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An Exploration of Taiwan's Legal System in Regard to Patent Dispute Resolution under the Globalization Trend

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Abstract

With the development of the globalization trends, the value of a multi-cultural society is threatened by the mainstream view of globalization; thus, the sovereignty of national laws is also facing the challenges of transnational law. Unfortunately, under the impact of globalization trends, the legal systems are unable to keep up with the speed of industrial changes. Obviously, Taiwanese legal system is facing rapid changes in the high-tech industries, and providing effective legal remedies for patent disputes have become an important subject for transnational law. Actually, the patent dispute cases often involve industrial and legal considerations in Taiwan's high-tech industry, such as professional technology, short product life, time to market, uncertain patent claims, court judgments at different trial levels, and the conflicts between national and transnational laws. Accordingly, in order to connect with transnational law and enrich Taiwan's judicial culture, this article takes Taiwan, the US, EU, and China as examples to explore and analyze the national legal provisions with regard to experts' participation in trial proceedings, the jurisdiction of courts and the consistency of verdicts, the recognition of equitable arbitration, and judge- made law.

Keywords: National Law, Transnational Law, Patent Disputes, Equitable Arbitration, Judge-Made Law

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I. Introduction

With the trend towards knowledge-based economies and globalization, knowledge innovation is updating and changing every minute. As a result, technology related to intellectual property rights, management and legal protection mechanisms has become the core of business competition. However, because legal systems are unable to keep up with the speed of industrial development, intellectual property rights are being improperly used as tools of competitive business strategy and causing the conflicts brought about by a knowledge gap to increase. As a result, this further creates a constant imbalance in the legal system. In view of the changing high-tech innovative technology day after day and the existing law's inability to comply with the appropriate needs, the law is incapable of achieving synchronicity with the high-tech development and advances with the times. In order to seek fair competition on international economic and trading development, as well as to make the intellectual property rights protection mechanisms become globally consistent legal norm standards, the legal norms and legal dispute solving mechanism must be beyond the scope transnational law by integrating different World Trade Organization (WTO) member nations under the TRIPS regulated by WTO. Meanwhile, the intellectual property rights law and fair trade law especially offer consistent global legal norms and dispute solving mechanisms.

Actually, the judgments of patent infringement in patent dispute cases often involve multidisciplinary aspects; they include not only business, industrial, and legal factors, but also technique factors, such as professional technology, short product life, time to market, uncertain patent claims, court judgments at different trial levels, and the conflicts between national and transnational laws. Therefore, the scope of the intellectual property right features uncertainty, especially in regard to the infringement of the patent right. Thus, to decide whether an invention and creation meet the novelty, industrial applicability and usefulness, and inventive step or non-obviousness elements, there will be different judgment standards among different court judges. Obviously, the experts' technical judgments are better than general judgments in patent dispute cases. In view of this situation, this article takes a comparative approach to explore and discuss the national legal provisions with regard to expert participation in trial proceedings.

The legal relief mechanism for patent dispute resolution is not only concerned with national performance in science, technology and innovation, but it is also crucial to overall economic growth and industrial competitiveness internationally. In general, when it comes to the method of the legal relief mechanism for patent dispute resolution, the parties may claim compensation in regard to all losses and damage through litigation, arbitration, issuing injunction orders, mailing warning letters, etc. In order to promote legal efficiency in patent proceedings, the Intellectual Property

Case Adjudication Act [1] and the Intellectual Property Court Organization Law [2] were announced and passed by the Taiwan legislature on March 28, 2007. With regard to the patent dispute resolution in Taiwan, the legal system of patent litigation inherited the dual parallel track of civil law, which includes common litigation (criminal case and civil case) and administrative litigation. There is a great possibility that the judgments among different courts and the IP Office will be inconsistent with each other. The influence of these laws after they come into force, how to build a new legal system for patent litigation and how to promote the competitiveness of Taiwan's high tech industries in a global market and within the legal system are issues worth further examination and discussion. Therefore, consistent verdicts are also a core concept to be explored and analyzed in this article.

As we know, litigation and arbitration entail alternative decisions, not linear decisions.[3] Under the trend of a knowledge-based economy and globalization, international commercial arbitration crosses national boundaries and acquires the characteristics of transnational law. Nevertheless, arbitral awards have the characteristics of transnational law, and decision making over arbitral awards comes from local arbitration courts. Arbitral awards are brought into force according to national law only. Reaching a balance between national law and transnational law requires a new way of thinking that is quite different from the traditional considerations of national sovereignty. As a result, determining how to integrate the relationship between international commercial arbitration and national arbitration law has become an interesting issue. In view of the above delineation, the recognition of equitable arbitration becomes a key point. In view of this, this article uses the patent equity of Anglo-American law to explore and compare whether it is possible for a Taiwanese arbitration court to cite equitable arbitration in the future.

In view of the rapid change in innovation in hi-tech industries, the US Federal Court uses the Anglo-American equity law to solve the cases concerning patent law, and it also uses the judge-made laws to fill legal loopholes. Usually, the US Federal Court not only creates the doctrine of equivalence, but also the exhaustion doctrine, estoppel, inequitable conduct and patent misuse, which are all applied to fill in legal loopholes. In contrast, while Taiwan laws are made by the legislature to make judgments, due to the rapidly changing times, this may not suit the current situation very well and may cause legal loopholes to occur. Hence, the courts have been inspecting legal loopholes not only with the traditional civil law system, but also with judge-made laws recognized

[1] Intellectual Property Case Adjudication Act promulgated on March 28, 2007 by Presidential Order Hwa-Tzong-1-Yi-Tze No. 09600035711. *Data available at:* http://law.moj.gov.tw/Eng/LawClass/LawHistory.aspx?PCode=A0030215(Visit Date: 2018.05.30)

[2] Intellectual Property Court Organization Law promulgated on March 28, 2007 by Presidential Order Hwa-Tzong-1-Yi-Tze No. 09600035701. *Data available at:* http://law.moj.gov.tw/Eng/Law Class/LawHistory.aspx?PCode=A0010090 (Visit Date: 2018.05.30)

[3] *See* Anika Gill, Jason Gray, Martin Skitmore & Stephen Callaghan (2015), *Comparison of the effects of litigation and ADR in South-East Queensland*, The International Journal of Construction Management, Volume.15, Issue 3, 2015, pp.254-263.

by Anglo-American equity law and the others derived from it. The judges use Anglo-American equity law as the top criterion to fill in legal loopholes and keep the situation at a dynamic equilibrium. Accordingly, this is a major reason why the judge-made law is a core issue to explore and analyze in this article. In view of this, this article uses the patent equity of Anglo-American law to explore and compare whether it is possible for a Taiwan's arbitration court and Taiwan's Intellectual Property (IP) court can cite the judge-made laws.

II. A comparative analysis of experts' technical judgments

Patents and other forms of intellectual property are intangible assets; therefore, the scope of the intellectual property right has the feature of uncertainty, especially in regard to the infringement of the patent right. The principle of claim construction includes the doctrines of central definition and peripheral definition. In general, civil law system countries such as Germany, Japan, the Netherlands and other countries, uphold the doctrine of central definition, while the common law system countries such as the UK take the doctrine of peripheral definition. Since 1870, in terms of the infringement of the patent right, the US Patent Act has been amended; the doctrine of revised patent is changing from the central definition to the peripheral definition.[4] In theory, the principle of compromise is supported, but the scope of patent rights is still not easy to clearly define, such as paragraph 3, article 58, Patent Law of the ROC (Taiwan) providing that the scope of the patent "invention is to the claims contained in the manual. And when necessary, there should be some demonstrations and diagrams." [5] However, the application scope of the patent specification in practice may be unable to clearly point out the boundaries, which is difficult even for the experts to define, not to mention non-experts. Different appraisers for the same patented technology may also lead to totally different identifications and results. Similarly, the judgments for invalid patent and infringement may sometimes totally diverge. Since the scope of the patent is considerably uncertain, to obtain the trust of both parties of the patent litigation, it is essential to involve experts in the judgment of invalid patent and patent infringement. As for the legal provisions regarding expert participation in trial proceedings, different countries have different interpretations and regulations.

[4] 35 U.S.C § 112(2): "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicants regards as his invention."

[5] Article 58 (3), ROC (Taiwan) Patent Act: "The scope of an invention patent right shall be determined based on the claim(s) set forth in the specification of the invention. The descriptions and drawings of the invention may be used as reference when interpreting the scope of the claims in the patent application."

A. The United States of America

In general, to make judgments on patent litigation, knowledge related to patent skill and professional knowledge in various areas of the industry are definitely necessary. For example, for U.S. patent litigation, the judgment on the elements for judging patent and patent infringement requires people who are familiar with the "person skilled in the art." First, among the substantive aspects of the patent elements, according to article 102, U.S. Patent Law, novelty requirements specify the difference between the "Prior Art" and patent request. In article 103, U.S. Patent Law for non- obviousness of the regulations, the appealing party is often comprised of those who are familiar with the patent request and also with the technology skills; they are called "Person Having Ordinary Skill in the Art." Therefore, if the case concerns skills that are quite plain to see, the patent case is not applicable. Moreover, for the form of the elements in U.S. patent terms, according to article 112, U.S. Patent Law states that a patent specification should include a text description of the invention and its narrative manufacturing, using methods and procedures to inform any person skilled in the art or the most relevant associated personnel, with complete, clear, correct wording, and these people can then manufacture and use said product. Moreover, the best way to record their instructions should be in written form for the best envisaged invention manner.

In view of the patent law disputes involving a highly technical nature, in the cases of Markman v. Westview Instrument, Inc. in 1996, United States, the Supreme Court considered in the first stage of patent infringement lawsuit the scope of patent belonging to “a matter of law” and being under the charge of the court of the functional responsibilities. The second phase of a patent infringement lawsuit for allegedly infringing goods or method falls within the scope of the disputed patent remains a question of fact, also called "a matter of fact." If the party claims for the trial proceedings, the decision is then in the hands of the jury. However, in 1997, in the case of Hilton Davis Chem v. Warner-Jenkinson Co., the Supreme Court considered whether the equality in the patented method remains part of the legal rights for the jury to decide, which then leads to the fact that it narrows the judgment scope of the judge to apply based on the doctrine of equivalents. Thus, whether the recognition of the scope of patent belongs to the judge or jury in the first stage of patent litigation shall depend on whether the case belongs to common law or equitable nature. According to article 7 of the Federal Constitution, the amendment states that the law applicable to the general nature of the lawsuit is: if the subject of litigation is valued at more than 20 dollars, then the parties have the right to call for a jury. However, in a litigation case with the trait of equity law, it is not applicable to article 7 of the Federal Constitution (amendment), which means that judges have the right to make judgments and the parties concerned have no right to select the jury.

In the selection of the jury members, in accordance with the article 5 of the Federal Constitution (amendment) related to the "due process of law", the jury must have the ability to make a rational decision; thus, they are qualified to take up the responsibility. In view of this, in regard to the practical cases of US Federal Court, the court holds that the cases should be left to the expert juries with professional knowledge (so- called Expert Jury/Blue Ribbon Jury), which meets article 7 of the Federal Constitution Amendment, and thus gives the right of parties to request a jury, and to request the due process of law according to article 5 of the Federal Constitution Amendment. If the jury does not possess adequate knowledge, understanding of the evidence, and the relevant legal standards, then the court should not permit the jury trial raised by the parties concerned.[6] Accordingly, if we compare the judgments made by an expert jury (persons skilled in the art), to those made by a judge or non-expert jury, the judgments made by the former may be based on much more specific knowledge. Therefore, the judgment of an expert jury can meet the requirements of justice, and also acquire trust from both parties to achieve the effect of settling disputes. In summary, in the U.S. federal court, while dealing with patent litigation, the decision making of judgment results from a professional judge when there is no technical judge to attend the trial. As a result, the main purpose of an expert jury is to compensate for professional judges in specific technical areas, and it is regarded as a remedy.

