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Dissertation Title:

Investigating Intellectual Property Protection of a Company's Spare Part
Business

Name of Author:

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College of Business, Public Policy and Law – School of Business and
Economics

Research Supervisor:

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Date Submitted:

September 2009

Signed Statement

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Master of Science in Technology Management is entirely my own work and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Abstract:

The following thesis looks at Intellectual Property Rights available to companies for the protection of spare parts.

The author reviews Intellectual Property, Patent, Copyright, Trademark and Design Right Legislation in the Ireland, The United Kingdom and The United States of America. The thesis discusses what the rights protect in terms of protecting against the infringement of spare parts.

The review leads the author to legal law cases that had an affect on the both the legislation and infringement for the spare parts business.

Finally, the author brings the research together by looking at Business Strategy and the affect that a business strategy can have on a company, providing guidelines of how to analysis a companies business and the interaction with intellectual property.

The thesis ends with a conclusion on intellectual property with strategy and the affects it can have on a company protecting its business, recommendations for a company in the spare part business on protecting their Intellectual property.

Chapter 1: Introduction

The replacement part business in many cases is the main business of service organisations today. Worth billions in US dollars, it is the number one source of income for some organisations. In a report published by the World Trade Organisation, the automotive industry, made up largely of multinational firms, mentions that the US import about \$36 billion worth of transport equipment from Mexico, \$14 billion of that was parts and accessories.¹

In the manufacturing world, the makers and suppliers of manufacturing equipment support products by supplying replacement parts. The replacement part business is part of after sales service in relation to installation part failures or failures of parts during the warranty and post warranty period, including preventative and corrective maintenance. Preventative maintenance, performed during normal use to keep the equipment in good working order whereas, corrective maintenance only when the equipment breaks down.²

There is a wide range of equipment; from an automobile to sophisticated pieces of equipment that manufactures microchips, both purchased on the knowledge that they will last longer than a single failure, for example, the exhaust on the car might need repaired but once replaced (corrective maintenance) will continue to run.

Replacement parts, also known as spare parts, allow customers to repair the equipment purchased for specific functions, returning the equipment to its original condition or at minimum a “working condition”.

¹ Norsås, H. K. (2007), International Production Sharing: A case for coherent Policy Framework, page 31

² Adedeji B. (2006), Handbook of Industrial and Systems Engineering, s. 26.3

In addition to replacement parts, many companies and even owners of cars want to prolong the lifetime of the equipment by performing maintenance. The replacement of parts on a regular basis, known in the manufacturing business as preventative maintenance measure, prolongs the life of the equipment, for example: in the case of a car, a service.

During preventative and corrective maintenance, additional parts may require replacing to complete the repair. For example, when replacing the exhaust system on a car, the exhaust system requires replacement seals, as part of the system. The seal completes the repair, without it, the exhaust system may leak, creating noise, and the performance may not be, as it should. A seal is a consumable part. Consumable parts become part of the repair process and are generally parts that discarded afterwards or if not used put to the side (not returned to stock). Specific examples of a consumable part in a printer; an ink cartridge, sold as a complete unit, includes the seals that stop the ink from escaping from the cartridge and printer are replaced each time with the ink cartridge.³ For the purpose of this thesis, reference of replacement, spare and consumable parts referred to as “parts”.

In a bid to reduce costs, some companies have moved to second sourcing parts. Second sourcing parts, drives down operating costs, for any piece of equipment, including automobiles, which in turn makes companies more competitive and ownership of cars/equipment cheaper for the consumer and customers.⁴

³ Canon, Search for “Press Release EMBARGO: 26 August 2008” high quality desktop colour printing – perfect for small and personal offices, pg 2, <http://www.canon.ie/Search/index.asp>, (last accessed 14.08.2009)

⁴ Riordan M. H. and Sappington D. E. M. (1989), Second Sourcing, The RAND Journal of Economics, No.1, Spring, pages 41-58 (Blackwell Publishing)

Second sourcing of Original Equipment Manufacturer (OEM) “parts” can have an affect on companies loosing out on business and even intellectual property rights. Losing spare parts business can and does have huge impact on business revenue.⁵

The following thesis will concentrate on how companies can protect their “parts” business in terms of Intellectual Property (IP). What legal tools are available to producers to protect their “parts” business from their customers second sourcing?

The author will review the theory of intellectual property, consumer rights, Irish, U.K. and U.S.A government legislation and legal court cases to determine the affect of this in relation to the “parts” business. In addition to the legal authorities, the author will look at options not covered by patents for one reason or another, for example; parts purchased from other vendors; second source parts from other suppliers of reproduced parts. A reproduced part is a part made by a company who did not design but manufactured a part to replace the one manufactured by the OEM.⁶

Before undertaking the research topic, the author believed there might be limited information to make a clear judgement in regards to protecting a company’s intellectual property of the “parts” business. The author will research what options are open to a company to protect their “parts” business, looking at a Company’s Strategy for pursuing intellectual property or an alternative means to support the business they want to enter.

⁵ Demag, Financial Issues search,
<http://www.zibb.com/article/5437650/Demag+Cranes+Decrease+in+Business+in+the+Third+Quarter+of+Financial+Year+due+to+Continuing+Economic+Crisis+Countermeasures+Initiated>
(last accessed 16.08.2008)

⁶ Carty H and Hodgkinson K (1989), Copyright, Designs and Patents Act 1988, The Modern Law Review, Vol. 52, No. 3, May, Blackwell Publishing, Pages 369-379: Reproduce the design for commercial purposes by making articles to that design

Finally, the thesis will give conclusions in the research of intellectual property open to companies to protect their “parts” business.

