



## **Abstracts of Conference Presenters**

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**Ahmad Ibrahim Kulliyyah of Laws  
International Islamic University Malaysia**

# Conference Abstracts

## In Alphabetical Order by Author Surname (in capital letters)

**Jurial ABD JALIL, Ahmad Ibrahim Kulliyah of Laws, International Islamic University Malaysia**

*Criminalizing Theft of Trade Secret in Malaysia: Legal Issues and Challenges*

Trade secrets hold substantial economic value that contributes significantly to the innovation and development of a business. Because of its significant value, trade secret has become the target of theft, misappropriation and unauthorised use by rival and foreign government. The threat continues to rise particularly with the proliferation of digital devices, wireless technology and trans-border business. The effect of this crime is tremendous since it undermines business potential and stunts its ability to further innovate, grow and invest in the market. Many common law countries like Malaysia rely on common law and contract law to protect trade secrets but the growing threat of trade secrets, and being a party to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership Agreement (CPTPP), Malaysia is obligated to criminalize theft of trade secrets and economic espionage. However criminalizing such act raises several legal issues and challenges, particularly due to the intangible nature of trade secrets. The Penal Code for example excludes intangible property from the scope of the law of theft, thus under which law Malaysia should criminalize the theft of trade secrets. In addition criminalizing the act may affect employee mobility and right to use the knowledge and skill they acquire at work. This article aims to highlight these legal issues and challenges faced by Malaysia in criminalizing theft of trade secrets and economic espionage.

**Ranjit Oommen ABRAHAM, Tami Nadu Dr. Ambedkar Law University (coauthor P.J. Yesu Nesa Joy Singh)**

*Interface Between Digital Rights Management and Fair Use for Access to Information*

The concept of Digital Rights Management and Fair Use are two sides of the same coin in the present era of online copyright. The copyright Legislation in many countries has been amended recently for the purpose of incorporating Digital Rights Management within the legislative framework. The concept of Fair Use is inevitably present in all copyright legislation throughout the world even though, the description may not be uniform. The evolution of Copyright Law clearly indicates the facts that Fair Use is an integral aspect of Copyright Legislation without which the basic right of Copyright would not have sustained. The advent of Internet has glorified copyright works because of its penetration in the World Wide Web leaving access, dissemination and storage possible without much difficulty. The copyrighted works in the online scenario also faces the risk of easy infringement by unidentifiable infringers in the Internet. The copyright owner has no other option but rather to gets some solace under the wings and spheres of Digital Rights Management which is developing at a great phase than expected. The various forms of Digital Rights Management restricts copyright

infringement technologically and legally. Innovations in Digital Rights Management Technology is creating a great challenge to the concept of Fair Use or Fair Dealings which is available as a defence or exceptions for copyright infringement in certain limited circumstances. The actual rights and access of various stakeholders under the fair use doctrines was of the same when compared to the Rights and access of all permitted users of the copyrighted work. The present scenario carves of the situation where copyrighted works protected by the DRM may not be accessible to users of fair use doctrines for either educational or research purposes. The legislators who advocated amendments to the copyright regime for including DRM provisions never had anticipated its impact on fair use or fair dealings. The jurisprudence of copyright legislation in various countries have been impacted because of DRM provisions that restricts educational use or non-commercial research use. This paper analyses the various impact of DRM provisions on fair use and its relevance to access information in online scenario. This paper further analyses the possible loss to academic community because of the imbalance persisting due to simultaneous presence of both DRM technologies and constraints' for fair use technologically. This paper would compare legislative framework interfacing DRM and fair use doctrine and would make necessary suggestions for an ideal copyright law for protecting both copyright through DRM and safeguarding the rights of academia through fair use or fair dealings.

**A.B.M. ABU NOMAN, Faculty of Law, University of Chittagong**

*Implementation of Intellectual Property Rights in Bangladesh: A Critical Analysis*

Intellectual Property rights usually refer to the legal rights resulting from creations of human intellects in the industrial, scientific, literary and artistic fields that known as copyright, trademark, patent, industrial design, geographical indications, trade secrets etc. However, the protection of intellectual property in Bangladesh, as a developing country, puts an inevitable importance because these rights do not only provide an incentive to the creator to develop and encourage his creations but also play an important indicator to accelerate the economic, cultural and technological development of the country. But these national and personal developments arising from the intellectual property, to a large extent, depend on the true existence and proper implementation of strong laws and effective mechanisms regarding protection of IP. At present, the legal avenues regarding protection of Intellectual property rights in Bangladesh are equipped with the Copyright Act, 2000, the Trademark Act, 2009, the Patents and Designs Act, 1911 which are the results of revision of the old British intellectual property laws. In addition to these, Bangladesh is the member state of several international treaties relating to protection of IP rights including Universal Copyright Convention 1975, TRIPS Agreement 1994, Berne Convention 1886, Paris Convention 1883 and also a member of the World Intellectual Property Organization (WIPO). Despite having couples of significant national legislations and ratifications of several international legislations, protections of the intellectual property rights in Bangladesh are not satisfactory due to multiple reasons including absence of strong IP laws, weak IP enforcement mechanisms, and non-compliance with international treaties relating to IP rights, limited skills and knowledge, absence of collective management organizations etc. In this regard, this study will seek to demonstrate the prevalent national laws and applicable international treaties relating to IP rights in Bangladesh as well as to examine how much the national laws of Bangladesh comply with these international treaties Further, this study will highlight the challenges in proper implementation of IP laws and finally, suggest some effective recommendations regarding proper implementation of IP laws in Bangladesh.

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

*Digital Environment and Copyright Piracy in the GCC – A Review*

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 article discusses the legislative enactments and regulations governing online piracy and the effects and implications in the GCC States. The article further explains the effect of laws and whether they reflect the current needs of the networked information in society veraciously.

**Samuel ANDREWS, Albany State University**

*Developing Indigenous Creative Industries of Asia and Africa: Bollywood, Nollywood and Afollywood Copyright Conundrum*

Currently, some intellectual property (IP) scholars contend that strong copyright protection has a chilling impact on creativity. These IP scholars further assert that copyright now serve instead as a form of corporate protectionism and undue financial welfare. Some copyright law scholars contend that copyright law has bloated to protect corporate stakeholders rather than society. This article is a case study of the Indian and Nigerian film industries, which stands for a sub-set of the Asian-African creative space. This paper sets out to test the competing hypotheses about whether strong copyright law incentivizes or discourages the nascent cultural content industries in a developing country. In Asia, the Indian film industry, Bollywood has become a global cultural force. Also, in Africa, Nollywood, the Nigerian film industry, created an indigenous content with a unique thematic genre, which this paper refers to as Afollywood. Bollywood and Nollywood are among the three largest film production industries. However, India, China and Nigeria have some of the highest cases of film piracy in Asia and Africa. However, India and Nigeria still keep a modest successful indigenous film industry despite the scourge of piracy and creative rights infringement. 4 This paper critically analyzes the underlying staying power of the indigenous film industries and the copyright question. Afollywood is an ideal case study to examine competing claims about the impact a copyright regime weighs on the creative growth of a creative industry in a developing economy. Afollywood and Nollywood innovations epitomizes both the need for a strong copyright law and the freedom of creating without restrictions of law. Although, the indigenous film industries thrive at their formative stages without the encumbrances of strong laws, Nollywood and Bollywood has shown that in the digital era for a film industry to compete effectively in the global market it needs an enhanced copyright laws for protection. The first narrative about the role of copyright law in the creativity debates is that indigenous film industries like Bollywood and Nollywood thrive and develop in large part because of weak copyright laws and non-enforcement of laws. The second competing narrative is that a strong copyright regime safeguards creativity in a creative content industry like Bollywood and Nollywood. According to the second account, Afollywood would have been highly developed but for weak copyright laws. Additionally, this account contends that, film piracy and other infringing activities undermine Afollywood, and prevent it from developing as true competitors to Hollywood, Bollywood, and films of Europe. My thesis contends that the second school of thought is correct after analyzing the nuanced factors that keeps Bollywood and Nollywood afloat despite acute film piracy.

5 This paper also concludes that the sustenance of Asian and African film industries despite chronic film piracy is nuance. Bollywood and Afrollywood maintain modest success because of a combination of factors, which includes the innovative ingenuity of filmmakers to impel economic growth. 6 Finally the paper further concludes with analyzing the intersection of enhanced copyright law and international trade policies, which recently includes multilateral trade disputes.

**Monique BAGAL, Consultant, Food and Agricultural Organization**

*The Feasibility of a Human-Rights Friendly Regime for Geographical Indications*

This paper builds on the “blockage” of multilateral protection of GIs (TRIPS) and the apparent need to transcend the dichotomy between the conception of the protection of GIs by “old world” countries and that of the “new world” countries. Experience shows that the advocacy for, or indictment against one or the other way of protecting GIs focuses essentially on the philosophy of protection in one or the other territories. As a reminder, the European Union “culture” is to protect industries far too exposed to competition; the American “culture” is to preserve economic freedom of operators and to grant monopoly on a geographical name only where such name has been tested on the market and is recognized by the “public” as having a geographical anchorage. Equally compelling, neither of these philosophies has allowed reaching the most acceptable balance for GI regime. This paper seeks to transcend them. It bets that everything has not been tried yet, at least from a legal perspective. In order to find a common solution and a way forward to multilateral protection of geographical indications, the paper relies on the culture of “human rights”, not really with a view to “moralize” the field of study but more to deduct practical answers deriving from the international human rights law. As a matter of fact, article 15 of the Convention on Economic, Social and Cultural Rights provides that “The States Parties to the present Covenant recognize the right of everyone [...] to benefit from the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author”. I will start by showing that members States de facto comply with article 15 by treating geographical indications as imprescriptible, inalienable and perpetual rights. I will then find the existence of a moral right attached to “geographical indication” (1) which allows drawing a number of conclusions inspired by article 6bis of the Bern Convention and broadly on the French regime of droit d’auteur: right of paternity and integrity, right to remuneration and resale right. The latter right is of particular importance for the management of the (free) use of European names by American operators who, nonetheless, acknowledge the paternity of the names to Europeans producers (2). The connection to the human rights regime also justifies a certain implication of the State (3). However, I am conscious that we are not in the best of worlds and such analysis cannot be disconnected from other rights (laws of States, other human rights, free-trade law and other distinctive signs). It also has to take into account facts and sovereign interests, different priorities. We may not expect the “best of the worlds”, we do not have to resign to accepting the international law of Geographical Indications as it stands; especially, considering the cross-cutting issues that are stake. It is all about integrating a systemic reflection and existing techniques to reach the “right balance” between commonly agreed interests.

**Nurul BARIZAH, Faculty of Law, Universitas Airlangga**

*Preventing Biopiracy in Indonesia through Disclosure Requirement and Access Permit; Will Such Approaches be Adequate?*

Indonesia is a power house of genetic resources in the world, possessing an extraordinary resource base, whether in the form of actual genetic resources or in the indigenous (adat) people's knowledge over such resources. These resources and traditional knowledges related to it have potential economic values to benefit people and its nation. However, the existence of intellectual property rights (IPR) protection for genetic resource-based inventions still has not enabled this country to obtain the maximum benefit from the wealth of its genetic resources and related traditional knowledge (GRTK). The practice of biopiracy and missappropriation of the use of genetic resources without fair and equitable sharing of benefit is also uneasy to eradicate. This paper analyses the adequacy of Indonesia's legal framework dealing with the protection GRTK and preventing biopiracy. In particular, it examines the adequacy of the new approach through disclosure requirement provided under the Patent Act of 2016. It further examines the current administrative approach through access permits for researchers. Then, this paper explores Indonesia's international obligations dealing with the protection of IPR and GRTK provided by the TRIPs Agreement, the Convention on Biological Diversity (CBD) and Nagoya Protocol, and how such obligations has been implemented under national law. Moreover, this Paper compares Indonesia's approaches to the protection GRTK and access to a fair and equitable sharing of benefits with India, Australia and Brazil. This paper argues that the disclosure requirement provided under Article 26 of the Indonesian Patent Act of 2016 is still inadequate to deal with biopiracy, and to provide legal basis for fair and equitable sharing of benefits from the utilization of GRTK. Specific national legislation dealing with the protection of GRTK, together with mandatory disclosure requirement under the Patent Act, and access permits will help Indonesia to provide a better protection of GRTK and promotion of fair and equitable sharing of benefits.

**Majid BASHIR, Ahmer Bilal Soofi & Co.**

*Public-Private Partnership in Intellectual Property Innovation: Role of Academies*

In a world where artificial intelligence and virtual reality have usurped the technological industry with innovational concepts, the importance of intellectual property laws and their applicability are at their peak. The key stakeholders in ensuring that awareness of intellectual property is spread outwardly include not only the educational forums but also the judicial academy, police academy, bar association and so on. There is a prerequisite for interaction between academic, enforcement agencies and judicial bodies in order to effectively implement the intellectual property laws in Pakistan. Out of all these, the major role is to be played by the courts in implementing the law. Another vital step in creating awareness of intellectual property is by incorporating intellectual property considerations in to the sphere of public-private partnerships. The result of which, would help in improving the GDP of any developing economy. Registration of intellectual property Rights are a vital component in ensuring that one's ideas, works and inventions are not copied without seeking permission. "The Intellectual Property Organization of Pakistan (IPO- Pakistan) plays an important part in the encouragement of registration of creative works. The country's GDP would increase with effective management and continuous integration by the IPO. Educational institutions play an imperative role in technological innovation and technology transfer. In the United States of America (U.S), the

landmark legislation Bahy-Dole Act 1980 played a significant role by introducing a uniform patent policy which enabled the universities to patent the work created by their faculty, staff and students. This leads the way in innovation by keeping the title of the work and encouraging technology transfer. This act authorized inventors and universities to formulate a way to share royalties from research and inventions funded by federal grants. The Bahy-Dole Act 1980 resulted in many private-public partnerships which contributed to the country's GDP. Universities and students can own their inventions if government gives them adequate funds for research encouraging more quality and relevant research with a purpose of commercialization. Inventions would accelerate growth, generate profits and stimulate collaboration with commercial enterprises creating a public-private partnership between them. In Pakistan, Universities need to introduce strong intellectual property policies and encourage students to innovate and share royalties with them and help them sell and facilitate startups. The Government must amend its legislation and emulate the Bahy-Dole Act 1980; increasing funding for research for the Universities. The enforcement agencies include the police, Federal Investigation Agency and Customs Authority. Naturally, all relevant agencies require training through understanding and awareness of the ubiquitous laws pertaining to intellectual property. Once acknowledgment of the laws has accrued, the enforcement agents will be able to recognize and take stringent steps in preventing the occurrence of intellectual property infringement. In this way, citizens of Pakistan will begin to feel confidence in their enforcement agencies. There will be more public interest in intellectual property as well. This will lead to an overall improvement in the GDP of Pakistan's economy. Judiciary's primary function is to implement the law and can play an instrumental role in effective enforcement of intellectual property laws. The federal and provincial judicial academies, as stakeholders should ensure that judges are well equipped in dispensation of justice in IP laws. In this regard, judges would be able to use their newly adapted knowledge in court rulings. Enforcement of laws will promote and facilitate private-public partnerships and startups. Thus, the role of the police, Customs and FIA will also enhance the probability of protecting their rights resulting in further contribution to the GDP of Pakistan. The IPO as an Organization can help other institutions for protection, strengthening, creating awareness of intellectual property laws and rights. It also manages all intellectual property offices in the country and advises the federal government on intellectual property rights, ensuring effective enforcement through designated law enforcement agencies by giving training to all government departments in their respective Academies. This policy can bring all stakeholders on one page and will identify the role of institutions legal as well as administrative responsibility to protect IP rights effectively. In Pakistan, there is a pressing need for awareness of IP laws and its role in GDP. Government should increase research expenditure and introduce legislation that empowers institutions to enforce laws and create a conducive environment for inventions.

**Sanusi BINTANG, Faculty of Law, Syiah Kuala University (co-authors Mujibussalim and Mahfud)**

*A Balanced Confidentiality Clause of International Investment Contracts for Effective Protection of Trade Secrets in Indonesia*

This paper analyses the interplay among trade secrets, international investment contracts, and public information disclosure laws in Indonesia. As part of private law, trade secrets are often regulated both under trade secrets legislation and international investment contracts. However, definition and scope of trade secrets in the legislation is not quite clear and clauses in international investment contracts are often so broad. These challenge the application of contract transparency under public law, as part

of public information transparency regulated in act on public information disclosure act. Different from purely international contracts which only apply private law regime, international investment contracts apply both private law and public law regimes. Therefore, under public law regime, the contract subject to rules of information disclosure act. This paper mainly utilizes doctrinal legal research method. Therefore, its main focus is on collecting and analyzing primary legal authorities. The primary legal authorities include both mandatory legal authorities in form of statutes and persuasive legal authorities in form of case law. Besides it also use secondary and tertiary legal authorities, particularly legal periodical, law books, and legal dictionary. In addition, as a supplementary, this paper also utilizes empirical data. The legal authorities and empirical data show unclear formulation of object of protection of trade secrets under Indonesian law and practice. Besides, there inconsistency is occurred between international investment contracts clauses in practices and rules of public information disclosure act on trade secrets exemption. The finding shows that in solving the problem of conflicting rules between private law regime and public law regime, domestic and international contract law principles and norms have provided solution by acknowledging the superiority of public law regime above private law regime. Therefore, protection of trade secrets under international investment contracts should not be contradictory to public information disclosure act. In other words, transparency of international investment contracts prevails wide trade secrets protection, and not vice versa. As a result, trade secrets protection in international investment contract clauses should be clearly defined. It should not include the whole parts of an international investment contracts as often encountered, but only to the part that is considered as trade secrets. Therefore, drafters of international investment contracts need to create a balanced protection for trade secrets through confidentiality clauses in international investment contracts by considering both the need for trade secrets protection and the need for transparency of international investment contracts.

**Lavinia BRANCUSI, Polish Academy of Sciences**

*Interfaces between Patents and Designs of Graphical User Interfaces - Enhancing or Cross-Blocking Means of Protection?*

This paper evaluates the implications that patent protection conferred on certain aspects of GUI may have on seeking for simultaneous protection by means of an industrial design in the context of EU law. On one hand, statutory provisions of EU design law facilitate registration of GUI as Community designs due to broad legal definitions of ‘design features’ and ‘product’. There are specific guidelines dedicated to graphical representation of motion/animation/sequences. Designs may consist of both aesthetical and functional features. However, a major obstacle to conferring (and enforcing) design protection comes from a legal exclusion pertaining to features ‘solely dictated’ by a product’s technical function. On the other hand, EPO has recently modified its guidelines for examination concerning patentability of user interfaces and ‘presentations of information’. Previously patent protection was refused for reasons related to lack of technical character cf. art. 52 EPC. This provision says that aesthetic creations, programs for computers, presentation of information and business methods are, as such, not regarded as inventions (in particular due to lack of technical character). At present EPO practice offers more examples when features of GUI allowing information to be displayed may contribute to the technical effect of the claimed subject-matter, being thus further included into the assessment of inventive step. For this purpose, a test operates with the distinction between ‘what’ (is the content of information displayed) and ‘how’ (is the information presented). However, ascertaining the technical character of some GUI features according to a patent standard

may have a negative impact on the possibility of protecting these features by means of a design right. The functional exclusion set forth in design law may start to operate. A recent CJ judgement delivered in Doceram case considers 'technical function' an autonomous concept of EU design law to be interpreted mostly in light of evidence coming from patent documentation. For sure GUI are major assets for business environment with an increasing need of legal protection via different IP rights. It is important therefore to distinguish the kind of features (elements) of GUI which should be covered by design and/or patent protection, respectively. The choice of a patent may diminish chances of effectively enforcing a design right. Analysing this kind of interface between patents and designs in the context of GUI may bring useful findings also for a more general discussion about cumulation of IP rights and the possible channeling effect between design and patent regimes.

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

*Legal Issues of IPR Litigation Procedure in Indonesia: Problems for Small Entrepreneurs*

IPR dispute resolution through litigation procedures is settled at the Commercial Court which is the chamber of the District Court. The Commercial Court is only found in 5 major Indonesian business cities. This is different from the District Courts which number 352 and are located in every city and district. Other differences between them are that at the Commercial Court has the much larger administrative fee and have shorter time settlement disputes. The small number of Commercial Courts are unfavorable for justiable who live far from the Commercial Court. In 2015 the Government made a special policy for the development of creative businesses. This businesses are potentially developed by small entrepreneurs domiciled far away from big cities. The Supreme Court in the same year made a Circular Letter to facilitate the settlement for simple and small value lawsuit. However, this rule cannot be applied to resolve IPR disputes. At present a number of justiable submit the laws to be decided through criminal procedure. It is necessary to find the appropriate legal mechanism for justiable. As a temporary measure, the authority of the District Court should be opened for the settlement of IPR disputes for small businesses that are far from the Commercial Court location.

**Bhumindr BUTR-INDR, Faculty of Law, Thammasat University**

*The Development of Geographical Indications Protection in Thailand: A Case Study of Klong Thom Coffee in Krabi province and Khao Talu Coffee in Chumphon Province*

It is a well-known fact that Intellectual Property (IP) is one of the most important tools in stimulating social and economic development. An argument in support of this approach is that a developed country tends to use IP as a tool in promoting economic growth. Among all areas of IP rights, geographical indications (GIs) are becoming important in Thailand. In Thailand, the Geographical Indications Protection Act has been in place since 2003 as a means to promote the rights protection of traditional agricultural knowledge. The paper synthesizes the results from empirical case studies undertaken in Thailand to provide some insights regarding the welfare impacts of GIs protection. The purpose of this article aims to compare the performance of the former community and the principle of protection of geographical indications (GI), based on the case of Khao Talu coffee in Chumphon province (GI certified) and coffee Krabi Province (Which has not yet requested GI certification) and also to establish some clarity over whether GIs can really be used as a tool to promote economic development in Thailand. The conceptual framework for analysis is 1. The return of coffee from

Khlong Thom. Krabi (Which has not yet been requested for GI certification). and what is the return?  
2. To study the return of coffee grown in Chumphon province of Chumphon (GI certified) both before and after protection of geographical indications. 3. Study the concept of Geographical Indication and a protection of the Geographical Indication Act.

**Gargi CHAKRABARTI, National Law University Jodhpur**

*Transfer of Technology: Analysis of Current Status in India*

At the conceptual level ‘technology’ is comprehended as knowledge of producing a good or to render a service; but in broader sense it is combination of knowledge, skill and equipment. Technology, by and large, is evolved by the developed countries; and transfer of technology to developing countries had been discussed in international forum like United Nations and World Trade Organization (WTO) since twentieth century. 2 In TRIPS Agreement 3 transfer of technology is mentioned on a serious note. 4 In 2002 WTO constituted the Working Group on Trade and Transfer of Technology (WGTTT) according to the mandate in para. 37 of the Doha Ministerial Declaration. 5 As per discussion in WGTTT there are four phases of technology transfer process – cross border transfer, learning, adaptation and diffusion; and many factors have their impact on the whole process like absorptive capacity of the receptor country, type and kind of foreign direct investment (FDI), disproportionate bargain power between the countries etc. 6 Technology transfer is the most important means by which developing countries such as India can success new technologies and incorporate them into the domestic industrial trade and development. Channels of technology transfer include technology license agreement, joint venture, FDI, reverse engineering, and non-commercial channels like collaborative projects. Being one of the biggest markets and growing economy in the global village, India has huge potential for transfer of technology; and Government of India is promoting all the channels of technology transfer. Foreign technology collaboration in India is permitted through automatic route [i.e. through authorized dealers appointed by Reserve Bank of India] or by prior government approval [through Project Approval Board]. Relationship of intellectual property rights and technology transfer is a growing concern for both developed and developing countries. Intellectual property environment of the receptor country has immense impact on technology transfer, and the technology owners are particularly transecting this factor before showing willingness for transfer of technology. This paper will analyze the growth in technology transfer in different sectors like in electrical equipment, electronics, computer software, chemicals, fertilizers, industrial machinery, transportation industry, mechanical engineering industry etc. in India. This paper will also examine the important issues like cost factor for the new technologies, appropriateness of the concerned foreign technology in India, impact of dependence on foreign technology, and transfer of outdated technology. This paper will also highlight the policies of India government regarding regulation of technology transfer in India as for example the extent and terms of equity participation, phasing of domestic manufacturing, appropriateness of technology, payment terms and foreign exchange outflow, and promotional measures. Scope of this paper also includes the discussion on challenges related to the domestic intellectual property protection level during transfer of technology and how India is responding to such challenges; even the policy of Republic of Korea (i.e. finding out the technologies which are innovative but at the end of their intellectual property protection and to encourage the domestic industry to establish an environment of creative imitation; with increment of technological and industrial absorptive capacity) will be examined in depth to consider the applicability of such policy from Indian perspective.

**Shambhu Prasad CHAKRABARTY, Amity Law School**

*The Relevance of PCT as a Tool to Protect Patent Rights beyond Boundaries*

India like many other countries has not matched the economic prowess of the likes of USA and China in many aspects including exploiting from Intellectual Property Rights and more specifically international patenting. The pro-patent regime of those countries is primarily responsible for the top position these countries have achieved in the global level. Indian domestic offices for example have an approach which is not pro-patent. Not granting patent is the rule and granting an exception. International protection of patent unlike 'International Copyright' demands application and grant of patent in the countries where the patentee/owner of the patent wish to exercise and exploit the patent. The approach of Domestic Patent Offices is very important as the benefit of international patent through Patent Cooperation Treaty (PCT) can be achieved only after it is accepted at the originating country, i.e., domestic patent. The approach of India, the largest democracy of the world and the biggest market to explore in the next few decades needs an urgent alteration, both substantive and procedural with regard to patent. PCT can play a pivotal role in reaching out Indian patents (products and processes) to the world and get them protected from infringement not only in the country but in the global level. Absence thereto would not only leave the economy shattered but would also fail to protect various inventions and traditional knowledge which forms the basis to many such inventions. The time has come to explore the sui generis system existing in various countries in protecting IPR that may eventually be protected by patenting.

**Pragya CHATURVEDI, Centre for Innovation, Intellectual Property, and Competition, National Law University (co-author Yogesh PAI)**

*IP in Big Data: Towards a Sui Generis Legislation in India*

Big data essentially refers to the technology that enables collection and processing of large volumes of data in real-time, where the data can be both structured and unstructured. Big data has had multiple characterizations as notable not because of its size, but because of its relationality to other data, with 3 Vs (Volume, Velocity, Variety); and even as the end of theory. The number of Vs keeps expanding, including Volatility and Veracity as the newfound characteristics. However, one characteristic which stands out in all definitions is the Volume which is simply unprecedented in comparison to past expectations. This valuable data is generated through huge investments as firms find ways to appropriate returns from the market. As an emerging economy in Asia, India stands to gain if its IP regime provides conducive environment for the Big Data industry to thrive. While there is no legal provision to directly deal with the protection of confidential databases, the most common practice to protect proprietary information, including confidential databases, is by way of non-disclosure agreements or a confidentiality clause in contracts which can be enforced by way of common law remedies for breach of confidence or remedies for breach of contract. The patent system excludes any presentation of data, thus making it unfit for big data to qualify although such data may be highly functional. The Draft National Innovation Act, 2008, while not specifically referring to databases, does seek to codify and consolidate the law of confidentiality in aid of protecting Confidential Information, trade secrets and Innovation. It further seeks to establish the contractual rights of parties to set out terms and conditions in respect of confidential information. It also proposes to establish the obligation of confidentiality arising from non-contractual relationships; protecting against disclosure

of confidential information in the public domain by third-parties. However, if the secrecy of the database cannot be maintained, databases are also eligible for protection under the Copyright Act, provided they meet the threshold of originality prescribed under the Act; as computer databases are protected as compilations, considered part of original literary works under the Act. The test of originality is applied to the selection and arrangement of the contents of the database in order to determine its eligibility for copyright protection. Compilations have also been protected as original literary works by way of jurisprudence. However, the courts, in recent cases have adopted a different approach and held customer lists and compilations to be non-copyrightable on account of lack of substantial skill or judgment. This view was reiterated in a recently concluded case where mechanically compiled databases were held to be non-copyrightable owing to lack of skill and judgment and the lack of authorship by a natural person which were held essential to claim ownership of copyright. In view of this, it is pertinent to mention that India does not have any legal mechanism to protect non-original databases. In light of the enormously growing relevance of big data and the lack of available protection to machine-generated data which does not have the authorship of a natural person and which does not meet the originality criteria required for copyright protection, this paper proposes to examine the context and need for a sui-generis database protection right in India.