B. European Union (EU) and its member countries

The situation of the inconvenience of cross-border litigation between parties and courts also arises among EU and non-EU member countries, with different countries applying the same transnational law. The European Parliament passed a unified patent system bill on December 11, 2012, which was expected to be implemented in 2014. The Unified patent system bill contains two protocols: The Unitary European Patent (UEP) and The Unified Patent Court (UPC).[7] Under the planning, the Unified Patent Court is composed of the Court of First Instance and the Court of Appeals, to process the judgment of patent disputes related to patent invalidation and patent infringement. [8] Furthermore, the Court of First Instance includes the central division, local division

[6] U.S. v. Potter, 552 F. 2d 901 (9th Cir. 1977). U.S. v. Kelifgen, 557 F.2d 1293 (9th Cir. 1977). In re Japanese Electronic Products Antitrust Litigation, 631 F.2d 1069 (3d Cir.1980). *See* Jordan M. Halle (2014), *Comments: Avoiding Those Wearing Propeller Hats: The Use of Blue Ribbon Juries in Complex Patent Litigation*, University of Baltimore Law Review: Volume.43: Issue.3, Article 4, 2014, pp.435-459.

[7] Implementing enhanced cooperation in the area of the creation of unitary patent protection. (REGULATION (EU) No 1257/2012) of The European Parliament and of The Council of the 17th of December 2012, Official Journal of the European Union. *Data available at:* http://eur- lex.europa.eu/ legal-content/EN/TXT/?uri=CELEX%3A32012R1257 (Visit Date: 2018. 03. 03). Implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements (COUNCIL REGULATION (EU) No 1260/2012) of the 17th of December 2012, Official Journal of the European Union, *Data available at:* http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A32012R1260 (Visit Date: 2018. 05.30)

[8] Article 6 (1), Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

and regional division.[9] The central division is located in Paris, and the branches in London and Munich, with the appeals court located in Luxemburg.[10]

Under the provisions of the Unified Patent, the judges of the three levels of courts comprise the following: [11]

1. Local Division:

   No more than 50 cases per year, and comprised of 1 native judge and 2 foreign judges. If there are over fifty cases per year, then it will be comprised of two native judges and one foreign judge.

2. Regional Division:

   It is composed of one native judge and two foreign judges.

3. Central Division:

   It is made up of two foreign judges and one judge with expertise background.

4. Appeals Court:

   It comprises three foreign judges and two judges with expertise background.

The Netherlands

The Netherlands is a member state of the European Union. According to the provisions of Dutch patent law, the court of first instance and the appeal court are concerned with the patent dispute of administrative matters, while the patent disputes of civil matters are under the jurisdiction of the Hague court.[12] The judges of the Hague court in patent litigation comprise experts with legal and technical background; they serve as a remedy for judges with inadequate technical knowledge.[13] Usually, the technique experts are qualified to be judges in trials of patent litigation. In addition, the rights of the technique expert are also the same as those of other professional judges without any difference, including the rights of full participation and equal voting in the trial of patent litigation.

[9] Article 7 (1), Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

[10] Article 7 (2), Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

[11] Articles 8 & 9, Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

[12] The article 80 (1), Patent Act 1995 (Netherlands): "The District Court of The Hague shall have exclusive jurisdiction in the first instance." *Data available at:* https://www.ivir.nl/syscontent/pdfs/163.pdf (Visit Date: 2018.03.03). Willem Hoorneman, Patent Litigation in Netherlands- International Patent Litigation Guide, pp.61, *Data available at:* http://www.cmslegal.com/ patentswithoutborders (Visit Date: 2018.05.30)

[13] Willem Hoorneman, Patent Litigation in Netherlands-International Patent Litigation Guide. pp.62,*Data available at:* http://www.cmslegal.com/patentswithoutborders. (Visit Date: 2018.05.30)

The Federal Republic of Germany

In Germany, one of the EU member countries, the Federal Patent Court is in charge of patent dispute cases and is mainly composed of a professional judge and technically qualified judges; it serves as a remedy for judges with inadequate technical knowledge. As a result, in the patent litigation trials, the rights of technically qualified judges are the same as those of other professional judges, including the rights of full participation and equal voting.[14]

C. The People's Republic of China (PRC)

In general, for the patent litigation in the PRC, in the first instance proceedings, it is permissible to hire non-legal background persons or technical experts as the people's jury with the panel of judges, and all the trial activities of the people's jury in the people's court have to comply with the law. In fact, non-legal background persons or technical experts in the people's jury with the judge panel cannot act as chief judges; however, they have the same rights as judges do.[15] As for fact-finding, the people's jury in court trials has the right of applicable law to exercise their voting with independence.[16] It is obvious that although they are called a jury, the people's jury in the PRC is more similar to "assessors". The people's jury has the right to share the judgment of judges through their participation as assessors. Therefore the rights of people jurors include: case hearing, investigation, mediation, inquiry, and file inspection. In addition, the people's jurors have the legal rights to find facts, determine the applicable law, participate in council, express independent opinions with dissent, and participate in the full trial.

[14] Section 65 (2) & 67 (1) (2), German Patent Act (as amended by the Act on Improvement of Enforcement of Intellectual Property Rights of the 31st of July 2009)

[15] Article 38 (2), Law of the People's Republic of China on the Organization of the People's Courts: **"**During the period of the exercise of their functions in the people's courts, the people's assessors shall be members of the court divisions in which they participate and shall enjoy equal rights with the judges." *See* Yifan Wang, Sarah Biddulph and Andrew Godwin (2017), *A Brief Introduction to the Chinese Judicial System and Court Hierarchy*, Asian Law Centre briefing paper, Volume.6, Asian Law Centre, Melbourne Law School, The University of Melbourne, 2017, pp.1-35. *Data available at:* http://law.unimelb.edu.au/_____data/assets/pdf_file/0004/2380684/ALC-Briefing-Paper-6-Wang,-Biddulph,-Godwin_5.pdf. (Visit Date: 2018.05.30)

[16] Article 7, Provisions of the Supreme People's Court on Several Issues Concerning People's Assessors' Participation in the Trial Activities: "When participating in the collegial bench to review cases, the people's assessors have the right to make comments independently on facts and laws, and exercise the right to vote independently." *See* Yifan Wang, Sarah Biddulph and Andrew Godwin (2017), supra note 15, at 1-35.

D. Taiwan

According to article 4 of Intellectual Property Case Adjudication Act of the ROC (Taiwan), the legal status and authority, and the duty of technique review officers in patent dispute hearings only include asking some questions to the parties, witnesses and appraisers, to express their point of view to the professional judge and to assist the judge in the investigation of evidence. In brief, the legal status of the technical review officer in the trial of patent litigation is that of only offering assistance.[17] In theory, the legal status of the technical review officer is neither that of a witness nor an appraiser in the trial of patent litigation, so how their technical opinions are exercised in the cross-examination in court and in the debate of the parties remains unknown. Furthermore, if the opinion of the judge differs from the statement of the technical review officer, and the judge still insists on his/her opinion to make the judgment, it obviously violates the goal of the establishment of the IP professional court in the Taiwan.

E. Concluding Remarks

There are both advantages and disadvantages in any legal system, as it is impossible to make a perfect one. The judgment of expert judges can gain the trust of the parties more easily; therefore, both the expert judges with technical background and the expert jury with technical background are better than the judges with legal background only. Based on the above discussion, the following cases are worth amending Taiwan IP law for reference, such as the U.S. federal court composed by expert jury; the European Union's Unified Patent Court (UPC) using judges with expertise background; the Netherlands, with the judges of the Hague court in patent litigation composed of possessing legal background and technical experts; Germany, the Senates of the Federal Patent Court composed of a professional judge and technically qualified judges. The duty of the technical review officer in Taiwan patent dispute hearings is limited to asking some questions to the parties, witnesses and appraisers, to express their viewpoint to the professional judge, and to assist the judge only in regard to the evidence of the investigation.[18] An interesting question is which one should be believed by the parties if the judgment differs between the professional judge and the technical review officer. According to article 4 of the Taiwan Intellectual Property Case Adjudication Act, the duty of the technical review officer is just to states his/her opinions to the judges; the technical review officer does not have the legal capacity to make any decisions in IP courts. As a result, this is not only against the goal of the establishment of the IP professional court, but also ignores the parties' demands in IP

[17] Article 4 of Taiwan Intellectual Property Case Adjudication Act: "The court may, whenever necessary, request Technical Examination Officers to perform the following duties: 1. Ask or explain to the parties factual and legal questions based on their professional knowledge, in order to clarify the disputes in action; 2. ask questions directly to witnesses or verification experts; 3. state opinions on the case to the judge and 4. assist in evidence-taking in the event of preservation of evidence."

[18] Article 4 of Intellectual Property Case Adjudication Act, R.O.C (Taiwan)

courts. This article posits that the technical review officer shall uphold the legal rights to make the judgment decision at least for the IP dispute cases. In this way, the judgment of the judiciaries will gain the trust of both parties.

III. Analysis of the jurisdiction of courts and verdict consistency

The purpose of designing intellectual property law is based on the trade-off relationship between public law and private law; thus, patent right theory enables a nation to approve exclusive rights for patentees during the pre-stage of the trade-off; the relationship between the parties falls under public law. In the later stage of the trade-off, the patentee exercises the exclusive rights, and the relationship between the parties falls under private law. As a result, the nature of patent law includes both public law and private law. In the pre-stage of the trade-off (the public law relationship), the administrative sanctions of patents are related to granting, invalidation and revocation, and involve judgments of high technique. Therefore, the correctness of the judgment relies on the technique-related statements of the Intellectual Property Office (administration). In the later stage of the trade-off (the private law relationship), the patentee exercises the exclusive rights related to patent validity and patent scope, while patent infringement involves judgments of high technique. Therefore the correctness of the judgment relies on the technique-related judgments of the Intellectual Property Court (judiciary). In order to reach consistent judgments between the Intellectual Property Office (administration) and Intellectual Property Court (judiciary), the Intellectual Property Court shall require the Intellectual Property Office to participate in the patent proceedings in the same case. Thus, the different judgments of patent dispute related to the patent scope, patent validity and patent infringement will work toward achieving consistency between both.

Patent examination involves judgment of technology. Along with the rapid development of technology, determining whether the application for an invention patent has the trait of novelty, an inventive step and utility varies. It depends on different standards at different stages. In view of what was mentioned above with regard to the patent grant and the judgment of patent infringement, either the Intellectual Property Office (administration) or the Intellectual Property Court (judiciary) usually cites the technology from previous cases as the judgment standards of technology to evaluate the technology applying for patent right. In particular, when the legal element is regulated with uncertain concepts, either the Intellectual Property Office (administration) or the Intellectual Property Court (judiciary) is provided with the judgment margin of appreciation. In addition, the administrative sanctions and the court's judgment always differ; thus, the presence or absence of patent validity is often difficult to predict for patentees. In the countries applying a dual track system in the trials of litigation, it includes public law and private law. In order to reach settlements of patent disputes, the legal system is provided with a dual and parallel track in the same case at the same time. Either the patent civil case or patent criminal case belongs to the jurisdiction of

the common courts, but the patent administration case belongs to the jurisdiction of administrative courts. In general, patent litigation related to patent validity may involve administrative proceedings. In addition, patent litigation related to patent infringement may involve common litigation (civil and criminal cases). Therefore, it will lead to the situation that the same patent cases are under the charge of the different courts, and that different judgments result. Based on the reasons mentioned above, for the judgment standards related to the patent validity, patent grant and patent infringement, the IP Office (administration) and the IP Court (judiciary) must reach judgments with consistent standards, so that in the patent hearing trial, it can help increase the predictability of patent dispute resolution for the parties.

A. The United States of America

In the U.S.A litigation system, public law and private law are rolled into one. In general, the cases arise from different US states, and belong to the courts of each US state. Accordingly, the cases can be reviewed by the US federal court if the case involves federal law. The US federal litigation system can be divided into Federal District Court, Federal Court of Appeals and the Supreme Court. The patent law in the US belongs to federal law; thus, the jurisdiction of cases can be governed and reviewed by the US federal court according to the Title 35 of the United States Code. Anyway, whether the patent case is one of invalid litigation or infringement lawsuit, the federal district courts are the first instance court.[19] The patent litigation of the second instance is within the jurisdiction of the Federal Circuit Court of Appeals (CAFC) exclusively,[20] and the U.S. Supreme Court is the final court of appeal in patent litigation.

