ARTICLES

Orkhan Hasanov
Postgraduate student of the Law Faculty of the Baku State University

THE ROLE OF INTELLECTUAL PROPERTY RIGHTS IN INTERNATIONAL TECHNOLOGY DIFFUSION AND FOREIGN DIRECT INVESTMENT

DOI 10.30729/2541-8823-2022-7-4-136-152

Abstract. *Notwithstanding there is no exact information about the direct liaison between Intellectual Property Rights (IPRs) and international trade and Foreign Direct Investment (FDI), however it may be said that most of the enhancements in Intellectual Property (IP) sphere were proposed by developed countries because of challenges relating to their commercial interests. In addressing this matter, this chapter will try to answer several questions on the ground that to what extent IPRs play an important role in enlargement of trade relations and in the decision-making process concerning where to invest, and respectively trends in order of a favorable climate expected by global business community. Further, it will be underlined in a depth manner that which investors need a strong IP regime, since some economic areas do, in fact, not stipulate a strong IP regime in the operation process. In addition, granting foreign patenting and licensing (mainly compulsory) and their legal grounds will be among discussed subjects by emphasizing their perspectives from technology and knowledge diffusion viewpoint.*

Keywords: *Intellectual Property Rights, technology diffusion, infringement, Intellectual Property Protection.*

1. IP protection and international trade

As noted above, there is no meaningful approach to relationship or availability of direct link between IPR and international trade in the academic literature[1], since

[1] *Shadlen Kenneth C.* Intellectual property, trade and development: can foes be friends? // Global Governance. 2007. 13 (2). P. 154.

IP protection is, in some cases, accepted as an obstacle to trade, particularly at the regional level, namely EU level. From an overall perspective, the close link between IP and trade stimulates innovation and commercialization, and the quality, volume and value of goods and services. Similarly, empirical evidence on damages caused by piracy and counterfeit to international trade increased considerably in recent years, which can be amounted to the direct relationship between these areas. According to the study by International Chamber of Commerce, international trade in pirated goods and counterfeiting is around $600 billion a year, which is equivalent to 5–7% of global trade. The OECD provides that the statistics do not involve the counterfeit and pirated products and goods consumed within one country and does not cover items distributed through websites that is why the real sum would be considerably when including the above noted nuances[1]. It is obvious non that main fiscal damages are belong to developed countries as they appear main exporters of knowledge, technology and other innovation based products. Increasingly, a weak IP system discourages international companies to engage in trade relations in the countries in which there are considerable deficiencies in fulfillment of international IP obligations. Significant part of academics mainly focuses on an indirect intersection between these two fields, for example, increasing the role of patent and copyright protection and enlargement of trade relations occur parallel. Moreover, emerging newer forms of IPR related to new trade fields, including but not limited to nanotechnology, genetic engineering and transportation is also evidence for the empirical link[2]. In these sectors, IP protection appear as challenges for countries to review (modify and approve) their existing investment policies, subsidies, competition law and practices which can respectively cause to positive outputs in the rate of knowledge creation, design, and technology invents[3].

It is probably fair to say that major developments in Chinese IP legislations and positive empirical results of IP enforcement in that country are obviously outcomes of large economic relations, mutually investments between the US and China, and irrevocable stance of the US on imposing sanctions and pressures on the latter[4]. While such legislative modifications and the actions required under the international organizations were declared unacceptable by China on the ground of economic and

---

[1] *Shayerah I., Ian F. F* Intellectual Property Rights and International Trade. Nova Publishers, 2008. Pp. 15–16.

[2] *Carlos M. Correa, Abdulqawi Yusuf.* Intellectual Property and International Trade: The TRIPs Agreement. Kluwer Law International, 2008. P. 332.

[3] *Anna Emanuelson.* Standardization agreements in the context of the new Horizontal Guidelines // E.C.L.R. 2012. Volume 33. Issue 2. P. 69.

[4] *Carlos M. Correa, Abdulqawi Yusuf.* Intellectual Property and International Trade: The TRIPs Agreement. Kluwer Law International, 2008. P. 96.

social security before US initiatives. Today, the US is the biggest trade partner of China and the amount of trade relation between these countries is approximately $322 billion annually. Unsurprisingly, only in 2009, total investments in China ponied up by US companies from NIKE to APPLE was around $3.6 billion[1] which is considered as one of the foundation stones of China's fastest economic growth.

