance indigenous aspirations in a colonial and neo-colonial context. Efforts have been oriented towards advancing IP as a public interest through articulating human rights and sustainable development objectives into the discourse of IP. There is an ever evolving need to contextualize IP. This paper also argues that indigeneity in Traditional Knowledge and Biodiversity can provide a local context for the Indigenous communities and their traditional cultural expressions in the global IP structure.

**S.P. VIDYASSRI, Saveetha School of Law, SIMATS**

*A Brief Review on Intellectual Property Rights with Special References to the Significance of Copyright and Trademark Rights*

The aim of the study is to review the significance of IPR especially copyrights and trademark rights. Intellectual property rights (IPR) are the rights given to persons over the creations of their minds: inventions, literary and artistic works, and symbols, names and images used in commerce. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. For the purpose of this study descriptive research is proposed to be used in order to accurately portray the public opinion on the importance of copy right and trademark right and to analyze the factors that cases issues. The samples are Proposed to be collected through electronic mode by posting status in WhatsApp and through sharing the emails. The expected sample size of this paper is 200+. Independent variables are gender, educational qualification The simple bar graph, pie chart, complex bar graph are the research tools used in this research. SPSS graphics will be attached in this research work, cross table will be used for this research work. The primary sources will be taken from the general public in the form of survey methods and the secondary data is also used where articles, books and journals are referred.

**Ratnaria WAHID, College of Law, Government and International Studies, Universiti Utara**

*Intellectual Property Concerns and Practices on the Datafication of Malaysia MOOCs*

Data has become the new oil. Datafication is increasingly relevant in online teaching environments. The datafication of education comprises of the collection of data on all levels of educational systems (individual, classroom, school, region, state, international), potentially about all processes of teaching, learning and school management. Everyday, large quantities of data are generated and collected on a daily basis, not only through educational institutions but also by (or in collaboration with) educational technology (Edtech) corporations. Digital learning platform such as the Massive Open Online Courses (MOOCs) thrives on datafication where learning processes are translated into data processes and turned into tracking systems that continuously relate individual progress to standardized performance. However, as large quantities of data are collected daily, datafication becomes a concern when online education was increasingly driven by privatization and globalization, raising fundamental legal or particularly intellectual property questions such as data ownership and access issues. This study firstly aims to understand the emerging datafication process in Malaysia MOOCs. Secondly, this paper then identify the intellectual property implication of such datafication activities. Thirdly, this paper identifies the appropriate intellectual property policies and practices that maybe used to facilitate the optimisation of datafication of Malaysia MOOCs. This study will provide a better understanding of the process, activities as well as the intellectual property concerns and

practices that follows from the datafication or data collected through the digital platform particularly MOOCs.

**Faye WANG, Brunel Law School, Brunel University, London**

*Resolving Online Infringement Disputes in the Age of Artificial Intelligence*

The common universal route of seeking solutions for copyright infringement on online platforms is that when rightsholders notice that their copyrighted content was infringed online, they may initiate a notice and takedown procedure to the operators of online platforms, seek solutions from online dispute resolution (ODR) and alternative dispute resolution (ADR) services, and when all fails, they may then file a lawsuit in courts. Nowadays, it is possible that notice and take down procedures and ODR services may be assisted by AI technology. Technical measures for blocking injunctions may also involve the consideration of appropriate AI technology. It is increasingly common for established online platforms to adopt voluntary AI-assisted technological solutions (such as ‘automated filtering software’ or ‘automated content moderation tools’) to minimise their legal risks for infringing content on their platforms before a notice and takedown legal procedure takes place.

The EC Directive on Electronic Commerce 2000 and UK E-Commerce Regulation 2020 prohibit imposing intermediaries with general monitoring obligations but grants intermediaries with responsibilities to remove illegal content under the ‘notice and takedown’ regime. The proposed Digital Service Act 2020 in its Pre-Session (3) and Recital (28) reinstates the prohibition of general monitoring obligations. However, the new Copyright Directive in 2019 in its Article 17 (4)(c) appears to contradict with the principle of prohibiting imposing ‘general monitoring obligations’. In the most recent European Court of Justice joint cases of YouTube and Elsevier, the Court also supports the use of automated filtering systems.