Chapter 2: Act Review

There are many websites, journals and books dedicated to information on intellectual property. For the purpose of this study, the author will use Legislation (Irish, U.K and US) and text books to narrow down what intellectual property is and how it relates to the “parts” business and what it, if at all, protects.

In the following chapter, the author will review the legislation, to understand the protection available by law to a company who wants to protect their “parts” business and, strategy to decide the reasons for a company taking a specific direction.

A: Intellectual Property

What is intellectual property (IP) and how does this relate to the “parts” business?

Intellectual property (IP) protects ideas and information that are of commercial value. In some instances, IP is seen as a negative right, as it stops others from doing things; counterfeiters, pirates, imitators and in some cases third parties (who independently reached the same idea), from exploiting without the license of the right-owner. In other cases it can be taken as a positive; a right being granted for a patent or to register a trade mark.⁷ “Intellectual property is often credited with providing an incentive for inventors to develop their creativity. Through IP protection, inventors can recoup their investment and

⁷ Cornish, W. and Llewelyn, D. (2007), Intellectual Property: Patents, Copyright, Trademarks and Allied Rights (London Sweet & Maxwell, 6th Edition), pages 6 -7

make a profit”.⁸ In the author’s opinion, it is clear to realize that the individual company’s who wants to protect their property would see the protection of intellectual property as a good thing; whereas, the individuals/companies who want to gain from someone else’s rights would say it was bad.

Deciding a on a strategy to use such as licensing and OEM agreements, strategic alliances, product diversification and aggressive positioning depends on three factors; barriers to imitation, such as those found in patents or copyright, A firms skills and resources; and the existence of a capable competitor, not including government legislation.⁹

Intellectual Property rights are exclusive rights, also known as tangible property, which third parties are prohibited from using or exploiting the subject it protects. Intangible property rights are protected but may not lead to a competitive advantage.¹⁰

The following examples will help the reader understand the difference between tangible and intangible rights.

Tangible right can be described as something someone owns, such as a car. The owner has exclusive rights to use the car, without permission no-one else can use it. The exclusive right provides a monopolistic situation and personal property is conceded. Property rights developed as no-one would spend time and money on developing something if they had no right in the process that would allow them to benefit from their work. You now have a situation that

⁸ Nihou P. (2009), The Limitation of Intellectual Property in the name of competition, (32 Fordham International Law Journal), January

⁹ Mohr, J., Sengupta, S., Slater, S. (2005), Strategy in the high-tech firm, Marketing of High-Technology Products and Innovations, (Pearson, 2nd Edition), pages 13-15

¹⁰ Torremans, P., Holyoak and Torremans (2008), Intellectual Property Law, (Oxford University Press 19, 5th Edition), pages 10-11

someone owns the car and the exclusive right to use it. The next step would be to sell the car, but why would someone purchase it, if they did not receive the exclusive right to use it? This creates a competitive advantage in terms of owning the car and the exclusive right to use it.¹¹

Intangible rights which can also be protected may not lead to a competitive advantage. For example; an invention that is used by multiple manufacturers does not give any competitive advantage as they are making the same product. It is not the product that gives the company the advantage it is something else, such as marketing techniques.¹² For example, there are many different companies selling printers but it is the marketing of the product that gains the competitive advantage.

Korah, 2005¹³, discusses in a Legal Case,¹⁴ exclusive rights. Volvo had refused to sell spare parts to Erik Veng, whom wished to use the parts in the repair of the automobile. Volvo claim of copyright protection in the Front Wing had given them the exclusive right to do what they wanted with the wing. The European Council had agreed but stated that this might be abuse of their right stating:

- The arbitrary refusal to supply spare parts to independent repairers,
- The fixing of prices for spare parts at an unfair level or

¹¹ Supra note 10 , page 11

¹² Supra note 11

¹³ Korah, V. (2005), The Interface Between Intellectual Property Rights and Competition in Developed Countries, Scripted Volume 2, Issue 4, December 2005, DOI: 10.2966/scrip.020405.429

¹⁴ Volvo AB v Erik Veng (UK) Ltd (238/87) [1989] 4 CMLR 122, 5 October 1988

- A decision no longer to produce spare parts for a particular model even though many cars of that model are still in circulation, provided that such conduct is liable

Intellectual property rights, inventions or creations have a link with Knowledge and ideas. Everyone has a right to use their knowledge and ideas to do what they want but it is when the invention or creation becomes legally binding that it create a competitive advantage.¹⁵ Why would one want to invent or create if they can imitate?