In contrast to the indirect relationship approach, some support that many of rapid and significant changes in IP sphere appeared because of close link between IPR and trade. Further, in line with challenges of transnational trade, existing trade related international and regional mechanisms incentivized their initiatives in order of establishing new conventional instruments concerning a harmonization of IP protection and international trade which is sound as a more favorable trade climate. The most important element in the evolution process of IPR is that major knowledge transferors started to pursue and impose pressure on transferees regarding IP protection in response to their socio-economic interests. Further enhancements attributable to the Paris Convention on the Protection of Industrial Property became effective from 1883, the Berne Convention for the Protection of Literary and Artistic Works, Madrid Convention dealing with the international registration of marks and trademarks are within the framework of the first international instruments regulating this area[2]. But the fact that bilateral trade agreements and some regional mechanisms constitute the main legal basis of IP regulation in connection with international trade in today's concept. Empirical evidence shows that notwithstanding with significant role of international instruments in the evolution of IPR, they are, in some instances, unable to cover specific IP matters due to the lack of consensus[3]. That is why, most parties (northern countries) interested in strong IP protection prefer bilateral and regional agreements to achieve maximum effectiveness with their actions. For example, regardless of China's signatory status in the TRIPS and its membership at the WTO, incorporation and enforcement of international IP obligations have showed quite weak progress, moreover other countries (e.g., India and Brasilia) expresses similarities of China also support this country's stance in international area. Bilateral actions do not only encompass trade relations among developed and developing countries, but also cover the relations among developed countries themselves[4].

---

[1] U.S. Companies That Invest Big in China 2010 [Electronic resource] // URL: http://www.forbes.com/2010/07/05/us-investments-china-markets-emerging-markets-fdi.html.

[2] *Nicholas Perdikis, Robert Read.* The WTO and the Regulation of International Trade: Recent Trade Disputes Between the European Union and the United States. Edward Elgar Publishing, 2005. Pp. 193–194.

[3] WTO Work of the Committee on Regional Trade Agreements (CRTA) (stating a lack of consensus to reach a final decision) [Electronic resource] // URL: http://www.wto.org/english/tratop_e/region_e/regcom_e.htm.

[4] *Nicholas Perdikis, Robert Read.* The WTO and the Regulation of International Trade: Recent Trade Disputes Between the European Union and the United States. Edward Elgar Publishing, 2005. P. 17.

Hence, bilateral treaties and imposing strong pressure on the foregoing countries by developed countries who are engaging in business relations with them may play a key role in this matter.

1.1. Expected trends regarding inclusion of all aspects of IP into further trade agreements

Putting aside several developments under 2003 TRIPS Agreements on the ground of Public Health, international community has witnessed very slow and little changes in other areas of IP in a recent context and is believed that it will be a part of further advances either within or outside the international organizations. Remaining issues waiting to be tackled are to cover business services, regulatory arrangement, and environmental aspect of international trade, and, of course, creation of a balanced approach to optimize IP law not only at the bilateral level, but also on a global scale. From other point of view, US-China bilateral treaty will only include the protection of the rights of US owners in China, not all the developed countries' interests that transferring knowledge to China, as a result the situation effects negatively competition in that country. To establishing a fair competitive environment, either all developed countries have to conclude separate bilateral agreements with China in order to operate in a competitive manner with US goods and products or relevant measures have to be taken under the international organizations. In scholarly writing, it is often voiced that ad hoc initiatives do not fit global concerns about IP protection and competition appropriately. Thus, adequate action whether by the WTO or blocks of countries towards establishing a global Anti-Counterfeiting Treaty seems a more possible and effective way to resolve the world-wide concerns rather than bilateral agreements. Matters addressing protection of clinical trial data and confidential commercial information is no longer observed in practice, however these issues are the subject of extensive discussions of just-completed Canada-European Union Comprehensive Economic and Trade Agreement (CETA). Similarly, the US negotiates establishing of a Tran-Pacific Partnership (TPP) Agreement in which the parties announced their agreement to treat the same concern that will apply through 12 Asia-Pacific countries if concluded. The USTR's "Fact Sheet" on the TPP proposals provides that there is a consensus on the protection of commonly accepted/existing issues such as trademarks, geographical indications, copyright, patents, trade secrets, data protection and other remained concerns, including IP enforcement, genetic resources and traditional knowledge that have never been negotiated outside multilateral IP policy frameworks[1]. The Agreement being concluded will be complied with through 12 countries that are playing an important role in international trade, this is why it is considerable to

[1] *Jeremy De Beer.* Applying Best Practice Principles to International Intellectual Property Lawmaking // IIC. 2013. No. 44. P. 892.

emphasize to what extent the TPP will stimulate economic growth and trade in and among party states, if successful. Pursuant to the report of Peterson Institute, TPP Agreement encompasses 793 million consumers and $28.1 trillion GDP which is equal to 39.0% of world GDP currently, and will increase annual world-wide income of the countries by $295 billion and exportation amount by $305 billion per year up to 2025[1]. Furthermore, the Fact Sheet found out FDI from other party states in the US will also positively effect by the Agreement, and the estimation is around $620.3 billion which constitute 23% of total FDI stock in that country.

2. IPRs and FDI

Licensing, joint venture and FDI are commonly applied market channels in the process of technology and knowledge transfer. According to author Maskus, FDI is the establishment or acquirement of an external capital that is controlled and regulated by means of the investing firm "transnational corporation"[2]. FDI is taken on by multinational companies to countries where transferring technology and knowledge are exceedingly needed in domestic market, but there are several components, including IP protection that referred in making decisions on where to invest that will be emphasized in further steps.