This paper reviews the existing and proposed regulations, including the Proposed Artificial Intelligence (AI) Act and seeks to establish an efficient and harmonised dispute resolution mechanism and framework to resolve copyright-related cases over the Internet with the assistance of artificial intelligence in Europe. It proposes possible legal and technological solutions to improve the legal certainty for rights holders and intermediaries.

**John WANG, Shih Hsin University**

*Moral Rights for Corporate Authors? The Lesson that Taiwan Can Learn from the US and UK Copyright Law*

Under Taiwanese copyright law, the term “copyright” is used as an umbrella term for two types of rights: moral rights protect the non-economic interests of the author and economic rights allow the rights owner to derive financial reward from the use of their works by others. Moral rights have been an integral and prominent part of Taiwanese copyright law since 1992. As in many civil law countries, the protection of moral rights is justified on the ground that a work of creative authorship reveals the author’s individual process of creativity and artistic autonomy. Because of their spiritual nature, moral rights attach to the author of the work. The protection of moral rights is perpetual, and moral rights are unassignable and unwaivable. Even fair use, the most important affirmative defense to the infringement of economic rights, constitutes no

defense to the violation of moral rights. All these features of Taiwanese moral rights regime seem to be in line with the moral right orthodoxy. What is heterodox is that under Taiwanese copyright law a party, natural person or corporation, that has made no creative contribution may be recognized as the author and thereby the holder of moral rights. The concept of author has been a confusing and controversial one in Taiwanese copyright law. On the one hand, the law explicitly defines the term author as the person who creates the work. On the other hand, the law allows authorship of a work to be determined by contract. That is, the employer may become the author of the work prepared by the employee within the scope of her employment and the commissioning party may become the author of a specially ordered or commissioned work. This is the case even though the employer or commissioning party are corporations rather than natural persons. Such arrangements have been a source of confusion and criticism in Taiwanese copyright.

In a landmark case, the lower court denied the corporate author's claim to moral rights under the reason that moral rights attach only to the person who actually creates the work. The Intellectual Property Court refuted the opinion of a lower court and ruled that corporate authors are legitimate holders of moral rights under Taiwanese copyright law. To enhance the persuasiveness of its ruling, the Court cited the US and UK copyright laws, claiming that under copyright laws of these two countries, corporations are given authorship status and recognized as holders of moral rights. The IP Court's interpretation of the relevant part of the US and UK copyright laws seems dubious to me. This work-in-progress study thus aims to investigate whether the IP Court interprets copyright law of these two countries correctly and the lesson that Taiwan can learn from their experiences.

**Saifei WANG, Intellectual Property Academy and School of Law, Renmin University of China**

*Entitlement of Data based on Specific Working Model of Data*

When scholars try to establish property rights for data, it is not to turn the actual controllers of data from "de facto control" to "theoretical control", but rather to build a market that allows data to give full value and promote human prosperity. In the field of data, the question of whether to assign the data the property right is closely related to the special collectivization subject at the very beginning. Valuable data is not from an individual itself or the collected data, of course, individuals may contribute, but the value of "big data" comes from the "collection" and "interaction" between the data. "Collection" and "interaction" correspond to the "labor" in Locke's labor theory, with data from the public domain or individuals as basic materials, mixing new labor produces new value through enterprises, and enterprises also try to empower the fruits of their labor. The question is in which form to which data entitlement can more match the contribution of enterprises, and can also further promote the development of the data industry. The analysis of data entitlement must not be separated from the "form of data playing value" and "the form of data transaction". The thinking of the former is to ensure that the established system can continue to meet the needs of the digital industry, and even promote the development of the industry. The thinking of the latter focuses on such a problem that the construction of data property rights will definitely promote market transactions. Is this data transaction conducted in a way that data is only part of the service, or can data as the target of the transaction? Further consideration, there are many forms and types of data, so not all forms of data are worth entitlement, and not all forms of data are suitable for conferring property rights, so it is necessary to analyze the diversification of data when designing the new property system. In China, one scholar has put forward a special concept of limited exclusive right protection on the data set based on the platform. One scholar divides the data into two categories: "display data" and "auxiliary data", and puts forward the suggestion of building "architectural property rights" according to the collaborative operation of the two

types of data that can generate value. In addition to thinking about the form of data property rights, we also need to think about the mode of data transaction. Back to the Calabresi and Melamed's theory, is the "property rule" or the "responsibility rule" more suitable for this special form of transaction data object. All these studies must be based on real life. On the one hand, we need to observe the competition and disputes between digital enterprises, and the other side should also observe the spontaneous transaction and communication mode formed by data enterprises, so as to promote the further development of relevant research.