**Michele CHEW, James Cook University of Singapore**

*What Are 'Soft Innovation Resources'?*

The comparative analysis of Finland and Singapore in embarking on the digital economy revealed that Finland achieved economic growth through soft innovation resources spillover to gross fixed capital, which facilitated in the removal of structural impediments to growth. Singapore's GDP growth, however, shows stagnation since 2013. This is postulated to be due to the traditional way of measuring the success of innovation, in terms of intellectual property products centered on R&D. The typical measures of the success of R&D investment include the quantity of publications in top tier journals, the quantity of patents filed, and the quantity of research scientists and engineers. Going into the future, the products of innovation may have greater intangible attributes or indirect impact. The source for innovation may be difficult to quantify as the concepts of user experience and co-design become more prevalent. As such, measuring the success of innovation in terms of intellectual property products centered on R&D may not be an accurate reflection of the nation's investment in innovation. This paper is an initial attempt to explore the study of soft innovation resources spillover in Singapore's clean technology sector, otherwise also known as the urban solutions sector. The author will also study if the existing models for R&D investment at the national level will help Singapore maintain her comparative and competitive advantage given that the success of innovation is no longer measured solely by the intellectual property products centered on R&D. Finally, the paper will attempt to address if the current models for international collaboration needs a review in light of emerging technologies such as artificial intelligence.

**Angela DALY, Faculty of Law, Chinese University of Hong Kong**

*3D Printing and Intellectual Property Futures in Asia*

This presentation is a preview of the findings from the 3D Printing and IP Futures project ([www.3dpipfutures.com](http://www.3dpipfutures.com)) funded by the UK Intellectual Property Office and led by the speaker, Dr.

Angela Daly. Over the last 2 years and employing mixed socio-legal research methods including the innovative horizon scanning technique, the project team has examined the current, emerging and future relationship and interaction between 3D printing and IP in both developed economies and three BRICS countries, namely China, India and Russia. This presentation will give an overview of the research and findings from a socio-legal academic perspective, with a focus on the research conducted in China, India and Singapore.

**Erdenechimeg DASHPUNTSAG, Otgontenger University of Mongolia**

*Using Intellectual Property as Collateral: An International Experience and a Mongolian Perspective*

Financial institutions and investors in Mongolia still prefer to use immovable, tangible properties as collateral and there is no experience using IP. When Mongolia enacted its Law on secured transaction of Movable property and intangible property 1 (hereinafter “Law on STMIP”) in 2016, drafters encouraged the recognition of securitization over IP rights, based on the assumption that security rights may be created for any type of IP including patents, utility models, designs, trademarks or even copyrights. The main challenge in using IP as collateral is risk, which may occur at various stages of the securitization process. The main objective of this research is to identify the difference between the Mongolian and other selected countries’ IP securitization legal background, and explore the possibilities for a developed system of IP securitization. Moreover, this research aims to analyzing the risk factors that may arise during the securitization process. For instance, uncertainty over the legal enforceability of IP owners’ rights, technology transfer, IP validity and valuation of IP assets are the main obstacles to using IP as collateral. Can these risks be mitigated? This work is primarily based on the analysis of the USA legal system’s utilization of securitization, since the United States is the world leader in securitized financing. At the same time, unforeseen obstacles to securitization may arise in countries with substantially different legal systems (such as those with the dominant civil law tradition, namely Japan). Therefore, we propose to explore both civil law and common law secured transaction regimes over IP. In much of the developed world, using IP as collateral is a financial tool. It is clear that more IP assets are now being used in asset based lending. For many technology firms, these IP rights have become their most valuable assets. The rise of companies such as Apple, Google and Facebook reflects the importance of IP as development factor in today’s economy.

**Mahyuddin DAUD, Ahmad Ibrahim Kulliyah of Laws, International Islamic University Malaysia**

*Reduction of Internet Pricing in Malaysia and its Relationship to the Evolution of Digital Content*

Internet access has become very extensive in the Southeast Asian region. Thailand and Singapore managed to provide great broadband access and speed, both on wired and mobile connections at low costs. To a greater extent, Internet access has been mooted to form part of the modern living necessity, which qualifies it to be a labelled as human right. Despite the increased Internet penetration in Malaysia, particularly in urban areas, there lies issues over expensive costs of subscription to high-speed broadband services. As consumers have no option but to opt for packages with expensive rate of subscription, there lies a great deal of uncertainty as to whether the Internet is exclusively meant for the elites. If such is the case, one cannot hope that the proposition to transform ‘Internet access’

as human right to be realised in a near future. At the same time, high costs to Internet access may well be translated into impeding growth of digital content as will be seen in this paper. Since this is a work in-progress, some of the popular Internet-pricing models and how adoption of these models may have its relation to the growth of digital content will be analysed. It is hypothesised that when Internet-pricing is reduced, it translates into positive impact to promoting evolution of digital content.

**Jeremy DE BEER, Faculty of Law, University of Ottawa**

*Intellectual Property in Mega-Regional Agreements: Lessons from Canada's Role in CETA, (CP)TPP, and USMCA*

The fora for governance of international trade have shifted from global institutions, for example the WTO, to mega-regional alliances through preferential trade agreements (PTAs). A focus of mega-regional alliances is increasingly on knowledge- economy issues—innovation policies, intellectual property (IP) norms and data regulation. At the same time, knowledge governance is becoming increasingly mega-regional, and the policy agenda is being driven by net holders and producers of IP. This paper offers insights on strategic responses to mega-regionalism based on Canada's experience with three mega-regional PTAs: the Canada-EU Comprehensive Economic and Partnership Agreement, CETA, the Comprehensive and Progressive (CP) Trans-Pacific Partnership (TPP), and the United States Mexico Canada Agreement (USMCA). It demonstrates how Canada's room to manoeuvre around IP in the USMCA was constrained by its failure to effectively strategize years earlier. While Canada was consumed with CETA negotiations, the United States shifted attention to TPP in the Asia-Pacific. As a result, Canada missed the opportunity to influence IP norm-setting, leaving itself few options for USMCA. Other countries can learn from Canada's experience about the need to pay attention not only to the mega-regional alliances that they are already a part of, but also to ones that they are not.

**Vishwas. H. DEVAIAH, Jindal Global Law School**

*Evolving Huawei v ZTE Framework and its influence on SEP litigation in India and China*

The European Commission in their recent communication paper (COM (2017) 712 final) (EC paper) titled 'Setting out the EU approach to Standard Essential Patents' considered the obligations that are cast upon parties during pre-licensing negotiations of SEPs on FRAND terms. The EC paper has derived such obligations from the behavioral criteria as determined by the CJEU in the Huawei judgement. While Huawei provided the general framework, it further evolved through various court decisions in Germany and in the Unwired Planet case. This paper reflects on the framework developed in the Huawei judgment and shows how this framework has evolved in the post Huawei cases in Germany and UK and its influence on SEP litigation in India and China. The post Huawei cases have tried to adhere to the overall framework provided under Huawei, although there are number of inconsistencies as to specific obligations. From the perceived inconsistencies, this paper concludes on a note that the overall conduct of the parties would play a major role before granting injunctive relief to SEP holders.

**Sunil Gladson DEVASHAYAM MATHIAS, School of Excellence in Law, The Tamil Nadu Dr. Ambedkar Law University**

*Patent on Green Technology and its Impact on Environmental Protection: With Particular Reference to Technology Transfer Mandate*

The evolutionary theory of innovation has shown that scientific inputs play a growing role in the innovative process. It also indicates that technological paradigm and it recognizes the relationship existing between technology and investment. In fact, technology is not just information that can be easily communicated but its transfer requires a capacity to learn and investment to incorporate it into the industrial production system. The investment capital significantly promotes the establishment of Research and Development activities within and beyond the arena of industries. As a result of innovative research, new inventions flooded into the market and which occupied a great quantum of market enrichments. Moreover, patent plays a very pivotal role to encourage and enhance the technology and it also mandates transfer of technology. It is indeed evident that if the patented technology is transferred the local industry may learn and develop the capacity to reproduce the same after the end of the patent period. As a consequence of technology transfer lot of new technologies will be invented and commodified. Most significantly, the researchers currently produced environmentally sound technology specifically known as “Green – Technology”. Green Technologies protect the environment from pollution and other kinds of environmental degradations. The green – technology protects the environment, ensures less pollution, uses all resources in a more sustainable manner, recycles more of their wastes and products and handles residual wastes in a more acceptable manner etc. The Patent given to these green technologies is called green patent. Patent over these kinds of environmentally, sound inventions certainly prevent, control and restrict the environmental problems throughout the world. Thus, this research paper affirmatively discusses the impact of patent over green technologies in the context of mandatory technology transfer and sustainable innovation.

**Aishwarya DHANCHOLIA, Rahul, Chaudhry & Partners**

*Using Intellectual Property Assets as Collateral in Financial Institutes: Scenario in a Developing Country “India”*

Intellectual property rights protect the intangible properties of the innovators. Apart from all the perks available for an IPR holder, one important benefit that can be introduced in India in its full-fledged form is “using intellectual property assets as a collateral for seeking loans”. This research includes an analysis of three major industrial sectors: Pharmaceuticals, FMCG and Software companies in India. The reason behind choosing these sectors is that these sectors forms the top-notch economic market of India. The statistical data of various companies under these three sectors show that there has been an increase in the Intangible Assets Value (which includes patents, trademarks, copyrights, trade secrets, etc.) of these companies as compared to the data of previous years. Also, the data shows that these companies are investing huge amounts in the Research & Development units to produce more viable assets to the company. For example, in 2014, global R&D expenditure by the pharma industry was approx. USD 139 billion. Despite of investing heavily in the IPRs, concept of securitization is not yet implemented in India. This research intends to figure out the reasons behind such an aversion. Where United States and Japan have already incorporated this idea, India is lagging far behind. Some of the reasons that could be reasonably averted are: 1. Nature of the assets; 2. Reliability of intangible assets; 3. IP evaluation; 4. Mind-set of financial institutions. There is a need of figuring out a

pragmatic approach to give some vent to the needs of the IP asset-heavy industries looking for financing alternatives. This research further intends to figure out various approaches to introduce such concept in the financial institutions in a developing country like India. A few years back, the website of WIPO reflected a short article on the securitization of IP assets. The article aimed at developing the trend of using IP assets as collaterals to generate loans. The Article also stated that although IP asset based securities are small in no. right now, but in a matter of time, interest and capacity to use IP assets as collaterals will increase with the increase in cash flow generated by IPRs. Recently, in the year 2016, National IPR Policy was released by the Ministry of Commerce and Industry with a tagline “Creative India, Innovative India”. This policy indicates a total of seven objectives out of which, Objective 5 is dedicated to “Commercialisation of IPRs”. This objective outlines the steps that should be taken to implement such principle. This research intends to discuss all the ideas incorporated in the policy. The main suggestion that the author wants to provide is subject to further research. The problems in the traditional financial institutes must be rectified one by one. Currently, the research is at a stage of data collection and further research. Datasets are generated by the Annual Reports of certain top Indian companies. Also, the author also intends to justify the Indian scenario by comparing them to that of the scenario of a developed country like USA.

**Djulaeka DJOERO, Faculty of Law, University of Trunojoyo Madura, (co-authors Dyah Ayu Sulisty RINI, Makhmud ZULKIFLI and Santi Rima MELATI)**

*Strengthening of Local Institution as a Protection of Geographical Indication of Camplong Water Guava*

Camplong water guava is one of the local fruit horticultural products of Sampang Regency (Madura) that has sweet, crisp and fresh flavors that are potentially protected by geographical indications. The Sampang regional government makes an icon of the region, but the obstacles related to local institutions are studied in this article. This research is a sociolegal to examine the related constraints and roles of local institutions in an effort to protect the Geographical Indication of Camplong water guava. Plan basis community planning with local wisdom facilities in Camplong water guava cultivation is expected to form strong institutions as an initial step to protect the geographical indications of Camplong water guava.

**Tabrez Y. EBRAHIM, California Western School of Law**

*Is There “Patent” in Sharia?: Implications for Innovation in the Muslim World*

Major sources of Sharia do not address and regulate patent protection per se—but does Sharia implicitly recognize “patent,” and if so, what degree of intangible property is permissible to allow for patent protection within fiqh (Islamic jurisprudence) guidelines? This Article augments debates among legal scholars and Muslim jurists on the permissibility of intellectual property within Sharia with a focus on the conceptual, doctrinal, and theological notions of “patent.” It argues that “patent” is an extension of property under Sharia, and examines patentable subject matter doctrine through secondary sources of Sharia. It assesses the patentable subject matter boundary between divine and human ingenuity and the issue of ownership for applications of abstract ideas, higher life forms, and natural laws and principles. It concludes with policy recommendations for economic development

and innovation for Muslim countries that are investing in the growth of knowledge-based, technology-centric economies.

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

*Determinants and Impacts of Public Agricultural Research: Product-level Evidence from Agricultural Kohsetsushi in Japan*

The public sector is an important source of agricultural research as many of the agricultural producers are individual farmers who cannot bear the cost of research and development. Public institutes for experimentation and research called Kohsetsushi help producers in agriculture and manufacturing improve productivity through technology transfer activities, thereby constituting an important component of regional innovation systems in Japan. This study establishes panel data of agricultural research input and output (new variety of a plant) by Kohsetsushi and examines whether their research activities are responsive to local needs and which type of research effort is conducive to the promotion of agricultural product innovation measured as registration of new varieties. Estimation results reveal significant variations across plants in the impacts of agricultural clusters on research on that plant. The impact of research on plant breeding on product innovation also varies across plants. Policy implications of the major findings are discussed.

**Jayanta GHOSH, Amity Law School**

*Artificial Intelligence and Market Competition in Shaping Future for Intellectual Property Domain*

The digital revolution has changed the complex legacy of traditional processes to simple online processes by implementation of artificial intelligence. This upgradation of the traditional system to the digitized system has made the life of the individual easy and drastically changed human lifestyle. Artificial Intelligence with holding of the machine based systematic strategies can easily determine the future market strategies. These strategies can help to regulate market demand and supply. A self-learning machine may find the optimal strategy is to enhance market transparency and thereby sustain conscious parallelism or foster price increases. Importantly, tacit coordination, when executed is not the fruit of explicit human design but rather the outcome of evolution, self-learning and independent machine execution. Recent studies have pointed to the potential in the future of machine-learning algorithms to achieve perfect first degree price discrimination, with firms segmenting the market into each individual consumer and charging him according to his willingness to pay. This dynamic pricing may enhance efficiency on the whole even if some individual consumers are affected. In most circumstances, price discrimination is economically efficient, since it encourages sellers to serve customers they would not otherwise be willing to serve; but those who are charged a higher price because they have a higher willingness to pay are seldom pleased to see others pay less. This work in progress research work will examine the impact of artificial intelligence in market competition on the intellectual property law domain. The innovation which supported by the intellectual property and shapes the future development can be analysed in this research. For example, artificial intelligence created work in 3D printing, who can claim copyright; whether programmer of that machine, who is handling the programme or the machine itself.

**Wenwei GUAN, City University of Hong Kong**

*Technology, Innovation and Copyright: TPMS and Copyright Reform in Hong Kong and Beyond*

This research examines Hong Kong's implementation of the anti-circumvention mechanism in the context of its ongoing copyright reform for the digital age. Driven by technological advances, Hong Kong's copyright reform, despite being in line with international development in the recent decade or so, sees mixed results. In a sharp contrast with the failures of two copyright amendments in 2011 and 2014 Bills, Hong Kong implemented the anti-circumvention obligation successfully in the 2007 Amendment protecting both access control and copy control for the right holders. Interestingly, the success of the 2007 introduction of the anti-circumvention and the failure of expanding copyright exceptions in 2011 and 2014 bills share the same, rightholders-centric philosophy of the copyright regime. By critical reference to the US DMCA's access control approach and EU's balance of access control with fair use interest, as well as the circumvention diversity seen in the new development of regional trade fragmentation from TPP, to ACTA, to RCEP, the research offers a second thought on Hong Kong's "successful" implementation of the anti-circumvention obligation and its implications for the technology-innovation dynamics in copyright reform. The research calls for caution on the balance of rights and obligations in the context of dynamics between technology, innovation, and copyright reform for the digital age.

**Noviana Dwi HARSIWI, Ministry of Research Technology and Higher Education, Republic of Indonesia**

*Innovation and Infringement in the Era of Online Market and How It Affects Developing Country's Economic Growth*

Innovation became a crucial part of economic growth in developing countries. Especially for countries who were rich in natural resources. In fact that natural resources keep decreasing, the government needs to encourage innovation and Small Medium Enterprise (SME) growth by providing some supportive policies. SME's nowadays became important factor in economic growth. SME in Indonesia support almost 60 percent of economic power and targeted by Ministry of SME to increase by 5 percent of the total population in 2019. There are approximately 57 million SME in Indonesia and in 2018 and 3.7 million of it has going online. Going online means it could be accessible more customer. But there is a lot of problems, especially regarding intellectual property. Innovation could not be separated from product development. Especially in the creative industry. The industry needs to be creative to fit in the market with tight competition. In the world of digitally connected, ideas became unlimited. People could access easily to many sources and search for ideas. Despite easy access, it also became a sign of infringement alert. A lot pirated goods sold in the market with cheaper price than the original. We often found a similar logo for some specific product which makes people confused. Despite of competition in product, market also competed in marketing strategy, especially at pricing. Furthermore, negative marketing strategy like predatory pricing could force another business out of the market. The main aim of this study is to measure effect of unfair competition in SME's and government policies regarding innovation to Indonesian economic growth. We collect some data from government ministries related to SME and the policies.

**Jingjing HU, Southwest University of Political Science and Law**

*China's Patent Distribution and Strategy in the Countries along the "Belt and Road"*

This research aims to strengthen the cooperation in science and technology innovation and intellectual property between China and the countries along "the Belt and Road (B&R, 一带一路)". This research analyzes the status of patent applications applied by Chinese entities in the countries along the B&R, by comparison with the application status in domestic China and that of the developed countries in the B&R countries. Furthermore, this research proposes to improve China's patent strategy and layout from three aspects. First, to sweep patent application international legal obstacles, it is required to construct a regional intellectual property law and institutional safeguard community constituted by the countries along the B&R. Second, corresponding to the "Strategy of Going-out (走出去战略)" proposed by the Chinese government, relevant parties including local governments boarding the B&R countries and innovation research institutes shall play an active role in assisting Chinese small and medium-sized enterprises to deploy patent strategies and strengthen their patent application capacities. Also, there are many Chinese investments concerns public interests, such as the "Melaka Gateway" and the "East Coast Rail Link" in Malaysia. However, existing measures including Investor-State Dispute Settlement (ISDS) and the WTO Dispute Settlement Body (DSB) cannot provide satisfying solutions for disputes between investors and local countries concerning intellectual property issues. Therefore, establishing a new particular dispute institution is required and reasonable. Third, in order to create a favorable environment for domestic intellectual property protection, multinational patent applications, and international patent cooperation, relevant assistant institutions or measures shall be provided or improved. Typically, it is advisable for China to adopt the "international exhaustion doctrine (国际穷竭原则)" in terms of trademark to deal with the issue of parallel import.

**Justin HUGHES, Loyola Law School, Los Angeles**

*Fair Use and Politics--At Home and Abroad*

American copyright law's fair use doctrine – a "standard" in a world of statutory copyright rules – has become an arena of ideological struggle over IP policy. At the international level, this debate frequently plays out in terms of how 17 U.S.C. 107 complies with or fails the "three-step test" of Berne and TRIPS. But asking whether section 107 complies with the three-step test is asking the wrong question: section 107 structure is not an exception -- it is a *mechanism* to establish particular exceptions. When the U.S. fair use doctrine works properly, it produces discrete *de facto* exceptions, such as parody following the U.S. Supreme Court's *Campbell* decision or intermediate copying in the software context following the Ninth Circuit's *Sega* and *Connectix* cases. Section 107 itself is almost certainly 'compliant' with the three-step test; it is particular applications of the doctrine that might be attacked in the future as failing the three-step test. In this paper, I will also describe how fair use has proliferated – in different permutations – to other jurisdictions, including Singapore, South Korea Sri Lanka, and Israel, as well as to more recent international agreements.

**Mazharul ISLAM, Faculty of Legal Studies, South Asian University**

*Pharmaceutical Industry of Bangladesh: Opportunities and Concerns in Conformity with IP Regime*

Most of the Developing and Least Developed Countries (LDC) are concerned about hard patent protection because they think that the negative impact would be an impediment for their pharmaceutical industries and access to low-cost medicines. However, Bangladesh could continue production of the generic versions of patented drugs until 1 January 2033. Therefore, this paper explores the position in Bangladesh along with the opportunities and concerns for the pharmaceutical industry during the transitional period. Furthermore, after a waiver period, Bangladesh would have to counter the TRIPS minimum standards for patents and other forms of IPRs. Hence, the article indicates the opportunities and concerns of Bangladesh's pharmaceutical industry by analyzing the national legislation in conformity with IP Regime.

**Towhidul ISLAM and Taslima JAHAN, Department of Law, University of Dhaka**

*Legal Framework & Scope of Protection of Plant Varieties: A Tool for Agro Economic Development of Bangladesh*

The TRIPS Agreement adopted by the WTO has become a global key to commercialize knowledge with the advance of technological contribution found in any field. Thus, IP confers legal ownership to the person or a business of a discovery or an invention attached to a particular product or process, which prohibits others from unauthorized use. It is evident that the Article 27 of the TRIPS referred to recognize and protect the innovation irrespective of any field of technology widens the opportunity of obtaining the global trade benefit under the friendly Patent Law of any State. As patent can be given for a product or process, it becomes an unbound tool of technical world to generate and regenerate the innovation that facilitates the socio-economic development in different levels of human needs. Patenting the life form activities or biotechnological contribution of the western world as introduced by Article 27 of the Agreement brings revolution in innovation. As an agricultural economic development tool, this voice of patent and innovation opens multiple opportunities including threat to unrecognized inventions available in different communities. Protection of plant varieties backed by the TRIPS compliance keeps careful thinking for future of agriculture in developing or least developed countries like Bangladesh. In this regard certain conventions like the UPOV and CBD with subsequent development holds significant interpretation to understand the patenting privilege of life form or agricultural product from Bangladesh context. To respond, the country has made a number of draft laws encompassing the plant varieties and farmers' rights protection, which are yet to get the final approval. Further, as a member of the CBD and the ITPGRFA, it has recently enacted the Bangladesh Biodiversity Act, 2017 which aims to ensure maximum protection for PGRs and TK and to confer the benefit sharing arrangement for their holders. From the agrarian economic perspective, protection and development of plant varieties get special attention in intellectual property and economy of Bangladesh. Both opportunities offered in term of regular patent law or any special legislation concerned to plant and genetic resources can be efficient legal tools for the development of agriculture. This paper actually works to interpret and integrate those guided international and legal principles and laws in line to understand the recent legal framework in protection of seeds and farmers' rights in Bangladesh. This paper also tries to find out how this draft legislation complies with internationally binding documents and creates the opportunities for existing and new innovators of the plant varieties to exploit the global benefit

mechanism. Finally, this paper looks into objectives of the legislation – draft and enacted pursuing for recognition and protection of PVP and farmers’ rights in consideration of the socio-economic development of Bangladesh.

**Norain Binti ISMAIL, Universiti Teknikal Malaysia Melaka (co-author Khadijah MOHAMED)**

*Intellectual Property Rights Aspects for Commercialising Research Products in the University*

In the recent years, universities are expected to play a more significant role in commercialising their research findings and to be recognised as “entrepreneurial university” (Ramli, et al, 2013; D’Este and Perkman, 2011). This approach was introduced by the universities in most of developed countries since 1990s, and in Malaysia, commercialisation of university research findings subsequently becomes one of the critical agendas laid out in the National Higher Education Strategic Plan, both in the Tenth and Eleventh Malaysia Plan respectively and in the Malaysia Education Blueprint 2015-2025 (EPU, 2010; EPU, 2015; Education Blue Print, 2015). It is clear that IP may become one of the sources of income for the universities and the country. Patent applications among public research institutions alone in Malaysia have increased 5-fold from 2005 until 2012 (Abdul Razak & Murray, 2017). While the number of IP application is increasing, commercialization remains limited (Thiruchelvam, et al, 2011). There are various challenges for commercialising research products face by universities such as poorly structured technology transfer offices and information process, lack of demand-oriented research and poor IP management, lack of relevance of university research and development to industry and lack of funding at various stages of the commercialization process (OECD, 2015). Thus, this paper aims to discuss on the legal aspects of commercialising research related to the IP. This study also employed a qualitative analysis using semi-structured interview with five academic researchers. They were selected based on various criteria such as different scientific and technical background and they have successfully commercialized their research products. Most of the universities in Malaysia have adopted IP and commercialisation policy to assist for commercialisation activities. Although the policies are in place, some academic researchers are unlikely comprehended what aspects and rights that these policies offered. Due to their scientific and technical background they face the challenge to understand the IPRs and some may not even aware about the existence of such policy. For many academic researchers, research data or research findings, such as ideas, process, techniques, prototypes or products are capable to be protected under IPRs. There are many aspects of IPRs might not be really appreciated by academic researchers especially on legal documents. Lack of understanding of different functions that IPRs could play may deny the rights academic researchers could potentially enjoy. IPR and commercialisation policy are adopted by the university for managing and regulating academic researchers in term of securing, protecting and exploiting research products, including determining the right ownership and profit sharing. In most cases, it is quite hard to convince academic researchers that their research products belong to the university. Although university provides their own IP policy, the details of allocation of the royalty or ownership are not often clearly articulated. Thus the contract of employment and NDAs should be prepared in advance because in the absence of the agreement, it is difficult to determine the ownership of the university employment especially when it involves a collaborative team of researchers.

**Dipesh JAIN and Ameya PANT, Bombay High Court, Mumbai**

*The Situation of Orphan Works in India: A Critical Analysis*

There have been significant mass digitization initiatives in India by various libraries, universities and other public institutions. Many of such activities have been stalled because of the challenges of compliance with copyright law. One of the challenges that this research aims to address is orphan works. Orphan works are copyright protected works where the right holders of the same are not identifiable or locatable. In such a situation a prospective person or an entity (user) who would like to digitize or use the work in some other form cannot get an authorization from the right holder for the use of such work. Many countries have adopted some form of legislative solution to tackle this phenomenon. In India, under the Copyright Act, compulsory licence under section 31A is the suggested approach towards use of orphan works. The European Union adopted Orphan Works Directive in the year 2012. Subsequently most of the member states have implemented the same in their national legislations. However, the debate on orphan works situation has not taken off in India. Are the digitization projects undertaken by various libraries of India facing problems because of orphan works situation? Are the current legal provision related to orphan works adequate in the age of digitization? India has been in the midst of a digital revolution in the backdrop of the Digital India initiative adopted in the year 2015. The shared common cultural heritage might be at a risk in the absence of appropriate policy solutions. It is important to avoid situations where it is not possible to disseminate information and knowledge to public due to over-protection by copyright laws. Information and knowledge-based society where there is effective creation and dissemination of information and knowledge will lead to contribution to the transformation and development of that society. One of the essential factors in such societies is the effective dissemination of educational, scientific and cultural materials. The Digital Library of India project and the increasing number of Indian universities such as Mysore University are digitizing their works. In this background it is necessary for the presence of legislative solutions that would better advance such moves. The newer business models and other problems stated herein were not considered in the past and therefore remain to be in grey area which may lead to conflicting judicial decisions and uncertainty among the various stakeholders.

**Rahmi JENED, Universitas Airlangga (co-authors Agung SUJATMIKO and Irene CALBOLI)**

*Geographical Indication Protection for Batunese Tropical Apple*

The Geographical Indication can be utilized by the producer / craftsman or industry and also its entrepreneurs to obtain added value from products / goods that have certain characteristics and qualities of the region. However, to date geographical indications have not been used to provide optimal results, especially in developing countries such as Indonesia. Currently, in the framework of the Indonesian government's agenda in achieving The Millennium Development Goals (MDGS) and the function of the state in prospering its welfare, the Directorate of Intellectual (DGIP) of Property Ministry of Law and Human Rights of Republic Indonesia creates a priority program for the protection of Geographical Indication through establishment of the Society of Geographical Indication Protection (MPIG) and the formation of The Guidance Book for Protection of Geographical Indications in indemnification of prime agricultural product and Food stuffs. In the province of East Java, the Directorate General of Ministry of Foreign Affairs of the Ministry of Agriculture targets batunese Tropical Apple as a Priority Program. This also enables the community

to benefit from Intellectual Property protection, one. Apple City Batu as pilot Project because it has unique characteristic as a tropical apple considering Indonesia as a tropical country located between two continents of Asia and Australia. The research problems are: 1. How to determine potential Geographical Indication protection for Batunese tropical Apple based on SWOT analysis?; 2. What constitute of The Society of Geographical Indication Protection for Batunese Tropical Apple?; 3. How to arrange The Guidance Book of Geographical Indication Protection for Batunese Tropical Apple as a part of GI application for registration to DGIP?