As found in section 3.2, the impacts of IPR on FDI is highly ambiguous, and it shows differences across industries, in a few words the relationship is a dependent context. Since empirical evidence do find out an indirect or mixed liaison between FDI and IP protection, positive, negative and insignificant effects of IP protection on foreign investment flows can be observed as the result of this indirect relationship. The study on 24 defined economies conducted by Smarzynka[3] highlights that IP protection has generally a significant impact on FDI flows and the strongest relationship is observed in certain economic areas, including pharmacology, chemicals, machinery and electrical equipment and to some extend in other related spheres. Some state that IPRs protection has become a small concern for multinational enterprises, particularly in services that are based on employment intensive and low technology. For instance, IPR protection does not have a major role in investment decisions on food and metals industries, since they are categorized

---

[1] *Peter A. Petri.* The Trans-Pacific Partnership and Asia-Pacific Integration: Policy Implications [Electronic resource] // URL: http://www.piie.com/publications/interstitial.cfm? ResearchID=2146.

[2] *Evenson Robert E.* Intellectual Property Rights and Economic Development, by Keith Maskus. 2001, 33. *Case W.* Res. J. Int'l L. Pp. 187–188.

[3] *Rod Falvey, Neil Foster.* The Role of Intellectual Property Rights in Technology Transfer and Economic Growth: Theory and Evidence. 2006. P. 33.

by low technology intensity[1]. By contrast, a large amount of foreign investments come to some oil-rich countries in which IP protection is considerably weak or there is no awareness about that, and investors have little concern about IP protection, or capital saved from their activities is extremely more than their total loss relating IP infringement that is another important. It may be argued that imitating technologies used in Petroleum sphere is highly difficult compared with other sectors, therefore transnational corporations engaging in the spheres other than Petroleum are seeking a strong IP regime in countries over which they are interested in investing.

In theory, two effects of IPR on foreign investment flows have been voiced loudly up to present. One of them is a weak IP protection discourages FDI in most circumstances. Another one is a stronger regime may lead transnational companies (TNC) to switch off their preferred model of protection that would be in the best interest of such TNCs.

From an overall perspective, a weak IP protection is a substantial factor leads affecting negatively investment climate and reducing country's rank concerning starting and doing business overseas, as a result dampens FDI.

Some strongly support[2] that IP protection level significantly affects the decision-making on investment plans, moreover it defines a host country and type of sector whether they are suitable for investment or not. According to the survey by the World Bank economist Edwin Mansfield, the percentage of survey participators — 100 US companies stated that IP protection is generally an important factor while they are making decisions on where to invest. The author highlights that positive effects of IP protection on cross-border trade and FDI is applicable to all countries, but this effect depends upon diverse range of factors such as development rate, technological advancement, and innovative capability of and GDP per capita in a host country. Increasingly, these factors are important to realize the protection level of IPRs in an importer country. An investment decision depends upon conditions in a host country, domestic market size, availability of resources (e.g., natural resources and employee) and production expenditures.

One of the main positive side of this form is that transferred technology and knowledge will be kept within a foreign entity, while other channels (joint venture and IP licensing) do not provide such a protection, therefore these two forms are very risky in terms of imitation compared with FDI[3]. In a similar vein, Michael J. Ferrantino emphasizes that in the case of a weak IP regime, FDI secures profit/

---

[1] *Evenson Robert E.* Intellectual Property Rights and Economic Development, by Keith Maskus. 2001, 33. *Case W.* Res. J. Int'l L. P. 190.

[2] Lee and Mansfield.

[3] *Edwin Mansfield.* Intellectual Property Protection, Direct Investment, and Technology Transfer 5 // International Finance Corporation Discussion Paper. 1995. No. 27.

investment returns and contributes investors to provide a direct control system over their proprietary assets[1].

Another finding is on variable costs of receiving technology so that technology and knowledge transfer and transfer expenditures are considerably complex and high through joint venture and licensing, that is why FDI is mostly undertaken from this point of view[2].

In present context, the popularity of FDI is being decreasing due to various factors in some parts of economic spheres and both in developed and developing countries[3]. Aitken and Harrison illustrate this concern on the basis that FDI restricts technology and knowledge diffusion, negatively affect competitiveness in the market and respectively creates a danger to a domestic market's productivity. But contrary arguments are also observed in the academic literature. For example, according to Dougherty's opinion, present economic growth and to some extent R&D in today's China is an obvious result of FDI started to come to that country from 1970s[4].

But this negative effect of FDI is, from some authors' viewpoint, highly arguable and may not be always attributable to all countries. More simply, a country should be innovative or have a satisfactory innovation capacity to engage by means of licensing and joint venture, but if a country does not have such a capacity FDI appears as an only optimal way to bring foreign investment to such a country, then other channels can be employed if the relevant capacity is provided. In such circumstances, FDI is important for the establishment of networks and a transport/public infrastructure which is exceedingly applicable to operations in accordance with Carbo-hydrogen resources. FDI is the most preferred channel to operate relating to petroleum sphere in LDCs that are rich in oil, which suffer from a lack of relevant knowledge and technology. As an example of this tendency, notwithstanding Petroleum Activities commenced by means of FDI in earlier times of independence, most of such operations are being currently carrying out in the form of Joint Venture or licensing in Azerbaijan, because all necessary infrastructures have been supplied at the time FDI was massively in Azerbaijan.

