

## Economics of Intellectual Property in Education

<sup>1,2</sup>Mardiah Hayati Binti Abu Baka, <sup>1,2</sup>Arizah Binti Mohamad Isa,  
<sup>1,2</sup>Inul Hafiza Binti Zainudin and <sup>1,2</sup>Wan Mardiana Binti Wan Musa  
<sup>1</sup>Faculty of Law,  
<sup>2</sup>University Teknologi MARA, (UiTM) Malaysia, Kuala Lumpur, Malaysia

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**Abstract:** Intellectual Property (IP) is a property and has similar values just like any other property. It concerns legal rights connected with creative works or commercial reputation and goodwill. The intellectual property proprietors can earn recognition or commercial benefit from what they invent or create. Within this conceptual study having the right balance between the interests of innovators that mostly comes from the educators and the wider public interest, the intellectual property rule aims to cultivate an environment in which creativity and innovation can boom. Intellectual property is driven to have the vital force as part of economic development notably if it is nurtured in the education system and other issue such as monopoly derives from the intellectual property rights. As part of an expansion of innovation, scholars need to inculcate the value of intellectual property via commercialization through the creation of competitive niche markets in order to gain lucrative return on investment in research and product development.

**Key words:** Intellectual property, monopoly, education, economic, competition

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### INTRODUCTION

In recent years, technology sector, especially the gadgets and other technological device industry is in demand for intellectual property protection particularly for patent portfolios. The patent trial of the century between Apple and Samsung in 2011 has created an almost unprecedented business history in which their litigation case had cost more than a billion dollars and compassing four continents (Benton *et al.*, 2014). Literally, the case had showcased that inventions with good intellectual property protection is essential, especially for startups who are looking for investors to invest their product. It is assured that exploiting the intellectual property may leads to uncertainty mainly patent as in either it will assist or detrimental to the business.

Intellectual property law is been enacted to secure the innovation's benefits for the public at large and it focuses on the shape of change over time and innovation's macroeconomic benefits (Driesen, 2012). Unless it is been protected under trade secret, intellectual property laws generally offer a right of exclusivity and the success of exploitation will give reward to the innovator and simultaneously for other innovators having an incentive and also to expose the innovative information to the public (Shapiro and Hassert, 2005).

Intellectual property protection in Malaysia comprises of trademarks, patents, industrial designs, geographical indications and copyright and layout designs of integrated circuits.

Malaysia is a one of member of the World Intellectual Property Organisation (WIPO) and a signatory to the Paris Convention, Berne Convention and Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) which Malaysia signed under the World Trade Organization (WTO). The government has played one of its roles by having Malaysia's intellectual property laws in accordance with the international standards and periodically reviewed by the TRIPS Council.

**Economics of intellectual property:** It is suffice to say that evidently, the power of ideas is driving the economic growth and development throughout the world. It is known by the economist in United States that their economic innovations have been a more powerful force in determining the productivity and output either by the increases in capital investment improvement or the skills of their workers (Shapiro and Hassert, 2005).

The value of intellectual property in United States which has such ideas from computer software to musical records or even film production and from pharmaceuticals to information technologies is astonishingly sky-high as compared in Malaysia. With the astonishing value of economic innovations with intellectual property as part of them, those with lack of respect to the intellectual property rights especially copyrights may have the underlying ideas to pirate it, steal it or counterfeit patented or copyrighted products and technologies (Shapiro and Hassert, 2005).

However, as compared to patented products that are more troublesome to duplicate such as electrical and electronics, pharmaceutical products, drugs and semiconductors the counterfeit rates are lower but substantial (Shapiro and Hassert, 2005). The dark side of counterfeiting industry which concern only on profits and neither on the threatened life of human whom is relying to the patented drugs.

