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CONTROL OF INTELLECTUAL PROPERTY IN COMMERCIALISING INNOVATION

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ABSTRACT

Innovations are known as intellectual creations new to the world or a new edition of an existing creation.¹ In other words, innovation is not only a discovery, but also a human contribution to increase productivity of an existing asset or a methodology. They are novel products of human intellectual endeavour.² Commercialising innovation means adding value to an intellectual creation by converting it into a consumable good or a service.³ This could be done by either individuals or by organisations to market and promote their innovations for commercial benefits. In commercialising innovation, the control of Intellectual Property (IP) has become significant. IP rights such as patents and copyrights could be used to protect innovations to avoid unauthorised commercial exploitation. Control of IP is substantially rewarding the innovators. Innovators have to overcome issues such as (1) poor utilization of intellectual property; (2) lack of protection for new business models; and (3) impact of inharmonious interpretations. Three solutions have been proposed in the study respectively; (1) exercising a balance control of IP; (2) applying strategic control of IP; and (3) developing IP laws for new business models. Considering these solutions, the control of IP could be utilized to formulate better approaches to effectively commercialise innovations. When commercialising innovations, it is important to examine: legal, political, economic, social, ethical and technical factors. Only legal factors are discussed in this study.

KEYWORDS: Innovation-Commercialising-Patents-Copyrights-Software-New Business Models-

1. THE CONTROL OF INTELLECTUAL PROPERTY

At present, most innovations are commercialised through new business models. For instance, innovators of widespread games such as ‘Minecraft’ and the ‘Second Life’ in the game industry and ‘Netflix’ in the entertainment industry have commercialised their products via new business models through the internet.

The control of Intellectual Property (IP) means utilising the rules and regulations provided in the realm of IP law to protect and enforce one’s rights when infringed or likely to be infringed. This study analyses mainly two important regimes which could provide such protection and enforcement; (1) commercialising patents and (2) commercialising copyrights. IP law could be used to protect the innovation from unauthorised commercial use of others. The rationale behind this control is it is unfair if there is an open opportunity for third parties to exploit an innovation which is created by using the inventor’s resources and to receive an unauthorised commercial advantage without remitting any royalty to the inventor. Therefore, the control of IP in commercialising innovation has become a reward for encouraging innovators. Intellectual property law supports not only domestic transactions, but also international trade by protecting innovations when infringed. For instance, if imported products of “X” are identical to the patented products of “Y”, then the latter would be entitled to bring a law suit against the former if the import was unauthorised.

The control of IP could be exercised not only to protect against the infringements, but also to seek declaration orders from Court, justifying an on-going commercial exploitation of innovation. This study discusses the commercialising innovation in the realms of patents and copyrights. Patents consider the novelty, while the copyrights focus the originality. Novelty has been defined in Section 64 of IP Act No.36 of 2003, (hereinafter IP Act 2003) as an invention which is not anticipated by prior art. Although not defined in detail, the requirement of originality is mentioned in section 6 (1) of the IP Act 2003. Both rights are important in commercialising new business models at present.

The word “control” in terms of IP law, is referred to the monopoly which could be either absolute or limited. Hence, in considering the issues in commercialising innovations, it is important to investigate whether such monopolies could be maintained efficiently and effectively to support the emerging new business models. The control of IP over an innovation could be discussed under two important areas; Patents and Copyrights.

1.1 COMMERCIALISING PATENTS

Currently, commercialising patents has become an integrated trade practice, which brings commercial advantages to the inventors. For instance, if a person invents a machine which could count cash notes and simultaneously remove the dust and bacteria on cash notes to avoid risk of health hazards to a cashier, it could improve the health and safety conditions of the business and therefore, it would become a commercially valuable product. Hence, the owner could commercialise this product domestically and internationally. In order to commercialise it, he could claim and register a patent for his innovation and could subsequently create a licensing system through IP contracts to strengthen the commercialisation process.

According to Section 84 (1) (c) of the IP Act 2003, the owner of a patent shall have an exclusive right to conclude licence contracts. In case if a patent is a subject matter of a business contract, even if the contract is terminated, the rights remain until the patent expires. Sometimes, Courts have provided additional protection even during the patent pending stages considering the status of the patent. In Global Flood Defence Systems Ltd v. Van Den Noort Innovations BV, Court had provided an opportunity to enforce the rights of a defendant who had acquired the patent during Court proceedings before the trial date.