**Afzal WANI, GGS Indraprastha University**

*Interface of Traditional Knowledge and Advanced Pharma Systems: Amazements from Covid-19 Pandemic as Experienced in Indigenous Environments*

Advancements in science and technology have taken humanity from all around discomforts to surprising pleasures, unbelievable in earlier times when human sufferings were innumerable due to ignorance and absence of the culture of inventions. The whole world has rightly appreciated these developments and created an incentivizing regime of intellectual property rights for carrying forward further the scientific and technological wonders for human good. The world of medicine, pharmaceuticals, surgery, diagnostics and surgical apparatus, has experienced remarkable developments bringing best of the satisfaction to human beings all over in world. While enjoying a state of coziness and relaxation, humanity was faced with a sudden pandemic situation which reduced the whole gamut of developments in the field of medicine to an insignificant low as compared to the challenge posed by the global-range epidemic threatening lives of millions across the planet earth. In the developing world with fragile health care systems the masses were in a high frustration level looking around with despair and shrinking horizons of life. In that state of despondency, a large section of the society was seen in traditional societies looking for their traditional systems of health care, both traditional raw medicines and physical exercises coupled with socio-psychological instructions. Many recovering people believed the effect of these traditional treatment mechanisms. That created a paradox though, the modern medicine, pharmaceuticals, surgery, diagnostics and surgical apparatus, have to hold the ground with fine support of intellectual property law suitable to sustain progress in science and technology in all situations. But, at the same time, it also needs to be appreciated that the wisdom of generations in indigenous systems of medicine and psycho-social exercises needs to be protected and allowed to be nourished with a fervor of diverse cultural fragrance, acceptable to people of their hues. The richness of the traditional wisdom fountains adoptable ideas in situations of distress, which has to be appreciated and protected. Still a large population of the world needs support of traditional knowledge, which is a scenario that needs a tangible expression for attention as complimentary to the modern initiatives and progress in health care. The experiences of the use of traditional knowledge during the COVID-19, at the Fourth IPIRA Conference will explain the scenario with illustrations from indigenous social environments.

**Joy XIANG, Peking University School of Transnational Law**

*Intellectual Property Laws, Competition Law, and Access to Know-how*

Access to technology, or technology transfer, includes the access to and transfer of know-how, expertise, experience, best practices, and processes relating to the technology. It may also include training on how to

use, adapt, and implement the technology. Such information likely is not fully disclosed by a patent or patent application. Such information may be under trade secret protection. The 2020 Covid-19 IP waiver proposal made by India and South Africa at the WTO TRIPS Council asks for waiver of relevant patent rights and trade secret rights, among others. In practice, how may a party seeking access to trade secrets, know-how, knowledge, experience, best practices, and processes related to a technology effectually realize such an access? Especially when such information may exist outside the territory of the jurisdiction that the seeker belongs. This paper explores possible answers to this question via venues in patent law, trade secret law, competition law, and existing flexibilities in the international forum such as the WTO TRIPS Agreement.

**Harshavardhan YADAV, Government Law College, Ujjain**

*A Study of Indian Intellectual Property Regime with Special Reference to Persons with Disabilities*

The World Bank estimates that 15% of world's population is affected by one disability or another. Most of them live in developing countries, and most of them are poor. As per Census 2011, in India, out of the 121 Cr population, about 2.68 Cr persons are 'disabled' which is 2.21% of the total population. In an era where 'inclusive development' is being emphasized as the right path towards sustainable development, focused initiatives for the welfare of disabled persons are essential. It is pertinent to note that a number of International commitments and guidelines including the National Policy for Persons with Disabilities (2006) recognize that Persons with Disabilities are valuable human resource for the country and seeks to create an environment that provides equal opportunities, protection of their rights and full participation in society.

Intellectual property surrounds us in nearly everything we do, at home, at school, at work, at rest and at play. No matter what we do, we are surrounded by the fruits of human creativity and invention. IPRs have been designed to benefit society by providing incentives to introduce new inventions and creations. The TRIPS Agreement mandated effective intellectual property system across the globe on rational and uniform basis brought radical and revolutionary changes in the system of IP in the member countries including India.