Patents are one of the primary approaches used to protect the investment made in ideas that produce innovations (Baldwin and Hanel, 2003). Patents not only the most tangible property among other intellectual property but also the strongest legal protection even though it is not the longest. Patents database can be a powerful sources of rich competitive intelligence. Patent applications are filed to provide protection for knowledge assets and therefore the number of filings is related to the value of capital invested in the innovation process that are available to benefit the population of a country (Baldwin and Hanel, 2003). Hence if the value of the intellectual property in particular patent reaching projection of billions of profits, it is justifiable when Apple had spent more for litigation process compared to research and developments of an invention in order to protect its exclusivity from any infringement.

Intellectual property rights create exclusivity in order to cure the market failure resulting from the public goods issues associated with intangible resources. As a registered proprietor of an intellectual property having an exclusive right is a legal authority to enjoy a resource or perform an action and to deny others the same privilege. Hence, exclusivity is the power to exclude but it does not intrinsically lead to exclusion as property is rather conceived as a power to decide to engage in exclusion or not (Dusollier, 2013).

In Malaysia, the owner of the intellectual property shall have the exclusive rights to produce, manufacture and even distribute their product that is protected under the intellectual property laws. Such product shall generate monetary value once it has outwitted the exploitation. The exclusive rights for intellectual property law in Malaysia are governed by several statutes.

For example, Section 36 of the Patents Act 1983 awards the registered proprietor of a patent the exclusive right to use and exploit the patent, however for Trade Marks Act 1976, by virtue of Section 35, the registered and unregistered owner has the exclusive right to use or license the use of, his trademark in relation to goods or services for which the mark has been registered at Malaysia Intellectual Property Organization (MYIPO). Meanwhile, Section 13 of the Copyright Act 1987 provides for the exclusive right to the owner of creative work to deal with and control, inter alia, the reproduction

of the original work in any material form, the distribution and communication of the copyrighted work to the public, by sale or any other commercialization mode.

### **MONOPOLY IN INTELLECTUAL PROPERTY RIGHTS**

When there is existence of market power for the exclusivity rights of an Intellectual Property due to the duration of protection, a contentious issue within the intersection between intellectual property rights and competition laws occurred. In Malaysia, the Competition Act is still new as it was only recently been enacted and enforced in 2012. According to the Malaysia Competition Commission (MyCC) Dhaniah Ahmad and Rashidah Ridha Sheikh Khalid noticed the tension arising between the intellectual property law and competition law in Malaysia (Ahmad and Khalid, 2011). Both law seem to be at odds as competition laws have the primary purpose of protecting competition in the markets and reducing trade barriers whereas intellectual property rights confer exclusive rights on the owner to exploit his intellectual creation within the duration of its protection (Ahmad and Khalid, 2011).

Although, there are conflicts but both laws are said to be complementing each other especially in promoting the growth of economy and cultivating innovation for the benefit of consumers. However, the fundamental role of competition law is to protect competition from any conduct that can threaten the market and in other words to have the economic driven to be more competitive yet efficient (Patel *et al.*, 2011). Massimiliano writes that the major concerns of competition law regarding intellectual property rights are the detrimental effects caused by the anti-competitive exercise of intellectual property rights and the market power that may result from granting such rights (Vatiero, 2010).

Market power is the power where the owner of intellectual property has to raise the market price over the marginal cost (Vatiero, 2010; Scott, 2009). So, if an intellectual property proprietor has the exclusivity to determine the prices, they may set higher than those needed to secure cost effective production in which will gives harm to the consumer. Further, the harm may cause by market power when the protection granted to the intellectual property proprietor allowing them to slow or distort innovation.

Competition law may be used to define the economic scope of intellectual property rights. However, the application of competition law in the intellectual property rights can lead to under or over balanced enforcement-careful balancing is indispensable (Drexel,

2005). It should not be used in a way which abolishes the very subject matter of the intellectual property rights but rather only to extent the necessary to avoid an abuse by the right holder. Main question arise on when is the used of intellectual property rights is said to be abusive.