In the Ethicon Inc. v. Quigg case of the U.S. Federal Circuit Court in 1988, the defendant was charged with infringement; the defendant not only proposed the invalidation of the patent in patent infringement litigation, but also filed for retrial to the

[19] 28 U.S.C. §1338. Patents, plant variety protection, copyrights, mask works, designs, trademarks, and unfair competition: "(a) The district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents, plant variety protection, copyrights and trademarks. Such jurisdiction shall be exclusive of the courts of the states in patent, plant variety protection and copyright cases. (b) The district courts shall have original jurisdiction of any civil action asserting a claim of unfair competition when joined with a substantial and related claim under the copyright, patent, plant variety protection or trademark laws." *See* Jiwen Chen (2009), *The Well-Pleaded Complaint Rule and Jurisdiction over Patent Law Counterclaims: An Empirical Assessment of Holmes Group and Proposals for Improvement*, Northwestern Journal of Technology and Intellectual Property, Volume.8, No.1, Northwestern University School of Law, Fall 2009, pp.94-115.

[20] 28 U.S.C. § 1295. Jurisdiction of the United States Court of Appeals for the Federal Circuit: "(a) The United States Court of Appeals for the Federal Circuit shall have exclusive jurisdiction: (1) of an appeal from a final decision of a district court of the United States, the United States District Court for the District of the Canal Zone, the District Court of Guam, the District Court of the Virgin Islands, or the District Court for the Northern Mariana Islands, if the jurisdiction of that court was based, in whole or in part, on section 1338 of this title, except a case involving a claim arising under any Act of Congress

United States Patent and Trademark Office (USPTO) at the same time. In the Ethicon Inc. v. Quigg case, the U.S. Federal Circuit Court expressed that the court and the Patent and Trademark Office hold different standards of proof, and the judgment of the Patent and Trademark Office is not binding on the courts. On the contrary, the court's judgment of patent litigation has absolute validity; the legal effects are not only binding to the parties, but also binding to the others.[21] Clearly, the U.S. adopts the single litigation system consisting of public and private law, and the exclusive jurisdiction of the court; therefore, no different judgments will be made by the exclusively ruling courts.

B. European Union (EU) and its member countries

As mentioned above, the inconsistent judgments in patent disputes between the Intellectual Property Office (administration) and the Intellectual Property Court (judiciary) usually arise within the scope of national law. However, contrasts and contradictions may occur not only in the national law, but also in the transnational law. For example, according to section 138 (1) of Convention on the Granting of European Patents (EPC) in 1973, with regard to the judgment of patent disputes related to patent invalid reasons, the court jurisdiction and litigation process depend on substantive law and procedural law relevant to regulations in each EU country. In view of the points mentioned above, the European Patent Convention (EPC) now has more than 38 members countries; therefore if patent conflicts occur, there may be more than 30 kinds of different legal proceedings of application. Without doubt, different member countries in accordance with the relevant provisions of their national substantive law and procedural law may produce several different trial results. As a result, the contradictions between transnational law and national law are bound to lead the applicable law to uncertain results.

After discussions for more than three decades, the European Parliament finally passed a unified patent system bill on December 11, 2012, which was expected to be implemented in 2014; it includes Unitary European Patent (UEP) and Unified Patent Court (UPC). Under the Unified patent system bill, each EU member country can write in English, German or French to propose the single application form, and the25 EU member countries will then automatically provide patent protection (except for

relating to copyrights, exclusive rights in mask works, or trademarks and no other claims under section 1338 (a) shall be governed by sections 1291, 1292, and 1294 of this title;…." *See* James F. Holderman & Halley Guren (2007), *The Patent Litigation Predicament in the U.S*, University of Illinois Journal of Law, Technology & Policy, 2007, pp.1–20.

[21] Ethicon Inc. v. Quigg 849 F.2d 1422-1428 (1988). *See* Jonathan Statman (2015), *Gaming the System: Invalidating Patents in Reexamination after Final Judgments in Litigation*, UCLA Journal of Law & Technology, Volume.19, Issue.1, 2015, pp.1-36.

Italy and Spain with objections), and the patentee does not need to re-apply.[22] The Unified Patent Court is composed of the Court of First Instance and Court of Appeals, for processing the judgment of patent dispute related to patent invalidity and patent infringement.[23] In addition, the Court of First Instance includes the central division, local division and regional division.[24] According to the plan, the central division is to be located in Paris, the branches in London and Munich, and the appeals court in Luxemburg.[25] Nonetheless, it is a shame that the unified patent court system cannot help to mend the legal uncertainty; the main reasons are as follows:

1. Spain did not yet ratify the agreement of the unified patent court, so that it will not help to mend the legal uncertainty.

2. Germany adopts the dual litigation system of public law and private law; the resolution of patent dispute related to patent infringement and patent invalidity can thus be divided into two systems, creating a parallel track between patent court and civil court in the same case. As a result, the judgments of different courts will cause inconsistency, such as the local division in Munich. On the contrary, the UK adopts the single litigation system consisting of public and private law, and the exclusive jurisdiction of the court; therefore, patent infringement and patent invalidity are in the same litigation system. As a result, in the local division in London, there will be no different judgments between the exclusively ruling courts.

3. In theory, the Unified Patent Court (UPC) set up three levels of courts: the court of first instance, local division and appeals court. If the judgment standards of patent grant or patent infringement among them differ, different judgments will possibly arise in the same case.

The Netherlands

The Netherlands is an EU member. The Hague District Court has exclusive jurisdiction at first instance with respect to patents[26], mainly dealing with the dispute

[22] Implementing enhanced cooperation in the area of the creation of unitary patent protection. (REGULATION (EU) No 1257/2012) of The European Parliament and of The Council of the 17th of December 2012, Official Journal of the European Union. *Data available at:* http://eur- lex.europa.eu/ legal-content/EN/TXT/?uri=CELEX%3A32012R1257 (Visit Date: 2018. 05.03). Implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements (COUNCIL REGULATION (EU) No 1260/2012) of the 17th of December 2012, Official Journal of the European Union. *Data available at:* http://eur- lex.europa.eu/leg al-content/EN/ALL/?uri=CELEX%3A32012R1260 (Visit Date: 2018. 05.30)

[23] Article 6 (1), Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

[24] Article 7 (1), Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

[25] Article 7 (2), Agreement on a Unified Patent Court and Statute (document 16351/12, of 11.01.2013)

[26] Article 80 (1), Patent Act 1995 (Netherlands): The District Court of The Hague shall have exclusive jurisdiction in the first instance. http://www.ivir.nl/legislation/nl/patentact1995.html.

of patent application, patent scope, patent infringement and patent licensing,[27]with the first instance court dealing with patent dispute cases according to the patent regulations. As disputes of the patent administrative matters and civil matters in the first instance court and the appellate court level are specific to The Hague District Court,[28] the court decision is unlikely to be inconsistent.

The Federal Republic of Germany

As mentioned above, Germany adopts the dual litigation system with public law and private law. Therefore, the resolution of patent dispute relating to patent infringement and patent invalidity can be divided into two systems; becoming a dual and parallel track between the patent court[29] and the civil court.[30] However, the patent court is composed of both legal and technical judges, whereas the ordinary civil court is only composed of legal judges, who lack the professional and technical abilities to judge. As a result, it leads to inconsistent judgments between the patent court and the ordinary civil court.

C. The People's Republic of China (PRC)

On March 12, 1984 China promulgated its first patent law. The Chinese court accepted five cases involving patent disputes of intellectual property law: 1. Administrative Patent. 2. Patent infringement. 3. Patent rights disputes. 4. Patent agreement disputes. 5. Other patent disputes. Patent dispute cases include administrative patent cases that should not be patentable for an invention, the invention patent which is declared invalid or maintained for patent invention disputes, or implementation of compulsory licensing disputes and other compulsory licensing disputes, with the Beijing First Intermediate People as the court of first instance court, and the Beijing Higher People's Court as the court of second instance.[31] Besides the two cases mentioned above, the rest of the patent disputes cases shall be governed by each province, autonomous region, municipality, special economic zone, and their own people's intermediate court as the first instance court. In addition, the jurisdiction of patent litigation shall be

[27] Article 80 (1) (a) (b) & Article 80 (2) (a) (b), Patent Act 1995 (Netherlands): The District Court of The Hague shall have exclusive jurisdiction in the first instance. *Data available at:* https://www.ivir.nl/syscontent/pdfs/163.pdf (Visit Date: 2018.05.30).

[28] *See* Willem Hoorneman (2013), Patent Litigation in Netherlands-International Patent Litigation Guide, May 2013, pp.61. *Data available at:* https://cms.law/en/NLD/Publication/International- Patent-Litigation-Guide (Visit Date: 2018.05.30).

[29] Section 65 (1), Germany Patent Act (as amended by the Act on Improvement of Enforcement of Intellectual Property Rights of the 31st of July 2009)

[30] Section 143, Germany Patent Act (as amended by the Act on Improvement of Enforcement of Intellectual Property Rights of the 31st of July 2009).

[31] Supreme People's Court issued Regulations Governing Allocation of Administrative Cases Involving Intellectual Property Rights with Respect to Licensing and Affirmation of Patent and Trademark Rights: According to the Regulations, the first and second instances of the following cases shall be adjudicated by the Intermediate and High Court of Beijing Municipality, and the intellectual property tribunals of the Supreme People's Court.

governed by each province, autonomous region, municipalities, special economic zone, and their own Higher People's Court as the court of second instance.[32] Obviously, the jurisdiction of patent litigation separately belongs to different courts, such as the administrative court and judiciary court, so the courts' judgments will possibly be inconsistent with each other.

D. Taiwan

As mentioned above, there are two types of patent law: public law and private law. Either the pre-stage relationship (the public law relationship) or the later stage relationship (the private law relationship) relies on technical experts to participate in the patent proceedings to achieve correct judgment. In theory, according to article 17 of Taiwan (ROC) Intellectual Property Case Adjudication, the intellectual property courts have the legal right to require the intellectual property office to participate in the patent proceedings and to express their own opinions.[33] Thus, the different judgments of patent dispute related to the patent scope, patent validity and patent infringement will maintain consistency between each other. However, due to Taiwan's litigation system's dual and parallel track, including common litigation (criminal and civil) and administrative litigation, the parties present the validity of the patent as a defense, according to article 182 of the Civil Procedure Law[34] and article 90 of Patent Law.[35] In that case the ordinary civil courts in patent infringement litigation have to stop the trial proceedings, and wait for the verdicts of the administrative court. As a result, it not only violates the principle of economic litigation but also leads to justice delay, even if any party wins the final lawsuit in patent litigation. In order to avoid any delay in the judicial proceedings, in pursuit of economic efficiency for one-off dispute resolution, paragraph 1 of article 16 of Intellectual Property Case Adjudication Act states that: "when a party claims or

[32] Rule 86 (1), Implementing Regulations for the Patent Law of the People's R epublic of China: "Any party concerned in a dispute over the ownership of the right to apply for a patent or the patent right, which is being mediated by the administrative authority for patent affairs, or is sued to the people's court, may request the Patent Administration Department under the State Council to suspend the relevant procedures." *See* Implementing Regulations of the Patent Law of the People's Republic of China (2010), China Patents & Trademarks, Statutes & Rules, No.2, 2010, pp.77-98. *Data available at:* http://www.cpahkltd.com/UploadFiles/20100412141415703.Pdf (Visit Date: 2018.05.30).

[33] Article17 (1) of Taiwan (ROC) Intellectual Property Case Adjudication Act: "To rule on the claims or defense raised by a party pursuant to the first paragraph of the preceding article, the court may, whenever necessary, order the competent intellectual property authority to intervene in the action."