Yet why have there been little systematic incorporation of disability perspective into Intellectual Property Law Regime, and few scholarly studies of Intellectual Property from a disability standpoint? Indeed, disability perspective is still rarely seriously considered in discussions of Intellectual Property at the national level. The objective of this research is to securitizing existing Indian IPR Regime especially copyright, trademark and patent law form the Critical Disability Studies standpoint.

**Abdumumin YULDASHOV, Tashkent State University of Law**

*IP Policy in Uzbekistan: Current Process*

Reforms in the field of intellectual property management in Uzbekistan can be divided into three stages. Stage 1 covered the years 1991-2011, when individual government bodies worked in the fields of industrial property (State Patent Office) and copyrights (Republican Copyright Agency of Uzbekistan). During the second stage, in 2011, the Intellectual Property Agency was created to combine the two above-mentioned agencies, thereby supporting a unified state administration in the field of intellectual property and optimizing the sector. Stage 3 began in 2019, when the IPA was transferred to the Ministry of Justice in order to ensure

reliable legal protection and protection of intellectual property in Uzbekistan, along with inter-agency cooperation in this area.

Today, the IPA registers inventions, utility models, industrial designs, trademarks, selection achievements, computer programs and databases that constitute intellectual property. It should be noted that in 2019 compared with 2018, there was an increase in Uzbekistan in the number of applications for computer programs and selection achievements by 65.7% and 54%, respectively. In addition, the number of national applicants for intellectual property in 2019 increased by 20.4% compared to 2018, and the number of foreign applicants increased by 13.5%. In turn, according to the results of the examination, the amount of state intellectual property in 2019 increased by 10% compared to 2018.

The procedure for electronic filing of trademark registration applications was introduced on September 1, 2019. It is noteworthy that 56 percent of electronic applications were submitted after hours, and were automatically accepted. As a result of the ongoing global COVID 19 pandemic since April 2020, the practice of filing electronic applications for all intellectual property objects has been introduced. Today, the agency is also involved in the process of Uzbekistan joining the WTO. Therefore, in order to introduce universally-recognized international standards in the field of intellectual property into national legislation, one of the priorities today is the accession of Uzbekistan.

In particular, in order to become a member of the WTO and fully ensure the exclusive rights of foreign investors, inventors and authors in the process of economic and political integration, the Code of Administrative Responsibility of Uzbekistan introduced a new responsibility for violation of intellectual property rights (copyright, invention, useful model and industrial design) on May 2, 2019, along with the already fixed object of intellectual property. In Uzbekistan, special attention is paid to the full protection of copyrights and related rights. This can be seen in the following international agreements and conventions ratified by our country in 2019 WIPO internet treaties. It is known that CMO`s play a special role in protecting copyright and related rights, as well as legislative mechanisms in this area. According to the Decree of the President of the Republic of Uzbekistan dated May 26, 2020, the state duty is now deferred if CMOs apply to the court within the powers granted to them by their copyright holders or their heirs.

**Yulia YULIA, Faculty of Law, Malikussaleh University**

*Traditional Knowledge of Coffee Farmers as Intellectual Property of the Community in Bener Meriah Regency, Aceh*

Traditional knowledge of coffee farmers is intellectual property in the form of ideas, ideas, or inventions of community groups. Tradition-based ideas refer to systems of knowledge, creation, innovation and cultural expression that have generally been passed on from generation to generation. This knowledge needs recognition and also its use without losing it as the knowledge identity of coffee farmers in Bener Meriah Regency. In fact, this is an extraordinary potential as an asset that must be protected and developed so that it can benefit the community.

This study uses empirical legal research with a qualitative approach that uses primary and secondary data. In obtaining primary data, respondents and informants were determined. The results of the study found that coffee farmers have traditional knowledge as intellectual property that can be managed by data collection or inventory. Various kinds of traditional knowledge of coffee farmers from seed sowing, land preparation,

planting, care and fertilization, harvest and post-harvest. This traditional knowledge has been passed down from generation to generation in coffee farming families, but the traditional knowledge is decreasing day by day. Coffee farmers in Bener Meriah Regency are not aware of the importance of traditional knowledge as intellectual property in producing coffee with characteristics and reputation.