**Pawee JENWEERANON, Faculty of Law, Thammasat University**

*Implication of Software Patenting on the Rise of Financial Technology in Thailand*

In recent years, modern societies have come to rely heavily on innovation in order to improve the economy as well as enhance the lives of citizens. Along with innovations comes the need for patent protection. This is because a patent can incentivize inventors by providing exclusive rights and copyright protection is insufficient to secure the interest of software inventors. So, computer related technologies including technologies which have been using in financial sectors also seek the patent protection from the IP Department. Accordingly, in many countries, including Thailand, patent ineligibility of software presumed to be an obstacle for financial technology development in some aspects. Most countries do provide for clear patent protection of software development; however, Thailand lacks statutory laws and examination guidelines to ensure patent protection for software. Specifically, in Thailand, the existing laws do not allow software developers to obtain a patent, which restricts the computer industry from making advancement in this area. While makers of software have continuously applied to the Department of Intellectual Property for recognition and protection of their inventions, officials reject the requests because they are handcuffed by the current guidelines. The Department of Intellectual Property must follow the Examination Manual for Invention and Petty Patent Applications B.E.25551 which comes under the Patent Act B.E.2542. To seek a legislative solution for the aforementioned issue, the author compares the legislative and judicial approaches in the U.S. and Japan because these two countries reformed their laws to deal with the issues of software patent protection. Ideally, a proper regulatory framework can promote the software industry and financial technology development in Thailand.

**Naazima KAMARDEEN, University of Colombo**

*The Use of Pre or Post Grant Opposition to Refine the Patent System in Sri Lanka – A Critical Analysis*

The Sri Lankan law of Intellectual Property is found in the Intellectual Property Act No 36 of 2003. This legislation was introduced after the country joined the WTO in 1995, and is generally accepted as being TRIPs-compliant. The rules governing patents, including the criteria for patentability are all drawn from TRIPs standards. However, there is no mechanism for challenging a patent, either before or after it is granted. This may have been due to the relatively low level of innovation that existed in Sri Lanka with regard to patents, at the time of accession to the WTO. However, it appears that the lack of a proper mechanism to challenge patents at either the pre (filed at any time after the publication of the patent application but before the grant of the patent) or post (filed by any interested person within one year of the grant of the patent ) grant stage has negative effects on innovation and industry.

This was highlighted in the recent case decided by the Commercial High Court of Colombo, *Maximus (pvt) Ltd. v M. R. Shantha*. In that case, which took nine years to be decided by the court, with the possibility of appeal to two higher courts (proceedings have been filed in the Court of Appeal at present) the respondent was clearly not entitled to a patent, as neither the product (paper made from elephant dung) nor the process involved, were new. The purpose of an opposition system is to weed out frivolous or bogus patents, and thus refine the system to reward true innovation. Without such a system, patent holders are able to block innovation that may be truly needed. Further, as illustrated by the case indicated above, the time of the courts, as well as of the litigants, is wasted. Therefore it is proposed that Sri Lanka should consider at least a post-grant opposition system, whereby an interested person can file objections within a year of grant of a patent, without having to resort to lengthy court proceedings to decide on a matter that could easily be solved at the Office of National Intellectual Property.

**Murshamshul KAMARIAH MUSA, University Sultan Zainal Abidin**

*Finding the Voice for Farmers under the PVP Law of Malaysia*

Malaysia, under its international obligation as a signatory of TRIPS enacted the Protection of New Plant Variety (PNPV) Act 2004 in compliance of Article 27.3(b) of the said international agreement. Malaysia does not allow patents over animals and plants and thus adopted the plant variety protection system to spur development in breeding and research in plants. The main objective of the Act is to provide protection provide for the protection of the rights of breeders of new plant varieties, and the recognition and protection of contribution made by farmers, local communities and indigenous people towards the creation of new plant varieties. Another international treaty which recognizes the contribution of farmers and local communities in protection and development of plants especially for food and agriculture is the FAO Treaty; better known the International Treaty On Plant Genetic Resources for Food and Agriculture (ITPGRFA) 2004. The Farmers' Right concept specifically emphasized that farmers (local communities and indigenous communities included) have played a significant role in the development and preservation of biodiversity of plants. Four core rights of farmers are accentuated under Article 9 of the ITPGRFA on Farmers' Rights concept, namely the right to traditional agricultural knowledge; the right to equitably share in any benefits derived from the usage of the plants which they have developed; the right to participate in any decision making process concerning them and the right to seed. The presentation focuses on the provisions of the Malaysian PVP legislation and will identify as to whether the said PVP law incorporates any voice for the farmers as per the Farmers' Rights concept.

**Mohammed Aaul KARIM, Department of Law, East West University**

*Geographical Indications at Bilateralism: Exploring EU-China Agreement on Geographical Indications*

Although the Agreement on Trade Related Aspects of Intellectual Property Rights (hereinafter TRIPS) is considered to be one of the successful international agreements having great number of member states but TRIPS could not solve comprehensively the complicated issues related to GI. Consequently, Doha Development Round pushed the agenda further by putting responsibility upon the TRIPS council to resolve the critical issues related GI protection. In Doha Development Round,

agricultural and foodstuffs based GI protection agendum raises some serious policy debates which include, the relationship between agro-foods based GI industry and local development, establishing international GI protection system and more significantly extension of GI protection for non-wine products. Regrettably, TRIPS council has not been able to come up with any concrete and consensual modalities in international protection of GIs and remove inequality between the wine and non-wine products. Thus, deadlock at TRIPS council has pursued the global and regional players to extend the protection of geographical indications, beyond the borders, through TRIPS plus legal mechanisms- Bilateral Trade Agreements and Free Trade Agreements (FTAs). Undeniably, European Union (EU) is playing a pivotal role with its extended trade policy to proliferate the horizons of TRIPS plus mechanisms with other countries around the world, including with some Asian countries. Till-date, EU-Korean, EU-Singapore and EU-Japan FTAs have been agreed upon. And other BTAs and FTAs such as EU-Vietnam, EU-India and EU-ASEAN countries are in the pipeline. It is to be noted that none of the TRIPS plus arrangements has exclusively dealt with geographical indications. As typology, such bilateralisms covered intellectual property as a chapter or with some provisions within which geographical indications were included. The proposed EU- China Bilateral Agreement would first ever specialized mutual agreement on geographical indications in Asia. EU-China started to negotiate a bilateral treaty on geographical indications back in March, 2011. It may take one or two more rounds of negotiations to conclude agreement. In 2007, both the parties initiated a '10 plus 10' pilot project where ten agricultural GI product from each party were agreed to be protected in the territory of other party. Subsequently, in 2017, China and EU have published '100 GI products' from each side to be protected in the territory of other party. EU-China Bilateral Treaty on GI is unique in the sense that two world's leading economies are dealing with exclusive protection for their GI products, particular Chinese GIs are mostly agricultural and foodstuffs whereas EU offers mostly wines and spirits. It is estimated that China-EU bilateralism on Geographical indications would change the GI landscape not only in the territories of both parties but also would be model for other Asian countries. Considering such backdrops, this bilateralism demands further research. Many Asian countries may take lessons from this bilateral approach of GI protection. In this aspect, Bangladesh as an emerging GI protecting country may take due consideration from EU-China bilateral treaty to harness its geographical indications beyond its border in future.

**Ariel KATZ, Faculty of Law, University of Toronto**

*Debunking the Fair Use vs. Fair Dealing Myth: Have We Had Fair Use All Along?*

According to conventional wisdom, a fundamental difference exists between the American fair use doctrine and the fair dealing doctrine, as exists in Canada and other Commonwealth jurisdictions: while American fair use can apply potentially to any purpose, fair dealing arguably could only apply to the purposes specifically enumerated in the statute. Accordingly, fair dealing cannot apply to dealings for other purposes even if they would otherwise be fair. This conventional wisdom is false. When the UK Parliament codified the doctrine of fair use a century ago and enacted the fair dealing provision, it had no intention to restrict or limit its application, adaptation and adjustment by the courts. The UK Parliament sought to codify a principle, an open, flexible, and general standard, not precise rules, and had no intention to prevent its application to purposes beyond those specifically mentioned in the statute. Unfortunately, the English courts, in a series of early post-codification failed to recognize this point have sentenced fair dealing to a hundred years of stagnation. Fortunately, at the turn of the twenty-first century the Supreme Court of Canada declined to follow that restrictive path. The Canadian Parliament's decision to explicitly recognize additional purposes in 2012 and add

other specific exceptions moves Canadian law in the same direction. The Court's rulings and Parliament's action have entrenched fair dealing and provided a necessary correction that allows fair dealing to resume the role it was always supposed to play. However, if conventional wisdom is correct, some uses, present or future, are still categorically excluded. This is not a recipe for progress. In a legal environment that outlaws novel ways of using, reusing and disseminating works outright, fewer new forms of expression will emerge. But there's better news: there is no serious indication that this is what Parliament intended when it legislated fair dealing, and there are very good reasons to challenge the view that it did have such intentions. Despite obiter dicta accepting the conventional wisdom, in many Commonwealth jurisdictions, the question of whether fair dealing could apply to non-enumerated purposes has never been decided, let alone by the highest courts. This paper explains why the conventional wisdom about the limited scope of fair dealing is wrong. Adapted from an earlier piece written in 2013, the paper includes additional evidence to that discussed in the earlier piece. It debunks the Fair Use vs. Fair Dealing Myth and shows that an open, flexible, and general fair dealing is already here. It always has been.

**Al-Hanisham Mohd KHALID, School of Law, Universiti Utara Malaysia (co-authors Rohaida NORDINB and Safinaz Mohd HUSSEIN)**

*Edge of Industrial Revolution 4.0, Intellectual Property Rights and the Butterfly Effect Towards Orang Asli in Malaysia*

The world has been introduced to the next wave of Industrial Revolution or better known as IR 4.0. With the rapid development of IR 4.0, many upcoming projects such as smart applications (e.g.: smart cities, smart car, smart school, smart government etc.), will directly and indirectly affect the Orang Asli's livelihood. In applying flapping of a butterfly wing as analogy, small changes in the current digital revolution (i.e.: IR 4.0 and IPRs) may causes a mammoth effect in a long run towards Malaysia development in general and specifically for Orang Asli. Therefore, this paper is written as an initiative to create awareness of Butterfly effects. By exploring these issues possibly through intellectual property rights, this paper contributes in preparing the Orang Asli and related authorities in formulating suitable policies and agenda as part of reducing gaps in digital divide and potential adverse effect to the Orang Asli.

**Naina KHANNA, European Intellectual Property Institutes Network - Innovation Society (EIPIN-IS)**

*Comparative Analysis of the Patent Quality Concerns in Europe and the U.S.A.*

The previous decades have witnessed rising concerns about patent quality. The problem of patent quality in general terms is the risk that patent law may protect more than it should. Academicians, industry and even the governments have contributed extensively to the literature on patent quality. Though, it is agreed that 'quality' is a subjective term and there exists an inherent difficulty in comprehensively defining the term 'patent quality'. Nonetheless, this has not impeded the scholarly contributions to the subject. A wide range of literature is available on attempts to define (wholly or partly) patent quality, empirically measuring patent quality (or composing patent quality indicators), assessing the factors affecting quality, comparing patent quality across various jurisdictions and so on. The issue of declining patent quality is neither new nor limited to the academic concerns. It is

well admitted by various patent offices and many have already been taking steps to keep a check. It is interesting to note that a substantial share of literature focusing on patent quality and related concerns comes from the U.S.A, maybe because critics in the U.S.A. gauged the problem earlier than elsewhere. Some authors in their comparative study on the subject have suggested that the U.S.A. should look at the EPO as the 'golden standard' for patenting activities. Nonetheless, even the European patent mechanism has been unable to remain impassable to the issue of patent quality, especially over the past two decades. The growing number of literature on patent quality and related concerns in Europe is a testimony to this fact. Prof. Bruno Van Pottelsberghe (2009) and Nicolas van Zeebroeck and Bruno van Pottelsberghe de la Potterie (2011) provided some evidence of low quality/value patents at the EPO. In corroboration is the recent outcry by the patent examiners at the EPO about endangered patent quality. This article is an attempt to analyze and compare the existing concerns about patent quality in Europe and the U.S.A. in order to derive the factors responsible for the present state of patent quality in Europe. First, a brief over-view of the literature related to patent quality and related concerns is done in order to provide a concise review of the scholarly contributions in the area. Equally, the general purpose of this article is not to construct a definition for patent quality but to focus on reasons for the recent decline in patent quality in Europe. The subsequent work will then compare the European situation to that of the U.S.A. to examine if the European low-quality patent problem is similar to that of the U.S.A. This is relevant to further answer the question, why or why not the same/similar legal solution will work for both these jurisdictions?

**Dennis KHONG, Faculty of Law, Multimedia University (co-author Shubha GHOSH)**

*The Law and Economics of Database Protection: A Theoretical and Comparative Analysis*

Although there are strong arguments in support of intellectual property protection for databases, as well as equally compelling arguments against such protection, the existing literature does not analyse the effects of two types of market failures arising from legal protection of databases to the development of intellectual property rights in databases. Sole-sourced databases being databases containing information which is only found available to the creators, are private monopolies. Short of copying content from such sole-sourced databases, there is no legal means of producing substitutes in such markets, unlike traditional works in copyright markets. Therefore, models of monopolistic competition or oligopoly may not fully capture the structure of the market for sole-sourced databases. In addition such databases may contain confidential or proprietary information which might counter access rights to sole-sourced databases. On the other hand, databases which are public-sourced, i.e. databases containing information which can be obtained, with sufficient effort and investment, from the world around us, are natural monopolies. The costs of collecting and arranging the information are fixed costs resulting declining average costs over the short and long run. Furthermore, the marginal costs of distributing the database once collected is zero, making marginal cost pricing along nonviable for sustaining firms in the industry. This paper looks from a theoretical and comparative perspective on how the laws on database protection can be formulated to address the above two forms of market failures. An ideal law is one that permits access on the payment of reasonable compensation through a compulsory license. Such compulsory license is needed because in addition to the market failures described above, databases of both sorts are often subject to technology control measure that will require permission from owners to circumvent. Databases as described are club goods whose uses are non-rival even though access can be excluded. A system of tolls can be designed to permit access to sole-sourced databases with the size of the toll calibrated to the extent and type of use. Certain information that might be deemed confidential, however, can be accessed only on express

conditions from the database owner. Standards for confidentiality would have to be imposed. Finally, tolls for public-sourced databases may be based on generalized tax revenues or through benefit fees, such as those charged for bridges or parks. Either set of tolls can be implemented through limitations and exceptions for infringement actions and the determination of damages.

**Pattarin KIATKAMOLKUL, Faculty of Business and Law and Politics, University of Hull**

*Intellectual Property Rights and the Pharmaceutical Industry in Thailand: The Role of Patent Protection upon on FDI and R&D Frameworks*

In this paper I intend to provide a constructive analysis relevant to the role of the regulation of intellectual property rights (IPRs) upon foreign direct investment (FDI) and research and development (R&D) regulatory frameworks, with a specific focus on the Thai Pharmaceutical Industry. The primary objective of this paper is to furnish evidence on the existence and function of any investment patterns which are stimulated as a result of intellectual property rights protection and especially patents. A secondary objective of this paper is to prove any link between the IPR-generated investment patterns and the stimulation of technology transfer into host country. The research utilizes semi-structured interviews to extract data, which were held mainly with executives of both public and private organizations and stakeholders in Thailand. Moreover, the research consists of a situation analysis base on a literature review of relevant research and data analyses. The paper begins with the basic structure of the pharmaceutical industry in Thailand. The second part provides the development and evolution of patent laws as applied to the pharmaceutical industry in Thailand. It then goes on to examine the impact of patent laws on FDI and research and development (R&D).

**Weijia (Marina) KONG, Shanghai International College of Intellectual Property, Tongji University (co-author CHENG Dali)**

*The Role of the Patent System in High-Tech Entrepreneurship—An Empirical Study from Shanghai*

“Mass entrepreneurship and innovation” is an effective way to stimulate social innovation potential and entrepreneurial vigor. The role of intellectual property in entrepreneurial activities has attracted much attention. The paper examines the complex relationship between entrepreneurial activities and the application and use of patent through questionnaire surveys and field interviews of nearly 200 technology startups in Shanghai. The survey found that patents have a weaker incentive for startups’ innovation, but they play an important role in helping companies to gain competitive advantages, by means of preventing technology from copying, obtaining government support, and improving corporate image etc. Startups are reluctant to apply for patents because of the insufficient legal protection and the fear of competitors’ follow-up R&D. The commercialization of the patent in entrepreneurship needs to be further strengthened besides the defensive purposes, and suggestions for improving the application of comprehensive patent strategies and raising the level of judicial protection are proposed.

**Aakanksha KUMAR, School of Law, Amity University**

*Publicity as a Fundamental Right in India: A Re-look at the Privacy Roots of Personality Protection*

On August 24, 2017, the apex court issued a seminal decision, clarifying finally, the position of the right to privacy under Indian law; as a fundamental right of all citizens, guaranteed under Part III of the Constitution. The majority decision in part, provides for the horizontal applicability of the privacy right, finding the ground in the enunciation of the right as having both common law and fundamental right aspects, thereby enabling the simultaneous enforcement of the same right as against those entities that qualify the test of state under Article 12; as well as against private entities. Interestingly further, Justice Kaul went a step further, and in his separate opinion, elevated the right of publicity; otherwise having been previously enunciated only as a common law right; to a being a facet of the fundamental guarantee of privacy. He opined thus – “Aside from the economic justifications for such a right, it is also justified as protecting individual autonomy and personal dignity. The right protects an individual’s free, personal conception of the ‘self.’ The right of publicity implicates a person’s interest in autonomous self-definition, which prevents others from interfering with the meanings and values that the public associates with her.” It is with this opinion that the researcher chooses to respectfully disagree, and justify the disagreements through this paper. The conception of fundamental rights has always carried with itself their inherent, inalienability; as opposed to the conception property rights, which carry with themselves a distinct characteristic of transferability. The right of publicity, as distinct from its privacy moorings, is now recognised as a stand-alone right in several states in the USA and also as a manifestation of the common law tort of passing off, in Indian case law interpretation. It has thus been enunciated as an intellectual property right, capable of licensing or assignment – as was the background in the Titan case wherein the Bachchans had transferred their right of publicity to Titan for their endorsement of the Tanishq jewellery brand. Prof. Jennifer Rothman wrote a piece in 2012, challenging the very conceptions of alienability of the publicity right seeking to challenge the leading treatise author in the field, J. Thomas McCarthy, who observed that the “rule of free assignability in gross of the right of publicity has never been seriously questioned.” This paper shall try to situate the Rothman v. McCarthy debate in the Indian context, and shall aim at offering a critique of Justice Kaul’s opinion, in light of the development of the right of publicity in India. The researcher shall aim to do so, following a comparative study method, using case law and academic writing examples from both USA and India, that detail the theoretical justifications for viewing publicity as a property right vis a vis privacy (and therefore publicity) as an inherent fundamental right.

**Ranjeet KUMAR, Madanpalle Institute of Technology and Science**

*IP Innovation, Valuation, Technology Transfer and Commercialization Issues*

Innovations after recognition comes into the shape in the form of some process, method or product in any field or any stream of the technology. It is critical issue to value any innovative idea which is going to revolutionize the field of specific area of technology. The Valuation of innovation whether is in the form of patent or any other IP is the major issues in the process of their commercialization or technology transfer. The market value of the innovation may be affected by many factors including the competitor market share or product value in the market. The analysis of these factors include may be arise a new research analysis for technology transfer and commercialization policy. The present

research proposal will be analyzed these factors of IP innovation valuation for the technology transfer and commercialization.

**Khusbhu KUMARI, National Law University Delhi (co-author Yogesh PAI)**

*Competition Law in the Agri-Biotech Industry in India*

India's Agri-biotech industry has been among the top destinations for FDI and growth in agricultural productivity. In agri-biotech, the technology for DNA sequencing is more important than the seed itself, and hence, the firms owning the technology enjoy patent rights to appropriate returns from the market. However, agri-biotech patents, when widely licensed, often raise complicated questions concerning sharing or surplus generated in markets where there are upstream and downstream players that provide complementary inputs. One such issue came up for scrutiny before the Competition Commission of India (CCI) when the agriculture ministry of India along with three seed companies filed information (complaint) against Monsanto Inc and its Indian subsidiaries for forcing anti-competitive sub-licensing agreements and abusing its dominant position in the Bt cotton seeds market in India. Monsanto Inc. sub-licenses the Bt cotton technology to the seed companies in India through its Indian subsidiary called Mahyco Monsanto Biotech (India) Ltd. (MMBL). The complaint was that MMBL was imposing certain terms and conditions in the sub-licensing agreements that were highly abusive and restrictive in nature. The terms and conditions in question required the sub-licensee to intimate MMBL within thirty days of the undertaking of development of hybrid seeds from the technology obtained from the competitors. Further, breach of this condition may trigger termination of the sub-licensing agreement. Also, a condition allowed Monsanto to immediately terminate the agreement in case any laws in the territory restricted the sub-licensing fees (trait value). The post-termination obligation required the sub-licensees to immediately cease selling of such genetically modified seeds and destroy all such seeds in existence and possession. The CCI has ordered a detailed probe against Monsanto after a prima facie analysis. The final ruling of the CCI is awaited. It is important for the CCI to evaluate the market structure and technology dependency issues of the Bt cotton industry in order to give an effective ruling. Licensing, which is in essence a contract, creates pro-competitive efficiencies since firms bargain within the constraints of the marketplace. While some licensing practices could be condemned based on proven harms, it remains to be seen if Monsanto's practices involving its patent licensing in Bt Cotton in India does raise concerns for competition law in the light of lack of harm to the competitive process. This paper specially examines: whether Monsanto's licensing agreement (as a vertical agreement) could qualify as an 'anticompetitive agreement' having appreciable adverse effect on competition; whether Monsanto acquired its dominance through illegal means. I.e. beyond the exclusivity conveyed by the patent grant; whether such dominance was abused by Monsanto by requiring: licensing terms that forecloses competitors from entering into upstream innovation markets; whether Monsanto's licensing terms creates barriers for downstream entrants and there by reduces competition in the seeds market. These issues are complex in the Indian situation in light of the fact that: the patent has been invalidated by the Delhi High Court in 2018. Hence an invalid patent was being used as the basis for technology licensing. Downstream markets are effectively reliant on patented invention, not only in terms of access to the technology but also for regulatory approvals. Price controls being imposed by the Indian government on seeds and in turn capping Monsanto's royalties.

**Qi Jun KWONG, Graduate School of Law, Nagoya University**

*Resolving Cross-border Patent Disputes in ASEAN through the Application of Conflict-of-law Model Laws*

In 2015, member states of the Association of Southeast Asian Nations (ASEAN) proposed the creation of an ASEAN Economic Community, which seeks to create a regional single market and production base. With the increase in movement of goods across borders, strategic circumvention of national patent laws through cross-border supplying of components to be assembled into a patent-infringing product constitutes a major concern. In addressing the impact of cross-border infringement activities, the emphases on strict territoriality among ASEAN member states have culminated in the concept of “interoperability.” Proposals raised in attempts to define the concept include the adoption of common private international law rules, both to obviate the need for substantive law harmonization and to conform with the strict territorial approach adopted by ASEAN member states. Accordingly, this research seeks to examine the applicability of the proposals, and attempts to develop the ideas by first analysing the territoriality principle. Strict territoriality has been a much-touted feature of ASEAN member states; if it were to constitute a legitimate interest however, the contour and objectives of the principle need to be succinctly defined. Second, the scope of “interoperability” is explored. The interpretation necessary for “interoperability” to correspond to the adoption of common private international law rules hinges upon the understanding of strict territoriality, and the gap will be analysed accordingly. Third, proposed model laws such as the ALI Principles and CLIP Principles are put to the test, and how the laws may fit the “interoperability” mould is examined. As the scope of protection conferred by patents based on a single invention may still be amended separately in different national patent offices, and that model laws only apply when parallel patents are identical, the validity of foreign corresponding patents in Southeast Asia may limit the application of the model laws. This research then calls for the creation of an ASEAN patent system, which may be manifested in the creation of an ASEAN unitary patent, or mutual recognition of patents among ASEAN member states, or a region-wide adoption of the doctrine of equivalents to alleviate the validity aspect. This research further suggests that ASEAN MS should consider the possibility on ruling upon a foreign patent by applying the granting state’s law as long as the validity aspect is not challenged, thereby maintaining the territoriality concern. Ultimately, this research aims to strike a balance between the conception of sovereignty and in furthering legal certainty for patent holders.

**Y.V.S. LAKSHMI, Marketing & Knowledge Management Group at Centre for Development of Telematics (co-author Vipin TYAGI)**

*IP Trends in 5G Technologies*

5G is rapidly gaining momentum globally and the first deployments are being planned for 2020. 5G technologies would transform the telecommunication ecosystem by connecting anything to everything, anywhere, anytime. 5G is not just the next evolution of 4G technology; 5G is revolutionary, it is expected to enable fundamentally new applications with much more stringent requirements in latency (Eg. Realtime) and bandwidth (Eg. streaming). Research in frontier technologies, such as 5G and related technologies will require intellectual property (IP) protection through patents and other forms of IPR. IPRs are important because they offer possible mechanisms for stimulating research, enabling access to technology and promoting enterprise growth, benefit of the society. Moreover, protection of IP creates incentive for more knowledge and technology

generation as scientists/ innovators are recognized and rewarded. The transfer of IPR enabled technologies through commercial route will gain greater importance in the future. In order to gain revenues from IPRs, a streamlined IP management increases the chance of better commercialization of the IPs and utilization of the knowledge created for the betterment of the society at a faster pace. Advancement of any technology can be better reflected by indicating the patent filing activity and research focus by the industry leaders. Though the 5G development in India is still in very nascent stage practically but many Indian academic institutes have set dedicated teams to work on it and generating IPRs on the same. 5G is not just a mobile technology it is a system to have an access to high & low data rate services. The potential enablers to achieve 5G data rates/ 5G globally and the patents filed are: 1. Beam formations – 2587; 2. MIMO-3426; 3. Millimetre wave 1435; 4. Smart radio 2227; 5. Non-Orthogonal Multiple Access 3697; 6. Radio convergence 1429

**Emmy LATIFAH, Faculty of Law, Universitas Sebelas Maret (co-author Moch Najib IMANULLAH)**

*Legal Protection of Trade Secret Through Employment Contract in Indonesia*

The proverb “information is power” is very appropriate to describe the importance of protecting trade secrets. Trade secrets can provide a significant competitive advantage over a product sold on the market since trade secrets can become a center for market niche creation that is difficult for competitors to penetrate. Such competitive advantage only can be obtained by maintaining information on trade secrets or prohibiting other parties from using or copying confidential information without the consent of the owner of the confidential information. Rules in many countries indicate that there is a prohibition on espionage access (or unlawfully) to trade secret information by sanctioning parties found guilty of unlawful access to trade secret information. Another reason why trade secret is important to get protection as trade secret is one of the complementary tools that strengthen other intellectual property assets owned by a company. An example here was when Coca-Cola protected its formula as a trade secret, in the same time, it has been strengthening its trademark. One of the important factor in running the business and protecting trade secret is employee. His loyalty is the biggest challenge faced by companies in the increasingly competitive business era. Employee can “make or break” a business through trade secrets. New and better products and processes that cannot be copied by the competitors provide competitive advantages for the company. Finding creative and inventive ideas continuously is an endless challenge for an entrepreneur. Even, some companies are even willing to hijack their competitors’ employee with the aim of being able to access the creative and inventive resources of competing companies and knowledge of the secrets of their success. Most of the disclosure or use of confidential information is carried out by employee of the previous company. This article will discuss to what extent legal protection over trade secrets can be provided through employment contracts between employer and employee in Indonesian perspective.