In the UK, although patents are granted for a period of twenty years, there is a special advantage if the creation is a medical or plant protection product because a Supplementary Protection Certificate (SPC) could be obtained. Although the SPC would not extend the duration of the patent, it could provide a similar protection for up to five years after the patent expires. Hence, the innovators in such production areas are encouraged to innovate as much as possible as they have an extended protection which could increase their confidence in commercialising their innovations.

One of the main advantages of commercialising patents is the ability of assignment. As mentioned in Section 84 (1) (b) of the IP Act 2003 the owner of a patent shall have an exclusive right to assign or transmit the patent. Once an assignment is recorded in the register, the assignee

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1 Waelde (n2) 7, para 1.23.
2 ibid 9, para1.31.
4 Waelde (n2) 11-12, para 1.37-1.38.
5 Intellectual Property Act No.36 of 2003 of Sri Lanka, s 64.
6 ibid s 6 (1).
7 Waelde (n2) 14, diagram 1.2.

11 Intellectual Property Act No.36 of 2003 of Sri Lanka, s 84 (1) (c).
12 [2015] EWHC 153 (IPEC) [48] [49].
14 Intellectual Property Act No.36 of 2003 of Sri Lanka, s 84 (1) (b).
has all the rights of the proprietor of the patent and is entitled to file action for an injunction as held in **ST. Regis Packaging (Pvt) Ltd v. Ceylon Paper Sacks Ltd.**

According to the agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), both products and the processes could be protected by granting exclusive rights to the owner to avoid unauthorised commercial benefits going to others. Thus, a number of modern innovative business models, which consist of either methods or processes could be protected under the umbrella of this agreement. Apart from the protection mechanisms, the owner has exclusive rights to gain commercial benefits by defining the licensing system for his creation.

When making a mercantile contract, many companies show interest in knowing whether the subject matter is patented or not. Therefore, if the innovation is patented, substantial confidence is generated between the parties to proceed towards further business transactions. In the modern context, it is visible that most innovations are industrial applications where the owners could seek statutory protection if they are new, involves inventive steps and industrially applicable. If innovators fulfil those requirements, they would be entitled to commercialise their innovations in more protective mechanisms which would consequently increase the overall benefits of commercialisation.

### 1.2 COMMERCIALISING COPYRIGHTS

Although the copyright is not a registered right, it is visible that many lawsuits have been filed to strengthen it. For instance, in the music industry, a massive number of cases have been filed for seeking protection. At the moment, there is a continuous trend of increasing the number of computer software, which could be protected in copyright law under literary, dramatic and musical works. ‘**Linden Lab**’, a US internet company which innovated ‘**Second Life**’ and ‘**Blocks World**’, has used the control of IP, to deliver non-exclusive rights to the users, subject to conditions. In order to commercialise their products, they have been introducing a revocable licence, which permit the users to receive the facilities provided in a virtual game which is developed by them. The ‘**Mojang Minecraft**’ end user licence agreement contains provisions to avoid the users from enjoying commercial benefits. However, it is an important fact to remember such a type of commercialisation is subject to exceptions in terms of educational purposes.

Furthermore, an innovator could use statutory mechanisms provided in law of copyright to protect his rights. The most important facility provided in IP law is the opportunity provided to assign copyright by licensing agreements. Such licensing methods could be executed even with the permission for sub-licensing of it as well. In addition, charging a royalty fee is available as an option in commercialising innovations. For example, copyright owner could outsource the publishing work and generate royalty payments from it.

### 2. CURRENT ISSUES

When commercialising innovation, there are a number of issues to deal with such as, (1) poor utilization of intellectual property; (2) lack of protection for new business models; and (3) impact of inharmonious interpretations.

#### 2.1 POOR UTILIZATION OF INTELLECTUAL PROPERTY

When considering contemporary issues in the regime of commercialising innovations, at first, it could be argued that there is an impact of unbalanced control over innovations. In other words, both less control and too much of control over an innovation have become contemporary issues in the industry. When discussing the poor control of copyrights a sound example is databases. Although ‘European Database Directives’ introduced database laws, it had excluded the contents of a database.

The protection provided by the aforesaid Directive presently covers only the infringement of the selection and the arrangement of the data. There are four rigid elements to prove when claiming protection for a database such as, independence of the constituent elements, systematic arrangement of data in a methodical way, opportunity for the individual accessibility and intellectual creation in the selection and the arrangement of the content.