[34] Article 182 (1) of Taiwan (ROC) Civil Procedure Code: When the decision on an action, in whole or in part, is premised upon the existence or non-existence of certain legal relations to be determined in another action, the court may by a ruling stay the proceeding until that action is concluded. Article 182 (2) of Taiwan (ROC) Civil Procedure Code: "Except as otherwise provided, the provision of the preceding paragraph shall apply mutatis mutandis to cases where the existence or non-existence of a legal relation is to be determined by an administrative proceeding."

[35] Article 90 (1) of Taiwan (ROC) Patent Act: "For any civil proceedings pending in a court in connection with an invention patent, the court may suspend the trial process until a decision on the patent application, invalidation, or revocation action related thereto has become irrevocable." (2003.02.06 Amended, Noncurrent).

defends that an intellectual property right shall be cancelled or revoked, the court shall decide based on the merit of the case, and the Code of Civil Procedure, Code of Administrative Litigation Procedure, or other applicable laws concerning the stay of an action shall not apply."[36] Nevertheless when dealing with the judgment of patent validity, the Intellectual Property Court (Court) cites the applicable laws without the "theory of issue preclusion" such as the Code of Civil Procedure; therefore, the Intellectual Property Court (Court) decides the verdict of the individual case for relative efficacy, and without the universal case for absolute efficacy, according to paragraph 2 of article 16 of the Intellectual Property Case Adjudication Act.[36] Consequently, the verdict of the Intellectual Property Court (Court) in the judgment of the Intellectual Property Office (Administration) does not have any binding force; the parties may put a claim again to the Intellectual Property Office (Administration) for the same case in spite of the fact that the evidence and reason remain the same: therefore the possibility of inconsistency may finally arise between the Intellectual Property Court (Court) and the Intellectual Property Office (Administration).

E. Concluding Remarks

The legal justice comprises procedural and substantive justice. The maintenance of "procedure justice," must go through a number of processes at various levels of trial courts. In fact, patent dispute cases often involve professional technology, but the rule of law and litigation emphasize the protection of procedural justice, which may be time-consuming and often leads to late justice. Even if each party wins the case, the victory may come too late for the viability of the product or procedure that has been fought for. After all, during the whole time spent fighting in court, the parties are losing business opportunities due to the shortness of product shelf life; even if the parties eventually win the case, the only prize may be a debt certificate with an apology for "delayed justice." According to the article 16 (2) of the ROC (Taiwan) Intellectual Property Case Adjudication Act it allows the patent judgment of the intellectual property court to only have relative effects case by case, and not absolute effects in most cases. Obviously, this can block situations such as that in which the party pursuant deliberately files tiresome proceedings on the civil and administrative sides simultaneously simply to hamper and wear down the opponent, waste their time, and keep them and their product out of the market. Especially when the evidence and reasons are slightly different, the judgment on patent right effects may be inconsistent, leading to a tangled and complex legal predicament that could become even more difficult and time consuming to resolve. Therefore, in this way the parties concerned might not be able to settle the two disputes at the same time.

[36] Article16 (2) of Taiwan (ROC) Intellectual Property Case Adjudication Act: "Under the circumstances in the preceding paragraph, the holder of the intellectual property right shall not claim any rights during the civil action against the opposing party where the court has recognized the grounds for cancellation or revocation of the intellectual property right.".

With regard to the patent dispute resolution in Taiwan, the legal system of patent litigation inherited the dual parallel track of civil law, which includes common litigation and administrative litigation. There is a great possibility that the judgments among different courts and the IP Office will be inconsistent with each other. In the case of Royal Dutch Philips Electronics Ltd. v. Princo Corporation of Taiwan, Philips not only filed a civil petition to Taiwan Hsinchu District Court, but also appealed to the Intellectual Property Court and the Supreme Court. Besides, they reported to the Fair Trade Commission through administrative procedure and filed an administrative lawsuit with the Taipei Supreme Administrative Court and the Supreme Court, respectively. In the patent litigation, the two parties of this case pleaded based on civil and administrative procedure; in the same case the legal understanding of the civil court and administrative court differed, which caused inconsistent judgments. In view of the shortcomings mentioned above, either the Intellectual Property Case Adjudication Act or the Intellectual Property Court Organization Act shall put the provisions of exclusive jurisdiction in writing so as to put an end to the disputes stemming from the chosen court and the judgment differences.

In most legal systems, such as USA federal law, the EU Unified patent system bill, and the patent legislation of Netherland civil law, the IP court puts on trial disputes of patent litigation under the principle of exclusive jurisdiction, in order to effectively solve the situation of inconsistent verdicts and delayed verdicts, as well as to save the litigant cost of the parties.[37] On the contrary, Taiwan's and China's legal systems are based on German civil law, which is different from English common law; thus, in regard to whether the IP cases belong to administrative case, civil case or criminal case in the first instance court, if the parties are unwilling to accept the judgment of first-instance court, the parties of IP cases may appeal to the civil court or criminal court as the second instance court due to the lack of exclusive jurisdiction. Consequently, the great possibility of inconsistent judgments may arise among IP Court, civil court, and criminal court; thus, it would be better if either the Intellectual Property Case Adjudication Act or the Intellectual Property Court Organization Act would put the provisions of exclusive jurisdiction down in writing, to put an end to the deficiencies of different judgments.[38]

[37] 28 USC § 1338 (a) of the Federal Rules of Civil Procedure: "The district courts shall have original jurisdiction of any civil action arising under any Act of Congress relating to patents, plant variety protection, copyrights and trademarks. No State court shall have jurisdiction over any claim for relief arising under any Act of Congress relating to patents, plant variety protection, or copyrights. For purposes of this subsection, the term "State" includes any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the United States Virgin Islands, American Samoa, Guam, and the Northern Mariana Islands." *See* Jiwen Chen (2009), supra note 19, at 94- 115.

[38] *See* Chung-Hsin Chang (2007), *The Progress Toward the Establishment and Operation of Taiwan Intellectual Property Court*, Taiwan Bar Journal, Volume.11 (4), Taipei: Taiwan Bar Association, pp.61-76. (in Mandarin).

As mentioned above, the inconsistency of the judgments at different levels of trial courts is obviously disadvantageous to the parties in patent litigation, based on the opinions of judicial economy. In addition, the inconsistency of the judgments will result in the parties' distrust and doubts regarding patent litigation, and difficulty in solving patent disputes. In brief, in order for the legal judgment to obtain the trust of both parties, and under consideration of judicial economy, Taiwan's IP legislation or revision may refer to the experience from USA federal law, the EU's Unified patent system bill, and the patent legislation of Netherland's civil law. Especially, the provisions of exclusive jurisdiction should be put down in writing in order to eliminate the deficiency of different judgments. It's worth mentioning here, according to the EU's Unified patent system bill, that the EU's IP court puts on trial disputes of patent litigation under the principle of exclusive jurisdiction, in order to solve inconsistent or delayed verdicts. Although Germany is an EU member country, it adopts the dual litigation system, with a dual and parallel track between the patent court and the civil court. Unfortunately, it leads to inconsistent judgments between the patent court and civil. In view of this, determining how to balance this difference between thr EU and Germany is an interesting issue deserving more attention in the future.

IV. The comparative analysis of the recognition of equitable arbitration

As mentioned above, in terms of the equitable arbitration system, if the arbitrator can engage in judge-made law of case law, then the arbitral awards of the arbitrator will be more flexible in the arbitration court hearing.[39] In addition, the disputes between the parties shall be entitled to fair treatment with goodwill, and thus with more ability to deal with the current diversified types of international business transactions. In general, international patent disputes have the trait of the cross- border and timely process of commercial products. As mentioned earlier, when the arbitration courts apply for equitable arbitration, it can acquire the parties' trust by expert judgments to avoid the disputes of judicial sovereignty. In addition, it can save more time and costs, as well as facilitate the calculation of huge damages. [40] However, it is still doubtful whether the arbitral awards of the arbitrator are used in most countries. In general, the common law countries mostly recognize the equitable arbitration of foreign arbitral award unless the equitable arbitration does not comply with international public order or *ultra vires* judgment, so that the relative party can make a defense.[41] Nevertheless, since the equitable arbitration of foreign arbitral award is involved in national judicial sovereignty, the legislation of each country for the equitable arbitration of foreign arbitral award has different requirements.

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[39] *See* Wei Ming Liao (2001), *Amiable Composition on International Business Arbitration, Arbitration*, The Arbitration Quarterly Volume. 61, Taipei: The Chinese Arbitration Association, pp.69-91. (in Mandarin).

[40] *See* Jiun Yi Lin (2000), *A Legal Study on Amiable Composition*, Unpublished Doctoral Dissertation, College of Law, National Cheng Chi University, Taipei, Taiwan R.O.C, pp.98-108. (in Mandarin).

[41] *See* Jack Graves (2011), *Arbitration as Contract: The Need for a Fully Developed and Comprehensive Set of Statutory Default Legal Rules*, William & Mary Business Law Review, Volume 2, Nov. 24, 2011, pp.225-287. *See* ARBITRATION the international journal of arbitration, mediation and dispute

A. The United States

America is one of the common law countries; the arbitrators in arbitration court can make the arbitral award based on their own sense of justice and equity for the arbitration decision for the cases of domestic or international arbitration. In other words, it is unnecessary for the arbitral award of the arbitrator to comply with the binding laws[42]; they can make the arbitral award according to their own sense of justice and equity. Actually, the provision of American Arbitration Act is very similar to the "amiable composition" of continental law. [43] In the practice of arbitration, in order to avoid the dispute of arbitral award between each party, the majority of the arbitrators considered it best if the arbitral award cites the applicable law. Therefore, the majority of the arbitrators are in the habit of seeking the guiding principles of law.[44]

B. European Union (EU) and its member countries

1. The European Convention on International Commercial Arbitration 1961

Article 7 (I), European Convention on international arbitration provisions of Commerce in 1961 states that: The parties shall be free to determine, by agreement, the law to be applied by the arbitrator to the substance of the dispute. Failing any indication by the parties as to the applicable law, the arbitrators shall apply the proper law under the rule of conflict that the arbitrator deems applicable. In both cases the arbitrator shall take account of the terms of the contract and trade usages. Besides, article 7 (II), European Convention on international arbitration provisions of Commerce in 1961 states that: The arbitrators shall act as amiable compositors if the parties so decide and if they may do so under the law applicable to the arbitration. As a result, according to the regulations mentioned above, under the express authorization of both parties and the governing law of arbitration expresses applying equitable arbitration[45], the arbitrator can make the arbitral award based on principles of equity.[46]

management, Volume.74, No. 4, Sweet & Maxwell, November 2008, pp.347-478.

[42] *See* Howard M. Holtzmann & Donald Francis Donovan (1999), Reports on United State, International Handbook commercial Arbitration Supplement 28, pp.44.

[43] *See* Jiun-Yi Lin (2000), supra note 40, at 235. Howard M. Holtzmann & Donald Francis Donovan (1999), supra note 42, at 44.

[44] *See* Howard M. Holtzmann & Donald Francis Donovan (1999), supra note 42, at 45.

[45] *See* Dominique T. Hascher (2011), *European Convention on International Commercial Arbitration of 1961*, Yearbook Comm. ARB'N XXXVI, 2011. *Data available at:* http://www.arbitration-icca.org/media/4/49305067580462/media113534204360520hascher_commentary_on_____the_european_convention_1961.pdf (Visit Date: 2018.05.30).

[46] *See* Dominique T. Hascher (1990), *Commentary: European Convention on International Commercial Arbitration 1961*, in Yearbook Commercial Arbitration, Volume.15, pp.648.

2. The European Convention Providing a Uniform Law Arbitration 1966

According to article 21, European Conventions Providing Uniform Law Arbitration 1966 states that: Except where otherwise stipulated, arbitrators shall make their awards in accordance with the rules of law. In addition, according to Annex II, European Convention Providing Uniform Law Arbitration 1966 states that: Any Contracting Party may declare that it reserves the right to provide that it is only after a dispute has arisen that the parties may, in pursuance of article 21 of the uniform law, exempt the arbitrators from deciding in accordance with the rules of law. In view of the above considerations, the principle of arbitrators' decision is mainly based on legal arbitration and views the equitable arbitration as the exception.