**Vu Van Anh LE, Durham Law School, Durham University**

*Compulsory Licensing for Patented Pharmaceuticals: A Comparative Analysis of India, Brazil and Thailand*

This paper is aimed to examine the implementation by three carefully selected developing countries (India, Brazil and Thailand) of one of the most significant and controversial TRIPS flexibilities – compulsory licensing – so as to meet their differing pharmaceutical needs. It critically evaluates the compulsory licensing mechanism of the aforementioned countries, each considered to be an emerging economy, capable of challenging the dominance of OECD nations. The findings suggest that each country's application of compulsory licensing is closely linked to two factors: how it has implemented TRIPS and, its pharmaceutical manufacturing capacity. Where a state capitalises on TRIPS flexibilities and has a well-developed manufacturing capacity, it is unlikely to use compulsory licensing (e.g. India). In contrast, where TRIPS flexibilities are underutilised combined with a low industrial development, then the grant of compulsory licences is highly likely (e.g. Brazil and Thailand). On the one hand, all the compulsory licence grants, to some extent, produced significant effects on society. In the short-term run, these licences eroded the monopoly of patent holding companies, driving down the price of medicine, thereby increasing the number of patients in treatment. Furthermore, as regards India and Brazil, mandatory licensing also resulted in price deductions for other medicines which were not subject to the compulsory licence. Somewhat surprisingly, in all three country case studies, the generics were not made at the cheapest price, compared with the substitutes available on the market, an important consideration for parties seeking a compulsory licence. The paper concludes that although the three countries under examination, i.e. India, Brazil and Thailand, all granted compulsory licensing for medicines, to judge from the political, practical, and economic perspectives, this legal tool's effectiveness varies from situation to situation. Given each country's unique characteristics, it is clear that compulsory licensing should not be regarded as a 'one-size-fits-all' solution to combat all healthcare issues in less-developed nations.

**Nari LEE, Department of Accounting and Commercial Law, Hanken School of Economics, (co-author Ulla-Maija MYLLY)**

*Third Party Liability in Trade Secrets*

In intellectual property, liability for infringement is traditionally conceived as strict liability regime, with knowledge and intent playing a limited role in establishing substantive direct infringement by the primary actor. One implied assumption supporting this construction of primary liability in intellectual property – in particular, registered rights- is the notice that the public is given. As patent and other registered rights are disclosed, the public is given notice and the presence as well as the substance of the right is communicated to the public. Thus, knowledge of the presence and the substance of the right may be presumed by the primary actors and the presence or absence of notice given to the public including infringer is an important factor that support the presumption for liability of primary infringer. The absence of good faith infringement defence in patent law, for example is a strong indication that such presumption is sustainable. This article argues that in the examination of knowledge and intent for primary or secondary liability for IPR, in relation to notice function of property, some distinction has to be made to the notice of the substance from notice of the presence, by examining trade secrets protection. Using the text of the article 4.4 & 5 of the EU Trade Secrets Directive, we argue that the third party liability in trade secrets should be understood that the

knowledge level required for the liability to arise should include both the presence and substance of the trade secret, and knowledge of the substance of the trade secret may not be implied by the knowledge of the presence of trade secret, thus should be clearly doctrinally differentiated from the third party/ secondary liability of other registrable rights and argues that a strong good faith defence is necessary for the misappropriation of trade secret.

**Jing LI, School of Law, Jinan University**

*Protection of GI Trademark and Innovation of National Rural Vitalization Strategy in China: Linxiang Fishing Floats Certification Trademark Case*

In China, both trademark and a sui generis GI & agri-food GI system are available for GI protection, which is called dual-track triple protection regime. GI trademark is a terminology used by Trademark Office to call collective trademark and certification trademark employed to register GIs under the Trademark Law. Very recently, Chinese government has launched a tremendous internal reform of governmental organizations. This reform has affected the current GI registration system, that is, the former GI trademark and sui generis GI registration have been unified but the agri-food GI registration system remains untouched. And an ambitious rural vitalization strategy is also introduced by the central government to achieve the goal of poverty alleviation and rural sustainable development. The paper will answer the research questions: What is the relationship between GI trademark protection and rural sustainable development? How does the innovation of promoting GI trademark lead to rural vitalization? Linxiang Fishing Floats Certification Trademark Case is a successful example to witness the social and economic development of a small city called Linxiang in Central China. The local government has made full use of the reputation of GI trademark connecting to its natural and human factors. The innovative methods made by the government has achieved tremendous economic growth and led to the rural vitalization. The methodology of the research would be literature review of GI trademark and field visits in Linxiang City. First hand data will be collected by visiting the industry association, interviewing GI trademark holder and users, discussing with the civil servants in local government involved in managing and controlling the GI trademark. The paper will illustrate the history of Linxiang Fishing Floats, the registration and management of GI trademark, and the innovative methods employed in promoting the GI trademark. The paper will then analyze what innovation is effective and what is the social and economic impact on rural vitalization. Finally, the paper will conclude by giving suggestion to the future development of GI trademark in China.

**Veasna LIM, SokSiphana & Associates (Member of ZICO Law)**

*Current Status on Legal Protection for GI Products in Cambodia*

The Royal Government of Cambodia (RGC) strongly believes that the establishment of a GI system will give Cambodia comparative advantages in terms of economy, tourism and culture, in addition to poverty alleviation as set forth in our Rectangular Strategy IV. With more GI products, there would be more diversification in terms of export markets for Cambodia, since up to now the country as a whole relies heavily on the exportation of garments, footwear and some agricultural products. Aiming for niche market with high value adds such as GI, Cambodian farmers will be able to generate more income and can also preserve the traditional know-how to attract more tourists into Cambodia. With

more GI products, employment will inevitably increase and as a result it will help prevent the illegal migration of local people to work in the informal sectors where ultimately, they will end up as victims of vicious forms of abuse. In view of the understanding of the benefits of GI, in 2010 via a pilot project technically and financially supported by the AFD (Agence France de Development), two Cambodian products were registered as GI; Kampot Pepper (or Mrech Kampot or Poivre de Kampot), and Kampong Speu Palm Sugar. Kampot Pepper (or Mrech Kampot and Poivre de Kampot) was recognized by the EU in 2016. As a result, all members of the Kampot Pepper Promotion Association (KPPA), created in 2009, are enjoying the benefits in term of increasing household incomes by selling these products to the EU markets as well as the spillover from tourism; the farm owners have organized a trip for tourists with various food and dessert made of Kampot Pepper. Recently, the pomelo (grapefruit) grown in Kratie province, in the Koh Trong commune, was registered as a third GI product following in the footsteps of the two aforementioned GI products. The process of getting Koh Trong Pamelos fruit registered as GI products required the establishment of the Koh Trong Pomelo Products Association with all of its required document being in place. However, out of 331 families growing pomelos in that area, only 155 families are members of that association. It was acknowledged that obtaining a GI status requires tremendous investment in terms of money, time and tireless effort. Some families in that area are still reluctant to believe the benefits of GI registered products. According to a source from the association, farmers could sell their GI pomelo for USD 2 to USD 3.5 per kilogram and they could harvest twice a year. Seeing these benefits, the RGC has anticipated to register more than 20 potential GI products, such as Kirivong Pepper in Takeo province, Kampot Salt and Kampot durian in Kampot province, Rattanakiri coffee in Rattanakiri Province, Siem Reap Sachkrock (sausage) in Siem Reap, Battambang Rice and Battambang Oranges and Phnom Srok Silk in Battambang Province, Kamplearnh fish paste from Kampong Khlaing in Kampong Chhnang Province. Once those products are registered, it will help promote Cambodia as a ecotourism destination and boost living standards.

**Valery LISITSA, Novosibirsk State University**

*IP, Innovation and Other Digital Assets in Business Transactions: Issues of Correlation and Due Legal Regulation*

In recent years IP, innovation and other digital assets are becoming a key factor in the economic development of any country. Thanks to the progress of information technologies a lot of new objects have appeared in business and turned to be involved into legal transactions. In particular, instead of conventional money, electronic money and cryptocurrency have already used as an alternative way of payment in contracts. Some traditional results of intellectual activity, i.e. works, can appear not only in writing, but also in a digital form, shaped with the use of Internet and other information tools. Know-how, technology, innovation and other information assets can be employed for investment purposes as well. However, the present international and national law rarely deals with information as an object of business transactions. Although there are some statutes in national legislation, i.e. Russian Federal Law of 27 July 2006 No 149-FZ “On Information, Information Technologies and Protection of Information”, which define information and provide for the mechanism of its protection, they usually cover personal data and access to information, which fall generally into the scope of administrative law. Meanwhile, it is private law, which is primarily designed for governing diverse property relations, including business transactions. However, unfortunately, it does not generally specify the use of information along with traditional objects (things, works, services, etc.). It is deemed that many information objects concerned can contain attributes of IP (literal and other works,

data, know-how, technology, etc.) and other property rights. In those cases the law does provide for granting intellectual rights to authors and other owners of those rights as well as the order of their implementation and protection, including conclusion, performance, change, and termination of appropriate (sale, license, etc.) contracts. In order to maintain the due legal regulation of new information assets it is argued that the similar mechanism be introduced into the law. From this regard, it is necessary to define such new objects, types and contents of appropriate property rights upon them, their owners, remedies for violation of the rights, etc. As the current judicial practice shows, otherwise the law is hardly capable to govern business transaction with such objects. In particular, it is especially true for e-money, cryptocurrency, and other digital assets. A good example for that is Russian Federal Law of 27 June 2011 No 161-FZ “On National Payment System”, which defines e-money as a property right of one person (the person who previously provided money) to another person (the obliged person) taking into account information on the amount of the provided money without opening of a bank account, as well as describes the procedure for the performance of payment services, including the transfer of funds, and the use of electronic means of payment.

**Glynn S. LUNNEY, Texas A&M University School of Law**

*Trade Dress: De Facto Functional is De Jure Functional*

In 1982, in *In re Morton-Norwich Products, Inc.*, Judge Giles Rich distinguished de jure functionality from de facto functionality in determining whether a product configuration or its packaging was eligible for protection as a trademark. Under his formulation, a product feature or packaging could serve a non-branding function in fact, even a critically important non-branding function, yet not be functional in law. He thereby allowed applicants to claim exclusive rights in functional product features through trademark law. This was and is a mistake. This article explains why.

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

*Standard Essential Patents Dispute Adjudication in China: A Case Study*

Asking for injunction is obviously the right patent holders can have under patent law. It is also the case for Standard Essential Patents (SEPs) holders, irrespective of the combination of patents and standards. However, given the probable market power SEPs holders could have had by means of incorporating their patents to standards, SEPs holders' turning to injunction could lead to abuse of patent right and triggered the application of antitrust law. Considering approaches different courts from different jurisdictions used, it is quite controversial to apply antitrust law for that it could be far more beneficial to the licensee of SEPs involved. Then the problem is how to draw a line. Different from *Huawei v. IDC* case, Chinese courts began to consider and apply other approaches in recent trials, notably the civil law, which should be positively assessed.

**Vandana MAHALWAR, Faculty of Law, University of Delhi**

*Copyright and Academic Course Packs: How Congruous?*

The issue of access to knowledge is on the forefronts the copyright related disputes. The access to knowledge movement, specifically in universities and schools, aims to guarantee the extended access for students to educational material. Books and articles, being the central learning materials in educational institutions, are photocopied in quantitatively significant number by students. These course packs are the compilations of excerpts and chapters from different books, created for a particular course for the perusal of students. The issue appears to be more critical when academic course packs are produced in considerable number by photocopiers. In this whole process, authors and publishers find themselves in an unsatisfactory and thwarting state, and the commercial photoshops are alleged to infringe the copyright of publishers by reproducing and distributing the educational material without seeking permission from copyright owners. On the contrary, the most common defense which is taken by defendants is that of 'fair use' or 'fair dealing'. The right of reproduction of copyright owners come in conflict with the routinely photocopying which is done in libraries and educational institutions as 'the three-step test' causes the academic photocopying to fall within the ambit of exceptions created at national level. Article 9(2) of Berne Convention and article 13 of TRIPS Agreement put in place a broad exception to the reproduction right, known as "three-step test", which favors access to knowledge. But, different nations have construed the three-step test differently and as per their national requirements, lacking uniformity at international level. The paper would discuss few significant judicial pronouncements including, the recent Delhi High Court decision in *The Chancellor, Masters & Scholars of the University of Oxford & Ors. v. Rameshwari Photocopy Services & Ors*, *Basic Books, Inc. v. Kinko's Graphic Corp.* and *Princeton University Press V. Michigan Doc.* In *Chancellor, Masters & Scholars of the University of Oxford & Ors. v. Rameshwari Photocopy Services & Ors*, some major publishers like Oxford University Press and Cambridge University Press took action against University of Delhi and Rameshwari, a small scale photocopy service operating within the premises of Delhi School of Economics, for selling course-packs to students based on the syllabi prescribed by University. Justice Endlaw delivered a judgment in which an attempt was made to strike balance between copyright and access to knowledge. The decision was in favour of University by contending that copyright is not a natural right. Similar rulings appeared in many more cases. This paper would examine the validity of academic course-packs and academic photocopying through the lens of three-step test. The paper also aims to analyse the interpretation of s. 52(1)(i) of the Indian Copyright Act, 1957. While analysing the fair use provisions, the paper would delve whether copyright and academic course packs can have a congruous relationship.

**Vijay Kumar MAKYAM, I-WIN IP Services**

*Unintentional Abandonment of Patent Applications: Need for Harmonization of Law Around the World*

Intellectual Property Rights are granted to encourage and motivate intellectual creation at large and it is a kind of reward for disclosure of such intellectual creation to the world. The most powerful form of Intellectual Property rights is Patents among all other varieties of Intellectual Property rights. Patents are granted to technological inventions which are novel, non-obvious and have utility, popularly called as NUN test for grant of patents. The law relating to Patents has been harmonized

around the world with TRIPs Agreement (One of the several WTO Agreements) that was entered into on 1st January 1995. The requirements for grant of patent, period of protection, subject matter and minimum standards etc., were discussed in the agreement and members are instructed to implement the same in their municipal laws with specific time frame. Patent law around the world has been thus harmonized with the implementation of TRIPs Agreement by member nations of WTO. However, there are still some issues which are different in each jurisdiction. In this paper, I have tried to expose one such issue i.e., unintentional abandonment of patent applications and law relating to the same in Asia comparing the same with law in other developed countries like USA and Europe.

**Bashar H. MALKAWI, College of Law, University of Sharjah**

*Enacting Patent Legislation in Jordan and Its Impact on Innovation*

The intellectual property regime in Jordan proved to be a stumbling block for Jordan's accession to the WTO. Jordan committed in its accession to the WTO to comply fully with the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPs), from the date of accession, without recourse to any transitional period. The question of Jordan's compliance has gained importance, especially given the decision by the USTR to unlist Jordan from the watch list of Special 301 in 1999. 1999. Compliance with TRIPs and the un-listing from the U.S. watch list of Special 301 helped Jordan accede to the WTO. In 1999, Jordan introduced its patent legislation, Patents Law of 1999, replacing the Patents and Designs Law which had been in effect since 1953. The 1999 Patents Law was further amended in 2001. By enacting this law, Jordan tried to encourage innovation through protecting inventors and permitting them to profit from their innovations. Also, stronger patent law may have increased in technology transfer in Jordan. Jordan's patent law complies with the TRIPs agreement to large extent. In light of Jordan's free trade agreement (FTA) with the U.S., Jordan's Patent Law exceeded TRIPs requirements in several areas. For example, the FTA does not exclude from patentability life forms, which is an issue of tremendous importance for biotechnology companies. In addition, the Memorandum of Understanding of the FTA expands the patentability provisions to include business methods and computer-related inventions. Also, the FTA allows the issuance compulsory licensing in only three cases: to remedy a practice determined to be anti-competitive; for public non-commercial use or national emergency or other circumstances of extreme emergency; and if there is a failure to meet working requirements. Of course, the impact of patent law on innovation cannot be resolved hypothetically. However, the current paper tries to examine whether Jordan's patent law has contributed to research and innovation by examining Jordan's Patent Law.

**Manjula MALLEPALLI, School of Law, Bennett University**

*TRIPs Agreement – Flexibilities and Complexities*

The TRIPs Agreement acknowledges that an inadequate safeguard of intellectual property rights could lead to global trade distortions, while undue protection could by itself lead to trade barriers. It therefore expresses that a delicate balance is to be achieved wherein protection of intellectual property rights by itself should not become barriers to trade. The IPRs are not only expected to contribute to the promotion of technological innovation, but also to the transfer and dissemination of technology in a way that benefits both its producers and users and that respects a balance of rights and obligations,

with the overall goal of promoting social and economic welfare (Article 7). The member states may adopt measures necessary to protect public health and nutrition; and other public interest measures which are consistent with the provisions of the TRIPS Agreement, which would lend to an escape for non-violation issues if these are eventually proved that measures are consistent with the Agreement (Article 8). In DS408 Complainant – India: ‘Seizure of generic drugs in transit India,’ India alleged that the measures at issue were inconsistent with the obligations of the European Union and the Netherlands under Articles V and X of GATT 1994 and under various provisions of the TRIPS, namely, Article 28 read together with Article 2, Articles 41 and 42, and Article 31 read together with the provisions of the August 2003 Decision on TRIPS and Public Health. India further submitted that it considers that the measures at issue also have a serious adverse impact on the ability of developing and least-developed country members of the WTO to protect public health and to provide access to medicines for all. Therefore, India stressed that the provisions of the TRIPS Agreement, referred to above, must be interpreted and implemented in light of the objectives and principles set forth in Articles 7 and 8 of the TRIPS Agreement, the Doha Ministerial Declaration on the TRIPS Agreement and Public Health adopted on 14 November 2001 and in the light of Article 12(1) of the International Covenant on Economic, Social and Cultural Rights, which recognizes the right of all persons to the enjoyment of the highest attainable standard of physical and mental health. Through the TRIPS, the WTO makes it mandatory for all its member countries to follow basic minimum standards of IPR provided for under TRIPS and bring about a degree of harmonization of domestic laws in this field. The negotiations while drafting the TRIPS were controversial due to more flexibilities demanded by the developing countries in public health sector, while developed countries seeking more stringent norms. These negotiations have led to provisions allowing for certain uses of patented products without authorization from the patent holder. Thus, this research paper attempts to focus on the flexibilities of the TRIPS Agreement, especially with regards to the compulsory licences and other uses without authorization, such as government use, experimental use, and the bolar exemption; which had led to the complexities in the Indian Patent regime vis-à-vis the international scenario.

**Gregory MANDEL, Beasley School of Law, Temple University**

*The Role of Public Perception in the Rule of Law: Experiments on Cross-Cultural Attitudes towards Property and Intellectual Property*

Institution of the rule of law plays a central role in debates about the ability of developing countries to advance their political, legal, and economic landscapes. Most analysis of the rule of law focuses from the top-down on its role in constraining the behavior of government officials. This paper explains that for the rule of law to succeed it also must perform from the bottom-up. Popular understanding of, and response to, law is necessary in order for a society to successfully implement rule of law principles. Drawing on original data concerning Chinese and American attitudes towards property and intellectual property rights as an example, this paper explores the great challenges to the rule of law in relation to popular understanding of law. Popular understanding of laws implicates bottom-up rule of law principles in two regards. First, if the public is not aware of laws, or if the public understands laws differently from what they actually provide, then the rules are not effectively capable of being followed. Second, even if there are laws that people know, people must still be motivated to follow the laws in order for them to function as rules. A disconnect between popular understanding and the law creates substantial legitimacy and functionality challenges for the rule of law. The experimental data reported here reveal that such significant challenges exist for the rule of law concerning intellectual property and property rights in both the United States and China. In

general, people misunderstand the purpose of intellectual property laws and therefore miscomprehend what is legal and illegal under the law. These results indicate, for example, that people may not be as dismissive of intellectual property rights as previously believed, but rather might simply misunderstand them. In addition, the relationship between Chinese and American attitudes towards intellectual property rights is more complex than previously understood. While Americans, as expected, do tend to prefer stronger property rights than Chinese in general, those American attitudes are highly context-dependent, and there is far more alignment between American and Chinese attitudes than expected. Both populations also have widespread property rights preferences that are inconsistent with the actual laws in each country. The experiments display that understanding how the rule of law functions from the bottom up, that is, how it may or may not lead people to change their behavior in response to the law, is a critical and complex question that requires significant understanding of cultural differences and individuals' perception of the laws. The insights provided here in connection with intellectual property and property rights in China and the United States provides initial steps with respect to how to advance rule of law principles on the ground in two distinct cultural contexts.

**Thomas MARGONI, CREATE, School of Law, University of Glasgow**

*Artificial Intelligence, Machine Learning and EU Copyright Law*

Within the broad field of Artificial Intelligence (AI), Machine learning (ML) looks at improving the performances of computers in executing tasks for which they were not specifically pre-programmed. Applied to the field of Natural Language Processing (NLP), ML helps computers to autonomously learn tasks such as the recognition, understanding and generation of natural language (i.e. the language spoken by humans). In other words, ML applied to NLP refers to the ability of humans to interact with computers in the same way in which humans interact among themselves. On the part of the computers this implies being able to understand human language, to understand its meaning, and to interact with it thorough the generation of new language. Examples of these applications are very common in the current information society. Digital devices including phones, tablets, watches and an increasing number of home furniture, are nowadays equipped with personal assistants (generally called "AI") which can be activated and can communicate through voice. More often than what one may think, when calling the consumer support service of a growing number of companies – or more commonly when contacting them via social networks – it is not a human who answers the phone call, replies to the tweets or other notifications. This study focuses specifically on this element, i.e. how computers learn a language. The reason is straightforward: when humans learn a new language they usually store the training information (e.g. the text book used to learn it) as an electrochemical trace in the area of the brain dedicated to language. Humans do not need a copyright exception in order to store that copy. Traditional copyright law and theory (in addition to common sense) have that this activity is outwith the copyright realm. However, it is far from clear that when a computer makes the corresponding digital copy of training material in order to learn a language this activity is likewise excluded from the copyright domain. On the contrary, normally any digital copy, temporary or permanent, in whole or in part, direct or indirect, has the potential to infringe copyright. Normally, computers learning natural languages need to "train models" using specific ML algorithms. The trained models represent the "memory" of a machine which has learned a language. But how is this memory created? Or in NLP parlance, how are the models trained? Usually, models are trained on corpora, that is to say on literary works often "available on the internet". The question thus becomes the following: is the act of training a model for ML purposes a copyright relevant activity? The answer

to this question is not only relevant in terms of copyright law and theory, but more broadly in terms of innovation policy as it has the potential to determine who has to ask whom for what permission in order to perform ML functions. In other words: who owns AI? In more precise terms, the research question of this short contribution will focus on the act of training a model for ML/NLP purposes and attempts to answer the question of whether this act infringes copyright and in particular the right of reproduction. In addition to this, the contribution also intends to explore whether there are other rights that may be infringed, in particular the right of adaptation, and thus determine whether a ML trained model can be considered a creative adaptation of the original corpora. The reference legal framework will be EU copyright law, with occasional reference to domestic law when necessary.

**Henny MARLYNA, Faculty of Law, Universitas Indonesia**

*The New Provisions of Trademark Deletion under Indonesia's Trademark Law (Law No. 20 Of 2016): Some Critical Comments*

Law No. 20 of 2016 on Trademark provides some new provisions on Trademark's Deletion which were different from the previous Law No. 15 of 2001. Under the previous Trademark Law, trademark's deletion petition/lawsuit can be brought by three respective parties (trademark owner, the Directorate General of Intellectual Property or third party) on the same legal basis. However, the Law No. 20 of 2016 comes up with different legal basis. One of the interesting new provision is the new role of the Trademark Appeal Commission to give a recommendation to the Minister of Law and Human Right in order that the Minister deletes a registered mark. This article provides some critical comments of the new provisions of trademark deletion under the Law No. 20 of 2016. Moreover, this article criticizes the term "deletion" as the term is not common in the international discussion on trademark protection. The concept of trademark deletion remains unclear as it is compared with trademark cancellation.

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

*Two Sides of a Dot: Challenges in Enforcing Trademarks in a World of 'New gTLDs'*

Since October 2013, the Internet Corporation for Assigned Names and Numbers (ICANN) has delegated 1227 new generic top-level domain names or new gTLDs. This has not only vastly changed how businesses and internet users interact with one another, but also has provided, and will continue to provide, fresh opportunities for businesses. However, with these new opportunities come new challenges. The aim of this paper is to provide a comprehensive and critical analysis of trademark disputes concerning new gTLDs that have arisen both during and after the process of their delegation. In its first part, the paper considers pre-delegation disputes, which mainly determine whether or not a particular 'string' becomes delegated resulting in its inclusion in the root zone of the hierarchical namespace of the Internet's Domain Name System. Essentially, these disputes concern the 'right' side of the dot. An analysis of the pre-delegation disputes reveal that it generally favours highly fanciful trademarks (e.g. EXXON)—in that unauthorised third parties are never likely to succeed in an application for a new gTLD that is identical or similar to a fanciful mark. Whereas, trademarks that are distinctive in respect of a certain class of products (e.g. COACH), yet comprises a common dictionary word, are not afforded any protection except in circumstances where the new gTLD applicant is a direct competitor of the trademark owner intending to operate a closed registry. As

such, new gTLDs (such as .coach) will easily be delegated, even where they are identical or similar to well-known trademarks. The second part of the paper considers post-delegation disputes, particularly between trademark owners and third parties who have registered domain names with a new gTLD. These are disputes concerning the 'left' side of the dot. An analysis of UDRP disputes involving domain names comprising new gTLDs reveal that dispute settlement panels often ignore the new gTLD in assessing whether a domain name is identical or similar to a trademark. Whereas, unlike gTLDs such as .com, .net or .org, new gTLDs often provide context to the use of a domain name—e.g. the use of 'handbags' with 'coach' in handbags.coach arguably reveal a specific meaning to the average internet user. Yet, in view of the current practices of UDRP panels, it is unlikely that a domain name complaint by a trademark owner with a distinctive, yet non-fanciful trademark (such as COACH), would succeed when their trademark comprises the new gTLD element of a domain name. In sum a consideration of disputes concerning new gTLDs both before and after the delegation process reveal a problematic interplay between ICANN's pre and post delegation dispute resolution mechanisms. The outcome is that those who own non-fanciful trademarks are at a significant disadvantage in the words of new gTLDs.

**Bryan MERCURIO, Faculty of Law, Chinese University of Hong Kong**

*Keep Calm and Carry On: Counter-Intuitive Lessons from the Jurisprudence on Fair and Equitable Treatment and Intellectual Property Rights*

For more than a decade, scaremongers and rationale thinkers worried that the fair and equitable treatment (FET) clause found in countless international investment agreements was being or could be interpreted so broadly as to narrow the legitimate regulatory authority of host states. Governments even reacted to these fears, with the European Union (EU) entirely re-drafting the FET language in its most recent treaties. Investment tribunals have now weighed in on FET as it applies to cases concerning intellectual property rights (IPRs), and thus far the worries regarding the expansion of the clause and narrowing of legitimate regulatory autonomy has proven to be overblown. Instead, the tribunals have if anything have adopted a reserved and (perhaps overly) cautious approach when interpreting IPRs in the investment context. If the trend continues, governments may feel more comfortable in taking action to restrict the use of IPRs. Whether this is for better or worse remains a debate for another day.

**Abhinav Kumar MISHRA, Lloyd Law Colleges Noida**

*Blockchain and IP Law: The Yin and Yen from Technology to IP World*

The Blockchain is one of the most disruptive technology of the 21st century which is leaving a deeper impact on the society. The use of blockchain technology is becoming rampant in each sphere of life. Not only the fintech, but also the law enforcement, registry making, data storage are varied other areas where the technology is being used today. The feature of decentralisation and distributed makes it of good use for the want of diversity and trustless environment. The tamperproof structure and immutable data structure makes this kind of database being used in many of the fields with credibility and without any doubt or hesitance. The Yin and Yen of Chinese mythology represents the balancing of two opposite forces for greater strength and sustainability. As we can find out that Blockchain also is one such technology which can be both subject (to) and means (by) of IP protection. The paper

argues that the IP rights arena needs both yin and yen feature of Blockchain i.e. Protecting the IPs through the use of Blockchain technology (IP management) and protecting the Blockchain technology using various IP protections (IP Protection to support Blockchain). Because of this dual sided mutually coexistence model, Blockchain Technology becomes one of the most disruptive technology for IP Law. In its first part, paper analyses the various IP Laws and applicability on Blockchain technologies. Where in second part of the paper, researcher talks about using the Blockchain technology in IP protection.