**Mahua ZAHUR, Department of Law, University of Dhaka**

*An Overview of Prospects and Challenges of GI for Agricultural Products and Foodstuffs in Bangladesh*

Geographical indication (GI) is predominantly used worldwide to denominate agricultural products and foodstuff with special features attributable to their places of origin. GI is considered as a valuable branding tool within IP domain to promote agricultural products and foodstuffs in local and international market. With that purpose in mind, Bangladesh has registered number of agricultural products and foodstuffs after the adoption of Geographical Indication of Goods (Registration and Protection) Act, 2013. These products include fish, mango, rice variety etc.

Registration is sought for many other agricultural products and processed food. As an agricultural country Bangladesh views its GI system as a useful means for regional development. Moreover, the system might benefit in the economic escalation of communities associated with cultivation and production of GI denominated agricultural products and foodstuffs. Vigorous Initiatives and measures are adopted by the Government for the promotion and advancement of these products.

However, like many other developing nations, Bangladesh is also experiencing number of challenges to maintain a robust GI regime. For agricultural and food products the management of GI is more challenging as these kind of products are related to health and safety of human and environment. Every aspect of food manufacturing, i.e., cultivation, processing, packaging etc. needs meticulous scrutiny system to ensure consumable quality. Ensuring healthy and safe food is one of the major challenges of food industry in Bangladesh. Even after the adoption of many statutory measures to ensure consumers' safety, the maintenance of food quality is still far from satisfaction level.

In this backdrop, the paper takes the view that, GI denominated agricultural and food products from Bangladesh might fail to achieve access in the international food market minimizing GI's principal function of branding and promotion. Moreover, some challenges of GI are sector specific. For example, factors like climate change, ongoing development works of the country have endangered natural habitat of GI denominated fish varieties. For other agricultural products, namely rice, mango etc. factors like use of synthetic fertilizer, absence of efficient preservation mechanism, lack of healthy packaging mechanism etc. have the effect of diminishing the healthiness and safety of agricultural products mentioned.

The paper aims to highlight problems and challenges that the system is currently facing in regard to agriculture related GIs. The paper holds the view that, all these factors, though exist extraneous to GI system can minimize GI's prospects unless addressed efficiently. In the given circumstances, the paper concludes that GI might bring only a very limited benefits in favour of agricultural and food products. The paper takes the view that, without strengthening the GI management the whole system will remain ineffective.

**Jiyu ZHANG, Intellectual Property Academy and School of Law, Renmin University of China**

*Patent Eligibility of Algorithms in the Digital Age: The Development and On-going Issues in China*

Our society is rapidly entering the digital age. More and more key technological innovations occur at the algorithm level. The patent protection of algorithms is of great significance for stimulating innovation in the field of information technology. In practice, China National Intellectual Property Administration (CNIPA) has been revising the Guidelines for Examination to meet the patent protection demands of algorithm-related inventions, and gradually affirmed the patent eligibility for more algorithm-related inventions. However, the eligibility of algorithm-related patents has not yet reached a common consensus, and there are still disputes on “abstract level restrictions” and “field restrictions” of algorithms in both theory and practice. China's 2021 Revision Draft of Guidelines For Examination still reflects some conservative attitudes regarding the patent eligibility for general algorithms in machine learning and other fields. This paper argues that it is necessary to re-examine the theoretical basis behind the basic principles on patent eligibility based on the technological foundation and current practices of inventions in the digital age, affirm the patent eligibility of general algorithms and shift research interests to how to better protect the algorithm patents.

**Naigen ZHANG, Fudan University**

*The Vaccines as the Global Public Goods relating to Intellectual Property Rights*

The vaccine is crucial to combat against the COVID-19 pandemic. China firstly proposed to provide the vaccines as the global public goods at the 73th WHO Assembly last May. The vaccines as the global public goods means that they should be accessible and affordable for the peoples of countries without capability of production, in particular for the developing and least developed countries. The WHO's COVAX is the vaccines pillar of the Access to COVID-19 Tools Accelerator. The COVAX is operated to guarantee fair and equitable access for every country in the world, which needs the fund to purchase the WHO approved vaccines for emergency use from the leading pharmaceutical companies in the United States, United Kingdom and China at the price affordable for the countries by government procurement. In addition, the COVAX receives the donated vaccines or financial aids from international organizations, national governments and the companies.