While determining perspectives of FDI in a country, it is important to pay a special attention to several crucial factors, including IP protection. The most accepted legal framework for defining FDI perspective, from this point of view, is "ownership-

---

[1] *Michael J. Ferrantino.* The Effect of Intellectual Property Rights on International Trade and Investment // World of Economy. 1993. Vol. 129(2). P. 303.

[2] Davidson and McFetridge. P. 156.

[3] UNCTAD "World Investment Report 2013" p. 12 [Electronic resource] // URL: http://unctad.org/en/publicationslibrary/wir2013_en.pdf.

[4] *Bjerregaard Beth.* Identifying Factors That Influence the Successful Transition of Criminal Justice Transfer Students // Journal of Criminal Justice Education. 2009. No. 20(2). Pp. 191–192.

location-internalization theory"[1] (OLI). In fact, only small part of IP is under the guarantee of conventional provisions, and the problem is particularly attributable to protection of intangible assets[2], but this approach provides significant advantages in terms of protecting other IP forms for foreign investors such as high-tech, know-how, organizational skills, trade secrets and establishment of positive business image. From an overall viewpoint, all necessary conditions that are crucial for flowing foreign investment to a country are, in theory, combined under two headings. Firstly, a host country must supply locational advantages for investors, which cover transportation availability, costs and tariffs discounts, easily accessing public networks. The second condition stipulates creating a favorable climate to internationalize production rather than selling and licensing distribution of the products.

In addressing the concern about a weak IP system, northern countries mostly prefer to conclude separate agreements with their southern counterparts for the purpose of establishing a more favorable business climate for their transnational companies. Commonly observed agreements on the protection and recognition of mutual investments, host government agreements and other bilateral and regional treaties constitute the legal basis of IP protection relating FDI in host countries. For example, the NAFTA agreement concluded among three host countries (US, Mexico, and Canada) includes fundamental provisions against IPRs infringements and sets up a dispute settlement mechanism, as a result each of these countries' companies enjoy a higher degree of IP protection in business operations.

Finally, FDI expresses great opportunities for open host countries, apart from meaning capital importation, that may be summarized as follows[3]; a) stimulates domestic R&D to a certain degree; b) increases export capacity, and respectively GDP of a host country; c) value added; d) plays an important role in the reduction of unemployment level.

2.1. IPRs and foreign patenting

In general context, a patent protection provision is only applicable in the territorial integrity of a country in which a patent is registered. In the case a rights owner filed his/her invention in the US finds out his invention is copied or registered in another country he cannot stop making, using and distribution of the item outside the US. Since manufacturing a product does not infringe the IPRs in another country's jurisdiction, so a US patent is only enforceable within the country and the relevant measures can be taken in attitude to infringements held in the US.

---

[1] *John H. Dunning.* Explaining Changing Patterns of International Production: In Defence of Eclectic Theory // Oxford Bulletin of Economics and Statistics. 1979. No. 41. P. 275.

[2] *John H. Dunning.* Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach // Review of World Economics. 1981. Vol. 117. Issue 1. Pp. 30–33.

[3] *Nunnenkamp Peter.* FDI and Economic Growth in Developing Countries. 2002, 3 J. World Investment.

An individual and artificial person can file inventions by means of two commonly recognized ways. One is by filing in a country or a region which is desired in terms of effective protection. Second is by filing through the Patent Cooperation Treaty concluded under the WIPO. The treaty provides an inventor can freely define a country or all signatory countries to file his invention, whichever expresses suitability for a potential rights owner. Today, the mechanism comprises 139 countries throughout the world[1].

While creating a unique foreign patenting policy, it is important to underline different and similar aspects of foreign patents in various domestic legislations. Significant parts of countries are dealing with a tie-tested method of defining a valid patent rather than the first to create the invention.

In the EU, this issue was also a subject to negotiations on establishing a coordinated patent registration system that would be able to fit double registration problem through the Union for a long time, and the Union has solved this concern with the establishment of the European Patent Office. However, the problem is continuing in trademark sphere. For this purpose, in 2009, the EU adopted the Community Trademark Regulation forecasts to form a community trademark office that will make it easy for companies to file and register a trademark within a sole institute[2].

Another point is that patentability of a subject may show differences across countries, for example patenting business methods, computer programs and human are not allowable or subject to compulsory licensing under some countries' legislations. For example, business methods may not, in most circumstances, be fall within the framework of patentable objects, but only within the category of *non-technical mental acts* in the European IP system, including the UK[3]. This states that the patent applicant may not, in any circumstances, be legally able to claim on the basis of infringements, moreover the holder may not create any barriers to others in development process of the invention unless otherwise or any other directions provided in domestic legislation.