Korah, 2005, describes one reason for inventing describing using Intellectual Property Right as a way to exclude others from exploiting a non-corporate asset. This means the owner of the right has the exclusive right to exploit his/her product. The exploitation leads to significant market power and act as a competitor barrier, in entry to a market. Although, having the right to exploit, there are rules to the governance of monopolies in the market place and the need for consideration when exploiting the grant of the IPR.¹⁶

Deciding on an intellectual property strategy for a companies business can be extremely important. Choosing the wrong strategy could be the down fall of a company, giving away a company's competitive advantage and a product that is not protected; a competitor may re-engineer the product, and then sell on to your customers. A competitive advantage example could be being first to market with a product that is protect by patents (emerging technology) but might not function to a high standard of customer spec. The company fixes the product in the field. Getting the product into the customer site is an advantage

¹⁵ Supra note 11

¹⁶ Supra note 13

in that it is unlikely that a customer would invest time on a product and have to go through the same scenario with another product.¹⁷

Corporate Strategy is important at an early stage for a company; deciding what business they are in and what they want to achieve; diversity of products they want to sell, where they will be located and how to allocate resources.¹⁸ In regards to intellectual property the company may decide, their strategy is to innovate new products and protect with intellectual property rights and to locate near the customers they want to sell to.

A Company's Business Strategy is a decision of how the company will compete successfully in the market they are in or want to enter. It concerns the value of the products (product expansion), the markets they will compete in (market penetration), services they want to provide (diversification), to the public to gain short, long term objectives of the company, which might be profitability or market-share.¹⁹

Business and Technology Strategy are linked in a technology-based company,²⁰ the business strategy decides what market to exploit and the technology strategy develops the technology to enter the market.

¹⁷ Supra note 9, pg 46 -47 and; Porter, M. E. (2003), Competitive Strategy in Emerging Industries, Mintzberg, Lampel, Quinn, Ghoshal, The Strategic Process (Pearson, Global 4th Edition), Reading 13.2

¹⁸ Johnson, G. Scholes, K, (2006), Whittington, R., Exploring Corporate Strategy (Prentice Hall, 7th Edition), s. 1.1.2

¹⁹ Supra note 18

²⁰ Module 111, Innovation and Technology Transfer, Masters in Technology management, Atlantic University Association, 2004,

The strategy of the company is relevant in this thesis as a company will have to decided what business they are in (“parts” business) and what is the technology strategy to compete in the business; cost reduction - reduce costs by process improvement or value engineering, new product development - product expansion, localization and radical diversification - acquire a new technology.

Technology Acquisition Strategies are ways in which a company can acquire technology. For example a company who supply “parts” may acquire a technology by internally researching and developing (inventing) to purchasing the technology (licensing or takeover). The strategy of “part” suppliers differ dependant on the company strategy, i.e. will they innovate and protect their intellectual property, will they copy another company’s without owning it, or will they purchase a license to produce the product or will they improve/modify an existing product.

i: Summary of intellectual property and “parts” business

The Intellectual Property Acts do not go into any detail of protection of “parts”, but one can say that an intellectual property is a protection of ones intellect in producing something, protecting it in terms of patents, trademarks, copyright and design rights Using this to make an informed decision of what intellectual property is; one can say that if a “parts” is the intellectual property of a company it may be protected.

The theory leads one find that intellectual property is something that someone owns and the owner has the exclusive right to use it, then owning “parts” might be someone’s intellectual property but the question would be do they have an exclusive right to use it as they see fit? The exclusive right would depend if they had a right to protect it. If they can protect that right, then they would have competitive advantage.

Legislation on Intellectual Property leads the author to look more in depth into patent, trademark, copyright and design law. An article by Valentine Korah explores issues relating to Intellectual Property Rights (IPR) and competition, citing Intellectual Property Rights as Patents, Trademarks, Copyright and other

items.²¹ This aligns with the authors findings on legislation and textbooks, which suggests reviewing legislation. The author will review legislation from the United States of America, Ireland and the United Kingdom.

Although the authors has determined that “parts” can be covered by intellectual property; the protection of something a company may gain from (business strategy), it is too early to understand the effects that intellectual property and business strategy may have on the “parts” business.

The next question to be answered is what are patents, trademarks, copyright and design protection and how does this relate to the protection of “parts”? The author reviews the legislation and text books behind these topics and the affect they have on the “parts” business in the following chapter.

B: Patent Act

i: Patent:

In the Irish Patent Act 2006, there is no definition of what a Patent is. This act is an amendment of previous acts, after agreements made with the World Trade Organisation (WTO) 1994, European patent convention 1973, Patent law treaty 2000 and the Geneva Convention 2000. The amendment refers to the Copyright and related rights Act 2000, Industrial Designs Act 2001, Patents Act 1964, Patents Act 1992 and the Trade Marks Act 1996.

The Irish Patent Act 1992, s. 2 (1), describes a patent as, “an exclusive right” awarded in relation to Part II or Part III (patent) of the act.

The Irish Patent Act 1992, s. 9 (1), refers to a patent as an “invention”. An invention is patentable if it is usable in an industrial application; must be new and involves an inventive step. The definition amended, in The IPA 2006 to

²¹ Supra note 13

include “all fields of technology” to define a patent as “an invention in all fields of technology”.

The latest patent act released in the UK is the Patent Act 2004, which is an amendment of the 1977 Act. Section 1 (1), describe patentable inventions in respect of the following conditions being satisfied: it is new, involves an inventive step and capable of industrial application not excluded by subsections (2) not inventions and (3) not novel or section (4a) unlawful disclosure.

In the United States Patent Act there are many legislative changes yearly put forward in the US Senate, some that may pass but in other cases fail. This makes it extremely difficult to follow but the latest US Patent Act 1994, s 100, defines; (a) invention means invention or discovery of, (b) the term process means process, art or method and includes a new use of a known process, machine, manufacture, composition of matter, or material.