The global public goods of vaccine indicate their accessibility and affordability instead of being totally free. The reason might be simple because of necessary investment of R&D on vaccines by producers. It is impossible to continue their R&D and productions of vaccine without commercial returns. It is why the Pfizer rejected to waiver its intellectual property rights even though the government of United States supports the India and South Africa's proposed waiver. Chinese government also supports the proposed waiver. However, the intellectual property rights would not be waived in China until the consensus are reached by the World Trade Organization. It seems hardly to reach this consensus. Therefore, we must study how to protect the intellectual property rights while considering the vaccines as the global public goods including the open approached of patent and trade secret licensing or the compulsory licensing under the Article 31bis of the TRIPS Agreement and equitable share of test data of vaccines. This paper will make a comprehensive analysis detail on these issues of intellectual property rights.



**Hewei ZHOU, Beijing University of Technology**

*Intellectual Property Punitive Damages Experience in China: High Expectations and Rethinking of Its Functions*

Since 2013, punitive damages have been stipulated successively in Chinese Trademark Law, Patent Law, Copyright Law and Anti-Unfair Competition Law. People have high expectations for punitive damages for IPR in China, hoping that punitive damages will achieve the purpose of strengthening IPR protection and regulating the order of IPR development in China. Punitive damages for IPRs as a minor issue has attracted very much attention, and various forums and papers are discussing the punitive damages system. If we take a serious look at the legislation and judiciary of IPR punitive damages in China, we will find that the role played by IPR punitive damages is not clear and the interface between the systems is problematic. It is necessary to respond to the real needs of IPR protection and to clarify the purpose of the IPR punitive damages system. Punitive damages for intellectual property rights are a kind of crossover of civil rights, and the attribution of compensation directly determines the value of punitive damages for intellectual property rights, and punitive damages in punishing whom also reveal the aggressive direction of punitive damages for intellectual property rights in Chinese practice. This might also be important for the world to know how intellectual property punitive damages rules are operating in China.

**Hongqian ZHOU, Institute of Comparative Law, Waseda University**

*Digital Exhaustion from the Perspective of Licenses and Competition*

It was well established that under the first-sale doctrine, those who lawfully acquired the copyrighted copies are entitled to dispose of those copies freely without asking for the rightsholders' admission. However, with digital books and music, we are losing control over the contents we "purchased". People are not allowed to dispose of things they "purchased" freely anymore, since platformers would add terms declaring that the ownership of the copies do not transfer with the "purchase", making the exhaustion impossible. Users' rights are limited by complicated End User License Agreements, whose terms are solely for the platformers to decide. Generally, users are not allowed to share the files with others, sell them to the second-hand stores, or sometimes not even allowed to use them outside the given region. Similarly, Libraries wishing to provide a digital lending service have no choice but to accept restrictions varying from an embargo for new releases, a limitation of lending counts to a bundle of unwanted titles.

Some measures are introduced to stop the platformers and rightsholders from abusing their advantage in online contract. For instance, Art. 8 of the recently adopted EU Digital Content Directive provided that the digital content or digital service shall be fit for the purposes for which digital content or digital services of the same type would normally be used, unless the consumer was specifically informed otherwise. However, it is not clear what kind of terms shall be held fit for the "normal usage". Furthermore, having no alternative on the relevant market, merely safeguarding the transparency of the license agreement shall mean little if not nothing, since the consumers would have to contract anyway. Besides, network effect could be specifically strong in the current internet society. Big platforms try all the way to keep their customers, causing a so-called "lock-in effect", making it difficult for latecomers (especially SMEs) to enter the market. As one can imagine, establishing digital exhaustion in the internet era could mean far more than just a copyright law matter. All these circumstances call for a revision from not a single area of law, but a grand collaboration of copyright law, contract law and antitrust law.

This paper will first review the current legal situation of consumers' (including libraries') right over copyrighted digital contents, especially those concerning the first-sale doctrine. Part 1 shall be discussing the limitation of copyright law protection applied alone, while Part 2 and 3 will review the latest law making and cases concerning the application of consumer law and competition law rules over the distribution of digital contents as well as the activities of online platformers. The paper will further investigate why and how should the protection on consumers' right over copyrighted digital contents be protected by the three areas of law combined.