**Khadijah MOHAMED, School of Law, University Utara Malaysia (co-author Norain Binti ISMAIL)**

*Intellectual Property Ownership Allocation in Commercialisation of University Research Output*

The roles of universities have evolved significantly in the globalised innovation economy. Along with teaching, research and publication, universities are also expected to contribute to the nation's economic growth through commercialization of research outputs and development of knowledge-based enterprises. In Malaysia, commercialisation of university research findings becomes one of the critical agendas in the National Higher Education Strategic Plan. Starting from 2015, public universities must provide twenty five percent of their operating budgets thus drive them to commercialize their research findings. This development enhances the importance of intellectual property (IP) created by academic researchers. As a result, most universities have established commercialisation offices in managing innovation and creativity activities, IP protection and commercialization opportunities for IP created by academic researchers. University IP Policies have also been introduced. While academic researchers have long been creating material in which IP rights may subsist, given the importance of university IP for commercialisation, questions of ownership and entitlement have become of pressing concern to university administrators, academics, students, government and relevant outside bodies. Prior studies showed that ownership issue is always perceived as critical and especially relevant for team of researchers and different sponsors. University IP policies usually vary on the status of IP creator when considering the ownership of IP rights. Although a model where ownership rights belong to the inventor is by far the most popular IP management model, researchers have to bear in mind that IP ownership belongs to the institution if they are created at a university. In commercialising research output, concerns on university IP ownership basically arise in three situations: (1) the university owns the IP, (2) the sponsor owns the IP, and (3) the university and sponsor jointly own the IP. For each situation, relevant provisions of contract, employment and IP laws should be considered in determining the issue of IP ownership. Through contract, parties are usually flexible to bind themselves to the terms as they deem appropriate and beneficial while under the employment law, IP ownership is based on the terms of contract of service the parties entered into. The various IP rights that are governed by their own statutes (except for trade secrets and unregistered trademarks, which are still governed by the common law) explicitly allocate the provisions on IP ownership as well as co-ownership of IP rights on their exploitation especially when research involves outside sponsors. However, university should consider adapting provisions that are most appropriate to its situation and requirements. This paper examines the above issues based on the relevant legal provisions in Malaysia so that basic information on university IP ownership could assist all stakeholders in understanding commercialisation issue in IP-related matters.

**Zahira MOHD ISHAN, Faculty of Economics and Management, University Putra Malaysia**

*Universities' IP Management Challenges*

This paper explores universities' intellectual property rights (IPR) management challenges in Malaysia. Universities contribute as technology solution providers for industries and communities through the technology transfer activities, which path is pre-determined largely by a cohesion between the researchers, internal system established in the university and external system supporting the IP towards commercialization in the country. It is seen that current laws in the country may pose a new challenge for the IPR managers in universities. Interpretation of a researcher's act in technology transfer activities as conflict of interest to the university may likely occur along the technology transfer activity path, which requires intervention or facilitation by the IPR managers. Current practice of obtaining the university's consent may become a hurdle that would lead to frustration among researchers over the system in the universities. Applying the qualitative legal research approach, this paper suggests means to overcome the likelihood of researcher's conflict of interest in the technology transfer activities.

**Debmita MONDAL, Hidayatullah National Law University**

*Arbitration as an Alternate Remedy to IP Disputes: An Indian Perspective*

Intellectual Property Rights are monopoly rights conferred on the owner or holder of an Intellectual Property (IP) and are statutory in nature. The IP rights granted under the statutes for the limited period to the holder or owner of intellectual property is thus to ensure balance between exclusive rights conferred on the owner or holder of IP and the rights of the members of the State to enjoy the fruits of such intellectual property. Disputes in regards to these statutory rights in intellectual property realm are mostly subjected to adjudication of courts in the respective national legal system. But a popular practice of bringing IP disputes to arbitration platform has emerged in the recent decade primarily based on the argument that IP rights like all other private rights are capable of being a subject of arbitration since its exploitation is premised on a contract between private individuals. The benefits attached to arbitration as an alternate to adjudication in courts are multiple and has been acknowledged across jurisdiction. Unlike adjudication in courts, arbitration allows parties to select arbitrators by parties who have expertise on the relevant laws or have industry exposure to IP issues involved at first hand and therefore are more aware of the nuances and complexities of a given IP dispute. Arbitration is also quicker and more cost effective than court adjudication. However, the primary challenges posed in arbitrability of IP issues arise from the very nature of IP rights which have an erga omnes effect and so arbitral tribunal being a private body does not have the authority to either undo or curb a statutory right as it would require Sovereign/State authority. The issue further develops into the question whether private arbitral tribunal should have the power to decide upon IP disputes which involve right in rem as against right in personam. To address such challenges, Indian Courts have in series of case laws adopted tests to determine when a dispute relating to an IP is arbitrable such as the "Rights Test" or the "Remedies Test". While it is easy to determine cases by arbitral tribunal where the point of dispute is regarding infringement of an IP right between private parties, the questions of validity of the IP right like patent, trademark, copyright itself cannot be dealt by such a forum. This becomes more complex if the IP dispute relate to IP protection over objects of public interest like validity of a pharma patent or agro-chemical patent or copyright protection over books etc... The aim of this presentation is to examine the Indian Jurisprudence behind evolution such

tests for determination of arbitrability of IP rights in a dispute and the hurdles faced in straight jacket implementation of these tests by Indian Courts.

**Helitha Noviamty MUCHTAR, Faculty of Law, Universitas Padjadjaran**

*Protection of Indication of Source of Creative and Innovative Works in West Java to Improve the Economy of Small and Medium Businesses*

The efforts to protect communal intellectual property in Indonesia are currently regulated in several separate laws and regulations. Geographical Indications and Indications of source are regulated in Law Number 20 of 2016 concerning Trademarks and Geographical Indications. Traditional Knowledge is regulated in Law Number 13 of 2016 concerning Patents. While regarding the Expression of Traditional Culture regulated in Law Number 28 of 2014 concerning Copyright. The research method used in this research is analytical descriptive method and comparative method, with normative juridical and sociological juridical approaches. Analytical descriptive method is a descriptive research method or systematic data presentation, to be analyzed linearly, laterally, deductively, inductively, explanatory and dialectically. Whereas the comparative method is a method that bases itself on a comparison of the similarities and differences between national legal systems and legal systems in other countries. Communal wealth owned by the region is expected to improve the welfare of the community, especially small and medium-sized entrepreneurs who make innovative creative works that look like a region.

**Dayananda MURTHY, Damodaran Sanjivayya National Law University**

*Copyright Issues in the Digital Media – Way Forward*

The intellectual and technological impact and entrepreneurial spirit has increased the use of intellectual property efficiently. The growth of intellectual property rights (IPR) in the age of Internet has taken the world to new heights of distinction in providing goods or services. The internet has set new challenges to copyright. Applicability of copyright to computer programs and software has posed greater challenge compared to granting patent. In addition, copyright in the literary work, artistic works, musical work, cinematograph or sound recording and all related rights have undergone a drastic changes. Copyright issues have remained unanswered in digital media. The piracy in the cyber space is widespread and the theft of IP has crossed territorial boundaries. The reproduction and distribution of copies is simple and inexpensive and difficult to control. The international and domestic laws have to ensure protection of copyright protection and regulate the magnitude of illicit consumption of copyright works in digital form. The digital revolution has increased the complexity for legislature and judiciary to provide with sufficient remedies. The Whelan ‘merger’ test and Altai’s “abstraction-filtration-comparison” test had driven the formulations. The WIPO Copyright Treaty, 1996 and WIPO Performances and Phonograms Treaty (WPPP) have been the next generation reforms for copyright protection. In 2012, Copyright law in India was amended to be in tone with the development of international scenario. The Digital Right Management and anti-circumvent measures, scope of rights and liabilities, consequences of infringement versus fair use and its impact on copyright in the digital media with special reference to India will be discussed in this paper. The paper will also make a comparative analysis of the United States of America and the United Kingdom as India is deriving and developing the legal scope of copyright in line with other countries.

**Salvin NAND, The University of Fiji School of Law**

*Access to Medicine in the South Pacific: Endogenous Factors Impeding the Benefits of WTO-TRIPs Agreement*

Access to essential medicines, nested in the right to the highest attainable standard of health, is well founded in international and domestic laws. If not all, most Pacific Island Countries (PICs) Constitution recognize access to essential medicines as a human right which is protected under the Bill of Rights. Although right to health is a basic human right, PICs are net importers of medicines and struggle to maintain a sustainable supply of medicines. Each year, many Pacific Islanders unnecessarily die of poverty-related and diseases, such as malaria, diarrhea, tuberculosis, HIV/AIDS and non-communicable diseases. According to the World Health Organisation life expectancy world ranking, Fiji has the highest death rate from diabetes. Medicines are available but Pacific Islanders often are unable to afford the patented drugs. This is largely because restrictive provisions in international trade agreements, particularly trade related intellectual property rights (TRIPS), are impeding access to essential medicines in developing countries, making medicines unaffordable to poor people. TRIPS provides member States to include in their patent legislation a provision for use without authorization of the patent holder (Compulsory Licensing), as provided in Article 31. However, Article 31(f) of TRIPS has constrained countries that do have manufacturing capacity in their ability to provide assistance because it requires that manufacture under compulsory licensing be predominantly for supply of the domestic market, even when the licence is issued for a national emergency or other circumstance of extreme urgency or for public non-commercial use. This problem was well recognized in Doha negotiations and that show the inclusion of Paragraph 6 in the Doha Declaration. The “Paragraph 6 System” aims to facilitate access to medicines under the TRIPS Agreement to those WTO Members with insufficient or no manufacturing capacities in the pharmaceutical sector and who could face difficulties in making effective use of compulsory licencing under the Agreement. In particular, Paragraph 6 System provides instrumental option of using the TRIPS flexibilities to acquire affordable medicines especially during public health emergencies and pandemics. Despite the associated benefits of Paragraph 6 system, one major problem is that not all PICs are members of WTO and those that are members do not have sufficient domestic legislation, systems and process relating to the procurement and distribution of medicines to realize the full benefits of the WTO-TRIPS Agreement. There are enough academic and policy debate on ‘Patent law’ vs. ‘Patients human rights’ but this research analyses PICs perspectives and explores what endogenous factors that affect the implementation of Paragraph 6 System with particular focus on Fiji. The paper further questions whether PICs would be better-off with a regional procurement division and whether TRIPs could facilitate regional compulsory licensing application.

**Rostam J. NEUWIRTH, Faculty of Law, University of Macau**

*The International Law on Cultural Property as Science Fiction: A Guide to Innovation in the Future of Global Law Making*

Most recently, the number of concepts that qualify as essentially oxymoronic concepts in global discourses in general and in science as well as law to be on the rise. This category of concepts includes notably the related rhetorical figures of oxymora and paradoxes. Their rise in language use first and foremost indicates a change in cognition, communication and cooperation between individuals and states alike. It marks a change from long established culture of contestation as it was described by

Walter B. Gallie in his article in 1956 on “essentially contested concepts”. In law, the challenge posed by oxymora and paradoxes is that they prevent the judge from reaching a clear verdict in the process of deciding a conflict between opposed parties expressing opposite views or contesting each other’s use of identical concepts. Put briefly, it is largely against the dominant mindset of persons trained in law to hold that someone may be guilty and innocent, right and wrong, or diligent and negligent at the same time. Yet, oxymora – which etymologically combine smart and stupid in a single word – do just that. For instance, the oxymoron of culture industry, disputed for a century in international trade law, does just that by meaning that cultural products are both, cultural and economic in nature, and should therefore be governed by both international trade agreements and various agreements aimed at the protection of the diversity of cultural expressions. Similarly, the notion of intellectual property combines apparently contradictory concepts. The same applies to the related concept of cultural property, the intrinsic contradictions of which were described as follows: First, cultural property is contradictory in the very pairing of its core concepts. Property is fixed, possessed, controlled by its owner, and alienable. Culture is none of these things. Thus, cultural property claims tend to fix culture, which if anything is unfixed, dynamic, and unstable. They also tend to sanitize culture, which if it is anything is human and messy, and therefore as ugly as it is beautiful, as destructive as it is creative, as offensive as it is inspiring. The qualification of cultural property as an oxymoron prompts this paper’s aim to cast a critical light on the present framework of the international law on cultural property. Instead, by following the inspiration provided by another oxymoron, the one of science fiction, the paper perceives this linguistic qualification not as a threat to the underlying realm of legal reasoning. Instead, it aims to highlight the potential opportunities that the protection of cultural property reserves for the future of global law and policymaking.

**Phan Quoc NGUYEN, School of Law, Vietnam National University**

*Legal Regulations on University-Industry Technology Transfer from Comparative Perspective between Vietnam and the USA*

Under the context of the economic globalization, to foster the competitiveness of start-ups and enterprises, the technology transfer and the exploitation of invention from universities to enterprises are very necessary. Therefore, the importance of policy and legal rules relating to the transfer of technology is enhanced. In order to ensure the purpose of the University-Industry technology translation, the policy of each country with a tendency individual development will create specific legal mechanisms. However, it cannot deny that with the development of science and technology, the building of coherent and synchronized legal mechanism is imperative. This paper will research, analyze the policy and laws to promote technological transfers of two countries with contrasted economies and scientific-technological levels (USA-an industrialized country and Vietnam-a developing country). Through the differences from the policy and development tendency, we can see the differences from current legal framework between two countries. Finally, the researches will show that although there is the clear differences from economic power and scientific-technological levels, the trend of completion for the policy and legal regulations of two countries relating to technology transfer are affected by the common development of the whole humanity.

**Hang NGUYEN HO BICH, Law School, University of Eastern Finland (co-author Katja LINDROOS)**

*Farmer's Privilege Regulations under Vietnam IP Law and European Union*

The UPOV Convention, on the one hand, recognizes the need to protect the legitimate interests of the breeders. Without the breeders, the new plant varieties are not able to be created and contributed to the whole society. The absolute protection of breeder's rights, however, would create the monopoly to the market and endanger the food security at some levels as well. Consequently, farmers would have to pay an as high price as the breeders wish if the breeder's exclusive rights are not controlled. The consumers, ultimately, have to pay high expenses for necessity food. This would lead to the food insecure situations nationally or even globally, which against the right to food as recognized by the United Nations in 1948. On the other hand, if breeder's rights are not well protected, breeders would not be able to reinvest or develop new plant varieties. The new high productivity generations of plant varieties would not be created, and the society would not be benefited therefrom. The above-mentioned situations are the dilemma that governments have to cope with during their national development. The farmer's privilege is a reasonable policy that can balance and harmonize the benefits between the breeder and farmers. Based on Article 14 of the UPOV Convention, Contracting Party will consider adopting farmer's privilege exemption into its law. Vietnam also contains the farmer's privilege in its Law on Intellectual Property, yet there are many loopholes regarding this provision and the application of this regulation, in reality, is limited still. This article, therefore, analyzes the European Community regulations on farmer's privilege and experiences of applying this right will be employed for Vietnam.

**Saad NUSRULLAH, Punjab University College of Law**

*Green Technology-Role of Patent Law in Protection of Environment. Law, Practice and Way Forward*

Protection of environment from further deterioration and sustainable development in this regard is need of the hour as the same is imperative for survival of living beings on our planet. Development, promotion and use of Green Technology is encouraged throughout the world to achieve objective of environment protection. Patent law can be a very effective tool to promote Green Technology. Also, The Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPs) allows member countries to exclude from patentability inventions the prevention of commercial exploitation of which would be necessary to protect human, animal or plant life or health or to avoid serious prejudice to the environment. Pakistan is a signatory to TRIPs and has opted to provide certain exceptions in the Pakistan Patents Ordinance, 2000 to protect environment and to promote Green Technology. Also, certain provisions, related to protection of BIODIVERSITY, have been included in the Pakistan Patents Ordinance, 2000. However, due to many factors such as illiteracy, poverty, lack of expertise, lack of will and most of all lack of clarity in the law interpretation, applicability and enforceability of the said exceptions is a huge challenge in a third world country like Pakistan. This paper will critically analyze the legal provisions provided in the Pakistan Patent Law regarding exception from patentability of the inventions the prevention of commercial exploitation of which would be necessary to avoid serious prejudice to the environment, current prevailing practices and way forward regarding adequacy, certainty, applicability and enforceability of such exclusions in comparison with other countries of the region.

**Caroline Joelle NWABUEZE, Enugu State University of Science and Technology**

*Enhancing Traditional Cultural Festivals' Economic Value through Geographical Indications: Case Study of New Yam Art Festivals in Nigeria*

As a repository of the cultural creativity of indigenous Igbo communities in Nigeria, Igbo masquerades are festival performances transmitted from generation to generation and connecting the people in the Eastern Region of Nigeria with their history. The indigenous people perform these masquerades according to the native ceremonial calendar or during social events. As such, the masquerade festival is recognized as part of the Igbo cultural heritage and has become a form of cultural entertainment, subject of attraction which is highly valued by the local population, and as a tourist attraction. The instrumental value of cultural heritage has been perceived through its capacity to stimulate tourism development and generate returns in the form of social benefits and economic growth. The return on investments in relation to works of creativity is secured in terms of intellectual property law. Igbo masquerades are the manifestation of cultural expressions produced by a group of communities and contain characteristic elements linked to the traditions developed within the Eastern Region of Nigeria. Geographical indications (GIs) have been defined as a method of indicating the origin of goods and services under the intellectual property system. The question arises whether GIs, as a category of rights, could enhance the valorisation of festival performances owned by a group of communities, representing characteristic elements of common traditional artistic heritage, and developed within a specific region. This paper analyses whether GIs could promote Igbo masquerades characterized by the territorial link between the festival and the Nigerian communities in the Eastern Region, as well as the uniqueness of the festival features, illustration of a cultural heritage common to the region. Firstly, the paper describes the fundamental features of masquerade festivals by indigenous Igbo communities in Nigeria. Then, traditional cultural expressions and their potentialities in terms of the GIs system are examined. The paper concludes with recommendations for proper valorization of the masquerade festivals as distinctive GIs within the Nigerian intellectual property legal system.

**Stefan PAPASTEFANOU, Bucerius Law School**

*Practicability and Significance of Human Dignity in International Patent Law: A Comparison of European, U.S., and Asian Patent Law*

In many of the world's significant patent systems, the implementation of aspects of public policy relating to moral into the patenting procedures has been subject to substantial legal discussion and controversial development. Especially in recent developments of bioethical inventions such as CRISPR and modern weapon technology raising moral concerns, the relationship of innovation and IP law has been fundamentally analyzed. The resulting national patent policies are very different. Both the explicit abandonment of any moral considerations in U.S. patent law and the directly opposed European approach of incorporating aspects of human dignity directly into patent litigation are allowed under Art. 27.2 TRIPS. Asian patent regulation approaches are situated between those extremes, depending on the specific national approach. This paper shows in a detailed, comparative and micro-functional analysis that all such developments are not inherently different and that the seemingly opposed current patentability approaches in all patent regimes are closer than it appears. The approaches also feature significant challenges in their application and functionalities. Furthermore, the analysis shows how the aspect of morality addresses the fundamental function of

patent law, in general, as well as the relation of judicial and legislative power and responsibility. Hence, the results of this analysis will also offer insights into constitutional fundamentals and patent litigation, respectively. Also, the analysis relates the different patent approaches to the national cultural peculiarities, especially regarding the role of human dignity in the context of Asian legal systems. Ultimately, the findings of the analysis show that elements from one jurisdiction's patentability approach can be utilized to improve the other's patenting procedure in terms of addressing the recent challenges of patent law and its interplay with aspects of human dignity and morality in general.

**Ana PENTEADO, University of Notre Dame, Sydney**

*Claiming Anything under the Sun: A Comparative Study of Plants Appropriation in the Intellectual Property Legal Frame*

Genetic Resources (GR) ownership exemplify a new frontier to ethics in science and intellectual property (IP), particularly in regards to genetically modified organisms. GMO's unrivalled useful application has become a commercial opportunity for plant breeders, whose innovative experiments with genes render them intangible protection as personal ownership. A monopoly on genetically modified plants species has generated plenty of varieties, as long as the introgression executed by breeders occurred successfully. Introgression of genetically modified material is innovative but also can create a confrontation to the limits of genetic appropriation. When is it necessary to acknowledge that there are limits to exclude genetic material sourced from plants? Should we become concerned that native plants' genetic codes are not excluded from patents and plant breeders' registration? In this paper, we investigate the Indian approach of exclusion of patentability on Bollgard-II cotton seed subject-matter for patentability in *Monsanto v. Nuziveedu* (2018), a recent decision on the cancellation of an awarded patent for transgenic cottonseed. We contrast that decision with the new proposed legislative reform presented to the Australian Parliament, the Australian Plant Breeder's Rights Bill 2018, in which a broad interpretation on genetic patentability and registration on plants varieties is looked upon favourably, even though Australian indigenous plants are not excluded and may become subject to natural or external interference on hybridisation. Before any discovery or use of genetic material essentially derived from bush plants generating personal property in native species, limits must be set on future scientific discoveries, ensuring the rights and the benefit of local communities.

**Mark PERRY, University of New England (co-author Paul MARTIN)**

*Australian Innovation Policy and Alignment with Intellectual Property Framework*

Intellectual property rights are assumed to be an important part of Australia's innovation landscape, and indeed they do contribute in many ways to creative outputs of the human mind. A fundamental purpose of IP regimes is also taken by most commentators, from judges to politicians, as implicit, and is based on the utilitarian motivation of fostering useful innovation provided by giving rights. Undoubtedly this private incentivisation for creativity and invention plays its part. However, often the other side of the reasoning behind the bargain between the state and private actors is that of the public benefit achieved by providing a formal framework that encourages the distribution of knowledge, ranging from creative arts to functional inventions. Although the use of the term

innovation varies from context to context, there is a common theme of newness, change and application. The “whole-of-government service” at business.gov.au, for example expresses “Innovation generally refers to changing processes or creating more effective processes, products and ideas”, and the Business Council of Australia suggests “Innovation is solving problems by applying knowledge and technology to find the right answers that create value”, with the OECD stating “Innovation is the implementation of a new or significantly improved product (good or service), process, new marketing method or a new organisational method in business practices, workplace organisation or external relations”. The link between IP and ‘innovation’ is also assumed, and indeed forms part of the calculation of rankings of innovation. The most comprehensive worldwide approach to national rankings for innovation are now annually produced through a collaboration between the World Intellectual Property Organisation, INSEAD and Cornell University with some other partners. The WIPO ranking involves a large number of metrics, and these also include local patents as well as PCT filings. This research looks at the known deficiencies in IP regimes, such as the high transaction costs when trying to acquire or defend rights, the limitations within the IP framework for dealing with collective rather than individual innovation, the ongoing unresolved issues around traditional knowledge, and the criticisms of monopoly IP strategies that stifle market entry. We look to target improvement in the effectiveness, efficiency and fairness of the implementation of the IP framework in support of Australia’s national innovation goals. The research looks to systematically identify potential risks and deficiencies in the existing regime, identify the impact of these within the framework of national innovation objectives, explore alternative means to address these issues, and propose reforms to legal rules, administrative arrangements, and other aspects of Australia’s innovation policies.

### **Sovath PHIN, Pannasastra University of Cambodia**

#### *Joint Ownership of Trademark in Cambodia from Comparative Perspective*

Under the Law on Marks, Trade Names and Acts of Unfair Competition (Trademark Law) of Cambodia, there is no provision concerning joint ownership of trademarks but in practice two or three owners of a trademark may file such trademark to the trademark office and have been approved for registration. In the registration procedure, there is also no requirement to submit or file any particular agreement when two or three owners are applicants for filing and registration of a trademark. In light of these facts, there are three relevant issues: first, whether or not the Trademark Law recognizes trademarks as an object of joint ownership; second, without relevant provisions of the Trademark Law, what are the rights and obligations of each joint owner; and third, if a dispute happens, what legal bases the relevant courts will use to decide the case. The presentation will first examine the existing Trademark Law and other relevant laws including patent law, copyright law and Civil Code of Cambodia to assess whether any of these laws could be used to address any of these issues. After examining the existing local laws, the presentation will look into laws and regulations of other countries in order to identify if there is any differences or similarities with the Trademark Law of Cambodia and to find out why they are different or similar. Last, the presentation will provide solutions on how to address these issues in Cambodia from a comparative law perspective.

**Tana PISTORIUS, College of Law, University of South Africa**

*An Intellectual Property Management Perspective on Data-Driven Innovations*

This paper explores some of the challenges that emerging technologies and new data-driven practices pose for traditional notions of intellectual property (IP) law and policy. Due to the nature of regulation, IP law is always a step or two behind technological development. Moreover, law evolves in a reactionary manner. Often law reform focuses on harnessing the potential benefits of a new technology or preventing an erosion of rights posed by a specific technological development. This is true of both IP law and data protection law. The Fourth Industrial Revolution is propelled by data and builds on well-known technologies such as the Internet of Things, big data, data analytics and artificial intelligence. Data-driven innovation and the leveraging of smart technologies can unlock tremendous value and create global opportunities. It is essential for a return on investment to create exclusivity for these data-driven innovations. However, these new data-driven innovations are often intrusive on citizens' privacy. Data protection can impact on the scope and enforcement of IP rights. Competition law also comes into play as access to data impacts on firms' ability to compete. Moreover, the use of data by competitors can both lead to anti-competitive practices such as collusion and price discrimination and to unlawful processing of personal information. The paper explores IP management strategies to address these emerging issues.

**M. Mahindra PRABU, Tamil Nadu National Law University (co-author Royal Raj SUBBURAJ)**

*Interface between Patent and Competition Laws: An Analysis on Recent Trends and Developments in India*

The Interface between Patent and Competition laws revolves around the issue of 'Monopoly' in the market. Though the concept of patent monopoly is different from traditional monopoly, the very idea of competition in the market can be threatened by the discriminatory pricing of patent licenses. To ensure the presence of competition in the market, the 'Standard Essential Patents' (SEPs) are introduced. The SEP is a patent which is declared as an essential industrial standard by the 'Standard Setting Organisation' (SSO). A Patent is an inventor's intangible property and its rights are well defined under various international agreements and national statutory laws. The concept of SEPs doesn't undermine the patentee's rights but acknowledges the patent and its rights. It strives to bring a 'fair, reasonable and non-discriminatory' (FRAND) pricing of patent licences. In fact, the 'SEPs' & 'FRAND' licences created a new business model on patent licensing and update the industry with new inventions and innovations. The concept of SEPs and FRAND licensing are often credited as the product of western countries mainly from the United States, the European Union and the United Kingdom due to their advanced business markets. But there exists no uniform practice even among the developed world. The reason is that the 'FRAND' license is a contractual obligation whereas the territorial laws governing the contracts are different. Further, the patent rights also being territorial, it is pertinent to study the developments in each jurisdiction to have a holistic view of SEPs across the different jurisdictions. The development of SEPs in India is in the nascent stage and it is being developed by judicial interpretations. The decisions rendered by the Delhi High Court in *Ericsson v. Micromax* (2015) and *Philips v. Rajesh Bansal & Others* (2018) are the first of its kind judgment in the field of SEPs in India. This research article is intended to explore those key developments and in particular, the judicial interpretations especially from the Delhi High Court which<sub>52</sub> laid the

foundation. The research primarily focuses on the following issues, they are 1. How the royalty rates are fixed for SEPs in India? 2. Whether a SEP from foreign jurisdiction can be considered equivalent in India? 3. Whether a court entertaining a suit for infringement of patents can decide on anti-competitive issues? 4. Whether the Competition Commission of India (CCI) has jurisdiction over patent matters? 5. Whether the Principle of Exhaustion has any significance in suits concerning SEPs in India? 6. Whether the recent Indian Court decisions on SEPs and FRAND align with rest of the world or it is setting up a new jurisprudence?

**Piergiuseppe PUSCEDDU, Law and Economics Center, University of Tilburg**

*Hic Sunt Dracones? Mapping the Legal Framework Assisting China's Technology Standards Policy*

China's economy has been growing at a fast rate in the past 30 years. While initially this growth was pursued through reforms aimed at boosting the manufacturing sector, it was after joining the WTO that the Country's government, confronted with ageing population and high licensing fees that domestic IT producers had to pay to foreign IP owners, realised that it was necessary to cultivate its innovation capabilities. Said concerns, in particular, have oriented Chinese policy makers to develop what is known as "indigenous innovation" policy, i.e. Chinese owned technology and standards. Said technology policy has formed object of academic study, with important contributions to the understanding of the Chinese standardization strategy – in particular in the IT domain – coming from different disciplines, political economy in particular. Scholars dealing with the issues surrounding innovation and technology policies are acquainted with terms such as techno-nationalism, techno-globalism and neo techno-nationalism, concepts that have abundantly being explored in the narrative over Chinese technology standard setting policies. Although these concepts are useful in order to provide an important account of the dynamics behind technology standards setting policies, and their repercussion on foreign policy, few contributions have explored the legal dimension of standardization in China. This article aims at filling this gap, and attempts at providing an account of the legal aspects surrounding China's technology standardization policy. The article is organised as follows. Part I introduces the problem. Part II tracks the evolution of the Chinese standardization regime. Part III discusses the Indigenous Innovation policy. Part IV analyses the legal framework for standardization. Part V concludes summarising the main findings.