The Netherlands

In the Netherlands, the arbitral award is stipulated under the first and second parts of the Civil Procedure Law, and includes Arbitration in the Netherlands and Arbitration outside the Netherlands. In addition, paragraph 1, article 1954, Civil Procedure Act states that: "The arbitral tribunal shall make its award in accordance with the rules of law", which is legal arbitration. Moreover, paragraph 3, article 1954, the Civil Procedure states that: "The arbitral tribunal shall decide as amiable compositor if the parties by agreement have authorized it to do so", which is the equitable arbitration. Thus in principle, the arbitrator must make an arbitral award in accordance with the rules of law; in exceptional circumstances when it is authorized by the arbitrator, people can make equity arbitration (amiable compositor).

However, in regard to the scrutiny standard of arbitration award, whether or not it should apply to the legal arbitration or equitable arbitration, the Netherlands in the field of domestic and international arbitrations has different paradoxical rules. The principle of domestic arbitration is mainly based on equitable arbitration, with legal arbitration as an exception according to paragraph 1, article 45, Arbitration Law. On the contrary, the principle of international arbitration is mainly based on legal arbitration and equitable arbitration as an exception in accordance with paragraph 2, article 45, Arbitration Law.[47]

The Federal Republic of Germany

In Germany, the arbitral award is stipulated under section 1051 - Rules applicable to substance of dispute.[48]

[47] *See* Pieter Sanders (1981), *National Report on The Netherlands*, in Yearbook Commercial Arbitration, Volume.VI, pp.60. International Handbook on Commercial Arbitration Supplement 7, Apr 1987, Annex1.

[48] Section 1051 - Rules applicable to substance of dispute, The New German Arbitration Law (English).

1. The arbitral tribunal shall decide the dispute in accordance with such rules of law as are chosen by the parties as applicable to the substance of the dispute. Any designation of the law or legal system of a given State shall be construed, unless otherwise expressed, as directly referring to the substantive law of that State and not to its conflict of laws rules.

2. Failing any designation by the parties, the arbitral tribunal shall apply the law of the State with which the subject-matter of the proceedings is most closely connected.

3. The arbitral tribunal shall decide *ex aequo et bono* or as amiable compositor only if the parties have expressly authorized it to do so. The parties may so authorize the arbitral tribunal up to the time of its decision.

4. In all cases, the arbitral tribunal shall decide in accordance with the terms of the contract and shall take into account the usages of the trade applicable to the transaction.

5. Thus informed, Germany views legal arbitration as the basic principle, unless the concerned parties clearly state that arbitrators can make the arbitral award based on the concerned regulations.

C. The People's Republic of China (PRC)

In China, the arbitral award was stipulated under Rule 47 of China International Economic and Trade Arbitration Commission provisions in 2012; the main provisions are as follows:

1. The arbitral court shall make the arbitral award based on facts and the contract, in accordance with the law, with reference to international practices, fair and reasonable judgment independently and impartially

2. The parties to the case have agreed on the use of physical things stated. If the parties have not agreed or agreed with the mandatory provisions of national law, the arbitral court shall decide the case by a legal entity to apply.

As mentioned above, according to Rule 47 of China International Economic and Trade Arbitration Commission in 2012 which emphasizes the principle of legal arbitration, equity arbitration is being dealt with. Since there are no clear and specific regulations related to it, it may be divided into positive and negative theories.

1. The positive theory

According to Rule 47 of China International Economic and Trade Arbitration Commission in 2012, the reference to international conventions and the principle of fair and reasonable made it clear that the arbitrator may give an arbitral award pursuant to equity arbitration.[49]

[49] *See* Zhi-Shi Chen (1998), *International Commercial Arbitration Law,* Beijing: Law Press China, pp.14. (in Mandarin).

2. Negative theory

> For the non-judgment of the parties to determine the rights and the obligations, responsibility range, number property must have a uniform standard; the arbitrator cannot ignore the law and arbitrate by his own will.[50]

D. Taiwan

Whether the cases of patent dispute are suitable for equitable arbitration, article 31 Arbitration Act of ROC (Taiwan) provisions states that "If expressly authorized by the parties, the arbitral tribunal may apply the rules of equity to determine", which results in the fact that whether arbitrators can judge regardless of the law still diverges into different opinions. Generally, based on the opinions of the parties concerned, as long as it conforms to the due procedures of law, the moral order of society, and stays within the empowerment range, arbitrators can make judgments.[51]

E. Concluding Remarks

In practices of patent dispute resolution, the business managers base their decisions on economic rationality and legal rationality; in considering the substantive justice and procedure justice, they may consent to apply arbitration to solve patent disputes. This business strategy obviously may control the time, budget, and transaction cost efficiently, to avoid time consuming proceedings and delayed justice. In theories of patent dispute resolution, arbitration is made by experts, in contrast to the judgment made by a general judge; as they are more objective on judgment, and they are trusted by the both parties. Moreover, arbitration is not a public action so the business secrets will not be revealed. Besides, arbitration is a matter of mutual agreement aiming to maintain a harmonious and trust relationship, and form industrial self-regulation inside the industry as business ethics. As the international business trading contract has something to do with national sovereignty, choosing arbitration may avoid unnecessary political interference; therefore, arbitration judgment, rather than court judgment, is more substantive and certain.[52]

In the cases of patent dispute resolution, the arbitrator may adopt equitable arbitration if it is based on the agreement of the both parties and complies with the principle of the autonomy of will, or the principle of contract of freedom. Compared with legal arbitration, equitable arbitration remains to be challenged, although based on the agreement of both parties, and complying with the principle of autonomy of will, or the freedom of contract. However, besides its advantages, equitable arbitration still has

[50] *See* Han-sheng Lee, Hao Yuan, Chao-Yang Liou, Ching-Hua Chang, Chin Hsu (1995), *Judicial Interpretation of Arbitration Law*, Beijing: Law Press China, pp.26. (in Mandarin).
[51] *See* Jiun Yi Lin (2000), supra note 40, at 378-400.

its own disadvantages, such as lack of stability or predictability; it doesn't comply with the rule of law, and the arbitral awards of arbitrators are arbitrary decisions. Especially, the equitable arbitration of foreign arbitral awards is involved in national judicial sovereignty; this is the major reason why equitable arbitration remains to be challenged.

Even so, the development of equitable arbitration is still dynamic in international society. Currently, both common law and civil law countries have already recognized equitable arbitration, such as the U.S.A, Canada, the UK, Germany, and the EU. Besides, many international arbitration organizations have recognized equitable arbitration, such as UNCITRAL Arbitration, UNCITRASL Model Law on International Commercial Arbitration, and the World Intellectual property rights organization (WIPO). Obviously, equitable arbitration is more capable of currently dealing with the diversified types of international business transactions. In view of this, Taiwan may take this experience from the U.S.A, Canada, the UK, Germany, and the EU, to revise article 31 of the Arbitration Act, and it shall expressly apply equitable arbitration, in order to avoid disputes between both parties.

V. A comparative analysis on the judge-made law

For the establishment of legal order, in the course of the development of jurisprudence, there are two main theories: natural law school and legal positivism school. The natural law school mainly explores the moral, political, religious and other provisions of law beyond legal positivism; therefore, it refuses to recognize the legal validity if the provision of law violates the natural law and justice (i.e. evil law is not viewed as law). On the contrary, the legal positivism school mainly emphasizes the empirical aspect of laws, excluding the moral, political, religious and other provisions of law, so it has to be complied with, even if it lacks the legitimacy of the law (i.e. even evil has rights).

While the core ideas of natural law and legal positivism differ, they have similar beliefs regarding the principle of equity law. The scholars of natural law think that in order to avoid the strict trait of the explanations of law-related language, which may lead to unfair results, the court has to make several additions to the interpretations of the law to realize justice. In addition, the scholars of legal positivism think that laws established by the legislative authorities represent the orders of the power holders; therefore, while making judgments, the judgment of courts must comply with the law. But sometimes the legal wording of provisions may seem ambiguous, and the courts have to make additional explanations in accordance with the principles of law or the purpose of public policy.[53] So, whether it is natural law that advocates recognition

[52] *See* Chin-Lung Lin (2012), *The Equilibrium Strategies of High -Tech Industrial System: An Empirical Research of Taiwan's Patent Disputes Solutions*, Unpublished PhD Dissertation, National Central University, Taiwan, pp.63.

[53] *See* T. Ian, McLeod (2010), *Legal Theory*, 5th Edition, Basingstoke: Palgrave Macmillan Limited, pp.78-80.

of the legal status within and outside the law, or legal positivism, which limits the recognition of the legal provisions, both agree that the court can try to fill the gap; however, the legal loophole arising under the principle of judge-made law, under the general principle of the law and public policy, was due to the vague definition of the law.

In the current era of globalization, the social environment and mainstream values are changing as well; therefore, how judges will be able to cite the applicable law to fill the legal loophole has become an important issue to explore. The traditional civil law system emphasizes the principle of the separation of powers. That is to say, the judges cannot establish law on their own; otherwise, it would violate the principle of separation of powers. In addition, whenever doubts related to the legal provisions arise, the judge can only explain it by legal syllogism and the meanings of the law in theoretical ways to ensure the stability and predictability of the law. However, due to the rigid legislative process, the legal norms often cannot contain all of the aspects related to social life. Consequently, the law may not be able to follow the rapid changes of the social environment. In contrast, in order to avoid the rigorous interpretation of legal provisions, the legal system of common law emphasizes the principle of judge-made law. In general, the judge in a court hearing can use precedents to fill in loopholes, giving novel interpretations of the law. In addition, the judge in a court hearing can derive a series of sub-principles from equity law. On the other hand, the legal system of civil law emphasizes that the "legislators make laws." Due to these two different legal systems, there are different requirements for the legislation of each country, as listed below:

A. The United State of America

The contemporary U.S. legal system is composed of case law and substantial law, and they are complementary. That is to say, the mechanism of judge-made law is still the foundation of the U.S. legal system. Richard Allen Posner, a judge on theU.S Court of Appeals, in regard to The Problems of Jurisprudence, believes that case law is judge-made law, and that the judge is also a legislator.[54] In addition, in Posner's book, *How Judges Think*, he claims that judges are not a vending machine, in spite of the majority of judicial decisions being driven by legalism, indicating that judges just mechanically apply the existing rules or legal reasoning mode in accordance with the established law of doctrine.[55]

In view of the uniqueness of high-tech industries and the rapid change of professional techniques, the existing law can never be able to meet people's needs; consequently, the law now can never keep up with the times. Therefore, for patent disputes, the U.S. federal court often takes equity law as a standard, and the judge of

[54] *See* Richard Allen Posner (1990), *The Problems of Jurisprudence*, Cambridge, Mass: Harvard University Press.

[55] *See* Richard Allen Posner (2008), *How Judges Think*, Cambridge and London: Harvard University

a court hearing can derive a series of sub-principles from the judge-made law, such as patent validity, patent infringement, etc. By so doing, equity law will be able to connect with the modern high-tech industries, and thus enrich the judicial culture of intellectual property.

Currently, in the practice of patent dispute cases, the U.S. Federal Circuit Court and the Federal Supreme Court usually cite equity law as the superordinate concept in response to the rapid changes of the socioeconomic environment. Accordingly, the judge of a court hearing can derive a series of sub-principles from the patent equity to fill the legal loopholes, such as the doctrine of equivalents, estoppel doctrine, exhaustion doctrine and patent misuse, to integrate successfully with contemporary social justice.