The US Patent Act 1994, s.171, have a provision for designs; anyone who invents any new, original, and ornamental design for an article of manufacture may obtain a patent therefore, subject to the conditions and requirements of this title.

ii: Novelty and State of the Art:

Under the Irish Patent Act 1992, s. 11(1) and the UK Patent Act 1977, s. 2(1), considers an invention as new if it does not form part of the state of art, anything not released, to the public domain before filing for the patent application. An invention must be new to be patentable. In IPA 1992, s. 11(2), the state of art is, to include everything made public anywhere in the world, meaning that it must be new.²² In the UK Patent Act 1977, s. 2(2), the states of

²² Clarke, R. and Smyth, S. (2005), Intellectual Property Law in Ireland (Total publishing, 2nd Edition), pages 55-56

art comprises all matter (product, process etc), not been released to the public, by written or oral description or used or in any other way.

Can “parts” be new? In regards to a patent, anything can be new if not released to the public domain before. A new type of printer can be new, but is it state of the art and not released to the public domain? The argument would depend if the printer technology were new, never released to the public domain, for example; in the case of a new ink printer being new, in the opinion of the author it would not be state of the art, as ink printers have been released before. A new type of technology not used before in a printer would be state of the art. It is possible to have “parts” as new and state of the art, if it was a new invention and not released to the public domain before. If a new invention, as part of a complex piece of equipment fails, then that part could become a replacement part, for example, researching the European Patent Office the author found that a patent, granted for an ink cartridge innovation, allowed a printer to detect if the ink was empty in the printer. If this cartridge becomes commercially used then the company using this patent might be able to protect other competitors from copying it.²³

iii: Inventive step:

Under the Irish Patent Act 1992, s.13 and UK Patent Act 1977, s.3, in order for an invention to be patentable, it must involve an inventive step. Although, novelty and inventive steps are separate criteria, they interrelate, for example, you can only question if it has an inventive step, if it has novelty and novelty must be state of the art. Judging the existence of an inventive step is determined by, whether the invention would be obvious to a person skilled in the art, on or before the application date. Obvious would be a term that would

²³ Qin Lei, Xu Xiuyuan, MA Xiaotian, Zhuhai - Inventors , Applicants Nine Star Electronics
Publication date: 2009-6-18, Patent Number WO2009074112 (A1) SC,
http://v3.espacenet.com/publicationDetails/biblio?CC=WO&NR=2009074112A1&KC=A1&FT=D&date=20090618&DB=EPODOC&locale=en_EP (last accessed 27.08.2008)

be used after the fact, for example if a problem is solved and the solution known, then in the future it would be obvious to the skilled person, not requiring the problem to be solved.²⁴

Using the criteria of an inventive step for a “part”, first the part must be new, not declared anywhere in the world and now, not obvious in terms of the problem to be solved, before it can be patentable. Based on this criteria the author still believes that component parts can still be patentable and then if required used as “parts”.

Innovation is not without its problems. According to Nihoul, “the better you innovate, the higher the risk you will have to share the results of your innovation”.²⁵ In the authors views this means that if your product is successful and granted an intellectual property/patent right, it is likely that some competitor will want to compete and share in the success of a new product. If someone is competing in the business then the innovative company will want to keep innovating to stay ahead of the business. If they do not continue to innovate, they loose out. Cooper states that new products account for a staggering 33 percent of company sales, on average. One third of the revenues of corporations are coming from products they did not sell five years before.²⁶ This alone would drive companies to produce new products.

iv: Industrial Application:

Irish Patent Act 1992, s. 14, considers an invention if it can be susceptible of industrial application if it can be made or used in any kind of industry, including agriculture. Under the UK Patent Act 1977, s. 4(1), “invention can be taken to be capable of industrial application, if it can be made or used in any

²⁴ Supra note 22, pages 61-62

²⁵ Supra note 8, page 8

²⁶ Cooper, R. G. (2001), *Winning at New Products* (Basic Books 3rd Edition), page 4

kind of industry, including agriculture”.²⁷ The wording of the Irish and UK Acts differ in terms of the use of the words “susceptible of” and “capable of”.

v: Patentable:

The IPA 1992, s. 10, “a patent shall not be granted in respect of, (a) an invention the publication or exploitation of which would be contrary to public order or morality, provided that the exploitation shall not be deemed to be so contrary only because it is prohibited by law;

The UK Patent Act 1997 (as amended by the 2004 Act), s. 1 (3), “a patent shall not be granted for an invention for commercial exploitation, of which it would be contrary to public policy or morality. The author comments that if a patent were to be granted and the patent office thought it would infringe public rights then the request for a patent would be revoked.”²⁸

The UK Patent Act 1997 (as amended by the 2004 Act), s. 1 (4), “For the purposes of s. 1(3) above, exploitation shall not be regarded as contrary to public policy or morality only because it is prohibited by any law in force in the United Kingdom or any part of it”.

Public policy may be a contention for argument as it suggests in the authors opinion, to protect the public from the commercialization of the patent. For example, if public policy suggests that the protection of “parts” is an issue in public policy, would the applicant be refused a patent, and competitors have the right to make the part? In the authors opinion s. 48 to s. 51 of the UK Patent act and s. 11 of the Competition Act 1980, deal with the state that anything that is an infringement of public policy then it is possible to request a hearing with the controller, who will decide if the patent should be revoked..