**Ziyan QIU, Nagoya University Graduate School of Law**

*Patent Infringement by Multiple Actors and Extraterritorial Patent Enforcement: Focusing on Cross-Border Scenarios*

According to the fundamental principle of patent law, patent infringement arises when all of the limitations in a particular claim are practiced literally or equivalently. As patent law is initially designed to deal with the circumstance of unified infringement by a single actor, when two or more parties are engaging in the process of practicing the patented invention, difficulties arise in determining patent infringement and imposing liability upon a party who hasn't completed the entire patented claims alone. Traditionally, such problems are mainly resolved by the doctrine of joint infringement or indirect infringement. Nonetheless, there are still loopholes remaining in each patent system through which parties can easily structure their activities to circumvent patent infringement liability, such as the so-called "divided infringement" dilemma in the United States. Furthermore, in

recent years, economic globalization along with the advancement of technology contribute to the rapid, cost-efficient dissemination of both tangible goods and intangible information, resulting in the increase of cases where patented inventions are being practiced by multiple actors situated in different jurisdictions. For instance, the manufacture of patented products is often modularized and involves cross-border production. Moreover, when combined with computer networks, of which the prominent feature is permitting geographically distributed use, a patented system or patented process might be practiced as a result of aggregating separate work done by parties in different locations. Besides the aforementioned problems concerning multi-actor infringement, the territorial nature of patent law has added to the complexities of addressing these scenarios. Consequently, from the perspective of substantial law, no country's patent law may cover such cross border conducts, even if the inventor owns patents in each relevant country. From the perspective of private international law, when there is a conflict of law between countries, the extraterritorial application of foreign patent law may be denied due to the principle of territoriality. Focusing on scenarios where multiple actors are practicing patented inventions dividedly in different jurisdictions, this article comparatively reviews the laws and cases of China, Japan and US, aiming to diminish the ambiguities in determining patent infringement and put forward proposals to pave the way for extraterritorial patent right enforcement. To begin with, this article outlines the basic parameters of tort liability and patent infringement rules, and explores the evolution of multi-actor infringement doctrine in cases. The article later discusses the principle of territoriality, turning to courts' recent elaborations and provisions with a potential extraterritorial effect. To complete the analysis of multi-actor infringement at transnational level, the article employs several hypothetical examples, related to patented product and patented process, to compare policies and practices among countries.

**Joost POORT and João Pedro QUINTAIS, Faculty of Law, University of Amsterdam**

*Global Online Piracy Study*

Building on a recent set of studies by the authors, this paper combines legal and empirical economic analysis to examine the acquisition and consumption of music, films, series, books and games through various legal and illegal channels in a set of 13 countries in Europe (France, Germany, the Netherlands, Poland, Spain, Sweden), the Americas (Brazil, Canada) and Asia (Hong Kong, Indonesia, Japan, Thailand). The analysis relies on a consumer survey among nearly 35,000 respondents, including over 7,000 minors, in those 13 countries, as well as on comparative legal research of copyright legislation and enforcement. The illegal channels considered are downloading and streaming from illegal sources (including via dedicated technical devices), and stream-ripping. The legal analysis further addresses the controversial legal status of hyperlinking and the sale of kodi boxes. The paper aims to: (i) provide factual information about the state of authorized and unauthorized acquisition and consumption of content; (ii) assess the underlying motives and mechanisms and the link with enforcement measures and legal supply; and (iii) assess the effect of online piracy on consumption from legal sources. On the legal front, we conclude that most of the activities studied are qualified as direct copyright infringement by users or give rise to liability for online intermediaries. Moreover, the latter are often subject to injunctions and duties of care even when they benefit from safe harbors. On the whole, copyright holders have a vast arsenal of enforcement measures, with a trend in many countries toward civil or administrative measures aimed at blocking websites providing access to infringing content. Still, the perceived effectiveness of enforcement measures is questionable, suggesting that the answer to piracy should be sought elsewhere, namely in the provision of affordable and convenient legal access to copyright-protected

content. On the empirical front, sales data reveal that across all content types and formats, per capita income is an important driver of expenditures (up to €30,000). Despite a decline in physical sales, the increase in digital sales led to net growth for all content categories between 2014 and 2017 in most countries. Expenditures on live concerts and cinema visits are also growing. The paper further identifies the countries where piracy is more and less prevalent, showing that at a country level online piracy correlates remarkably strongly with a lack of purchasing power. In other words, higher per capita income coincides with a lower number of pirates per legal users. Moreover, it is clear that pirates are also legal users, with their median legal consumption being typically twice that of non-pirating legal users. Finally, although the analysis confirms earlier studies in finding statistical evidence that illegal consumption displaces legal consumption of recorded music, films/series, games and books, we find no displacement for minors and a positive effect for live music. Moreover, longitudinal analysis reveals that over a three-year time span, changes in legal and illegal consumption are positively correlated. It appears that improvements in the availability from legal channels are dominant and changes in personal preferences affect legal and illegal consumption alike.

**Dao Thi Mai QUYEN, CIRAD (co-author Ha Le Thi Thu)**

*Geographical Indications in the EU-Vietnam Free Trade Agreement: What Stands Beyond the “Geographical” Essence?*

Geographical indications (GIs) refer to signs used on a product whose specific quality, reputation or other characteristics are essentially due to its place of origin. Known as a pioneer in setting up a comprehensive sui generis protection system for GIs, the European Union (EU) has effortlessly encompassed its internal benchmark of GI protection in a number of bilateral negotiations with Asian countries such as South Korea, Singapore, Malaysia and Vietnam. Finalized at the end of 2015, the EU-Vietnam free trade agreement (EVFTA) has marked another successive breakthrough of the EU in exporting its long-standing sui generis regime of GI protection. With respect to the scope of protection, the GI chapter in EVFTA has introduced a peculiar rule that arguably touches upon the non-geographical element which might not be inherent in GI-denominated products. Accordingly, Article 6.5.1(a)(iii) of EVFTA requires one Party to provide legal means against an act of using a mutually protected GI of the other Party for any products that fall within the product class specified in the mutual protection list and that does emanate from the country of origin but fails to comply with the “laws and regulations” of the other Party that would apply to the consumption of such products in the other Party. This paper thus seeks to define the “laws and regulations” as such within the meaning of food safety, animal and plant health standards. It also discusses the extent to which international standards on sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) might be reflected as non-geographical elements for the purpose of GI protection within EVFTA.

**Laina RAFIANTI, Faculty of Law, Universitas Padjadjaran (co-author Miranda RISANG AYU)**

*National Collective Management System of Songs and Music in Indonesia*

In 2014, Indonesian law number 28 amended the old copyright law number 19 of 2002 and becomes the first Indonesian intellectual property law that laying down a legal basis to implement the fulfillment of authors’ rights and related rights through a royalty management system. This law

devotes a chapter to acknowledge important function of collecting societies or collective management organizations in Indonesia to put in place practices of several collective management organizations which had been existed since 1980 on behalf of the authors' proprietors. Interestingly, article 89 of the law mentions the existence of two national collective management organizations: the national collective management organizations for authors and related rights. The first national collective management organizations were obligated to evaluate several existing collective management organizations to renew their operational permits, to submit a recommendation for a new collective management organization, to coordinate the effectiveness and efficiency of the existing collective management organizations to collect and distribute royalties in the most effective and comfortable manner for users, and to rise the economic benefits of songs and musical works of the proprietors through a new distributions' mechanism. During the 3 year period of their duties, the national collective management organizations have added 12 other commercial sectors as the users as well as royalty payers beside karaoke. However, until the end of their working period on January, 2018, the commercial users in the internet has not been covered. Albeit the biggest amount of royalty's collection in Indonesian history that had been successfully collected by the national collective management organizations, tensions had also been occurred due to the different systems practiced by a number of existing collective management organizations under the coordination of the national collective management organizations. This paper tries to address the role and function of national collective management organization (NCMO) and collective management organizations (CMOs) for authors and related rights of songs and music based on the existing law and implementing regulations, the advantages and disadvantages of the in-built management system of royalties, and the best way to establish a 'one stop shop' national system of collecting and distributing royalties. The qualitative data of this paper were obtained and analyzed from the contents of laws and implementing regulations, formal reports, in depth observation and interviews with selected source persons on the fields. Due to the uniqueness of the existence of the national collective management organizations, this paper also used comparative study with a similar system found in Brazil. The results of the research in this paper shows that the national management system of royalties is a unique and effective system to rise the economic benefits for authors and related right proprietors. Yet, the system needs to be further transformed in a manner that would be more acceptable by all collective management organizations and more applicable to collect royalties from the usages of copyright works, especially in the internet.

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

*Disclosure of Origin and Benefit Sharing in the Case of Genetic Resources' Problem and Solution for Preventing Biopiracy in Indonesia*

The paper highlights that Indonesian policies and laws to control access to genetic resources and ensure fair benefit sharing, including their effectiveness has been questionable. The policy and laws have lagged behind the practice of complexity and diversity of biopiracy, bioprospecting and commercial activities in the case of plant genetic resources for agriculture that are poorly recognized. Therefore, this paper exposes some key issues that remain unresolved in the run-up to finalizing an regime on access and benefit sharing (ABS) in Indonesia. Furthermore, the paper will analysis the effectiveness of new provisions in Indonesian Patent Act imposing patent applicants to disclose the origin of genetic resources and to share benefit for the utilization of genetic resources, in relation to prevent biopiracy and sustainable use of genetic resources. However, this paper recognizes the problems of implementing the provisions at normative and practical level. The normative challenge

may arise since the provision needs further regulations to facilitate access and ensure fair and equitable benefit sharing such as regulation on Prior Informed Concern (PIC), Mutually Agreed Terms (MAT), Multilateral System of Access, and other code of conducts to administer the ABS issues, etc. At practical level, the problem of follow-up mechanisms and institutional framework remains unclear and questionable. Thus, the paper advises that developing the legislative and the institutional framework on ABS, including adopting international model laws and guidelines will be the strategic solutions for addressing those problems.

**Tharindu H. RATHNAYAKE and Dylan Tharindu RATHNAYAKE, The Open University of Sri Lanka**

*An Investigation of Social Media Users' Awareness on IP Rights and IP Violations: A Case of Sri Lankan Facebook Users*

Within the changing global communication landscape, Social Networking Sites (Social Media) such as Facebook, YouTube, Instagram and Twitter have become invariably important in individuals' lives due to the influence of social media on their communication habits. It is observable that share of communications occur in these new platforms is rapidly increasing as individuals deeply engaging in social media (Berthon, Pitt, and Campbell, 2008). Further, beyond just a mere communication platform, social media has become an act of supporting social issues or political issues through various social media activities. Among different social networking sites, Facebook is one of the most famous social networking sites and utilized for different purposes in different parts of the world (Boyd and Ellison 2007). In comparison to traditional media, social networks such as Facebook allows individuals to write, comment, like & share content. With this unique nature, social media has gained the recent attention of scholars from various disciplines due to both its business and social implications. However, despite the fact that social media has such implications, less scholarly attention has been given to the issues that have aroused in social media usage by individuals. It is notable that many IP violations occur in social media platforms and less empirical evidences can be found regarding such IP related issues. When Social Media and Intellectual Property issues are concerned, defamation, patent, copyright and trademark are prominent areas which need to be concerned. Even though Sri Lankan government established Computer Crime Act, No. 24 of 2007 to deal primarily with computer related crimes, hacking offences and Intellectual Property Act, No. 36 of 2003 for deal with copyright and related rights, it does not directly deal with social media IP violations. Therefore, the objective of this study is to explore Social Media Users' Awareness on IP Rights and IP Violations with reference to Facebook users in Sri Lanka. The research was qualitative in nature and guided by interpretative research paradigm. In-depth interviews were conducted to collect data where the unit of analysis was individual Facebook users. Data was then analyzed using thematic analysis. The findings clearly depict that Sri Lankan Facebook users have a less awareness on IP rights and possible IP violations that might occur in social media platforms such as Facebook. These findings shed lights on the government to bring necessary regulations to minimize such IP violations and it urges policy makers to undertake appropriate mechanisms to increase the level of individuals' awareness on IP rights, IP violations in social media and its possible consequences.

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

### *Academia–Industry Collaboration for Commercialisation of Intellectual Property: Problems and Prospects in Asian Region*

University is a place of higher learning where ‘skilled human resources’ are created through ‘knowledge resources’ for scientific, cultural, industrial and human development. Keeping the objectives in mind, the government establishes infrastructural, consumer and academic industries. The universities have the potential to play a central role as dynamos of growth in the innovation process and be a huge generators of wealth. The invention in the university can lead to innovation in the course of teaching and bring academic- economic benefit to the stake holders. The university makes the student think, question and interpret for the creation of intellectual property. This is why teaching and research go together. Research is creation of knowledge, teaching is dissemination of knowledge and authoring is diffusion of knowledge. The authors, teachers and researchers are engine of innovation/invention, modernisation and civilisation. But very few universities’ ‘research and development’ wing could have framed this objective, mission and vision in Asia. In order to activate the Indian universities, a bill named ‘protection and utilization of public funded intellectual property (PUPFIP)’ was introduced in Parliament in 2008 which was inspired from BAYH-DOLE Act (BDA), 1980 of USA. The Act was implemented in 1981, facilitating patenting by American Universities. The bill aimed to integrate teaching and research with industry, encourage the faculty scientist to innovate and get the IP patented. The provision of sharing of royalty shows the objectives of self-reliance. This can lead to collaboration in between government institutions and industry. The ultimate purpose is to awaken the universities for their role in socio-economic development. But the bill is still pending along with the National innovation and trade secret Bill 2008. Although the national Intellectual policy has been framed in 2016. The policy has novel vision but without legislative support. But South Africa could legislate as ‘INTELLECTUAL PROPERTY RIGHTS FROM PUBLICLY FINANCED RESEARCH AND DEVELOPMENT (IPRPFRD) ACT’, in 2008. This legislation has brought revolution in research in universities and around twenty percent increase in IP creation has been registered. The universities have been authorised to register IP from public funded research institutions, adding to prosperity and employment. In this context, the paper seeks to study the viability of intellectual property creation in Asian region, if the universities are associated with industry. However, the private universities also can be included in this industry- technology movement. But the universities are suffering from shortage of adequate number of experienced teachers, material infrastructure, legislative mandate and visionary leadership. The curriculum is purely theoretical and degree oriented. There is no passion for producing an employment ready-workforce. The academia-industry collaboration requires to be extended to all the professional as well non-professional courses, i.e. engineering, medical, fashion technology, legal studies, and hotel & tourism technology. Even the ‘doctoral research’ requires to be socio-industry oriented. The department of literature/humanities can be the best feeder to the cultural industries. Can there be such remodeling of academics-industry without the regional movement or world leadership, i.e. WIPO and WTO?

**OK SAIDIN, Faculty of Law, University of North Sumatra**

*Products with Geographical Indication and Indication of Origin (Study in North Sumatera)*

Geographical indication and appellation of origin are an important part in today's era of commerce. Other than a crucial factor in the quality of the product, indication of geographic is also about the reputation of the product. In North Sumatera, there are many products which have the potential of geographic indication and appellation of origin, but they are yet to be identified and recorded, thus it is becoming the background of this research is significant to be conducted. The method used in this research is a prevalent method in legal study, legal-normative method (doctrinal research) and empirical sociologic method (non-doctrinal research). From the research in three districts of North Sumatera, products with geographic indication were found, which were agricultural products from geographical condition (natural factor); Orange of Berastagi, Passion Fruit of Berastagi, Karo Coffee, Banana of Deli Serdang, Brahrang Rambutan. And then there are products of human factor: Malayan Spicy Porridge, Karo Arsik, Anyang Kepah, Karo Traditional House Design, Malay Traditional House Design, Tumbuk Lada Keris (ceremonial knife), Malayan Tanjak, Batu Bara Songket, Karo Uis Gara (Uis Gatip). Subjects of the right who can apply for the geographic indication are the district government and/or Adat Law Community in the three districts. The support of local government is necessary to maintain the products. As well as for the acceleration of the products in order to compete in national and international market, intervention and alignment to local society or producers (farmers and craftsmen) are necessary in the trading of these products with geographic indication.

**Noor Asyikeen Binti Mohd SALLEH, Faculty of Law, University of Malaya**

*Worldwide Challenges Impairing Enforcement of Trade Secret Protection*

The purpose of this paper is to examine a number of challenges impairing enforcement of trade secrets protection globally wherein further research and development are encouraged to be performed towards providing effective protection of trade secrets comprehensively. The first challenge is that current laws protecting trade secrets and efforts to enforce them in many countries remain relatively weak. Secondly, the worldwide growing numbers of cyber economic espionage and theft of trade secret. Last but not least, employment mobility affecting trade secret protection.

**Edy SANTOSO, Nusantara Islamic University**

*Computer Software Protection on Social Innovation in Supporting the Creative Industry*

Nowadays, in its development, Information and Communication Technology (ICT) allows to creating a commerce activity based on application what it calls with 'e-commerce'. In some countries, such as Indonesia, the development of e-commerce has birth a new model of Transportation Network Companies (TNCs) services which previously unknown, such as Uber and then it were followed by Grab, and Go-Jek. It led to the revolutionary transportation with online base. The emergence of the TNCs is believed to be able to support government programs to enhance the creative industry. Computer Software is a part of creative industries which focus substantially on creating and exploiting intellectual property products that get protection under copyrights regime in some countries. It is to become a trigger to create innovation service by implementing social innovation

concept in this model. Therefore, this paper will examine the matters related to computer software protection on social innovation in a effort to support the creative industry of TNCs .

**Sachin SATHYARAIAN, Forum for Law, Environment, Development and Governance**

*Protecting Geographical Indications in the “Old World” Developing Countries: The Cases of Basmati Rice, Jinhua Ham and Ethiopian Heritage Coffees*

The paper attempts to study how the interests of the “Old World” developing countries are addressed by international legal instruments covering geographical indications (GIs). The standoff between the EU and the US brings in a conflict of “Old World”- “New World” interests into the debate on IP which was already plagued by an overarching North – South imbalance. What are Old World and New World Countries and what are their differences in terms of protecting GIs? In the “Old World” countries, the GIs reflect continuous cultivation and evolution by producers who have remained in the region or the country of origin for centuries. The reputations of their products are based on specific characteristics of their ecosystems and biodiversity and application of creativity and traditional knowledge (TK) by the communities. Can wine manufactured in China be considered an “Old World” product from a developing country? Do all products coming from developing countries within the Old World bracket enjoy the distinction? As opposed to the concept of “terroir” in European countries, most developing countries link the GIs to the national identity in a post-colonial world order. However, the arguments for rural and community development mooted by the EU have captured the imagination of the majority of these developing countries. The paper discusses three case studies, analyzing specific challenges faced by Old World developing countries in protecting their GIs and drawing parallels between their experiences. In all three case studies, protection was necessitated because of usurpation by private companies. In terms of territoriality and the role of governments in protecting GIs, the first case study is that of India’s attempts at protecting Basmati rice. Which organizations can legitimately apply for a collective mark? Which areas can be demarcated for the cultivation of a particular product? Both the international and intra-national challenges to the protection of Basmati are discussed. The second case study is that of Jinhua ham, where the Chinese three-tier system creates consumer confusion, overlap and conflict of rights between GIs and trademarks. Can a private company without any geographical significance claim priority using trademarks over the community that lives and engages in production within the region? To what extent is the link between producers and consumers important in ascertaining the level of protection? The final case study is the Ethiopian model on heritage coffees as an adaptive system that was designed outside the GI framework. Does the absence of a GI regime create a hindrance to the protection of agricultural products in developing countries? Should Old World developing countries focus on efforts on the “claw back” of generic names or adopt strategies to capitalize on the visibility?

**Keita SATO, Chuo Law School, Chuo University**

*Droit de Suite in Japan—Pessimistic Long Road to Get New Legislation*

Several countries such as Senegal and Congo proposed that “droit de suite” should be included in the agenda of WIPO SCCR meeting. However, Delegation of Japan opposed their proposals. At the SCCR 35 in May 2018, the Delegation of Japan explained its position, “discussion of droit de suite should not be given priority at this moment.” Also in Japan, CISAC (international copyright holders’

organization) and Jaspas (Japanese Society for Protecting Artists' Rights) hold a press conference, but almost got no response. I would like to discuss why Japan is in such pessimistic mood to have legislation of droit de suite. I can point out several reasons. 1) Need for droit de suite is not enough explained, 2) Rich people would oppose introduction of remuneration scheme since it may infringe freedom of contract rule. If remuneration scheme of droit de suite is introduced, price of artwork is opened to the public. Rich people may want price of art work transaction kept secret. In this presentation, I would explain other reasons, and my proposals to have legislation.

**Owais Hassan SHAIKH, Shaheed Zulfiqar Ali Bhutto University of Law (co-author Ashish BHARADWAY)**

*Strategic Actions Speak Louder than Words? A Framework for National IP Policy Making*

Formulating national intellectual property policies (NIPPs) is a recent phenomenon in developing countries, which is gaining momentum as intangible knowledge and IPRs become important constituents in economic growth and development priorities. In this paper, we make, perhaps the first, framework to comprehensively study and understand the structure and contents of national IP policies. We attempt to identify the various goals of an IP policy and the means to achieve them, as stated in the strategic actions outlined in an IP policy document. After looking at more than 500 strategic actions from the IP policies of selected African countries that are at the initial stages of economic development, we start with identifying, through our Goals-and-Means Framework, how the IP policy goals are realized by the strategic actions that make up the implementation plan. For each IP policy, we identify one or more of the five goals for each strategic action: incentivizing innovation, stimulating competition, enabling access, preserving domestic traditional resources and protecting intellectual property rights. Simultaneously, we identify one or more means of executing the strategic actions to achieve the above-mentioned goals: creating awareness, building capacity, ensuring compliance with international and/or national legal standards/policies, administrative proficiency and effective enforcement. The Goal-and-Means Framework aims to locate the focus of the national IP policy so that policy makers are able to align it better with the national priorities and also to maximize the efficient use of limited resources to achieve the policy goals. Mere assessment of the IP policy gets the job only half done. Therefore, we also present a framework for IP policy making, referred to as the 'NIPP Cube'. The NIPP cube assists policymakers in constructing an IP policy by linking different strands of IP with overall development priorities and national imperatives. Admittedly, the NIPP Cube is not a replacement of the knowledge and expertise of a policymaker. Rather, it is a supportive tool for lateral thinking in preparing a holistic IP policy ensuring that it is in sync with other socio-economic and development policies of a country. Each of the six sides of the NIPP cube represents an integral constituent of an IP system, which are: type of IP right, primary beneficiary/stakeholder, proposed impact areas, primary policy implementer, time horizon and underlying vision.

**Kavita SHARMA, Rajiv Gandhi School of Intellectual Property Law, Indian Institute of Technology (co-author M. PADMNAVATI)**

*Artificial Intelligence and Patents in Indian Healthcare Sector: Legal Issues and Challenges*

Artificial Intelligence is set to revolutionise drug research and trials. As such its role in healthcare has attracted investment. With a promise of enhancing performance in the healthcare sector and complementing human skills, Artificial Intelligence has considerably expanded the scope of human activities. Whether it is the detection of fractures and skin lesions or improving efficiency in patient admission and discharge, the use of Artificial Intelligence is diverse and complex. Reports suggest that by 2035 Artificial Intelligence will become a major business driver in India. Some States in India have begun to provide support to Artificial Intelligence start-ups with the help of policy framework and fund. The top Indian healthcare companies have already entered into tie-ups with Artificial Intelligence companies. Indian pharmaceutical companies are not far behind, with most of them using Artificial Intelligence for drug discovery such as targeted molecule discovery. Be it in the manufacturing of medical equipment and supplies or in medical insurance, rapid application of Artificial Intelligence is already being realised. With the growth of Artificial Intelligence in the Indian healthcare sector, the filing of patents is expected to increase considerably with respect to pharmaceutical products. However, the patent eligibility requirements for Artificial Intelligence-based inventions would be restrictive in India as implementation of Artificial Intelligence utilises advanced software programming. Therefore, it is important to analyse how Artificial Intelligence-based claims or systems would be prosecuted or otherwise dealt with by the patent office in India. The present study seeks to identify comparative patent prosecution of Artificial Intelligence-based inventions in a patent family. Further, identifying the scope of Indian Patents Act, 1970 in relation to Artificial Intelligence-based inventions would provide an understanding of the prospects and challenges of Artificial Intelligence in Indian healthcare sector.

**Rudra SHARMA, National Law College, Tribhuvan University**

*Intellectual Property Policy of Nepal*

The international community had been prescribing Nepal for decades to make an Intellectual Property (IP) Policy so that all the reforms related to intellectual property could be channelized into one stream. Nepal finally made the IP policy 2017. The major concern for international community in Nepal in terms of IPR are mainly two – protection of trademark especially well-known trademark and geographical indication (GI). Proper utilization of the GI could pave a way for huge contribution towards Nepalese economy which is basically an agricultural economy. Protection of IP in Nepal relates to the policies and practices of India and China as Nepal is between India and China. Therefore, the Intellectual Property Policy, 2017 of Nepal need to be compared with the IP Policy, 2016 of India. It is obvious that any global company or any business which is aspiring to be global need to protect its intellectual property especially trademark in Nepal. But, how to protect it? It remains a serious legal question. Common law provides for protection without registration. But, civil law provides protection according to registration. Protection on the basis of being well-known mark is another prominent issue. However, it has been difficult to establish one's right until and unless it is registered. Global companies which did not register their trademark in Nepal are paying high price for such non-registration. Therefore, the IP, 2017 of need to be compared closely with the Intellectual Property Policy 2016 of India. The IP policy of India has following seven objectives: IPR Awareness: Outreach and Promotion - To create public awareness about the economic, social and cultural benefits of IPRs among all sections of society; Generation of IPRs - To stimulate the generation of IPRs; Legal and Legislative Framework - To have strong and effective IPR laws, which balance the interests of rights owners with larger public interest; Administration and Management - To modernize and strengthen service oriented IPR administration; Commercialization of IPRs - Get value for IPRs

through commercialization; Enforcement and Adjudication - To strengthen the enforcement and adjudicatory mechanisms for combating IPR infringements; Human Capital Development - To strengthen and expand human resources, institutions and capacities for teaching, training, research and skill building in IPRs. The IP policy of Nepal also tries to cover very many things starting from traditional kinds of IPs like copyright policy, trademark policy, patent policy etc to recent developments like biodiversity etc. However, it is still not perfect. The IP policy need to be revised to make it more comprehensive and workable. Further, Nepal need to reform laws, institutions and practices based on the IP policy. Nepal is still working with an old IP Act called Patent Design and Trademark Act, 1965 which can be considered as one of the oldest IP laws of the world. A draft of a new and comprehensive IP law is making round for more than two decades. Therefore, a detail comparison of IP policy of Nepal with India and other countries is highly desirable.

**Chung-Lun SHEN, National Chenchi University College of Law**

*Patent Infringement and Artificial Intelligence: Reflection on Patent Law to Recognize AI as the Party Concerned Liable for Patent Infringement*

Unlike the recent other emerging technologies, being merely addressed in their instrumentality, the technology of artificial intelligence has been moving further to bring in the potentially disruptive effect on autonomous innovation. In order to respond to the possible challenges caused by artificial intelligence to current intellectual property laws, the scholarship always worries whether intellectual property laws should be refined to recognize the robotics embedded with artificial intelligence as an inventor or author provided that they have really done autonomous contribution or expression on the invention or work. While the supporters thinks admitting the ownership of IP enjoyed by the robotics would be conducive to fulfilment of legislative policy encouraging innovation under IP law, the opponents questions the ignorance of human's design and training over artificial intelligence to recognize directly the robotics as the inventor or author. As a matter fact, besides the issue of ownership under IP law, the liability of IP infringement under artificial intelligence is also worth exploring but few academic works have delivered the concerns about the issue. Analogous to the dispute of ownership in the innovative result done by artificial intelligence, the issue of determination of the party liable for IP infringement might be anticipated in the practice of artificial intelligence in R&D and facilitating the products or services in the market. To take patent law for example, as to whether the robotics embedded with artificial intelligence would be liable for patent infringement or be entitled to the interests secured by the exception of patent rights, it fully relies upon the extent of the robotics' autonomous recognition and decision on commitment of patent infringement. It's the main focus of the article to seek the justification and possible criteria to evaluate, in the practice of artificial intelligence, whether the autonomy artificial intelligence created sufficiently leads to its ultimate burden of liability of patent infringement. Otherwise, it is reasonable to infer that the human creating and training artificial intelligence should be, jointly with the robotics, liable for patent infringement, or let the human solely liable for such the result. Moreover, even though artificial intelligence might be liable for patent infringement. It is necessary to examine an ensuing issue on how to make the liability of artificial intelligence fit in the current legal system where merely respects

the qualification of the human being for liability. The answer is highly relevant to the smooth operation of the provisions about remedies under patent law when patent infringement was done by artificial intelligence. The article will discuss the issue thoroughly as well.