B. European Union (EU) and its member countries

Italy failed to implement article 215 of the EC Treaty regarding State liability, but the European Community (EC) Treaty does not clearly state the specific consequences of member states regarding the violation of EU Community law. Therefore, in order to fill the legal loopholes on the relief rights of EU law, the judgment of the Francovich v. Italy case (C-6/90) on November 19, 1991, the European Court of Justice established a principle of state liability in EU law according to judge-made law.[56] Thereafter, the principle of state liability was further developed in the case of Brasserie du Pêcheur and Factortame (Cases C-46/93 and C-48/93, 1996). The Judgment of the European Court of Justice held that: "Since the Treaty contains no provision expressly and specifically governing the consequences of breaches of Community law by Member States, it is for the Court, in pursuance of the task conferred on it by article 164 of the Treaty to ensure that in the interpretation and application of the Treaty, the law is observed, to rule on such a question in accordance with generally accepted methods of interpretation, in particular by reference to the fundamental principles of the Community legal system and, where necessary, general principles common to the legal systems of the Member States."[57]

In view of the fundamental principles of the EU community legal system mentioned above, including the case of Erich Stauder v. City of Ulm in 1969[58], Nold in 1974[59], the Wachauf in 1989[60], ERT in 1991[61] and the case of Netherlands v.

Press.

[56] EuGH, Slg. 1991, I-5357 =NJW 1992, S.165 ff.

[57] EuGH Brasserie du Pêcheur und Factortame v. 05.03.1996, verb. Rs. C-46/93 u. C-48/93, Slg. 1996, I-1029, EuZW 7/1996, 205 ff., Tz. 27.

[58] Case 29/69, [1969] ECR 419.

[59] Case 4/73, [1974] ECR 491.

[60] Case 5/88, [1989] ECR 2609.

[61] Case C-260/89, [1991] ECR I-2925.

case in 1998[62] , the European Court of Justice has always put great emphasis on the protection of fundamental human rights, which everymember state must comply with. For instance, from the standpoint of the EU member states (Germany is one of the EU member states), in the Kloppenburg case, the Federal Constitutional Court of Germany posits that the European Community (EC) has formed a legal tradition and legal culture; therefore, the European Court of Justice should not just interpret the law but also engage in judge-made law. Since judge- made law has developed over more than one hundred years[63], the European Court of Justice has the power to apply judge-made law. To sum up, according to article 220 of the EC Treaty and the cases mentioned above[64], the EU not only authorizes the European Court of Justice to engage in judge-made law, but also provides a legal basis for the legitimacy of judge-made law.[65]

The Federal Republic of Germany

Germany applies the legal system of civil law, emphasizing "legislators make laws", based on the principle of separation of powers. Thus, judges can only apply the interpretation of logic and semantics or the argumentation of jurisprudence. In other words, the judges cannot cite the precedents; otherwise it would breach the principles of separation of powers. A famous saying by German jurist Westermann goes: "Justice in terms of its very nature values the use of the law, rather than the independence of judges judged". Even though, the legislators did not give an explicit provision for the application of the law to be used.[66] In practice, paragraph 1 of article 97 of the Basic Law of the Federal Republic of Germany states that "Judges shall be independent and subject only to the law". So, it clearly reveals the fact that the judges must be free to make their own judgments on cases fairly and impartially, relying only on the facts of the specific case and the applicable law.

However, with the rapidly changing social environment, the legislation cannot keep up with the times, which often leads to loopholes in the legal provisions. Arthur Kaufmann, a German jurist and legal philosopher, posits that the provisions of law, in the people's belief, have gotten rid of no legal loopholes, which gives the judges the creative responsibility to help fill legal loopholes, and judges shall not refuse judgment just because there are no relevant provisions of law.[67] In addition, Karl Larenz, a German jurist, further distinguishes judge-made law into judge- made law of extra and

[62] Case C-377/98, Netherlands v. Parliament and Council, [2001] ECR I-7079, para. 70.

[63] BVerfGE 75, 223 (242 f), Kloppenburg - Richtlinien –Beschluß v. 8. 4. 1987; BverfGE 89, 155 (209. f).

[64] Article 220, the Treaty on European Union: "The Court of Justice and the Court of First Instance,each within its jurisdiction, shall ensure that in the interpretation and application of this Treaty the law is observed.

[65] Thomas von Danwitz, Verwaltungsrechtliches System und Europäische Integration, 1996, S. 133 ff.

[66] *See* Harry Westermann (1955). Wesen und Grenzen der richterlichen Streitentscheidung im Zivilrecht. Muenster.

[67] *See* Arthur Kaufmann, Rechtsphilosophie, Munchen (1997), translated by Shing-I Liu (2004),Beijing:

judge-made law of intra import.[68]

For the judicial practice in Germany, in the Soraya case (BVerfGE 34, 269), in order to effectively fill the loopholes in the legal system, the Federal Constitutional Court of Germany expressed their opinion and established the principle that the judges have the right to fill in the loopholes of legal provisions by using judge-made law.[69] In addition, some scholars believe that paragraph 3 of article 20 of the German Basic Law is: *"Die Gesetzgebung ist an die verfassungsmäßige Ordnung, die vollziehende Gewalt und die Rechtsprechung sind an Gesetz und Recht gebunden*". The German legal terms were written in: "*andere gesetzliche Regelungen*" instead of "*Recht*";[70] therefore, the applicable law for judges should include not only statutory law but also judge-made law. Of course, the judges in Germany today are still limited by the statutory laws, but their value can be further implied with the application of the judge-made law.[71]

C. The People's Republic of China (PRC)

The legal system of the PRC is inherited from civil law, and statutory law is the major source of their laws. Since the rapid change of the socioeconomics environment, the statutory laws cannot always respond to people's need in time. Therefore, in order to fill the legal loopholes of statutory laws, the courts can adopt legal precedent or judicial interpretation to engage in judge-made law. The judicial interpretation is a general norm applied to general cases before they happen, in order to provide several standards to future cases. On the contrary, the legal precedent is an independent judgment of a single case after it happened, so that future cases can consult it. Anyway, both judicial interpretation and legal precedent provide the basis of judgment for later cases.

With regard to the development of judicial interpretation, the Chinese judicial interpretation was established in accordance with the Standing Committee on article 2 of Provisions of the Supreme People's Court on the Judicial Interpretation Work of the National People's Congress in June 1981; it emphasizes the "one-level, dual system." The "one-level" means that only the Supreme People's Court and the Supreme People's Procuratorate have the right of judicial interpretations. The so- called "dual system" means that the right of judicial interpretation is shared by the Supreme People's Court and the Supreme People's Procuratorate. The Supreme People's Court has the judicial interpretation right on trial, while the Supreme People's Procuratorate has the judicial interpretation right of inspection.

Law Press China, 2004, pp.73.

[68] *See* Karl Larenz, Methodenlehre der Rechtswissenschaft, Berlin (1960), translated by Ai-Er Chen (2003), Taipei: Taiwan Commercial Press, 2003.

[69] *See* Jian-Hong Fan (2010), *On the space in the Application of Law and Judicial Independence: German Laws as an Example*, Academic Journal of one country Two Systems, No.1, pp.76-85. (in Mandarin).

[70] *See* Jian-Hong Fan (2010), supra note 69, at 76-85.

[71] BGHZ11, 35h, BGHZ3, 315, BGHZ 4, 157, BGHZ 17, 275; BVerfGE 3, 242, BVerfGE 13, 164.

With regard to the development of legal precedent, the Chinese judicial interpretation was established following the gazette of the Supreme People's Court first launched in 1985, and it has turned over a new leaf in legal precedent. In general, the Supreme People's Court publishes the specific legal cases as a basis for the guidance of each level of the people's courts. Though the People's Court Cases Selection edited by the Supreme People's Court in 1992 has an important influence on legal precedent, it's not as influential as the gazette of the Supreme People's Court, but still has its own impact on legal precedent. Furthermore, article 13 of the Second Five-Year Reform Outlines for the People's Court, published by the Supreme People's Court in 2005, states that: "Constructing and perfecting the case guidance system. Focusing attention on the use of guiding cases to unify legal applicable standards, to guide the work of lower courts, to enrich and develop legal theory, and other uses. The SPC will issue regulations related to the case guidance system, to regulate the designation of standards and procedures for selecting guiding cases, methods for issuing them, and guidance rules". As mentioned above, the influence of legal precedent in the Chinese judicial system is ineffable.

The principle of judge-made law is judgments made by judges with personal characteristics, such as experience, wisdom and consideration during trials. With regard to judge-made law, in comparing China with Germany, although they belong to the same legal system of civil law, there are many differences. In China's legal system, the principles of judge-made law are limited to *intra jus*, which includes the judicial interpretation and legal precedent, while *extra jus* includes judicial review and judge-made law. To sum up, a lot of improvement still waits to be done in the legal system.

D. Taiwan

The Republic of China's (Taiwan) legal system has always been based on the legislation of German civil law, and differs from Anglo-American common law, Taiwan's legal system emphasizes "legislators make laws", while the responsibility and authority of judges is to judge only in a case-by-case approach with the spirit of statutory laws, and to use the logical and semantic interpretation as the basis of judgment in the cases. Undoubtedly, with regard to the "legal loopholes", the judges will be able to use the rationale argumentation as the basis of the judge-made law of *intra jus*; it includes analogy explanation, legal precedents and the council of grand justices. However, the judgment is based either on legal interpretation, which conforms to the spirit of the constitution, or on the limited interpretation, which conforms to the spirit of constitution. Both are involved in citing applicable law, and the "legal loopholes" are between beyond the statutory laws and within the overall law (*extra jus*). Briefly, the "legal loopholes" go beyond the duties of judges. Thus, controversy often arises as to whether judge-made law can go beyond or within the overall law (*extra jus*). In judicial practice, the16th resolution of civil court of the Supreme Court ROC (Taiwan) explicitly recognized in 2003 that judges have the right to engage in judge-made law. In addition, in 2005 the No.

595 Council of Grand Justices ROC (Taiwan), Grand Justice Hsu, Tzong-Li and three other Grand Justices proposed the concurring opinion that either the legal interpretation, which conforms to the spirit of the constitution, or the limited interpretation, which conforms to the spirit of the constitution shall adopt the judge-made law as the basis of methodology.[72] With regard to judge-made law, if Taiwan is compared to Germany, although they belong to the same legal system of civil law, there are many differences. As mentioned above, Taiwan's judicial system allows judges to be able to use *intra jus* and *extra jus*. But controversy often arises as to whether the judge of a court hearing can derive a series of sub-principles from equity law.

E. Concluding Remarks

In practice, with regard to the distinction of the cooperative and competitive relationship between patent misuse and anti-trust law, the judges of the US Common Law Court often cited the equity law of Anglo-American common law to form the judge-made law, and thus caused the sub-principle of the equity law to adapt to the mainstream value of the diversified society in the rapidly changing world. Under the current globalization, solving disputes regarding intellectual property patents not only involves high-tech industries, but also has profound impact on the fairness of the market trading order. The everlasting equity jurisprudence through judge-made law created the sub-principle of the equity jurisprudence to adapt to the rapidly changing society. The US Common Law court set the judgment standard between the Patent Misuse Principle and "Anti-trust law" based on judge-made law to come up with two judgment principles: Per Se Illegal and Rule of Reason.

With the trends of global development, the procedures of common law countries are always first based on case law and then connect with statutory law. On the contrary, the civil law countries are rooted in the statutory law, and these are then combined with case law. Although, the legal form of common law and civil law look different, they are the same thing in the end. In practice, the judges can use the judge- made law of case law to create the sub-principles of equitable law and to fill the legal loopholes. Since Taiwan's legal system is rooted in statutory civil law, and the judgment of the court is based on statutory law, Taiwan's legislature often fails to come up with new legal elements when dealing with issues concerning transnational law. As a result, legal loopholes may occur.

Most countries have recognized judge-made law, including the U.S.A, the U.K, Germany and other EU member states; therefore, judge-made law is a new development trend for solving issues related to transnational law. In view of the points mentioned above, judge-made law is able to fill in the legal loopholes, whether caused by legislator

[72] *See* His-Ping Chen (2005), *The research of the Trial Error, dispute and conflict***,** Unpublished LLM Dissertation, College of Law, National Cheng Chi University, Taipei, Taiwan R.O.C, pp.135. (in Mandarin).

negligence, laziness, silence, or the rapidly changing social environment. But, the method of judge-made law is not unlimited; otherwise, it could possibly violate the principle of rule of law. However, judge-made law shall comply with the principle of equitable law [73] and the fundamental human right of constitution.[74] In addition, judge-made law shall not violate civil law, public order and good morals.[75] Briefly, judge-made law is obviously a new development trend for solving issues related to transnational law, and the judges can use judge-made law to create the sub-principles of equitable law and to fill in the legal loopholes.