²⁷ Supra note 22, page 66

²⁸ UK Statutory Instruments 2008 No. 1820, Competition, The Competition Act 1998 (Public Policy Exclusion) Order 2008

vi: Lifetime of a patent:

The Irish Patent Act 1992, s. 36 (1), the term of a patent, grants and enforces a patent for a period of twenty years but states in sub-section (2) that if the payment for fee is not paid then the patent will no longer be in force

The UK Patent Act 1977, s. 25 (1), after receiving patent grant, the term of the patent is granted for a period of 20 years until Sub-section 3 the renewal fee is paid by the prescribed period or the patent cease to have effect.

Under the U.S. Patent Act, s. 154, the term of patent defines the length the patent last is for 17 years, subject to payment fees.

Irish Patent Act 1992, s. 19 (1), disclosure of invention, means that the applicant gives up the information which makes the invention. The information should be clear enough for someone familiar with the art could carry out the instructions.

vii: Infringement

The Irish Patent Act 1992, s. 40, states that the owner can enforce the right to prevent third parties consent from infringing in the State, anything relating to the patent or direct infringement of the patent. Classifying an infringing act, according to, if the patent is: (a) a product; (b) a process; or (c) a product of a process, for example, using a process, which is the subject matter or obtained directly by a process, which is the subject matter. Section 41, discusses the contributory or indirect infringement. The UK Patents Act 1977 (as amended by 2004 Act), s. 60, wording is different but means the same thing, infringing the patent without the consent of the proprietor and offering to provide anything in relation to the patent.²⁹

²⁹ Supra note 22, page 108

Direct infringement of a patent under the IPA 1992, s. 40 (a), can happen in a number of ways, making, offering, putting on the market, using, importing or stocking the product for those purposes. Reading this in conjunction with s. 46 (1) in respect to a process for obtaining a new product, if produced by an unauthorised party, it is produced by the same process which is an infringement. This protects patented processes used on products.

Under the U.S. Patent Act, s. 271, 35 U.S.C. 271 (c) whoever sells a component of a patented machine, manufacture, combination, or composition, or a material is liable. Section 281, suggests that it is the patentee responsibility to remedy by civil action of infringers of the patent. Section 283 states certain courts may grant injunctions to prevent violation of any rights secured by patent.

viii: Non-infringement:

Under the Irish Patent Act 1992, s. 42 (a) and The UK Patent Act 1977, s 60 (5) (a), the rights of the patent will not be infringed if done privately for non-commercial purposes. It is also not an infringement of the patent if done with consent of the proprietor.³⁰ A review of Licensing of patents is discussed a later section.

ix: Infringement proceedings:

The Irish Patent Act 1992, s. 47 (1), states that, it is the proprietor that needs to take to court the infringer of the patent. This means that even though the proprietor has a patent it is required that that person protect the patent by taking legal proceedings to enforce the patent right. The UK Patent Act 1977, s 61 (1), proceedings for infringement of patent, state that, it is the proprietors who has to uphold a claim of infringement in the courts.

³⁰ Supra note 22, page 109

Section 129 (1) of the UK Fair Trading Act, discusses that there can be no prosecution of an offence under the Fair Trading Act after the expiration of three years from the commission of the offence or one year from the discovery

x: Use of a patent:

Under the Irish Patent Act 1992, s. 70, after the expiration of three years, any person can request a licence under the patent.

The UK Patent Act 2004, which grants a patent to give the proprietor the exclusive rights of his invention, also covers possibilities open to others to use the patent for their purposes:

- The possibility of application for licensing a patent, when the patentee does not want to enter into an agreement can have an impact for companies wanting to sell “parts” that are covered by other companies patents.
- Patent infringement is possible for private use, as long as, not connected to commercialisation. This however may lead to infringement, if the private use in turn leads to a new product.

xi: Patent rights in other countries:

Irish Patent Act 1992, s. 119, discusses European patents, stating that European patents are equivalent rights as if granted by the Act. The UK Patent Act 1977, s. 77, stresses a European Patent, treated in the same context as if it were granted by the UK Act. The UK Patent Act references, in relation to competition, The Fair Trading Act 1973, Competition Act 1980 and The Enterprise Act 2002. 35 U.S.C. s104, Inventions made abroad mentions that the US recognizes patents made in NAFTA and WTO affiliated countries.

The UK Patents Act 1977 (as amended by 2004 Act), s. 50(a), that after a merger and market investigation that when there is issues relating to competition the Competition Committee and/or the Secretary of State have the

right to make changes to remedy, mitigate or prevent an issue arising from the patent and possible infringement.

IPR is limited nationally, for example a patent granted in the U.K. cannot be protected in the U.S., unless of course that the applicant files in all countries which as suggested in the report would be expensive. In Europe, it is possible to apply for a European patent, which has rights of protection in the member's state.³¹

xiii: Applying for a license

The Irish Patent Act covers new inventions, which can include “parts” used in any machine. The Patent will act as a protection to the invention, giving the proprietor exclusive rights. However, after 3 years it is possible for anyone to request for a license to use the patent for their own purpose.

The Irish Patent Act 1992, s. 68 discusses the right of the proprietor in licensing the patent. The proprietor can request that the controller grant license to possible candidates of the patent when granted.