Empirical results provide that there has been a continuing neediness for foreign patenting and is still in progress throughout the world, particularly in developed countries. Total foreign patenting filed by US, Japan, and Germany companies increased from 127,000 to 413.000, 49.000 to 129,000 and 83.0000 to 163,000 respectively. But the fact that some countries' domestic legislations do not simply mention foreign patenting, or they do provide discrimination in terms of granting only certain citizenship. Unsurprisingly, in such countries, applications for foreign patenting

---

[1] [Electronic resource] // URL: http://www.wipo.int/treaties/en/registration/pct/.

[2] Article 2, Council Regulation (EC) No 207/2009 of 26 February 2009 on the Community trademark.

[3] *Michael Nieder.* Patent protection for business methods and computer programs? // I.T. Rev. 2002. No. 13(7). P. 114.

are extremely low compared with the others, particularly developed countries. The US legislation imposes no discriminatory measures in accordance with citizenship of patent applicants; it means notwithstanding the national of the right owner, the patent may be registered as the same as done with respect to US nationals. Therefore, the US stands at first for the number of foreign patenting applications and is a giant from this perspective followed by Germany and Japan[1]. Some state that regardless filing foreign patenting stipulates fixed expenditures and high complication, the trend shows that business entities interested in investing in foreign patenting believe it involves high commercial value compared with normal patenting[2].

In developing countries, excluding Taiwan and South Korea foreign, patenting process does not show inventiveness as much as observed in their northern counterparts[3], as economies of the first category are mainly based on imitative activities and enforcement effectiveness is highly low at a national level, on a global scale as well.

The most criticized side of foreign patenting is about high costs of filing, even more than patent registration expenditures in the US. In addition to official fees and agent's payments[4], costs of effective enforcement of foreign patents and compensation for damages are also subject to extensive debates. However, certain English speaker countries provide flexibility in attitude to filing costs. For example, in Canada, New Zealand and Australia registration expenditures of a foreign patent is considerably low due to translation and filing can be carried out in English, furthermore, Canadian legislation stipulates discount for filing based on differentiation of small, medium and large enterprises. Another example, regardless Mexico legislation does not underline such a specific discount on the ground of that differentiation, it states 50% concession in the case the application forwarded by, and an invention belongs to an individual person.

2.2. Overview of the licensing system

Licensing system is an ever-increasing issue for today's knowledge-based economies and may give highly desirable outcomes to business entities. When companies want to operate with licensing system, they face a number of difficulties including costs, increasing collaboration, however in latest years licensing IP has

---

[1] *Jonathan Eaton, Samuel Kortum.* International Technology Diffusion: Theory and Measurement // International Economic Review. 1999. No. 40. P. 570.

[2] Office of technology assessment Washington DC, Innovation and commercialization of emerging technologies. DIANE Publishing, 1995. P. 7.

[3] *Parimal Patel, Keith Pavitt.* Uneven (and Divergent) Technological Accumulation among Advanced Countries: Evidence and a Framework of Explanation. Industrial and Corporate Change 3, 1994, p. 787.

[4] *Taylor C. T., Silberston A., Silberston Z. A.* The Economic Impact of the Patent System: A Study of the British Experience. CUP Archive, 1973. P. 108.

been recognized as a preferred tool to escalate corporate revenues. In a recent context, licensing covers wide range of IPs such as copyright, patents, know-how, trademarks, trade secrets and all key IP assets, and the system is embodied in most countries' legislative system, that is why there are no problems with terms and clauses[1]. Licensing may occur within a firm, a JV agreement or between unaffiliated firms and agreements on IP license which grants the rights to third parties to make, use and distribute (economic rights) the protected items involving human knowledge and ideas for profit return. In practice, a license may involve technical assistance, codified knowledge and may stipulate a fixed or a franchise fee and a royalty that to be paid by licensor. A license agreement between licensor (a party grants the rights) and licensee (a party gets the license) should encompass clear terms, payment options, restrictions, termination provisions, exclusivity, effective time and geographical limitation in order to eliminate any further confusions. Along to the positive aspects of IP licensing, it is important to highlight the downsides of the system. For example, a licensor may give exclusive economic rights, potentially large quota of profits may go to a licensee[2], and thus the system always needs to be controlled by auditor for the purpose of revealing appropriate royalty.

2.2.1. Compulsory Licensing

Compulsory licensing (non-voluntary) has been in practice with establishment of the main international IP conventions such as Paris and Berne Conventions, nevertheless at first its scope was very narrow and did not apply to wide range of IP forms[3]. It is granted by a government without the permission of the owner on the ground of public interest or public non-commercial use which is mainly observed relating public health and pharmaceutical sector. However, practice show that this provision may be applicable to other forms of IP, for instance once a music is released a person can record a song without the permission of music publisher by only paying 8.5 cent in the US. In other words, there is no need to inform the rights owner in each case that a third party is willing to use his/her property.