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22 Intellectual Property Office UK, ‘Exceptions to copyright: Guidance for creators and copyright owners’ (October 2014) 4, [1].
24 Graham M. Dutfield and Uma Suthersanen, ‘the innovation dilemma: intellectual property and the historical legacy of cumulative creativity’ (n1) 421.
Since these elements are inflexible, most of the existing databases do not deserve the protection. Consequently, commercially valuable or expensively created databases are excluded from the current protection. On the other hand, protection under this Directive does not apply to computer programs used in the making or operation of databases accessible by electronic means.26

Secondly, the protection granted by a patent is generally valid only twenty years after the filing date.27 Once this period is over, generally there are no other means of renewing the patent. Another issue is the ‘Patent Trolls’ where a person or an entity which is not the original creator of the innovation but attempting to enforce the rights on it by noticing or instituting legal suits against any infringer. 28 Therefore, protection could be misused by third parties such as ‘Patent Trolls’ for their financial benefits. The doubt in question is whether the actual objective intended by legislature has been achieved by the patent law. The disadvantage of the said trolls is, instead of the objective of protecting the innovation, they proceed with the aim of generating income through law suits against Small and Medium Enterprises (SME).29

Thirdly, maintaining a patent is considerably difficult because non-exploitation of a patent would lead to serious consequences. Although the patent is a good method of protection of innovations, sometimes, for instance, a third party may obtain a non-exclusive licence from the Director General of IP to exploit the patent. According to Section 86 (2) (a) of the IP Act 2003, a third party could make an application to the Director General of intellectual property for the purpose of obtaining a licence to exploit a patent.30 According to Section 86 (2) (b) of the said Act, if such a party could prove that he or she has made efforts to obtain approval from the right holder on reasonable commercial terms and conditions, and such efforts have not been successful within a reasonable period of time, then a licence could be issued to the said applicant.31

A similar feature could be seen within the compulsory licensing system in the UK. Accordingly, if the applicant of a patent had not commercialised the patented product for the last three years, he or she is prevented from enjoying the exclusive rights on it because a compulsory licence could be granted to a third-party applicant.32 Hence, if the innovator rushed in filing the patent application and if he lost the benefits of such patent due to non-exploitation of his innovation within three years, there would be an issue because the invention had already been disclosed to public at the time filing the patent. In addition, the right to charge a payment from the licensee would be deprived on the grounds of unfair terms in the licence due to the application of compulsory licensing method.33

2.2 LACK OF IP PROTECTION FOR NEW BUSINESS MODELS

Most modern business methods are excluded from patentability. According to Section 62 (3) (c) of the IP Act 2003, schemes, rules or methods for doing business are not patentable in Sri Lanka.34 At the moment, there are many business models which are backed by software. If a person creates a new business model which itself is software, the only available remedy for such person is to seek copyright protection instead of patent.35

In the game developing industry, the core business model is based on their gaming methods. Although such methods are patentable in USA,36 they are not patentable in Sri Lanka, because Section 62 (3) (c) of the IP Act 2003, has prohibited claiming patents for ‘playing games’.37 As a result, unfortunately, computer and mobile applications which permit users to play games are not patentable in Sri Lanka. This situation necessarily demotivates not only action game developers, but also educational game developers. Although computer programmes are copyrightable according to Section 6 (1) (a) of the said Act,38 the protection provided in copyright law is considerably weaker than patents.39

In order to prove the copyright for a new business model with a web- based information system, the domain registration and data uploaded dates could be considered. However, practically it could be difficult to prove the first published date and version, as web sites are frequently updated. A third party could simply copy the innovator’s business model and software system, and upload the data to his existing web page under an existing domain name. Consequently, even as the originator, innovator may fail in proving the proper uploaded date. Hence, the application of copyright in modern business models based on internet has become more complex.

Although we could apply and obtain design rights for certain business models, it is not possible to maintain an absolute monopoly over the

26 Ibid art 1 (3).
27 Intellectual Property Act No.36 of 2003 of Sri Lanka, s 83 (1).
29 Ibid 184.
31 Ibid s 86 (2) (b).
32 The Patents Act 1977 UK, s 48 (1) and (2).
33 Bently (n6) 302, para 7.1.
34 Intellectual Property Act No.36 of 2003 of Sri Lanka, s 62 (3) (c).
38 Waechle (n2) 12 para 1.39.
innovation compared with the patents. In the case of Aerotel Ltd v. Telco Holdings Ltd, Court had decided that a business model based on telephone operating software system was not patentable under the European Patent Convention. In addition, a line of reasoning was reinforced in AT & T Knowledge Ventures LP and CVON Innovations Limited v. Comptroller General of Patents where Court had applied the same rule with respect to software-based business models and decided that a digital media hosting service was not patentable.