The UK Patent Act 2004, which grants a patent to give the proprietor the exclusive rights of his invention, also covers possibilities open to others to use the patent for their purposes. The possibility of application for licensing a patent, when the patentee does not want to enter into an agreement can have an impact for companies wanting to sell “parts” that are covered by other companies patents.

The UK Patent Act 1977 (as amended by 2004 Act), s. 48 (1), is a section of interest. Compulsory Licences: general, suggests that after 3 years anyone can apply for (a) a licence for the patent.

³¹ Supra note 13

The UK Patents Act 1977 (as amended by 2004 Act), s. 48A (1), anyone that is a proprietor of the World Trade Organisation, have the grounds for a license if

- (a) Patented invention is a product demands not met,
- (b) Refusal of the patent owner to grant a license on reasonable terms –
 - i. exploitation of any patent invention involving an important technological advance is hindered
 - ii. development of commercial or industrial activity unfairly stopped
- (c) Reasons of conditions imposed by proprietor or the disposal and use of the patented product or process or establishment or development of commercial or industrial activities are unfairly opinion formed.

In Europe, Korah discusses Case Law that centres on the refusal to supply goods. In one case, Commercial Solvents, refusal to supply goods to a former customer was abuse of its dominant position in the market. The EC Treaty, article 82, suggests that if a company is in a dominant position should not eliminate the competition by refusing to supply parts “just because”, but, required a reason for this justification.³²

In the UK, grounds for the license application, if proven that there were discussions of a license agreement with the patentee. There is a stipulation that there will be no order or entry if the patented invention is in the field of semi-conductor technology.

The UK Competition Act 1980, s. for the purposes of this Act a person engages in an anti-competitive practice if, in the course of business, that person pursues a course of conduct which, of itself or when taken together with a course of conduct pursued by persons associated with him, has or is intended to have or is likely to have the effect of restricting, distorting or preventing competition in

³² Supra Note 13

connection with the production, supply or acquisition of goods in the United Kingdom or any part of it or the supply or securing of services in the United Kingdom or any part of it.

Under s. 14 (1), of the Competition Act states that after subsection (2) of section 51 of the Patents Act 1977 (application by Crown in cases of monopoly or merger) there shall be inserted the following subsection (2) where (a) “on a reference under section 5 of the Competition Act 1980, a report of the Commission, as laid before Parliament, contains conclusions to the effect that- (i) any person was engaged in an anti-competitive practice in relation to a description of goods which consist of or include patented products or in relation to a description of services in which a patented product or process is used, and (ii) that practice operated or might be expected to operate against the public interest ; or (b) on a reference under 'section 11 of that Act, such a report contains conclusions to the effect that- (i) any person is pursuing a course of conduct in relation to such a description of goods or services, and (ii) that course of conduct operates against the public interest, the appropriate Minister or Ministers may, subject to subsection (3) below, apply to the controller for relief under subsection (5A) where the controller can cancel or modify the license, in respect of the patent.”.

There are grounds in which others can apply for a license, when they are not part of the World Trade Organisation, including, a company that commercially work in the UK.

xiii: Patent and relevance for “parts”

The Irish, UK and US Legal Laws is broadly defined by all three countries as an invention, something that is new, usable in an industrial application, involves an inventive step.

Each country grants a patent for inventions after receiving an application form. If granted a term of 17 years for the US to 20 years for Ireland and the UK, and for a “new design” a term of up to 14 years, in the US.

The grant term is only valid in each country as long as the patentee pays the fees at specific times. Unpaid fees can cause the patent to laps. Relative to the gains of having a patent the costs of keeping the patent active are relatively low.

In the Irish and U.K law, it is possible to licence when granted the patent or the controller can grant a licence after the patent has reached three years due to specific circumstances, such as the patent not used. Under the UK Act, the three-year license does affect the Semiconductor Industry, unless the patentee allows, which creates an additional protection.

The US Patent Act 2007, 35 U.S.C. 101, states that all parts can be patented and even full machines.

Claims for patents in the US, mentioned to be more lenient in the U.S. than they are in Europe. For example, the report mentions that the “One click” patent granted to Amazon for their website and the mention of dubious patents upheld. This is maybe the authors experience but maybe it is the legislation and/or the office that grants the rights that are lacking. For example, if laws written in a way that the guidelines cannot be deviated from then maybe less time would be spent in courts. In another opinion this is maybe, why people invest in products that they believe can give them return on investment as they see that there are loopholes and creates a way to provide competition.³³

All three countries acknowledge the World Trade Organisation but the patent requires register in each country. A European patent is active in each of the European Union countries.

The Patent Acts reveal it is possible to grant a patent for one single part, used within the piece of equipment, as long as it meets the guidelines laid out by the patent office in that country. For example, a product with multiple “parts” covered by one patent shown in the following search. A company in the US

³³ Supra note 13

called Newport Corporation supplies robotics to industries such as the Semiconductor Industry. Newport received a patent for what they describe as an “end effector”, used to transport Silicon wafers. The “end effector” used within the robotic system, which in turn is used in the Semiconductor Processing Equipment.³⁴ The patent finally rejected under the Patent Co-operation Treaty, an international patent application system that helps companies with more time to develop and exploit their inventions. It allows the applicant to keep options open to obtain patents in up to ninety countries and then decided on the countries it wants to select.³⁵ In addition to this Europe also has a European Patent Convention treaty, which has a single, standard procedure for granting patents.³⁶

Receiving a patent can be extremely important for a company that specialises in supplying “parts” as part of their business. If a company can claim that the invention of “parts” are “new” and can prove it can be used in any kind of industry, they can be protect by law which creates a monopoly situation for that company. The Competition and Fair Trading Acts of the UK, highlight how difficult it is for a company to infringe on a patent.