**Rujita SHENOY, National Law University Odisha**

*Lessons from US Hatch Waxman Act and BPCIA: Really Regulating Competition?*

In the light of expiry of patents of many biologics, there is great scope for generic pharmaceutical companies to come up with biosimilar drugs which are not like generic drugs. Thus, biosimilar drugs are different and more complicated than chemical drugs, biosimilar therapeutic products include insulin, erythropoietin, chorionic gonadotropin, streptokinase, interferon and heparin. The incentivising mechanism for drug innovators continued by means of Biologics Price Competition and Innovation Act (hereafter BPCIA), in case of biologics and the Hatch-Waxman Amendments in the United States of America. If the provisions in Hatch Waxman give way to anti-competitive practices between patent holder and generic manufacturer by delaying the entry generics by settlement and offering sharing of market for the delay thus resulting in patent monopoly abuse, finally US supreme court in Actavis case holding it as an anticompetitive practise. The attempt of this paper is to examine the provisions of BPCIA. Act, whether it leaves any scope for anticompetitive practice, because unlike the Hatch-Waxman act BPCIA is structured differently to avoid anti-competitive practises learning from the past experience. Is it really successful in regulating anti-competitive practises will be explored. It will be also explored whether BPCIA is successful in regulating anti-competitive practises in case of biosimilar drugs and what lesson can be learned from US experience for Asian countries. Thus the paper delves in to the positive and negative aspect of BPCIA. The paper also examines the anti-competitive practice between biosimilars applications and patent holder of biologics, by analysing the ongoing recent ligations. Celltrion and Pfizer's Inflectra (infliximab-dyyb), a biosimilar to Johnson & Johnson's Remicade (infliximab), which was approved has been challenged by Johnson & Johnson for patent infringement. So the lack of exclusivity period for the first noninterchangeable biosimilar potentially limits the incentives for early biosimilar entry and less likely to cause anti-competitive practise. But J&J found out a way out to block biosimilars of Pfizer. Recently, Pfizer sued J&J for anti-competitive practise, where insurers reversed course after J&J threatened to withhold significant rebates unless insurers agreed to "biosimilar-exclusion" contracts that effectively block coverage for Inflectra and other infliximab biosimilars. Thus blocking cheap biosimilars in the market. The paper also examines the Indian situation in case of biologics. In India also the situation remains the same where biosimilars are facing anti-competitive practises of patent holders to block biologics, recent CCI decision throws light in to it where Roche create an impression about the propriety of the approvals granted, the safety and efficacy of biosimilars, the risk associated and the outcome of the on-going court proceedings in the medical fraternity, including doctors, hospitals, tender authorities, institutes etc blocking biosimilars product of Biocon & Mylan.

**Subhoshree SIL and Mudit TAYAL, IP Litigation, High Court of Delhi**

*Standard Essential Patent (SEP): Judicial Determination of Essentiality and Dynamics of Arriving at FRAND*

With the advent of the fourth generation of the industrial revolution that is Artificial Intelligence (AI) and the Internet of Things (IoT); technological innovation and interoperability between technological devices has become inevitable, and so has the significance of technological Patents, Standardization and SEPs. The elaborate process of Standardization by different Standard Setting Organizations (SSOs), the impact of SSO policies on a patent declaration by the Patent Holders and the purview of SSO review mechanism, together create multi-faceted dynamics in the journey of the Patent getting absorbed as SEP. The Paper aims at dealing with the concept of ‘Essentiality’ in SEPs, involving commercial and technical essentiality, time of declaration, patent claims versus patent analysis in relation to essentiality, determination of ‘essentiality’ during the process of standardization and the parameters of judicial determination of essentiality in SEP litigation around the world. The paper will analyze the impact of the declaration of essentiality on the valuation of Patent and challenges of over-declaration before Standard Setting Organizations (SSOs) along with evidentiary challenges to SEP litigation. As soon as a Patent Holder’s Patent becomes a SEP, the reasonable apprehension of ‘Patent Hold-Up’ and ‘Royalty Stalking’ comes into the scenario, along with its possible impact on Patent Licensing. To prevent such an abuse of position by the Patent Holder, the obligation of licensing the SEP at Fair, Reasonable and Non-Discriminatory (FRAND) rate of royalty was adopted along with the evolution of different approaches of arriving at FRAND rate and FRAND range by different Courts around the world through judicial review; but over the years the ambiguity and complexities surrounding FRAND have made the concept a mere utopian thought. The multi-faceted nature of the SEP licensing process, which makes it the common point of interaction between Competition Law, Contract Law, Intellectual Property Law, makes it most crucial legal polysemy. The authors in this Paper aim at reaching a fixed parameter for the determination of FRAND royalty rates while also determining the appropriate roles for the several stakeholders (the SSOs, Patent holder, licensees, Courts, and Anti-trust regulatory authority) involved in the entire process of standardization and SEP licensing. Over the recent years SEP licensing royalty rates have been challenged by the licensees in the Courts as being contrary to the FRAND obligations imposed by the SSOs upon the patent holder and as an abuse of the dominant status accorded to them through the standardization process, while also challenging the basic premise of essentiality of the patents in question. On the other hand, SEP holders have been strenuously enforcing their intellectual property rights against potential licensees by seeking injunctions. Thus bringing the entire process under the purview of both the Courts and Anti-trust watchdog agencies and creating a dispute of jurisdiction and authority. The Paper thus aims at critically analyzing and resolving the present challenges in terms of judicial review of declarations of Essentiality and determination of FRAND rates, conditions during SEP litigation and licensing, crystallization and segregation of roles for regulatory authorities and formulation of broad SEP licensing guidelines.

**Valerie Selvie SINAGA, Faculty of Law, Atma Jaya Catholic University of Indonesia (co-author Jessica RESTIANA)**

*Patent System in the ASEAN Member Countries: In Search of Effective Ways to Develop a Better Patent System in the Region*

A good Intellectual Property (IP) system undoubtedly has positive impact on economy as it is able to help attracting foreign investment and encouraging the advancement of science and technology in a country. Realizing the importance of IP Rights (IPRs) for the development in the region, there have been much discussion among the ASEAN member states in harmonizing their IP system to encourage more registration and utilization of IPRs in their member countries. However, there are a lot of legal

infrastructures need to be prepared in each of ASEAN member countries and at ASEAN level before the harmonization of IP system can be realized. In patent area, the harmonization idea are even required more efforts since there is also a quite significant difference of technology development among ASEAN member countries. This study would like to assess readiness of the ASEAN in harmonizing its patent system based on the development of patent legal and regulatory framework in each of the ASEAN member states and the initiatives related to IP and patent system have been made at regional level. This study would also recommend the effective ways for developing patent system that encourages better utilization of patent in the ASEAN region.

**Manveen SINGH, Jindal Global Law School**

*Tracing the Evolution of Standards and Standards-Setting Organizations in the ICT Era*

Standards and standards-setting organizations (SSOs) have played a crucial role in shaping the innovation landscape for over three decades, especially in the information and communication technologies (ICT) sector. The advancement in mobile telecommunication and the Internet has led to a fundamental change in the way individuals communicate with each other. Devices such as smartphones, tablets, laptops and smart watches bear complex mechanical and technological features and perform multiple functionalities by connecting seamlessly. However, in order for the interoperability of these devices and their functionalities to come through, there is a requirement of a common set of specifications and interfaces, in the form of standards. Standards are widely acknowledged to be the mainstay of modern economy and can lead to an increase in the value of consumer products, as well as increased rates of innovation. The setting of standards and commercializing of innovation at large is facilitated by voluntary associations called SSOs. Competing firms come together under the auspices of SSOs to collaboratively select and adopt uniform technical standards. It is worth noting that the benefits brought about by these standards have a greater visibility in the ICT sector, primarily on account of two reasons. First, in order to make complex technologies work, there is a requirement of hundreds of thousands of patents. Second, there is a strong need for devices and networks to interoperate in the ICT sector, which makes it absolutely necessary to develop common technical standards. SSOs are further tasked with the responsibility of fostering a regime of rapid technological innovation by balancing the interests of their members; their membership comprising of patent owners or standard essential patent (SEP) holders on one hand and implementers or licensees on the other. While the patent owners are involved in research and development (R&D) and look to maximize their earnings from licensing out their SEPs, the implementers look to seek licenses from SEP holders on terms that are fair, reasonable and non-discriminatory (FRAND), in order to use the patented technology in the manufacturing of standard-compliant end-use products. There is yet, a third category of member companies that are vertically integrated and besides owning SEPs, also operate actively in the downstream market. As members of SSOs, these firms compete in the market on both, horizontal and vertical levels, which gives rise to a possible likelihood of collusion albeit theoretically. It is because of this aspect of standard-setting, that the role of SSOs becomes extremely important. A pertinent question that arises then is, what are SSOs and how do they function? Furthermore, what is the legality of SSOs and how have they helped in the evolution of industry standards? In an attempt to answer the aforementioned questions, the focus of this paper shall center around standardization and standard-setting organizations, while tracing the evolution of standards and standard-setting activities in the ICT sector.

**Srishti SINGH, United Nation's University for Peace**

*India's Plant Variety Protection Regime: Balancing TRIPS and Farmer's Rights*

India, being a primarily agricultural driven economy, agricultural research including the development of new plant varieties has always remained a top priority of the government. But initially, India did not have any legislation to protect the plant varieties. However, once India became signatory to the Trade Related Aspects of Intellectual Property Rights Agreement (TRIPS) in 1994, to comply with the requirements of the Agreement, particularly Article 27.3(b) of the TRIPS Agreement which laid down that lays members shall provide for protection of plant varieties either by patents or by an effective sui generis protection or both. It has been drafted in a way so as to address the concerns of the developing nations by providing a flexible standard of protection as long as the effectiveness requirements is satisfied. Coming back to India, the existing Indian Patent Act, 1970 proved to be insufficient as it expressly excluded agriculture and horticultural methods of production from patentability. Consequently, Protection of Plant Varieties and Farmers' Rights Act was drafted. The primary purpose of the PPVFR Act is to address India's concerns about protecting the rights of small and marginalized farming communities, while at the same time promoting plant breeding by granting adequate IP rights protection to incentivize further research and innovation in this field. This paper shall discuss in detail the successes and failures of the PPVFR Act & how it has been shaped by both domestic and international pressures. But the paper in its conclusion maintains that the Act has to a great extent, successfully maintained a balance between farmer's rights and breeder's rights. The Act protects farmers' rights to save, use, exchange and share all farm produce, including seeds that fall within the purview of the Act, and it provides protection of indigenous knowledge against unwary monetization.

**Winner SITORIUS, Faculty of Law, Hasanuddin University**

*An Analysis of the Object of Geographical Indication Protection under Indonesian Trademark and Geographical Indication Law*

This paper aimed at studying whether the objects of geographical indication (GI) under Indonesian Trademark and Geographical Indication Law are still in line with the provisions of TRIPs Agreement on GI and whether it will give more benefit to Indonesia rather than to other countries. The approaches used are statutory, conceptual, and comparative approach by analyzing the provisions of TRIPs Agreement, Indonesian's Trademark and Geographical Indication Law, some countries, such as Thailand, Vietnam, India, and Australia. It is concluded that the objects of a geographical indication under Indonesian Law are wider than other countries. They are included natural resources, which are not only in the form of biotic components such as animals, plants, and microorganisms but also components abiotics such as petroleum, natural gas, various types of metals, water, and soil, whereas in other countries the objects are only in the form of biotic components. There is no certainty whether this provision will give more benefit to Indonesia rather than to other countries since up to the recent day there is no registered GI in the form of abiotic components, either from the national applicant or foreign applicant.

**Song XIAOTING, Shanghai International College of Intellectual Property, Tongji University,**

*Fairly Protect Innovations Associated with Traditional Knowledge: The Experience from China*

Traditional knowledge has become one of the most important resource for innovations with the development of science and technology. many innovations derived by or associated with traditional knowledge. These have reduced cost and raise the competitive ability of enterprises, but at the sometimes, many relative litigations have increased. After analyze some of typical intellectual property cases of China, we find that one of the key question involved in this cases is what kind of object and how big scope should be granted by intellectual property law. we hold the opinion that we should classified all kind of innovations associated with traditional knowledge into three categories, and increasing the requirements of intellectual property exclude the “weak innovation” from intellectual property right If these innovations are satisfied the features of heritage or just take traditional knowledge mixed with existing modern technology. Only in this way we could encourage the real and original innovation and preserve the interests of traditional knowledge holders.

**Sumit SONKAR, Faculty of Law, Chinese University of Hong Kong**

*Enforcing Copyright through Website Blocking: Emerging Trends in UK and India*

This article will analyze the developing jurisprudence and legal intricacies of ex-parte interim orders in India and UK, which are being obtained due to the apprehension of copyright violations by production houses and the broadcasters against ISPs, illegal unlicensed distributors, cable operators, and anonymous or unknown defendants on the pretext of safeguarding their economic interests. It will also scrutinize the approach adopted by the Indian and UK courts in stifling piracy by granting relief of blocking of websites. Moreover, an attempt will be made to critically evaluate various empirical studies on the impact of blocking of websites as a measure to curb piracy and its unintended consequences on the industry in terms of competition, innovation, and investment and will elaborate further on whether the results of website blocking harness economic benefits and shake ups entrenched piracy practices as claimed or not.

**Mini SRIVASTAVA, Amity Law School, Amity University**

*Marrakesh Treaty for Persons with Print Disability – A Comparative Legal Discourse in Asia*

The Right to access knowledge is one of the basic human rights. There is a direct relationship between the knowledge and development as the access to knowledge can play a pivotal role in any individual’s key decisions areas such as education, employment, improved health, and social and political participation. These aspects are espoused in numerous human rights treaties, including the Convention on the Rights of Persons with Disabilities (CRPD) which provides concrete obligations in promoting the rights of persons with print disabilities. Those with disabilities often do not have necessary access to information, leading to serious development impacts including lower rates of education and employment and higher rates of poverty. Individuals with disabilities are also

particularly susceptible in times of disaster. Statistically, WIPO reports that 285 million people worldwide are blind or visually impaired. 90% of them live on low incomes in developing and least developed countries. Only 1–7% of books are published in a format they can read like such as braille, audio, e-books or materials with large print. Lack of equitable, timely and affordable access to published works in accessible formats, referred to as a ‘book famine,’ prevents millions of persons with print disabilities around the world from making the most of human development opportunities. Print disability can be caused by visual disabilities such as blindness and low vision, developmental and learning disabilities such as dyslexia and autism, or physical disabilities such as Parkinson’s disease and paralysis. Persons with print disabilities cannot obtain information effectively from print materials in the conventional way – for example, they may not be able to read the text, hold a book or turn pages. Therefore, they require accessible formats. However, due to a lack of published works in accessible formats, the right to knowledge is often out of reach for the nearly 300 million people who are blind, visually impaired or have reading difficulties due to physical or learning disabilities. Ninety percent of these ‘persons with print disabilities’ are estimated to live in developing countries. The lack of equitable, timely and affordable access to written knowledge further exacerbates and perpetuates challenges and rights violations already faced by persons with disabilities. It ultimately hinders global efforts towards inclusive and equitable development. The ‘book famine’ can exclude persons with print disabilities from access to education, employment, health care, culture, or participation in just about any aspect of political, economic and social activities. The 2013 marked a milestone in International Copyright Law regime with the settlement of a new treaty known as The Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired, or Otherwise Print Disabled. The Marrakesh Treaty aims at helping the visually impaired persons to access copyrighted books. The Treaty has a single objective: to increase access to books, magazines and other printed materials for people with print disabilities. It aims to achieve this by making it easier for accessible copies to be created and shared across international borders. By implementing the Marrakesh Treaty, countries can 1) improve the education and life-chances of many of their citizens; 2) implement the principles of international human rights law and 3) stimulate economic development and social progress. One of the unique features of the Marrakesh Treaty is that it is the first treaty to be devoted solely to copyright limitations or exceptions rather than focusing on the rights of the creators. It states that copyright doesn’t apply if a book is reproduced for visually challenged people i.e. in Braille language, audiobooks etc. and even permits cross-border exchange and translation of such books for the benefit of the visually challenged. Lack of books in accessible formats for the blind and visually impaired has been a great barrier to education and employment opportunities, this is especially true in developing and least developed countries. There are an estimated 253 million people worldwide who are visually impaired and have trouble accessing books. Despite the ability to convert print books into accessible formats like Braille, audio, and digital copies, over 95 percent of published works are unavailable to people with print disabilities.

**Preeti Muhammed SRIVASTAVA, Muscat College (co-author Nitha SIJU)**

*Attitude, Perception and Awareness of Intellectual Property Rights (IPR) among College Students in Oman*

Over the last few years, Sultanate of Oman has taken immense efforts in improvising its intellectual property and copyright laws to act in accordance with its FTA obligations. This has resulted in making the copyrights, trade secrets, trademarks and patents to be in line with the WTO’s intellectual property laws. Despite having a strong framework on IPR, the Oman MOCI (Ministry of Commerce and

Industry) have an immense work of tackling the violators which is expensive and time consuming. IPR aspects, issues and implications are not only for Industry but also for Academia, as Universities and Colleges promote the creativity in students and encourages them to be entrepreneurs. Sultanate of Oman is keen in promoting and supporting young creative minds in Universities/Colleges to foster economic growth. HEIs in Oman have an IPR policy which is not only the requirement of the Oman government but also the requirement for Oman Academic Accreditation Authority (OAAA). Various seminars and workshops are organized by various institutions and government to spread the awareness of Intellectual Property rights in Oman. But how far the students' creative ideas or innovation is protected is a debatable topic. The educational institutions sometimes narrow the focus of Intellectual property rights only related to plagiarism and cheating cases, but there is earnest need to know whether there are provisions to protect their innovative ideas and products and also whether the students understand their IPR rights fully or not. The knowledge about Intellectual property rights is an essential element for the students in their education and future development. The knowledge and application of IPR and the future career of a student has a strong link as they are the potential knowledge workers or entrepreneurs and hence there is a need to examine the students' attitude, perception and awareness levels for IPR aspects. The study aims to find out how much the Omani students know, understand and implement IPR aspects in their daily work. It will be interesting to study their attitude, perception and awareness levels regarding IPR and to understand their views regarding the protection of their innovative and creative products/processes or ideas. This is perhaps a maiden attempt to understand the IPR issues in Oman from students' perspective. The research will have both Qualitative and Quantitative approach. The survey design and questionnaires containing the aspects of attitude, perception and awareness will be used to obtain data from the students and the HEIs will be approached and interviewed to find out how they have implemented the IPR in their respective institutions. The research aims at targeting around 200 students across 8 Colleges in Muscat region in Oman. Data will be analysed through SPSS software. The objective of this paper is to fill in the gap in the literature and give recommendations to the College/Universities and government bodies to develop the culture and awareness about IPR reflecting students' perspective.

**Aarthi Priya SUBRAMANI, VIT University**

*Utilisation of Artificial Intelligence in Determination of Patentability of an Invention: The Way Forward*

Inventions have become ubiquitous in the knowledge based society and myriad kinds of inventions are being conceived every day. The next level of Inventions are the conception of Artificial Intelligence, wherein the machine is able to exhibit similar kind of intelligence as a human being. This has led to further advancement in technology sans human intervention. The convergence of Artificial Intelligence in the Patent field makes it even more interesting to delve upon. The contours of Artificial Intelligence are evolving day by day and thereby widening the dynamics of the Patent Law as well. It becomes more interesting, if Artificial Intelligence can be utilised in the determination of Patentability and Patent eligibility of other inventions and innovations. With regard to Patent Eligibility problem arises in drawing the boundary between an abstract idea and the inventive concept or the Natural Phenomenon and the biologically created product. The courts are struggling to decrease the subjectivity in the determination with little success so far. The recent Judgements of *In re Bilski*, *Alice Corporation case* and *Mayo v. Prometheus* stand testimony to this fact. This leads to different judgements for the same invention and the Patentee will always in the fear of his invention being declared not patentable during the twenty year period. Subjectivity hinders the finality of the

determination of Patentability. The probabilities of successfully utilising Artificial Intelligence in these gray areas are appealing. For example, AI Patents is an Artificial Intelligence is utilised in the area of Patent Search. Another popular Artificial Intelligence is TRIZ meaning “theory of the resolution of invention-related tasks” It studies the general pattern of invention around the globe and provides myriad range of solutions to difficult problems. There have been success stories around the globe led by the top market players. Also another Artificial Intelligence known as FSTP, Fact Screening and Transforming Processor determines the creative height of an invention irrespective of the field of technology and determines the Patentability of the Invention. Based on the Laws of the myriad nations it can also determine whether the Invention forms Patent Eligible subject matter. The possibility of FSTP, an Artificial Intelligence replacing objectivity in place of subjectivity in determination of Patentability is high. This can also lend finality to the decisions and quickens the process of determining Patentability. Thus novel Patent models can arise if this Artificial Intelligence comes into vogue. Albeit the advantages of the Artificial Intelligence in Determination of Patent Eligibility and Patent Eligible Subject Matter the profound impact of the applications must be analysed thoroughly. Doubts with regard to its reliability and rigid mathematical approach in the determination are to be pondered in depth. Also, whether Determination based solely on Objective Approach can give accurate results have to be deliberated. Therefore the researcher attempts to study the positive and negative impacts of utilising Artificial Intelligence in Determination of Patentability and to deduce the way forward.

**Surendran SUBRAMANIAM, School of Law, Queensland University of Technology**

*Trademarks in the Digital Environment: Identifying a Parameter Relevant for Online Trademark Infringement*

Trade mark law is grappling with interpretations of the law written years ago to deal with instances which were never envisaged. This is particularly true in respect of trade marks that are being used by third parties on the internet in ways which are different from trade marks’ traditional use as a ‘badge of origin’. These new ways in which trade marks are being used in cyberspace have led to the emergence of hundreds of online trade mark infringement disputes all over the world. The most prominent new way that third party trade marks are being used is in invisible mode i.e. where the trade mark is used in the source code that is hidden within a computer program e.g. metatags, keyword advertising, link navigation and software agents. These invisible uses do not cause consumer confusion in the sense traditionally understood under the law. Apart from that, the new ways that trade marks are being used in cyberspace also provide new values that go beyond the basic information about the goods and services which trade marks have traditionally given. These new values particularly have high significance in the new competitive spaces of the digital environment, such as search engine placement and computational advertisements. The objective of this paper is to recommend how trade mark law should develop for the digital environment. This research traces litigation revolving around invisible trade mark use beginning with significant cases in the United States and the EU right up to more recent disputes occurring in Asia Pacific countries such as Australia, New Zealand, China, Japan and South Korea. This study examines the tensions that arise amongst trade mark owners, their business competitors, consumers and search intermediaries as a result of the new ways that trademarks are being used in cyberspace, through the lens of law and economics which very importantly, takes into account technology as an endogenous factor in the analysis. Upon identifying the market failures that occur as a result of the new ways in which trade marks are being used in cyberspace, this paper then investigates the structures of the relationship of

all the relevant stakeholders that juxtaposes their positions instead of relying on the underlying presuppositions of traditional trademark law theories which always only identify stakeholders and place them on opposing ends of the spectrum e.g. producers who are motivated by the maximisation of wealth and consumers who are motivated by the maximisation of utility. Finally, this research contemplates the new values that trade marks are attributed with in cyberspace and thereafter articulates a new parameter in the law that will best encourage the correction of the occurring market failures, whilst simultaneously protecting the legitimate interests of trade mark proprietors, their business rivals, search intermediaries and consumers.

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

*IPR a Key Tool in Protection and Commercialization of Traditional Cultural Expressions (TCEs) – Developing Countries Perspective*

Traditional Cultural Expressions (TCEs) refers to those expressions which have been passed on from generation to generation as living heritage for a long period of time, often accompanied by continuous, small changes. Traditional cultural expressions/expressions of folklore are in the form of cultural manifestations such as music, art, designs, symbols and performances. Protection of indigenous heritage and intangible resources, such as their traditional knowledge (TK) and traditional cultural expressions (TCEs), is one of the latest frontiers of indigenous peoples' struggle for their rights and resources. Indigenous peoples have become increasingly vocal on the international stage, challenging existing legal frameworks and understandings. TCEs can help to promote and protect cultural creativity, innovation, and the diversity of cultural expressions, benefiting not only those who may call such expressions their own, but all humanity. The protection of TCEs not only maintains the characteristic tradition of a nation but also brings economic feedbacks. Some countries, such as France, Korea and Japan, have rich experience in tangible TCEs protection. Traditional cultural expressions can sometimes be protected by existing systems, such as copyright and related rights, geographical indications, appellations of origin, trademarks and certification marks. For example, contemporary adaptations of folklore are copyrightable, while performances of traditional songs and music may come under the WIPO Performances and Phonograms Treaty. Trademarks can be used to identify authentic indigenous arts, as the Maori Arts Board in New Zealand, Te Waka Toi, has done. There are many examples around the world of indigenous names, signs and symbols that have been registered as GIs. These include KARGOPOL clay toys in the Russian Federation; and Mysore silk, Kashmir Pashmina and Pochampally Ikat in India. Trade secret law also imposes liability for the wrongful acquisition, use, or disclosure of valuable information that is the subject of reasonable secrecy efforts. Anecdotal evidence suggests that absent traditional knowledge protection, indigenous and local groups are becoming warier of sharing information with outsiders who are in a position to improve and commercialize it. Intellectual property law can and should encourage parties of unequal economic power to collaborate and share information on fair terms. Because the existing international intellectual property system does not fully protect traditional knowledge and traditional cultural expressions, many communities and governments have called for an international legal instrument providing sui generis protection. This paper aims to explore the suitable legal instruments which are helpful in protection and preservation of TCEs from a developing countries stand point. It is organized like this, first part of the paper deals with definition of TCEs, second part will focus on different forms of TCEs, third part will throw some light on international and national IPR regimes aimed at protection of TCEs, fourth part will present a discussion on 'whether trade secret law or GI is a viable

option for protection of TCEs', fifth part deals with approaches for protection of TCEs like positive protection and defensive protection its advantages and disadvantages, finally ends with conclusion.

**Ranggalawe Suryasaladin SUGIRI, Faculty of Law, University of Indonesia, Indonesia**

*The Utilization of IP System as a Tool to Enhance Production and Promotion of Traditional Hand Weaving in Indonesia: Collective Mark Protection or Geographical Indications?*

Indonesia has enormous traditional textile practices and traditions that could benefit its economic development especially rural economy. The current study identifies not less than 39 regions that has its unique traditions of hand weaving. This cultural potential could become a source to contribute Indonesia creative economy sectors such as fashions and crafts, that not only has economic prospects at national level but also in regional and international level. Our current work in progress is to what extend intellectual Property (IP) system, especially collective marks protection and geographical indications protection in Indonesia, could be used and implemented as to support traditional weavers and small enterprises producing and selling traditional hand woven textile. This article would try analyze the compatibility of those IP protection system and mapping the challenges faces by traditional weavers and small medium enterprises in using those system in 4 regions in Indonesia, which are: Bali, Sikka (Flores Island), Rote Island, and Tanimbar Island.

**Alexandr SVETLICINII, Faculty of Law, University of Macau**

*The Gene Patenting Dilemma: An Antitrust Perspective*

The patentability of gene sequences was subjected to intense debate across disciplines and jurisdictions in the light of the rapid progress in genetic diagnostic/testing technologies and genome-based treatment. In its 2013 Myriad ruling the US Supreme Court has questioned the gene patenting stating that “naturally occurring” DNA sequences, even isolated from the body, cannot be patented. In 2015, the High Court of Australia followed this approach and rendered a similar ruling refusing the patentability of the DNA sequence in the BRCA1 gene. Other jurisdictions have followed a different path. For example, the China’s State Intellectual Property Office has confirmed the patentability of gene sequences in its 2010 guidelines on patent examinations. In the EU, the Biotech Directive (98/44/EC) recognizes gene sequences as patentable inventions provided their industrial application is disclosed at the time of application. The jurisdictions that allow gene patenting will have to address the problems related to the licensing of such patents since DNA sequences represent indispensable tools for research and development of gene-based diagnostics and therapeutics. The refusal to license or restrictive licensing terms can influence the whole downstream markets dependent on the gene sequences as an upstream input. The presentation will address the regulatory responses that antitrust/competition law can offer to address the anti-competitive effects stemming from the abuse of patent rights. It will particularly focus on the concepts of “essential facility” and “refusal to deal” as a form of abuse of dominant position. Without affecting the regulatory approaches to gene patentability, competition law can offer a number of enforcement tools aimed at curbing the exercise of monopoly power while protecting innovation and maximizing the consumer welfare.