2.3 IMPACT OF INHARMONIOUS INTERPRETATIONS

There are a number of interpretation issues at domestic and international level IP disputes. For instance, the IP Act 2003 of Sri Lanka and the Patent Act 1977 of UK, require an inventor to demonstrate the inventive steps and the invention should not be obvious to a person skilled in the art. This has become an important issue of interpretation. In the matter of Hallen Co. and Anr. V. Brabantia (UK) Ltd, Court has developed a test to interpret the word ‘obvious’ to overcome such issues. According to this new test, the word ‘obvious’ in the inventive steps should be interpreted depending on the facts of each case. In Aerotel Ltd v. Telco Holdings Ltd, Court held that it is difficult in interpreting that what are excluded from patentability.

When considering the application of IP control, it is visible that substantially different interpretations have been given to the terms in statutes. Sometimes, the disharmony between different jurisdictions may discourage innovators. Although there are a number of international treaties in the realm of IP to allow priority in all signatory states, none of those treaties have provided a sound international terminology for IP.

A considerable effort to overcome these issues was the TRIPS agreement. If member states have not followed the directions in TRIPS, consequently, they would be deprived of enjoying the benefits of the General Agreement on Tariffs and Trade (GATT) because the TRIPS was formulated to achieve the principles of General Agreement on Tariffs and Trade (GATT) 1994. However, there is a significant necessity to introduce more international treaties to protect upcoming innovations, especially the ones with science and technology.

3. HOW TO OVERCOME THE ISSUES?

To avoid the above-discussed issues, several solutions may be supportive such as (1) exercising a balanced control of IP; (2) applying strategic control of IP; and (3) developing IP laws for new business models.

3.1 EXERCISING A BALANCED CONTROL OF IP

Having a balanced control is the solution. For instance, a multinational company which has businesses around the world should use a balanced level of patent protection to strengthen both international and domestic trade. Otherwise, when such a company promotes its products worldwide, there may be issues of infringements of IPR in domestic markets to which it is selling. According to Gower’s review of IP in 2005, balanced control was one of the key recommendations among other things to avoid issues in commercialising innovation. An absolute or limited monopoly should be balanced properly to provide an efficient and effective foundation for the enforcement of IP in commercialising innovation.

In order to enhance the realm of science and technology, the Royal Society of UK has suggested to utilize the IP laws in a balanced manner to motivate the innovators. For instance, in Samsung Electronics (UK) Ltd v. Apple Inc, Samsung had successfully appropriated IPR, and consequently the Court ordered Apple, to publish a non-infringement notice on their official web site. When considering enforcement methods, companies sometimes attempt to protect their innovation by sending threatening letters. Nonetheless, Courts have a negative feedback about such a types of notices as held in Golden Eye (International) Ltd v. Telefonica UK Ltd.

An innovator may be interested in funding and therefore, he may disclose his invention and inventive steps to a foreign party through documentation or prototype. Even if the funding is granted or not, such a party may copy and reproduce

43 Aerotel Ltd (n38) [8] (Jacob LJ).

45 TRIPS, preamble (a).
47 The Royal Society, Keeping Science Open: the effect of intellectual property policy on the conduct of science (Royal Society April 2013) 29, para 6.1.
the innovation and subsequently claim ownership in their country because IPR are only national rights. Such risks could be minimised by preparing a Non-Disclosure Agreement (NDA) before disclosing details of an innovation. Therefore, striking a balance control of IP is necessary to protect an innovation.

3.2 APPLYING STRATEGIC CONTROL OF IP

In order to avoid losing the benefits of a patent due to non-exploitation, the innovator should have a strategic IP plan to identify the potential threats during the first few years from the date which the patent had been granted. In certain situations, innovators could use several IPR as a strategy. For instance, although the Viagra patent has expired in 2013, the trademark protection is still in place.\(^5\) Hence, if an innovation is absorbing a great amount of commercial revenue in the industry, a strategic IP solution could be applied. Therefore, a demanding product could be protected by both the patent and the trademark simultaneously to strengthen the protection.