Article 31 of the TRIPS does not directly mention compulsory licensing, however, sets out the legal basis for a compulsory licensing by stating that: "*Where the law of a Member allows for other use of the subject matter of a patent without the authorization of the right holder … the following provisions shall be respected*".

---

[1] *Joel W. Mohrman.* Capitalising on Intellectual Property: An introduction to Licensing System. 2009, 38 Brief.

[2] *Russell L. Parr.* Royalty rate economics. E.I.P.R., 1990, pp. 133–135.

[3] *Merges R. P.* Compulsory Licensing vs. the Three 'Golden Ladies' Property Rights // Contracts and Markets. 2004. No. 508. Analysis 1.

This translates that a government may, under some circumstances, allow a third party to execute economic rights that prevail over patentee's private interests[1]. Some claim that this is a workable solution for governments to overcome their public health requirements and to fill needs of a domestic market[2]. The provision under the TRIPS does not restrict the options of countries, moreover leaves governments with a great room of interpretation in defining the relevant grounds. For avoidance of any doubt, governments should assure that the measure has been taken in order of public necessity and in the case of extreme urgencies such as patents are unable to sell the most needed products/goods due to several factors, including higher prices[3].

However, it is argued that it opens great opportunities for abuse of the procedure, therefore a strong international control system or modification of the applicable provision under the TRIPS should be changed. This concern was also subject to the Doha Declaration, in which it provides a narrower definition compared with Article 31 by stating that *"each Member has the right to grant compulsory licenses and the freedom to determine the grounds upon which such licenses are granted"*[4].

The legal ground of compulsory licensing in the EU is the Compulsory Licensing Regulation dated 2006[5] that is applicable throughout the Union, excluding the Isle of Man[6]. Pursuant to the Regulation, a third party who is interested in producing specific pharmaceutical items may be granted compulsory licensing for the purpose of exporting to other states suffering from public health difficulties. Section 128A.02 highlights several proceedings concerning with compulsory licensing in terms of application, modification revocation, and all the steps should refer to the Patent Rules that became effective from 2007.

Facts show that compulsory licensing has not yet take a root in all countries, specifically it is new emerging system in some countries, while the system has been being implementing for a long time in Western part of the world. First compulsory licensing was registered in India in 2012 by the Indian Controller of Patents, in

---

[1] Article 31 of the TRIPS Agreement: (a) any grant of compulsory license is to be considered on its individual merits; (b) compulsory licensing should be resorted to only if the negotiations for voluntary licensing have failed, except in case of emergencies; (c) the scope and duration of license must be limited; (d) the license must be non-exclusive; (e) the license must be non-exclusive; (f) the patent-holder must be paid adequate remuneration.

[2] *Katri Paas.* Compulsory licensing under the TRIPs Agreement — a cruel taunt for developing countries? E.I.P.R., 2009, p. 610.

[3] UNCTAD/ICTSD, Resource Book on TRIPS and Development: An authoritative and practical guide to the TRIPS Agreement (2005), p.461 [electronic resource] // URL: http://www.iprsonline.org/unctadictsd/ResourceBookIndex.htm.

[4] Para 5 (b). Doha Declaration.

[5] Regulation (EC) No 816/2006 of the European Parliament and of the Council of 17 May 2006.

[6] Section 128A.03 of the Regulation dated 2007.

which the Indian generics producer *Natco Pharma Ltd* was granted the economic rights of certain medicines used to treat liver and kidney cancer for the purpose of fulfilling public necessity. According to the license agreement, the parties agreed on producing and selling the items in India and payment of 6% royalty on total sales quarterly. The Controller revealed that the defendant did not sell medicines in that territory at all, thus it was convicted of IP infringement.

Another concern is IP licensing may confer antitrust and monopolization[1], as a consequence a business entity can occupy the marketplace. For this purpose, the Commission, in some cases, considered that giving IP licensing to a number of market players would, in fact, be a crucial remedy for the manipulation of its leading place and support the competition rate in the market and also decrease prices at a balanced level[2]. In a similar vein, four US courts issued a number of compulsory licenses covering public health, software, and defense sector and engineering patents to tackle antitrust problem in the market in 2006[3].

At first, it had a limited scope of application and was initially applied to pharmaceutical and health care system, but it is anticipated that the scope of compulsory licensing shall be enlarged towards biotechnology and information and communication technologies (ICT) in a recent context as the result of globalizing economy and the pressure under TRIPS[4]. Compulsory license limits the scope of exclusivity and respectively cuts down negative effects by imposing a royalty on the users[5]. The system works so that a third party will be legally able to use, produce and exercise economic rights of the protected item only after the registration and the payment of royalty[6]. But it could be argued that this involves a concern so that a third party can use the item without informing the rights owners just getting the consent of a government. In addressing this concern, a balanced form of compulsory licensing has been accepted in international area, namely compulsory licensing come royalties which does not deprive an owner to execute the rights. Increasingly, in the latter framework, the users of the protected goods/products are expected to inform the first party (owner) that they are willing to use his or her rights and to pay adequate royalty, while the first framework does not stipulate such conditions.