Overly strong intellectual property laws unduly interfere with competition and therefore reduce welfare unnecessarily and vice versa. Overly aggressive competition law may privilege static efficiency over innovation, reducing long term welfare. Hence, both laws again must be balanced (Driesen, 2012; Raju, 2014).

The controversial aspects concerns when it involves circumstances of refusal to license an intellectual property rights which may constitute an abuse of a dominant position. Hence, by way of having commercialized agreements exploiting the intellectual property, the owner is prevented from any competition as the intellectual property law grants an exclusive right to the owner or inventor of the protected research (Australian Government, 2003).

In Malaysia, competition law is still new and there is a need to differentiate the rights in Malaysia as there is no guidelines that provide further explanation regarding how to overcome the issues, in particular harmonizing the conflicts between both laws especially in curbing the abuse of a dominant position. Both laws share the same objectives and also share the same economic rationale.

It is important to note that the conflicts and tensions that occur can affect the economic growth and therefore finding solution to the issues is crucial in order to increase innovations driven in Malaysia. It is hoped that with the introduction of a new model both laws can be harmonized in preventing total monopoly rights that is detrimental to the market economy.

#### **INTELLECTUAL PROPERTY IN EDUCATION**

Each categories of Intellectual property has their own sets of commercial value. Understanding intellectual property in education should include references to skills and competencies that young people can be expected to acquire in the classroom that enable them to become well educated with intellectual property, lead them to respect intellectual property rights, whether their own or those of others and understand its potential not just the greediness to generate income and economic growth (Soetendorp *et al.*, 2015). Paul Romer, an economist has indicate the significance of education in economy and that advanced knowledge in the advanced countries is needed to improve the standard of living of the poorest citizens of the poorest countries and if investment is been

initiated for education but at the same time did not deny their citizens cultivating ideas from the other developed countries, it will vastly transform their citizen's advantage of the worldwide stock of knowledge. If, in addition, it offers incentives for privately held ideas to be put to use within its borders (for example, by protecting foreign patents, copyrights and licenses and by permitting direct investment by foreign firms), its citizens can soon create a novel invention that will build up the human capital and also economic growth for the country.

When intellectual property rights are respected, commitments to research and development are strong, the political and economic ecosystem are anchored, barriers to starting new businesses are relatively low, then economically-powerful innovations shall originate primarily in advanced economies (Shapiro and Hassert, 2005).

Due to the worries of the findings from a survey in 2015, that between 35 and 50% of young Europeans display attitudes which favour counterfeiting or illegal downloading, the Office for Harmonization in the Internal Market (OHIM) has initiated a study on intellectual property education in school curricula in the EU member states with additional international comparisons (Soetendorp *et al.*, 2015).

The study shows that, intellectual property is not included as a main subject; intellectual property topics are covered in diverse subjects for example in science, library skills and lingual subjects. Intellectual property may be referenced in discussions about library use and research and rights in general. It is most likely to arise in the context of responsible use of Information Technology (IT) materials, in the arts or computer sciences and under the general headings of rights and obligations taught in citizens intellectual property classes (Soetendorp *et al.*, 2015).

Intellectual property education is most relevant for children when it comes to learning about rights and obligations as a citizen and the need to respect the rights of others. Most topics on intellectual property like copyright, confidentiality, privacy, trade secrets and plagiarism is been exposed in their education level. Hence, in Malaysia it is good to adopt such survey in order to assist the educational policymaker to meet the challenges in digital era now a days.

#### **CONCLUSION**

Intellectual property has a major goal of providing opportunities for economic growth. Through research and development, scholars are responsible in inventing dynamic economic driven intellectual property for the

benefits of the public. Hence, exploitation of intellectual property via commercialization agreement may circumvent the monopoly of market power in competition law. In order to harmonize the interface between intellectual property law and competition law, it is suggested to have a guideline for the intellectual property proprietors to avoid any abuse of dominant position under the Competition Act 2010. Further, it is a crucial fact to be highlighted as part of curricular in education system to disseminate the awareness of the importance of nurturing the younger ones in respecting intellectual property.

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