While applying strategic control of IP, it is necessary to obtain advice from trained individuals and organisations which have the expertise and knowledge in commercialising innovation. Such experts could support in improving the effectiveness of commercialising the products or services by directing and facilitating a tailored approach.\(^5\) For example, an innovator may obtain advice from experts at National Intellectual Property Office (NIPO) and the Sri Lanka Inventors Commission (SLIC) before commercialising his innovation. In the UK, the Technology Strategy Board (Innovate UK) and the IP Office provide expert advices to new innovators on how to commercialise their innovations to gain a competitive advantage.\(^5\) Having more digital copyright exchanges, is another strategy to avoid issues in commercialisation. In such a system the sharing of licences could be done considerably much more effectively.\(^5\)

Furthermore, the choice of the dispute resolution method has also become vital. If an innovator predicts that Court proceedings would be time consuming and would unnecessarily disclose trade secrets to general public, then he could select either arbitration as an Alternative Dispute Resolution method (ADR) to solve disputes that arise when commercialising his innovation. This objective could be achieved by including an arbitration clause in the arbitration agreement as a condition precedent to litigation.\(^5\) Such ADR methods could minimise the time taken for IP dispute resolution process and ultimately improve efficiency and effectiveness of the commercialising plan of the innovation\(^5\) and increase the Return on Investment (ROI) of the same.

3.3 DEVELOPING IP LAWS FOR NEW BUSINESS MODELS

The development of intellectual property laws to govern new business models requires public, private and international partnerships. Through such cooperation, domestic laws and international treaties could be formulated to protect and commercialise new business models. For instance, there are ‘sui generis’ laws created for semiconductor topography, plant breeders’ rights and data base rights.\(^5\) The sui generis data base law has contributed enormously to companies in European Economic Area (EEA) for the protection of their new investments in databases. An innovator who substantially invests in creating a database is now protected under the said sui generis data base law.

However, the sui generis database law does not adequately offer a solution that covers all circumstances. For example, in the case of British Horseracing Board v. William Hill, a database was excluded from the protection of the sui generis database law due to lack of independent material in the database.\(^5\)

Moreover, it is essential to explore the possibility of introducing a sui generis law for computer or web based business models. Although the TRIPS agreement covers copyright protection for computer programmes\(^5\) and compilation of data,\(^5\) it is not sufficient to protect new computer-generated business methods and solutions. Why could not patents be granted to the new business models based on software? The software should be permitted to be patented if they are commercially valuable and expensively created or if they are novel inventions. Taking a photograph or writing a poem is comparatively different from creating a new business model. If a new business model is a software, it should be granted a patent as it is an innovation. An information system such as ‘Minecraft’ is not just an expression; it is a functioning complex business model.

Therefore, a new sui generis patent law could be introduced in the realm of technological business models as they are novel and innovative. On top of that, it is necessary to introduce IP laws to cover the embedded software in devices. If the protection has

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\(^5\) Waelde, (n 2) 4, para 1.10.

\(^5\) Abiola Inniss, ‘International intellectual property law and policy: can the Caribbean region capitalise on current global developmental trends in intellectual property rights and innovation policies’ (2012) 3(2) WIPOI 237,253.


\(^5\) <https://www.gov.uk/government/organisations/innovate-uk/about> accessed 14\(^8\) August 2018.

\(^5\) Bently (n 6) 310–311 para 10.
been allocated for the semiconductors, then why a sui generis law could not be created for software stored in a system? It is possible to expand the scope of IP law by introducing new rights to govern new innovations. There is a process known as ‘emulation’ defined as ‘the creation of a new and distinct right by analogy drawn eclectically from the types already known’. Therefore, it is possible to introduce new sui generis law for software based new business models.

4. CONCLUSION

Commercialising innovation is correlated with the realm of intellectual property law. In order to have a better convenience in domestic and international trade, an innovator should exercise a balanced control of intellectual property. When creating such a balance, it is significant to have a positive contribution not only from innovators but also from legislators. Having less control over too much control over an innovation would be harmful when commercialising innovation. As discussed above, too much control creates serious issues while less control is not sufficient to protect an invention.

There is a substantial need to introduce intellectual property laws covering the infringements in the realm of new business models. Contemporary rules and regulations are inadequate to answer emerging issues and claims of innovators. Therefore, a new set of sui generis laws could be introduced to provide remedies to innovators at least in the area of software-based business models. If an innovation is kept isolated from a commercial environment, it could never attain a mercantile benefit.

Once an innovator invents a new business model to sell a product or a service, IP control should be integrated in a strategic way to such process, while creating a substantial ROI. Thus, an application of a well administered and managed strategic control of intellectual property, could positively support the commercialising innovation considerably much more effectively than conventional approaches. Finally, after a careful analysis of the above issues and solutions, the control of intellectual property could be utilized to formulate better approaches for the commercialising innovations.

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61 ibid 55.