The strategy of a company is very important at the outset deciding on what type of technology or products to invest in. The strategy acquisition can be expensive and times not worth the investment. A license of a patent might be a

³⁴ Bacchi, Paul., Filipski, Paul. – Inventors, Specimen holding robotic arm end effector, 15 March, 2008,
http://v3.espacenet.com/publicationDetails/biblio?DB=EPODOC&adjacent=true&locale=en_EP&FT=D&date=20080315&CC=AT&NR=389237T&KC=T - (Last accessed on 27.08.2009)

³⁵ Patent Co-operation Treaty, Additional Information,
<http://www.wipo.int/pct/en/texts/articles/atoc.htm> (last accessed 27.08.2009)

³⁶ European Patent Convention Treaty, Additional Information,
<http://www.epo.org/patents/law/legal-texts/html/epc/2000/e/contents.html> (last accessed 27.08.2009)

good strategy, as the cost of research and development are already complete and a proven product.

One question that still requires answering: If a company purchases a complete system, which has a patent for a certain part, can the company replace that part by second sourcing? It really depends if a patent covers that part or not.

Being granted a patent gives exclusive rights that stop others from using the right associated with the grant. The patentee is required to enforce legal action of the infringer. The costs of legal action may defer an individual or small company from taking out a patent.

C: Design Act

i: Design Acts:

Under the Irish Industrial Design Act (IDA) 2001, s. 2(1), the definition of design is:

“the appearance of the whole or a part of a product resulting from the features of, in particular, the lines, contours, colour, shape, texture or materials of the product itself or its ornamentation”.

The word “product”, defined in s.2 as:

“any industrial or handicraft item, including parts intended to be assembled into a complex product, packaging, get-up, graphic symbols and typographical typefaces, but not including computer programs”.

In the UK, the Design Act as known as, the Registered Design Act (RDA) 1949. The Act amended on numerous occasions, lastly by the Regulatory Reform Order 2006, which provides registration of designs and the protection of registered designs in the United Kingdom. Under s. 1 (2), the definition of a design is identical to the Irish Act.

There is no separate Design Legislation in the USA; designs, protected by Patents Act (as discussed earlier) and under the Copyright Act (as discussed later).

ii: Complex Products and Component parts

In relation to this thesis it is important to understand what is conceived as a “complex product” in the Design Acts of Ireland and the UK. Under the IDA 2001, s. 2(1), “complex product is a product which is composed of multiple components which can be replaced permitting disassembly and reassembly of the product”; Under the UK RDA 1949, s. 1(3), “complex product is a product which is composed of at least two replaceable component parts.

Both are defined slightly different in terms of “multiple versus at least two”, which in the author’s opinion doesn’t have any affect on the product. What becomes interesting is the Irish Act mentions disassembly and reassembly, where the UK Act mentions replacement. This will be approached in a later section.

iii: Novelty and individual character

Under the IDA 2001, s. 12(1), a design must be new and have individual character³⁷ and under subsection 2, is identical if previously made available to the public when it differs only by details that have no significance. The UK RDA 1949 (amended), s. 1B, has the same requirements of novelty and individual character.

Revisiting the component part of a complex system, under IDA 2001, s. 14(1), a component part also is considered new and have individual character if: (a) the component part, once incorporated into the complex product, remains

³⁷ IDA 2001 section 13(1): a design has individual character if the overall impression it produces on user, differs from the overall impression produced, on such a user by a design made public before the application for registration. (2)In assessing individual character, the degree of freedom of the author of the design in developing the design shall be taken into consideration.

visible during normal use of the complex product, (b) the visible parts must fulfil the requirements of novelty and individual character.

The UK RDA 1949, s. 1B (8), has the same criteria used in the Irish Act for component part of a complex system. It is important to note that “normal use” excludes maintenance, servicing or repair work³⁸

Looking at what we know so far the author believes that in the instance of design rights it might be possible for a company to use the section of component parts as a way to second source parts. The Irish and UK Design Acts state that a component part is only covered if it is visible during normal operation. So if the part is in a position that can not be seen then that would constitute non infringement if the company decided to use a third party to supply “parts” if they meet the criteria for a design right.

iv: Protection:

In the Irish Industrial Design Act 2001, s. 16 (1), a design with features of appearance, dictated by its technical function, shall not be registered. Sub-section 2, features of a product, reproduced in their exact form to fit within a product, so either product can function will not be a registered design. Sub-section 3, a design serving the purpose of allowing multiple assembly or connection of mutually interchangeable products within a modular system, can be registered, under this act.

Under the UK RDA 1949, s. 1C, the same principles apply as the Irish Act for technical function, reproduction and multiple assembly/connections.

v: Design Rights:

Irish Industrial Design Act 2001, s. 22, an application for registration of a design shall be personal property.