IV. Conclusion

With reference to the abovementioned cases and discussions, this paper presents the following viewpoints.

A. Expert judgments

The purpose of patent litigation in high-tech industry is the same as for general litigation: to pursue personal and public justice. High-tech industry has the particularity of high-tech expertise, and therefore the consideration factors of patent litigation differ significantly from those of general litigation. Hence, with regard to the patent litigation of high-tech industry, the patent rights also involve high-tech expertise. In order to acquire the trust of the parties in patent litigation, the judges or arbitrators shall be familiar with the high-tech knowledge in each technical domain, and thus be able to resolve disputes. As a result, with regard to the patent litigation of high-tech industry, the technological expertise of the judges or arbitrators is of high concern, as well as their professional legal ability.

[73] It was not until the end of the 15th century that England established the court of chancery in the common law system, and the court of chancery gradually developed a set of unique basic principles of equity law based on cases, such as: 1. Equity regards done what ought to be done. 2. Equity will not suffer a wrong to be without a remedy. 3. Equity delights in equality. 4. One who seeks equity must do equity. 5. Equity aids the vigilant, not those who slumber on their rights. 6. Equity imputes an intent to fulfill an obligation.7. Equity acts in persona. 8. Equity abhors forfeiture. 9. Equity does not require an idle gesture. 10. One who comes into equity must come with clean hands. 11. Equity delights to do justice and not by halves.12. Equity will take jurisdiction to avoid a multiplicity of suits. 13. Equity follows the law. 14. Equity will not aid a volunteer. 15. Where equities are equal, the law will prevail. 16. Between equal equities the first in order of time shall prevail. 17. Equity will not complete an imperfect gift. 18. Equity will not allow a statute to be used as a cloak for fraud. 19. Equity will not allow a trust to fail for want of a trustee. *See* Richard Edwards, Nigel Stockwell (2005). *Trusts and Equity*, 5th Edition, London: Pearson Education, pp.34-48. McGhee J (2005), *Snell's Equity*, 31st Edition, London: Sweet & Maxwell, pp.27. Hudson Alastair (2005), Equity & Trusts, 4th Edition**,** London: Cavendish Publishing Limited, pp.24. Gary Watt (2016), *Trusts and Equity.* Oxford University Press, 16th Edition, 2016, pp.529- 565.

[74] *See* Mao-Zong Huang (1987), *Legal Method and Modern Civil Law*, NTU Legal Science Collection, Taipei: National Taiwan University, pp.384. (in Mandarin).

[75] *See* Mao-Zong Huang (1987), supra note 74, at 385.

In the current patent dispute resolution of the high-tech industry in Taiwan's legal system, the key point of patent litigation or arbitration depends on many factors, such as the substantive law of patents, including the legal element of patent grants, identification of patent infringement, etc., in addition to the procedural law related to the judge appointment, evidence investigation, technical appraisal, etc. In other words, the provisions of patent technology related to patent law are a key point, and they influence substantive patent law and procedural patent law. Obviously, without the consideration of professional patent technology, the process of patent litigation or arbitration shall be more time-consuming, more delayed and incur more cost, so that the legal justice will be challenged by the parties.

In terms of proper legislation for each country, the U.S. federal court has no high-tech expert judges to attend the trials for patent dispute, but there is an expert jury to compensate for the lack of judges in specific technical areas. In the European Union (EU) and its member countries, the Unified Patent Court (UPC) puts judges with expertise background in the Central Division and Appeals Court. In the Netherlands, Hague court judges in patent litigation comprise both those with legal background and technical experts. In Germany, the Senates of the Federal Patent Court are composed of professional judges and technically qualified judges. In China, the first instance proceedings will be able to hire people with non-legal background or technical experts for the people's jury in the jury system. The profile of people on the jury of the People's Republic of China is divided into the "jury", or "assessor". But, the people's jury has the right to share the judgment of judges through the participation of assessors, such as case hearing, investigation, mediation, inquiry and file inspection. In addition, the people's jurors have the legal rights to find the facts, determine the applicable law, participate in council, express independent opinion with dissent, and participate in full trials.

In contrast, for the patent litigation in Taiwan's IP court, in the patent dispute hearing, the duty of the technical review officer is limited to posing some questions to the parties, witnesses and appraisers to express their viewpoint to the professional judge, and to assist the judge in assessing the evidence of the investigation. Briefly, the legal status of the technical review officer in the trial of patent litigation is only assistance.[76] However, the legal status of the technical review officer is neither that of witness nor appraiser in the trial of patent litigation; thus how the technical opinion can be conducted in cross-examination in court and debate remains unknown. In addition, if the opinion of the judge differs from the statement of the technical review officer and the judge still insists on his/her opinion on the judgment, inconsistence results. This is obviously against the goal of the establishment of an IP professional court (ROC, Taiwan).

[76] Article 4 of the Taiwan Intellectual Property Case Adjudication Act: The court may, whenever necessary, request a Technical Examination Officer to perform the following duties: 1. Ask or explain to the parties factual and legal questions based on the professional knowledge in order to

In my opinion, the design purpose of intellectual property laws is to pursue the truth to win people's trust, and the responsibility of the judges is to find the truth in the trial of patent litigation. Therefore, the best way for the Intellectual Property Case Adjudication Act of the ROC (Taiwan) to achieve this goal is to set judges with expertise background in the trial of patent litigation, like the Unified Patent Court (UPC) of the European Union, the Netherlands and Germany. Otherwise, there's a second choice: the Intellectual Property Case Adjudication Act of the ROC (Taiwan) can set up the expert jury to participate in council, to express independent opinions with dissent, and participate in full trials just like the U.S. federal court or the People's Republic of China. By so doing, I believe the parties of patent litigation will give their trust to the court's judgment for the objective technical data as legal evidence.

B. The patent litigation court and the ruling territory

With the ever-changing science techniques, besides technical innovation, the competitive niche of high-tech industries is based on the time to market of commercial products; this can definitely help in seeking to acquire an absolute competitive advantage. As a result, in the process of the time to market with commercial products, the product life cycles become shorter. The effective factors of product life cycles also involve many variables, such as R&D, product manufacturing and product price; among these variables, timing becomes the key point of market competition in the high-tech industry. In view of the importance of timing, the Own Brand Manufacture (OBM) always relies on its own strengths with a large amount of capital and patent technique to force disadvantaged competitors out of the market by patent litigation, in order to acquire an absolute competitive advantage. The OBM is suspected of engaging in patent misuse related to equity law so that its competitors cannot launch their products onto the market with great timing; this action violates the principles of legal justice. In view of this weakness, determining how to integrate legal justice into patent litigation has become an important issue.

As for patent dispute resolution in Taiwan, the legal system of patent litigation follows the dual parallel track of civil law, which includes common litigation (criminal case and civil case) and administrative litigation. So, the parties of patent litigation can propose their claims in common court, patent court, and IP Office for the same case at the same time. Obviously, there is a great possibility that the judgments among different courts and IP Office will be inconsistent; therefore, the legal relief of patent litigation parties requires traveling among different courts and the IP Office. Furthermore, with regard to the process of administrative remedies, first of all, the parties of a patent dispute must file an appeal to the Intellectual Property Office; the item of appeal includes application, invalidation, opposition and revocation. Subsequently, there are four steps

clarify the disputes in action; 2. ask questions directly to witnesses or verification experts; 3. state opinions on the case to the judge; and 4. assist in evidence-taking in the event of preservation of evidence.

for administrative litigation. First, the parties of the patent dispute can file judicial review proceedings at the Intellectual Property Court, and file a lawsuit against the decision of the Intellectual Property Office if a party on the patent dispute is unwilling to accept the decision of the Intellectual Property. Third, if the parties of a patent dispute are still unwilling to accept the judgment of the Intellectual Property Court, the parties can appeal their case to the Intellectual Property High Court.[77]

As mentioned above, due to the rigidity of the judicial proceedings, they always fail to meet the timeliness of product commercialization. Consequently, the courts' final verdicts become the belated justice, and "justice delayed is justice denied." In order to solve the problem of inconsistent verdicts and to effectively cut expenses for both parties, according to article 2 of the Intellectual Property Court Organization Act of the ROC (Taiwan): "The Intellectual Property Court Act shall govern matters in relation to civil, criminal and administrative actions over intellectual property." As a result, the patent litigation relating to patent validity and patent infringement shall be changed from the dual system (the dual parallel track) to a single system. Under the patent legislation of Anglo-American common law, and the patent legislation of Netherlands civil law, the IP court puts on trial disputes of patent litigation under the principle of exclusive jurisdiction in order to effectively solve the situation of inconsistent verdicts, delayed verdicts, and to save the litigant costs of the parties. On the other hand, in Taiwan, both the provisions of the Intellectual Property Case Adjudication Act and Intellectual Property Court Organization Act do not entail exclusive jurisdiction. As a result, whether the IP cases belong to administrative cases, civil cases or criminal cases in the first instance court, if the parties are unwilling to accept the judgment of the first instance court, the parties of IP cases may appeal to civil court or criminal court as the second instance court due to the lack of exclusive jurisdiction. As a consequence, the great possibility of inconsistency may arise among the IP Court, civil court and criminal court. Thus, in my opinion, either the Intellectual Property Case Adjudication Act or the Intellectual Property Court Organization Act shall put down the provisions of exclusive jurisdiction in writing, in order to put an end to the problem of different judgments.[78]

C. The admittance of equitable arbitration

With respect to the choices of patent dispute solutions, if compared with litigation, arbitration provides many advantages, such as flexibility, rapidity, economy, experts, confidentiality and industrial harmony. Of course, most managers in the IP dispute would like to accept arbitration rather than lawsuits. Compared with legal arbitration, the equitable arbitration has its own disadvantages: There is no stability or predictability,

[77] Article 32 of Taiwan (ROC) Intellectual Property Case Adjudication Act: Unless otherwise prescribed by law, an appeal may be filed with the final administrative court against a judgment of the Intellectual Property Court.

[78] *See* Chung-Hsin Chang (2007), *The Progress Toward the Establishment and Operation of Taiwan Intellectual Property Court*, Taiwan Bar Journal, Volume.11 (4), Taipei: Taiwan Bar Association, pp.61-76. (in Mandarin).

and it does not comply with the rule of law, and the arbitral awards of arbitrators are based on arbitrary decisions. However, in my viewpoint, the arbitrator may adopt equitable arbitration if the equitable arbitration is based on the opinions of the parties concerned and complies with the principle of the autonomy of will or the principle of contract freedom.

Many countries have already recognized equitable arbitration. For example, in the U.S.A., both the U.S. Federal Arbitration Act (FAA) and the Uniform Arbitration Act (UAA) have already adopted equitable arbitration. Furthermore, in 1986, the Federal Commercial Arbitration Act of Canada adopted equitable arbitration based on the United Nations Model Law on International Commercial Arbitration. In addition, paragraph 1(B) of article 46 of Arbitration Act 1996 of the UK adopted equitable arbitration. Section 1051 (10th amended) of the Civil Procedure Act 1997 of Germany included equitable arbitration and made it one of the civil remedies.

Besides the international organization in the world, paragraph 2 of article 7 of the European Convention on International Commercial Arbitration 1961 recognizes equitable arbitration. Subsequently, paragraph 2 of article 33 of the UNCITRAL Arbitration Rules 1976 provides equitable arbitration. Furthermore, paragraph 3 of article 28 of the UNCITRASL Model Law on International Commercial Arbitration 1985 recognizes equitable arbitration. Paragraph 1 of rule 59 of the World Intellectual property rights organization (WIPO) 1994 expressly applies equitable arbitration. Obviously, since equity arbitration may avoid the disputes on judicial sovereignty, equitable arbitration is more capable to deal with the current diversified types of international business transactions. To sum up, equitable arbitration has already been accepted by various countries' legislation and international organizations, and will become a new trend in international arbitration.