---

[1] Arriva The Shires Ltd v London Luton Airport Operations Ltd [2014] EWHC 64 (Ch).

[2] Tono v European Commission (T-434/08) [2013] 5 C.M.L.R. 14.

[3] US v. Besser Mfg. Co., 343 U.S. 444, 447.

[4] *Chien C.* Cheap Drugs at What Price to Innovation: Does the Compulsory Licensing of Pharmaceuticals Hurt Innovation? Berkeley Tech. L.J., 2003 (18), p. 85.

[5] *Cristiano Antonelli.* Compulsory licensing: the foundations of an institutional innovation. W.I.P.O.J., 2013, p. 173.

[6] *Reichman J., Maskus K.* International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime. Cambridge University Press, 2005. P. 278.

In the case if a third party fails to provide sufficient information and to pay royalties, the rights holder can sue the defendant on the ground of IP infringement[1].

Chapter II: Government Use under 28 USC 1498 lays down the legal basis for use of copyright and patents by the federal government. Pursuant to the provision, the US government can use or authorize using the protected items by third parties by paying reasonably to the right owner[2], but the first party is not, in any circumstances, entitled to sue any parties, including government and parties received permission from the government on the ground of infringement[3].

2.2.2. Compensation for compulsory licensing

The main question in academic literature is what the conditions of accessing compulsory licensing are. In addition, what is the price of receiving compulsory licensing? In the case of Magill, the ECJ and the European Commission clarified the situation on the grounds of two crucial conditions that competent persons should refer to "non-discriminatory" and "reasonable" terms while granting and compensating compulsory licensing. Similarly, the same situation was also subject to Microsoft case where it was held that the royalty rate should be defined on the basis of the above noted terms not the strategic value of the Company, since the concept of compensation determination stipulates that a reasonable price should be given to the rights owners for the purpose of compensating the invention expenditures. As mentioned above, the relevant US legislation also refers to reasonable payment or loss of profits[4] terms for use of compulsory licensing rather than mathematic calculation. To the extent that the process, including evaluating, granting and payment should be based on "fairness" concept, however there is no meaningful approach to the implementation of the fairness concept in practice, more simply what the elements of this concept are. According to some authors[5], neither the EU nor the US legislations has yet clarified what the elements of reasonable royalty rate are, therefore divergent approaches are observed in court decisions on royalty rate while the facts and nature of IP are same or similar. For example, in the case of *Georgia-Pacific Corp v. US Plywood Corp*[6], district and federal court of the US provided quite different payment sums for the use of IP subject to the case, it means one of them violated the fairness concept.

---

[1] *Cristiano Antonelli.* Compulsory licensing: the foundations of an institutional innovation. W.I.P.O.J., 2013. Op.cit. 164.

[2] *Hughes Aircraft Co. V.* U. S. Nos. 94-5149, 95-5001. 86 F.3d 1566 (1996).

[3] Crater Corp. v. Lucent Technologies, 423 F.3d 1260 (Fed. Cir. 2005).

[4] Kohler Mira Ltd v Bristan Group Ltd [2014] EWHC 1931 (IPEC).

[5] *Cristiano Antonelli.* Compulsory licensing: the foundations of an institutional innovation. W.I.P.O.J., 2013. Op.cit. 181.

[6] Georgia-Pacific Corp v. US Plywood Corp., 318 FSupp 1116 6 USPQ 235 (SD NY 1970).

In the event a third party fails to fulfill legal obligations relating to payment of reasonable rate under the relevant legislations, governments or competent institutions may impose sanction or sanctions on that party. For example, the European Commission may reject a license application if it considers that the license application is to violate provisions under Article 82 and is accounted to be abusive, that is why the Commission is legally able to impose sanction on that particular entity in order of assuring the violation will end.

In the case of Georgia-Pacific Corp, the Court highlighted fifteen factors that should be considered in determining reasonable royalty fee and those factors have been using by courts to date. One of the possible ways, some courts apply to define the rate based on royalty rate paid by the licensee for the use of similar products in a particular market. Empirical evidence provides that there are several elements playing a key role in defining a compensating compulsory licensing. For example, the industry, nature, and scope of the license and protection level of that specific intellectual property are the most common observed factors. On the one hand, competitive capacity of a product, specifically anticipated profits, or money savings through the use of the IP is a crucial factor in this regard as well. The fact that most companies prefer to receive license on a product that is intensively needed in the market rather than investing in new and uncommon ones. Finally, exclusivity is also a widely accepted factor in determining the royalty rate. Exclusive license means that there is only one granted license or one licensee in a specific market, and it places the licensee at advantage in the market and gives option to him to preclude others that are interested in engaging in the same/similar business action.

One important question is waiting for an answer that to what extent do granting licensing and imposing a royalty rate effect further innovation, if it has. This statement is frequently voiced by defendants, for example in the Microsoft verdict[1], the company stated that it spends considerable capital in its innovative activities and sharing the information with other business entities will cause negative consequences of company motivation in terms of impeding innovative activities for new software.