**Shirin SYED, North Maharashtra University**

### *Indian Scenario of IP and Innovation: Role of Competition Law*

One of the important objectives of patent protection is the promotion of investment in R&D and thus act as a tool for innovation. However, there could be undesirable results from patent protection on innovation. Practices such as patent trolling or patent thickets can act as a barrier to innovation. Another potential implications of patent protection is the high price. This high price often compromises access to innovations such as new and efficacious medicine to needy people. Further, critique also points out that the statutory monopoly granted by patents can often result in rent seeking behaviour of patent holders and may not invest sufficiently to spurt innovation. The competition law can act as safeguard against the abuse of patents and facilitate innovation. In the context of the interface between competition law and patented inventions, the following acts can hit different pillars of competition law viz. agreements, abuse of dominant position and combination (mergers and acquisitions). First, the licensing agreements containing conditions, which may prevent competition can attract the provisions of competition law to regulate agreements. Second, high prices on patented products can be treated as an abuse of dominant position. Third, refusal to license an IP right may be anti-competitive under certain conditions such as refusing to license the second/dependent patent over the existing patented invention, refusal on reasonable terms to the generic competitors, etc. Fourth, abuse of patent through multiple patenting around the same technology falls within the abuse of dominant position. The competition authorities may ask the patented inventions in public domain to generate competition. The competition law can attract not only downstream but also on upstream. This paper would focus mainly on the above four issues in the Indian context. In March 2013, Ericsson sued Indian mobile manufacturers Micromax, Lava, Xiaomi, etc for patent infringement. Ericsson claimed that Micromax mobile phones infringed its SEPs in its mobile phone technologies like 3G and EDGE. SEPs are determined on consensus by SSOs like ETSI or IEEE to recognise standards internationally. Consequently, Micromax and Intex has filed separate complaints under India's Competition Act, 2002 before the CCI, alleging that Ericsson had abused its dominant position. It is a punishable offence under Indian competition law. Micromax and Intex have both claimed that Ericsson's royalty rates were excessive and not on FRAND terms. The CCI, found that there to be a prima facie case in each of the above complaints, ordered the Director General to undertake an investigation into the allegation. The final report is awaited. The CCI, found that there to be a prima facie case in each of the above complaints, ordered the Director General to undertake an investigation into the allegations. It is an example of adverse use of patent to prevent local manufacturing and innovation. First part of the paper would discuss the various abuse of patent rights and its implications for innovations. Second, part of the paper would describe the competition law flexibility in the TRIPS Agreement. Third part of the paper would look at the incorporation of the competition law flexibility in the Indian Patents Act and the Competition Act. The fourth part of the paper would analyse the disputes between the mobile manufacturers and the Ericsson technologies with regard to licensing of patented technologies. Final part of the paper would suggest the conclusions and recommendations.

**Karolina SZTOBRYN, University of Łódź**

*The Clash between Intellectual Property Law and Human Rights – Some Reflections from the Marrakesh Treaty Perspective*

The relationship between intellectual property law and human rights is complex and the subject of divergent scholar discourse. On the hand, we can consider rights to intellectual property as the human right. This position is however criticize by some scholars, which argue that certain forms of intellectual property rights are equivalent to human rights, while others are not. Another group indicates that intellectual property rights distinct from human rights. On the other hand the access to knowledge, information, cultural and artistic events may belong to the category of human rights. Therefore intellectual property rights can in fact hindrance the human rights. Although there is no clear consensus on the relationship between intellectual property rights and human rights, one should agree that there is a need to balance these both fields of law through regulations and appropriate legal policy. Achieving this balance is necessary in order to guarantee access to immaterial goods and protect author's or creator's possession rights. The rule that was suppose to balance these two aims is the "three-step test" for limitations and exceptions established in many international IP law treaties. Thanks to the general wording of this test and its flexibility, it is applicable to various cases. Unfortunately this is also the main drawback of this rule. The unique factual situations, that the users and owners have to face, also enforce the unique legal look. Lately the international legislator takes steps aiming at defining the protection-access relation in the more detailed and accurate way. This occurred for example in the Marrakesh Treaty to Facilitate Access to Published Works for Persons Who Are Blind, Visually Impaired or Otherwise Print Disabled. Providing more explicit and clear provisions on access to copyright works gives people with disabilities the right to participate in social and artistic life, but also can limit the author's copyrights. Therefore it should be assessed, whether the Marrakesh Treaty balances those two rights.

**Pek San TAY, Faculty of Law, University of Malaya**

*Recent Developments in the Protection of Registered Trade Marks in Malaysia*

Since the establishment of the Malaysian Intellectual Property Court in 2007, there has been a considerable growth in the number of reported court decisions on registered trade mark disputes in this country. This increase not only demonstrates the judiciary's concerted effort to clear the backlog of court cases but also provides a fertile ground for developing and understanding the boundaries of the protection of registered trade marks under the Trade Marks Act 1976. The superior courts in Malaysia, ranging from the High Court to the Federal Court, have on several occasions sought to define the limit and clarify the provisions of the Act. For instance, the Federal Court has recently clarified that the High Court, in hearing an appeal from the decision of the Registrar of Trade Marks, is exercising its original and not appellate jurisdiction. The Federal Court in other cases have shed light on when a person is entitled to be the owner of a trade mark for the purpose of an application for registration of the trade mark, the meaning of an 'aggrieved person' for expungement proceedings under sections 45 and 46 of the Act and the scope of the exclusive right of a registered trade mark proprietor. The Court of Appeal and High Court have also ruled on important aspects of registered trade mark law, such as the recognition of the dilution of well-known marks as a ground to prohibit another trader from registering a similar trade mark, the acceptance that a 'mark' under the Act includes a shape mark, the limits of the exclusive right of a registered trade mark proprietor and the boundaries of infringement actions. Without a doubt the decided cases have contributed to a richer jurisprudence of Malaysian trade mark law. Nevertheless, it is submitted that a number of the decisions are difficult to reconcile with established legal principles and these need further analysis. The purpose of this paper is to trace the development of Malaysian registered trade mark law during the last 5-year period, that is, from the beginning of 2014 until the end of 2018. It examines how the

courts have clarified important aspects of registered trade mark law and how some decisions have cast uncertainty on certain parts of the law. As the boundaries of protection gradually become clearer and more defined through the decided cases, businesses operating in Malaysia gain more certainty on the permissible limit of acts that they can carry out in relation to their registered trade marks. Undeniably, this certainty and confidence augur well for local and foreign businesses that are operating in Malaysia.

**Madina TURSUNOVA, Tashkent State University of Law**

*Implementing Innovations in Uzbekistan: Current Problems and Possible Solutions*

Today the economy of Uzbekistan is mostly relies on mining of natural resources and production of cotton. However for stable development of Uzbek economy it is important to direct forces towards a knowledge-based economy. The word of innovations is becoming more and more popular for Uzbekistan in the same way as for other states appeared on the spot of the former Soviet Union. Sovereign states try to adopt the laws and create favorable environments for development of innovations but most of them are not successful. It is an evident rule that the modernizing of economy is only possible with new technologies. Uzbek government believes that all the efforts must concentrate in attraction of foreign companies with new technologies which will help transfer Uzbek national economy to a new level which is a level of innovations. Uzbekistan recognizes a concept of innovation as a newly created hi-tech product highly demanded in market because of its efficiency and a number of benefits provided for the state and business. At the same time innovation presents a complex notion which combines a set of results of intellectual activity. One of the main problems for above said we may refer to the administrative barriers and a low level of development of legislation of intellectual property. As a result the legislation does not clearly say about how a whole mechanism of intellectual property circulation functions and what benefits the developers of innovations obtain and how the state controls activity of developers. Uzbekistan does not have a separate law on innovation. However a bill of law is almost ready and under review in the Parliament. So far a bill of law which is introduced by the Government is promising, however there is no clear mechanism for creating a link between business and scientific institutions. The priority role in the bill is occupied by the state which is the main customer. The bill of law provides for significant preferences for enterprises which engaged in innovative activity. Nevertheless, there is no clear understanding of how institutions and business can benefit from innovation activity. This fact may badly influence the development of innovations in Uzbekistan. The law also distinguishes the legal status of foreign and local companies and does not equally treat them which are also not a positive tendency. In our understanding implementation of innovations into the Uzbek economy is only possible after adopting international standards related to protection of intellectual property rights into national legislation. The main owners of innovations are multinational companies which own hi-tech technologies and may show the interest in transfer its innovative production to sovereign state Uzbekistan. Meanwhile, the system of protection of intellectual property is not eager to meet the standards. Therefore, Uzbekistan should establish a preferable environment for the development of innovations. This literally means that the Government must elaborate a significant change into the national legislation which will provide for the preferences and guarantee protection of exclusive rights.

**Pratyush Nath UPRETI, Sciences Po Law School**

### *Intellectual Property in Friendship, Commerce, and Navigation Treaties: A Historical Account*

Historically, developed countries succeeded in marrying trade with intellectual property (IP) but failed to incorporate the investment aspects of IP. The relationship between IP, trade, and investment is old, but the debates are new. The recent cases of litigating intellectual property rights (IPRs) in investor- state dispute settlement (ISDS) have demonstrated debate and discussion giving rise to the relatively unexplored debate of IPRs-ISDS interactions. In the nineteenth and twentieth century, the international diplomacy and economic relations on a reciprocal basis were maintained through the bilateral treaty of the Friendship Commerce and Navigation (FCN). Most of them included all areas of law including IP. Surprisingly, most of the areas covered by the FCN are currently also being negotiated in new generation international investment agreements. In light of the recent IP disputes in ISDS, it is important to understand the historical relationship between IP and investment agreements. In this context, this paper aims to discuss the inclusion of IP in the early FCN treaties and analyze whether the reference to IPRs in FCN treaties was aimed to regulate international IP.

**Tran VAN NAM, Faculty of Law, National Economics University**

### *Technology Transfer Valuation Services: Opportunities and Challenges in Vietnam*

Technology transfer services have been introduced in Vietnam for long time; however it becomes heated issues recently. During the 2016-2017 survey conducted in Hanoi and Thai Nguyen province, the author raises several questions for this research, (1) how has the legal position of technology transfer services in Vietnam been? (2) What issues appear to be the main obstacles of Vietnamese laws on technology transfer services? What would be done to improve the efficiency of technology transfer valuation services in the near future? Based on analyzing of current status of technology transfer services as well as by studying several specific cases in valuation of technology in Vietnam, the study points out some inadequacies in current regulations on technology transfer valuation services. As results, the author provides some suggestions to enhance the effectiveness of technology transfer valuation services in Vietnam.

**Riccardo VECCELLIO SEGATE, Faculty of Law, University of Macau**

### *The Social Cost of Public Startup Investment Funds: Intellectual Property Rights, Cyber-Security Policing, Competitiveness, and State Economic Securitization of Cyber-Exposed Trade Secrets*

Thefts of so-called “trade secrets” are as old as trade secrets themselves, representing a top challenge for those called upon to design policies able to effectively protect intellectual property rights. This holds particularly true in the digital era, where thefts are less and less committed by physical individuals (mostly company insiders), and increasingly pursued by means of outsourced offline or online cyber-attacks, i.e. hardware components or malicious software fabricated to penetrate competitors’ systems. As the recent news coming from the long-lasting US-China “cyber/trade confrontation”—so nicely reported by Bloomberg in ‘The Big Hack: How China Used a Tiny Chip to Infiltrate U.S. Companies’—demonstrate, such thefts may involve the highest sphere of international politics and infiltrate globalized supply chains of digital information and devices on an

unprecedented and worrying scale. Whereas the just-mentioned case referred to intelligence espionage, the possible disruption of these thefts on countries' "innovation texture" remains largely unaddressed in scholarly and practitioners' literature, despite its obvious impact on States' capacity to keep up with the most recent technological developments and expand their economies. Against this backdrop, newly-founded IT startups are arguably the most vulnerable asset of States' strategic growth plans, thus representing an ideal target for State-backed unlawful accesses operated by foreign companies. My paper will scrutinize the national legislation enacted by the four top players of the Indo-Pacific region (namely China, India, Japan, and Australia) to protect their innovation ecosystem from trade secrets thefts, as well as their stances on the possible responsibility of States under public international law (e.g. for lack of due diligence over actions taking place within their territory or performed by public officials) when it comes to allegedly State-sponsored infiltrations in critical IT infrastructures of foreign companies to steal their trade secrets. It must be admitted, after all, that laws related to security and IP rights, understood in traditional terms, stand as the first step only towards a comprehensive protection of trade secrets. My analysis will lead to the conclusion that rather economic approaches to national and international policymaking may suitably describe the priorities and concerns related to this issue. It will be suggested that, along with a more traditional framework of IPRs and criminal enforcement of them, economics-grounded policies are necessary in order to preserve the security of core startup markets and networks. For instance, States may grant permissions and allocate loans to startups exclusively when the latter (plan to) implement strict data-safety procedures; furthermore, in building state-owned "venture capital" for innovation, States may take into consideration the social cost of distributing money or fiscal advantages to companies whose competitive advantage would probably get stolen. This requires not only proper legislation (again, reaching far beyond the usual criminal and civil law realms) on competition, but just as importantly, a certain extent of coherence between internal and external interests, to the end of avoiding innovation-endangering retaliatory practices from foreign governments and secret services. In this sense, it is important to grasp the limits to State policing, considering the discrepancy between different capitalist systems (that is, the more centralized one of China versus the more liberalism-led of its surrounding countries outlined above).

**Saurabh VISHNUBHAKAT, Texas A&M University School of Law**

*The Patent Landscape of the U.S. International Trade Commission*

The role of the U.S. International Trade Commission in mediating intellectual property policy is the subject of a growing literature, especially following the ITC's sudden prominence as an alternative forum when the Supreme Court's 2006 eBay decision diminished the expected benefit for patent owners from enforcing patents in federal-court litigation. This project contributes to that literature through a comprehensive study of the patents asserted in Section 337 actions before the ITC. Of particular interest are so-called "patentography" issues such as the national origin and transnational distribution of inventors named on ITC patents as compared with patents asserted or challenged in other U.S. tribunals. Also of interest, building on prior research into court-agency substitution in the U.S. patent system, are the degrees to which ITC patents are also involved in concurrent proceedings both in the federal courts and in challenges before the USPTO Patent Trial and Appeal Board. The aim of this project is to help develop a more complete account of the ITC's underappreciated role in the persistently global reach of the U.S. patent system.

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

*Considering Copyright Law in Open Educational Resources Development*

Extensive research has shown emerging trends calling for the creation of high-level educational resources that are free and openly available on the internet. This orientation was first adopted at and simply termed as Open Educational Resources (OER). OER may be defined as any type of educational materials that are in the public domain or introduced with an open license. This simply means that anyone can legally and freely copy, use, adapt and re-share educational materials such as textbooks, curricula, syllabi, lecture notes, assignments, tests, projects, audio, video and animation, without any form of copyright restrictions. Studies have also shown that providing information or resources that can be shared, used and reuse serve a positive impact to the public good. Yet, OER creators are open to the risk of intellectual property infringement. Studies have shown serious concern over copyright infringement when publishing and creating digital resources. It is not clear to what extent domestic legal system supports or stifles the OER development especially when copyright law differs between jurisdictions. This study traces the development of OER initiatives in Asia Pacific regions that are very much diverse in its background, language, culture and educational system. This study specifically examines the role of copyright law in supporting or hampering the proliferation of OER by taking Malaysia and Japan as a comparative case study.

**Wei WANG, Faculty of Law, The University of Hong Kong**

*Copyright and Net Neutrality in Cross-Border China: Ethical, Legal and Social Implications in the Balance of Rights*

Net neutrality literally refers to a balance of rights that enable all the information and data to be equally treated within the legitimate scope. However, some continuous attempts to undo net neutrality rules are reportedly being carried out to cater for tech giants and streaming media providers. Meanwhile, algorithmic bias and discrimination have imposed substantial constraints upon data justice thereby revolutionizing the procedural identification of “good data” and “paid prioritization” in the traditional copyrighted industries. In this regard, net neutrality rules regulate not only the ISPs but also the content creators and copyright owners in the light of the alleged moral accountability for the open Internet. Thus, net neutrality appears unneutral for stakeholders and intensifies the debate over anti-competitive practices, specifically when courts interpret copyright licensing efficiency and transactional hazards based on some freedom-led or market-driven perceptions regardless of the noticeable gap between authorship and rights & obligations of all sides with the onset of the next-generation Internet. The open Internet requires net neutrality rules to secure that communication infrastructure can be regionally shared by most Internet users at least, which implies that broadband Internet services should be regulated as a public utility. In this view, ISPs as public goods cannot self-create additional exclusive rights by filtering Internet content to generate their own revenue. Nevertheless, these exclusive rights hereof often relate to economic rights of copyright as advocates of net neutrality argue that access to and distribution of novel web content may be controlled by multiple service providers’ monopolistic approaches to offending against the end-to-end principle. Thus, there should exist some more explicit boundaries around the identification of when and how net neutrality regulates the relevant parties of copyright in an imperfect competitive market. In China’s cross-border entertainment scenario, the article addresses how we ‘synchronize’ recent

technological advances and standards of the Internet in an explicit and solution-oriented manner that empowers the extant copyright regime to be geared towards net neutrality rules by minimizing loss of social welfare. It also attempts to identify if net neutrality screens for an inevitable consequence that copyright owners suffer a considerable loss of remuneration across major jurisdictions and international treaties & agreements due to algorithmic and coding schemes of a de-centralization Internet such as accountability, transparency and security. It may thus be submitted that the War on Mathematics is likely to provoke Internet-related copyright controversies over freedom of speech, privacy and non-discrimination at the natural and constitutional level, thereby balancing public and private interests within regulatory space of the communications and creative industry. In conclusion, findings would be made as regards the feasibility that we constitute or interpret a new model of neutral copyright norms by ELSI design to plug the loophole in net neutrality so that copyright law can be reasonably responsive to the Internet exceptionalism under which extra exclusive rights and mandatory obligations may operate on non-market grounds.

**Afzal WANI, Guru Gobind Singh Indraprastha University**

*Protection and Advancement of Farmers' Right in the Context of Changing Faces of Technology: Indian Scene*

Modern technologies have held the ground for advancement of humanity in their own mechanical ways. The farmers' fortune is tied up with conventional plant varieties and traditional knowledge they have acquired from their ancestors and by experience. The new technologies have changed the whole ground for them. Making of the new varieties of food is a welcome step but that should not result in the elimination of natural traditional plant varieties. The Protection of Plant Varieties and Farmers Rights Act 2001 (PPVFR Act) in India enables farmers to save, use, sow, re-sow, exchange, share or sell his farm produce including seed of a variety protected under this Act in the same manner as before the coming into force of this Act. However, in the absence of any institutional support for the purpose the farmer is not able to avail the facility. The farmer is also not entitled to sell "branded seeds" of a variety protected under the Act, which includes any seeds put in a package or any other container and labelled in a manner indicating that such seeds are of a variety protected under this Act. The Act recognizes a farmer and farmers' group to file application for the registration of the variety of seeds bred by them to get protection under the Act but for that the farmer has to satisfy all the condition similar to a corporate breeder including the criteria of novelty, distinctiveness, uniformity and stability as mentioned in the Act. This practically excludes all possibility of any farmer to get a variety of seed registered. The Authority is required to protect the rights of farmers and plant variety by adopting appropriate measure but so far no such measure have been taken, especially no suitable steps have been taken to approach the farmers to condition them to the new system as they cannot do so on their own. The result is that so far only few farmers' varieties have been registered. One of the reasons for this problem being absence of an effective mechanism for carrying forward the policies under the Act and the effective implementation of the PPVFR Act, lack of information to the farmers is an issue that has not been statutorily addressed. The Act gives protection to the farmer against the supply of bad quality seeds but the clause is not properly framed, leaving it to the discretion of the Authority. The farmers should be able to impose terms and conditions for granting consent at least in case of any essential derived variety but there is no enabling provision in the Act to that effect. Thus, a serious

effort has to be made to analyse the existing law on the rights of farmers and to recommend a dynamic farmer-based approach for landraces conservation and enhancement with modern scientific advances.

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

*Domestic Innovation of Clean Technologies by Developing Countries?*

This article has two major components. It first examines how exemplary developed countries (e.g., Denmark, Sweden, and the U.S.), key emerging economies (e.g., China and India), and other exemplary developing countries (e.g., Russia and Armenia) have been developing clean technology innovations. The article then explores whether/how developing nations may build up their own IP portfolios of clean technologies, instead of relying on in-bound transfer of clean technologies from developed countries. This article reflects part II of a research project exploring how to address climate change via the development and deployment of clean technologies. Part I of the research project examines whether IPR has been a major reason for the very limited transfer of clean technologies from developed nations to developing nations. The researcher's conclusion is that IPR has not been the main reason. An article on Part I is available at <https://ssrn.com/abstract=2742713>. Part III of the project explores different IPR models for building mutually benefiting international collaboration on the development and global deployment of clean technologies.

**Dai YOKOMIZO, Faculty of Law, Nagoya University**

*Internet Intermediaries and Conflict of Laws with Regard to IP Infringement*

The objective of the presentation is to examine conflict-of-laws issues with regard to the liability of an Internet Intermediary in the IP infringement. Internet intermediaries provide a variety of facilities and services in the Internet, in particular a platform on which users can post contents such as auction sites, social network sites, and blogging sites. In case of the IP infringement on that platform, IP rightholders often have strong interest in bringing their claims against internet intermediaries, since they have information about alleged direct infringers, financial resources, and measures to block access to the content or remove it. However, it is often the case that an internet intermediary is located abroad because of the cross-border nature of the Internet. How should a forum's court exercise its international adjudicative jurisdiction over such a case? Which state law should govern to determine the liability of the internet intermediary? This presentation will deal with these conflict-of-laws issues, mainly from the Japanese viewpoint.

**Siti Baqiyatul ZAHRAA, Inti International Universities and Colleges**

*Protection of Well Known Trademarks: A Paradigm Shift from Likelihood of Confusion of Trademark Infringement to Anti -Dilution under Malaysian Trademark Law*

Well Known Marks are considered as famous mark which are known by consumer and had obtained a reasonable degree of recognition. Well Known Marks are commercial magnets that attract consumers to buy their products and simultaneously retain their loyalty. Trademark particularly Well Known Marks, are prone to unwarranted free riding conduct from new corporations who intend to

ride upon the reputation build by the Well Known Marks, as well as taking unfair advantage over the Well Known Marks. Without effective and proper protection in safeguarding the distinctiveness of the Well Known Marks trademark, all efforts put into building the brand will go to waste. The Companies and/or owners of the Well Known Marks who had expended time, labour, and financial resources in establishing the brand will not be able to enjoy the fruits of their labour. The continuing use of a mark similar to the senior's Well Known Mark will inexorably have an adverse effect upon the value of the senior's mark Well Known Mark and that if the senior is powerless to prevent such uses, in some cases, the senior's Well Known mark will eventually be deprived of all distinctiveness. The end result of which will show the gradual degeneration of a distinctive mark to a descriptive mark. Though the Malaysian Trademark Act 1976 provides for special status of Well Known Mark specifically under Section 14 (1) (d) and (e) as well as Regulation 13A and 13B of the Trademark Regulation 2001, together with infringement action under Section 38(1) of the Trademark Act 1976, and under the law of passing off, there is uncertainty and vagueness in protection of Well Known Trademark. This is because the legal test for trademark infringement emphasizes whether use of a substantially similar mark results in consumer confusion. The consumer confusion standard is now so intertwined with the notion of trademark protection that marks often are protected only when confusion is evident. Legal Challenges such as what happens if there is no confusion between the senior mark and the junior mark but if it continues to coexist in the market, it would likely cause damage or detriment to the distinctiveness of the trademark? What happen also if a mark is used on different goods or services or non-competing goods/services that on high probability that there is no confusion? Will the wrongdoer escape full liability without any repercussions imposed on him? Is the traditional principle of likelihood of confusion a suitable mechanism to protect well known marks? Thus this imminent issue is creating a vacuum within the sphere of trademark protection law in Malaysia. This Article will examine the legal landscape of protection of Well Known Marks in Malaysia and the fundamental principles of Anti-Dilution by looking into the United Kingdom and the United States Approach. Subsequently, the researcher will conclude whether anti-dilution law should be adopted in Malaysia by amending the statutory provision of the Malaysian Trademark Act 1976.

**Mahua ZAHUR, Department of Law, East West University**

*The Myth and Reality of Geographical Indication in Bangladesh: A Case Study of Jamdani*

Geographical Indication (GI) has garnered a considerable interest among the WTO members to harness its economic viability within the domestic system. Some significant amount of scholarships, relating to TRIPs, propagated the myth that, GI has a huge latent potential to bring development to a community struggling for development. This uncanny promise has driven Bangladesh, a least developed country, to introduce a GI scheme on the belief that the scheme will give economic impetus to community's own traditional artisans and crafts. It may be easily discernable having a look at the list of registered GIs and probable GIs tagged as reputed from Bangladesh. In some practical cases GI has in fact failed to bring the desired result of economic development to the community. To understand the gap between the myth and the reality the paper considers the case study of Jamdani- the first registered GI of Bangladesh. This particular GI from Bangladesh has attracted attention of the policy makers, investors, designers and other stakeholders. Trusting on jamdani's reputation, it has continuously been put forward that the registration of this distinctive sign will bring positive financial benefits. However, this possibility is still far from reality. This paper makes an enquiry of the aspects that put the reputation of this GI at stake. The paper also examines the intrinsic

shortcomings of institutional capacities that might, if not addressed properly, devalue or destroy the ‘reputation’ and economic viability of this GI. The paper also argues that the present state of this GI is scanty in reality, and the hope of community development is only mythical.

**Huaiyin ZHANG, Shanghai International College of Intellectual Property, Tongji University**

*The Protection of Celebrity Name in China: after the ‘乔丹’ case by the Supreme People’s Court of China*

The Supreme People’s Court (SPC) case of “乔丹”, instituted by Michael Jordan against Qiaodan Sports, is a landmark case over the protection of right to personal name in the People’s Republic of China (PRC). In the retrial proceeding, the SPC gave 8 exhaustive explanations to the disputed questions, and eventually reversed the lower court’s decision. From the holding, we find that a famous foreign name can be protected by Chinese Trademark law only when it satisfies three conditions: First, the specified name enjoys a certain popularity in China and is well-known to the concerned public; second, the concerned public uses the specified name to refer to the original person of that name; and third, there has already been a stable match between the specific name and the original person of that name. Although China mainly adopts “right to name” for the legal protection of celebrity names, the right to name is a kind of personal right, difficult to be used to fully protect economic benefits derived from the names of celebrities. Comparing Germany’s extended protection model of personality rights and United States model of “right of publicity,” we think China can try to introduce United States model to protect the celebrity name’s right.

**Naigen ZHANG, School of Law, Fudan University**

*“Belt & Road”-Related IPR Customs Enforcement: China-Eaeu, China-Eu Cooperation*

The “Belt & Road” is the new idea to promote economic cooperation and trade mainly in Asia and Europe. To build the Economic Belt of Silk Road is very important for China to develop trade in transit with Central Asia and European countries by the intercontinental railways. China signed the agreement with Russia on linked cooperation between the EAEU and the Economic Belt of Silk Road, which needs implementation of further customs cooperation including IPR customs enforcement. The “Belt & Road” is relevant for the EU not only to hope more trades with China and Asian countries by road, but also to concern more goods in transit destined to the EU territories while China is still the main source of counterfeits and pirate goods suspended at the EU border, therefore, it is the EU strategy to cooperate with Chinese government to combat the infringing goods originate from China. This article provides a primary analysis on “Belt & Road”-related IPR customs enforcement based on China-EAEA, China-EU cooperation with the introduction to the recent development of customs laws and IPR enforcement in the EAEU and the EU, and the comparative studies for Chinese policy makers and legislators to learn from, particularly, the EU experiences of IPR customs enforcement on goods in transit.