D. The judge-made laws

National laws rely on national sovereignty to exercise their power; on the other hand, transnational law always crossed national boundaries without the form of national sovereignty. Take the WTO as an example; WTO member states include nations applying Anglo-American common law, civil law, or other legal systems. Although the resolution of WTO has no binding power [79], the resolutions of the Dispute Settlement Body (DSB) and the appeal authority often cited previous cases in order to demonstrate their resolutions as reasonable and legitimate. For instance, in the Mexico Tax Measures on Soft Drinks and Other Beverages case (DS308), the Dispute Settlement Body and the appeal authority cited dozens of their own precedent decisions. Ever since, some scholars believe that the resolutions of the Dispute Settlement Body and the appeal authority exert a quasi-precedential effect.[80] Apparently, since the Dispute Settlement Body and the appeal authority will comply with the precedents, or change or overthrow the precedent, the dispute resolution of WTO is flexible in using precedent.

As for the competitive relationship between national law and transnational law, either the common law system or civil law system is always combining national law and transnational law. In other words, it is a new trend. In the legal system of common law, national law and transnational law will be combined together. The legal system of civil law and the legal system of common law are developing toward the same situation in the future. The statutory law legal system is the main source of law in civil law, but it also recognizes legal precedent, judicial review and judicial interpretation. The legal system of common law is also in the same situation, since it is mainly based on case law (judge-made law), but the promulgation of statutory law is also applied by the legislature. As a result, the function of case law has been strengthened. Today, the common law countries always employ case law, and then connect it with statutory law. On the contrary, the civil law countries are rooted in statutory law, and then combine it with case law. In my opinion, while the legal form of common law and civil law are quite different, in essence, they are the same at the end.

Since Taiwan's legal system is rooted in the statutory law of civil law legal system, and the judgment of courts is based on statutory law, Taiwan's legislature often fails to come up with new legal elements when it comes to dealing with issues concerning transnational law. Consequently, legal loophole may happen. In traditional legal methodology, the judges of legal system in civil law not only apply analogy, the interpretation of teleological expansion and the interpretation of teleological limitation, but also apply the principles of equitable law regarding case law as a superordinate concept, in order to solve patent disputes effectively. In theory, the judges can use the judge-made law of case law to create the sub-principles of equitable law and to fill in the legal loopholes. In view of the above-mentioned findings, since most legislation of countries have recognized the judge-made law of case law, such as the U.S.A., the U.K., Germany and other EU member states, the judge-made law of case law is obviously a new development trend for solving issues related to transnational law, whether caused by a legislator's negligence, laziness, silence, or the rapid change of the social environment. However, the method of judge-made law is not unlimited; otherwise, it is possible to violate the principle of rule of law. Thus, this article believes that the judge-made law of case law shall comply with the principle of equitable law and the fundamental human rights of the constitution, and also that the judge-made law of common law shall not violate civil law[81], public order and good morals.[82]

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[79] *See*, Appellate Body Report, Japan-Taxes on Alcoholic Beverages, WT/DS8/AB/R, WT/DS10/A B/R, WT/DS11/AB/R (1996-10-04)

[80] *See* Adrian Chua (1998), *The Precedential Effect of WTO Panel and Appellate Body Reports*, Leiden Journal of International Law, Volume.11, 1998, pp.47.

[81] *See* Stefan Vogenauer and. Jan Kleinheisterkamp (2015), *Commentary on the UNIDROIT Principles of International Commercial Contracts (PICC)*, Oxford, United Kingdom: Oxford University Press, 2015, pp.81-110. *See* Taida Begic (2005), *Applicable Law in International Investment Disputes*, Eleven International Publishing, pp.98-101.

[82] *See* Res. Asst. Arzu (SEN) Kalyon (2017), *Arbitrators Acting As An Amiable Compositeur Under International Commercial Law*, Law & Justice Review, Issue 14, June 2017, pp.95-104.

References

Alastair, Hudson, *Equity & Trusts*, 4th Edition**,** London: Cavendish Publishing Limited, 2005.

ARBITRATION the international journal of arbitration, mediation and dispute management, Volume.74, No. 4, Sweet & Maxwell, November 2008, pp.347- 478.

Begic, Taida, *Applicable Law in International Investment Disputes*, Eleven International Publishing, pp.98-101, 2005.

Chang, Chung-Hsin, *The Progress Toward the Establishment and Operation of Taiwan Intellectual Property Court*, Taiwan Bar Journal, Volume.11 (4), Taipei: Taiwan Bar Association, pp. 61-76, 2007. (in Mandarin)

Chen, His-Ping, *The research of the Trial Error, dispute and conflict***,** Unpublished LLM Dissertation, College of Law, National Cheng Chi University, Taipei, Taiwan R.O.C. 135, 2005. (in Mandarin)

Chen, Jiwen, *The Well-Pleaded Complaint Rule and Jurisdiction over Patent Law Counterclaims: An Empirical Assessment of Holmes Group and Proposals for Improvement*, Northwestern Journal of Technology and Intellectual Property, Volume.8, No.1, pp.94-115, 2009.

Chen, Zhi-Shi, *International Commercial Arbitration Law,* Beijing: Law Press China, p.14, 1998. (in Mandarin)

Chua, Adrian, *The Precedential Effect of WTO Panel and Appellate Body Reports*, Leiden Journal of International Law, Volume.11, p.47, 1998.

Dominique T. Hascher (2011), European Convention on International Commercial Arbitration of 1961, Yearbook Comm. ARB'N XXXVI, 2011. *Data available at:* http://www.arbitration-icca.org/media/4/49305067580462/media11353420 4360520hascher_commentary_on the_european_convention_1961.pdf (Visit Date: 2018.05.30)

Edwards Richard, Stockwell Nigel, *Trusts and Equity*, 5th Edition, London: Pearson Education, pp.34-48, 2005.

Fan, Jian-Hong, *On the space in the Application of Law and Judicial Independence: German Laws as an Example,* Academic Journal of one country Two Systems, No.1, pp.76-85, 2010. (in Mandarin)

Gill, Anika; Gray, Jason; Skitmore, Martin & Callaghan, Stephen, *Comparison of the effects of litigation and ADR in South-East Queensland*, The International Journal of Construction Management, Volume.15, Issue 3, pp.254-263, 2015.

Graves, Jack, *Arbitration as Contract: The Need for a Fully Developed and Comprehensive Set of Statutory Default Legal Rules*, William & Mary Business Law Review, Volume. 2, pp.225-287, 2011.

Halle, Jordan M, *Comments: Avoiding Those Wearing Propeller Hats: The Use of Blue Ribbon Juries in Complex Patent Litigation*, University of Baltimore Law Review: Volume.43: Issue.3, Article 4, pp.435-459, 2014.

Hascher, Dominique T, *Commentary: European Convention on International Commercial Arbitration 1961*, in Yearbook Commercial Arbitration, Volume.15, pp.648, 1990.

Holderman, James F. & Guren, Halley, *The Patent Litigation Predicament in the U.S*, University of Illinois Journal of Law, Technology & Policy, pp.1–20, 2007.

Howard M. Holtzmann & Donald Francis Donovan, Reports on United State, International Handbook commercial Arbitration Supplement 28, p.44, 1999.

Huang, Mao-Zong, *Legal Method and Modern Civil Law*, NTU Legal Science Collection, Taipei: National Taiwan University, 1987. (in Mandarin)

Implementing enhanced cooperation in the area of the creation of unitary patent protection, (REGULATION (EU) No 1257/2012) of The European Parliament and of The Council of the 17th of December 2012, Official Journal of the European Union. *Data available at:* https://eur-lex.europa.eu/legal-content/ EN/TXT/?qid=1542780613009&uri=CELEX:32012R1257 (Visit Date: 2018. 05.30).

Implementing enhanced cooperation in the area of the creation of unitary patent protection with regard to the applicable translation arrangements (COUNCIL REGULATION (EU) No 1260/2012) of the 17th of December 2012, Official Journal of the European Union., *Data available at:* https://eur-lex.europa.eu/le gal-content/EN/TXT/?qid=1542780723122&uri=CELEX:32012R1260 (Visit Date: 2018. 05.30)

Implementing Regulations of the Patent Law of the People's Republic of China (2010), China Patents & Trademarks, Statutes & Rules, No.2, 2010, pp.77-98. *Data available at:* http://www.cpahkltd.com/UploadFiles/2010041214141570 3.Pdf. (Visit Date: 2018.05.30).

Kalyon, Res. Asst. Arzu (SEN), *Arbitrators Acting As An Amiable Compositeur Under International Commercial Law*, Law & Justice Review, Issue 14, pp.95- 104, 2017.

Karl Larenz, Methodenlehre der Rechtswissenschaft, Berlin (1960), translated by Ai- Er Chen (2003), Taipei: Taiwan Commercial Press.

Lee, Han-Sheng, Hao Yuan, Chao-Yang Liou, Ching-Hua Chang, Chin Hsu, *Judicial Interpretation of Arbitration Law*, Beijing: Law Press China, p.26, 1995. (in Mandarin)

Liao, Wei-Ming, *Amiable Composition on International Business Arbitration, Arbitration*, The Arbitration Quarterly Volume. 61, Taipei: The Chinese Arbitration Association, pp.69-91, 2001. (in Mandarin)

Lin, Chin-Lung, *The Equilibrium Strategies of High -Tech Industrial System: An Empirical Research of Taiwan's Patent Disputes Solutions,* Unpublished, PhD Dissertation, National Central University, Taiwan R.O.C, p.63, 2012.

Lin, Jiun-Yi, *A Legal Study on Amiable Composition*, Unpublished Doctoral Dissertation, College of Law, National Cheng Chi University, Taipei, Taiwan R.O.C, pp.98-108, 2000. (in Mandarin)

Liu, Shing-I, Beijing: Law Press China, p.73, 2004. (in Mandarin)

McGhee, John, *Snell's Equity*, 31st Edition, London: Sweet & Maxwell, 2005.

Mcleod, T. Ian, *Legal Theory*, 5th Edition, Basingstoke: Palgrave Macmillan Limited, pp.78-80, 2010.

Posner, Richard Allen, *How Judges Think*, Cambridge and London: Harvard University Press, 2008.

Posner, Richard Allen, *The Problems of Jurisprudence*, Cambridge, Mass: Harvard University Press, 1990.

Sanders, Pieter, *National Report on The Netherlands*, in Yearbook Commercial Arbitration, Volume.VI, p.60, 1981.

Statman, Jonathan, *Gaming the System: Invalidating Patents in Reexamination after Final Judgments in Litigation*, UCLA Journal of Law & Technology, Volume.19, No.1, pp.1-36, 2015.

Vogenauer, Stefan and. Kleinheisterkamp, Jan, *Commentary on the UNIDROIT Principles of International Commercial Contracts (PICC)*, Oxford, United Kingdom: Oxford University Press, pp.81-110, 2015.

Wang, Yifan; Biddulph, Sarah and Godwin, Andrew, *A Brief Introduction to the Chinese Judicial System and Court Hierarchy*, Asian Law Centre briefing paper, Volume.6, Asian Law Centre, Melbourne Law School, The University of Melbourne, pp.1-35, 2017.

Watt, Gary, *Trusts and Equity.*, Oxford University Press, 16th Edition. pp.529-56, 2016.

Westermann, Harry, Wesen und Grenzen der richterlichen Streitentscheidung im Zivilrecht. Muenster, 1995.

Willem Hoorneman, Patent Litigation in Netherlands-International Patent Litigation Guide, *Data available at:* http://www.cmslegal.com/patentswithoutborders (Visit Date: 2018.05.30)

Yifan Wang, Sarah Biddulph and Andrew Godwin (2017), *A Brief Introduction to the Chinese Judicial System and Court Hierarchy*, Asian Law Centre briefing paper, Volume.6, Asian Law Centre, Melbourne Law School, The University of Melbourne, 2017, p.1-35. *Data available at:* http://law.unimelb.edu.au/ data/assets/pdf _file/0004/2380684/ALC-Briefing-Paper-6-Wang,-Biddulph,- Godwin_5.pdf (Visit Date: 2018.05.30)