References

Resource Book on TRIPS and Development. Cambridge University Press, 2005.

Shayerah I., Ian F. F. Intellectual Property Rights and International Trade. Nova Publishers, 2008.

[1] *Marsden Philip.* Picking over the CFI Microsoft Judgment of 17 September. Loy // Consumer L. Rev. 172. 2007. No. (20). P. 174.

World Trade Organization, Dispute Settlement Reports 2000. Cambridge University Press, 2002, Volume 5. Pp. 2235–2620.

Taylor C. T., Silberston A., Silberston Z. A. The Economic Impact of the Patent System: A Study of the British Experience. CUP Archive, 1973. 408 p.

Carlos M. Correa, Abdulqawi Yusuf. Intellectual Property and International Trade: The TRIPs Agreement. Kluwer Law International, 2008. 499p.

Office of technology assessment Washington DC, Innovation and commercialization of emerging technologies. DIANE Publishing, 1995. 102 p.

Nicholas Perdikis, Robert Read. The WTO and the Regulation of International Trade: Recent Trade Disputes Between the European Union and the United States. Edward Elgar Publishing, 2005. 295 p.

Reichman J., Maskus K. International Public Goods and Transfer of Technology under a Globalized Intellectual Property Regime. Cambridge University Press, 2005. P. 278.

Shadlen Kenneth C. Intellectual property, trade and development: can foes be friends? // Global Governance. 2007. No. 13 (2). Pp. 171–177.

Anna Emanuelson. Standardization agreements in the context of the new Horizontal Guidelines // E.C.L.R. 2012. Volume 33. Issue 2. P. 69–77.

Jeremy De Beer. Applying Best Practice Principles to International Intellectual Property Lawmaking. IIC, 2013, 44. 884–901.

Evenson Robert E. Intellectual Property Rights and Economic Development, by Keith Maskus. 2001, 33. Case W. Res. J. Int'l L. 187 p.

Michael J. Ferrantino. The Effect of Intellectual Property Rights on International Trade and Investment // World of Economy. 1993. Vol. 129(2). Pp. 300–331.

Bjerregaard Beth. Identifying Factors That Influence the Successful Transition of Criminal Justice Transfer Students // Journal of Criminal Justice Education. 2009. No. 20(2). Pp. 173–193.

Dunning John H. Explaining Changing Patterns of International Production: In Defence of Eclectic Theory // Oxford Bulletin of Economics and Statistics. 1979. No 41. Pp. 269–295.

Dunning John H. Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach // Review of World Economics. 1981. Vol. 117. Issue 1, Pp. 30–64.

Nunnenkamp Peter. FDI and Economic Growth in Developing Countries. 2002, 3 J. World Investment.

Joel W. Mohrman. Capitalising on Intellectual Property: An introduction to Licensing System. 2009, 38 Brief.

Michael Nieder. Patent protection for business methods and computer programs? // I. T. Rev. 2002. No. 13(7).

Russell L. Parr. Royalty rate economics // E.I.P.R. 1990. Pp. 133–135.

Merges R. P. Compulsory Licensing vs. the Three 'Golden Ladies' Property Rights // Contracts and Markets. 2004. No. 508.

Katri Paas. Compulsory licensing under the TRIPs Agreement — a cruel taunt for developing countries? // E.I.P.R. 2009. P 610.

Chien C. Cheap Drugs at What Price to Innovation: Does the Compulsory Licensing of Pharmaceuticals Hurt Innovation? // Berkeley Tech. L.J. 2003. No. (18). P. 76–85.

Cristiano Antonelli. Compulsory licensing: the foundations of an institutional innovation. W.I.P.O.J., 2013, pp. 157–174.

Marsden Philip. Picking over the CFI Microsoft Judgment of 17 September. Loy // Consumer L. Rev. 172. 2007. No. (20).

Rod Falvey, Neil Foster. The Role of Intellectual Property Rights in Technology Transfer and Economic Growth: Theory and Evidence. 2006. 100 p.

Edwin Mansfield. Intellectual Property Protection, Direct Investment, and Technology Transfer 5 // International Finance Corporation Discussion Paper 1995. No. 27. 46 p.

Jonathan Eaton, Samuel Kortum. International Technology Diffusion: Theory and Measurement // International Economic Review. 1999. No. 40.

Parimal Patel, Keith Pavitt. Uneven (and Divergent) Technological Accumulation among Advanced Countries: Evidence and a Framework of Explanation. Industrial and Corporate Change 3, 1994, pp. 759–787.

Information about the author

Orkhan Hasanov (Baku, Azerbaijan) — Postgraduate student of the Law Faculty of the Baku State University (23, Zahid Khalilov St., Baku, AZ 1148, Azerbaijan; e-mail: orkhan.hasanov@yahoo.co.uk).

Recommended citation

Hasanov O. The role of intellectual property rights in international technology diffusion and foreign direct investment. Kazan University Law Review. 2022; 4 (7): 136–152. DOI: 10.30729/2541-8823-2022-7-4-136-152.