³⁸ IDA 2001, s. 14 (2)

Section 42, defines a design right as:

- (1) Property right referred to design right,
- (2) Registered proprietor of a design is the owner of the design right,
- (3) Applies to any design that does not produce on the informed user a different over-all impression,
- (4) Gives the owner exclusive rights to use the design or authorise others to use it, and
- (5) Design right does not apply to the use of a component part of a complex product for the purpose of repair of that product so, as to restore its original appearance. Answering the question in section “ii” it is allowed to disassemble, reassemble and replace “parts” without infringing in the act.

UK Amended Registered Designs Act 1949, s.7, right given by registration, gives the registered proprietor the exclusive right to use the design and any design which does not produce on the informed user a different overall impression.

vi: Licensing:

Irish Industrial Design Act 2001, s. 41 (1), the owner of the design right is entitled to apply to the controller to license the design. Under the UK law, it is also possible to license the design but it is not required to register it with a controller.

vii: Duration of Design Right:

Irish Industrial Design Act 2001, s. 43, the duration of the design right lasts for 5 years, but can be renewed four times, giving a total lifetime of the right to 25 years, by paying the prescribed fee.

UK Amended Registered Designs Act 1949, s. 8, gives the duration period as 5 years with an extension of up to 4 times, maximizing the right as 25 years, as long as all criteria is met and payments made.

viii: Infringement

Irish Industrial Design Act 2001, s. 51, discusses infringement of the design without a license. If someone uses the design without a license than it is an infringement of the design right.

Under s. 57 (1) of the Act, an infringement of the design right is actionable by the registered proprietor of the design.

UK RDA 1949 (amended), s 7A, mentions that a registered design is not infringed by the act if (5) the component part is used for the purpose of the repair of a complex product to restore its original appearance.

Under the IDA 2001, s. 16 (1), as mentioned in the “Protection” section a product dictated by its technical function, the features of appearance shall not be registerable.

The UK RDA 1949, s. 7A, clearly states that component parts can be used for repair in complex systems, but the IDA 2001, s. 16 (2), must-fit provisions, limit the protection for spare parts in cases of mechanical interconnection.

ix: Effect of Design Acts on “parts” business

Both Ireland and the U.K countries have a similar take on what a design is but it can be argued that the protection they grant differ.

Design is the appearance of the design in the lines, contours, shape and material. It can be a whole or part of a product. It must be new and of individual character. In case of a “part” – component part it must be new, stay visible when part of a complex system and have individual character.

In relation to protecting inventions, it might be easier to justify the protection in terms of a patent. The design act in many cases, leave a loophole for someone to infringe on the right without being liable.

The acts, clearly state that the protection of the design is if the product is visible during normal use. The Irish act appears to protect component parts, unless there is an exception to the must-fit provisions in s. 16(2).³⁹

The UK RDA 1949, s. 7A, clearly states that a component part is replaceable if it is for repair purposes.

Going back to the IDA 2001, s. 14(1)(a), the component part, once incorporated into the complex product, remains visible during normal use of the complex product, in the authors opinion leaves a loop-hole for people to exploit the protection against infringement.

In a complex system, suggested, that the part has been installed into that system to do a function and may not actually be designed to have a shape, lines, contours and specific material, especially relating to manufacturing equipment. For designs, used in cars, boats and aeroplanes where the actual shape, used to change the operational aspect of the overall whole product, the person designing should take into account the possibility of registering the design.

It would be in the interest of a company that designs products to think about registering the design, when the design takes the appearance of the product in terms of the shape, line etc. A registered design does not take into account of the technical function so in terms of “parts” it is only parts that are registered for the appearance that are covered by this law.

More information on types of designs registered in Ireland, anyone can view these on the Patent Office Website.⁴⁰

³⁹ Supra note 22, page 455

To protect a “part”, based on concept of look, could lead to possibilities for designers to protect their product in terms of shape and appearance. Designing shape, contour etc into a part may be a way for a company to protect against someone copying that part.

D: Trade Marks Act:

i: Trade Marks:

The Irish Trade Marks Act 1996, s 6, states a “trade mark” something that distinguishes goods or services, consisting of but not only to, words, designs, shapes and packaging.

Under the UK Trade Marks Act 1994, s. 1(1), a “trade mark” is a sign, used to distinguish your goods and services from those of your competitors for example; it can be words, logos or a combination of both. In other words, it differentiates your goods or service as different from someone else's.⁴¹

U.S. 15 USC 1091.2005, definition: a trademark is a word, name, symbol, or device that is used in trade with goods to indicate the source of the goods and to distinguish them from the goods of others.⁴² For example, Microsoft name is a trademark and so are some of their product names such as Windows, for their operating systems.

⁴⁰ Ireland Patent office, review of Registered Designs,
http://www.patentsoffice.ie/en/design_what_is.aspx - (last accessed 16.08.2009) and
<http://www.ipo.gov.uk/os.htm> (last accessed 16.08.2009)

⁴¹ Supra note 7, page 603

⁴² US Patents and Trademark additional Information,
<http://www.uspto.gov/web/offices/pac/doc/general/index.html#ptsc> (last accessed 27.08.2009)
and; US Trademarks, <http://www.uspto.gov/web/offices/tac/doc/basic/> (last accessed 27.08.2009)

IPR, described as a way to encourage investment (function of IPR), having prospect of an exclusive right enables investment into Research and Development. Trademarks attract investment as consumers identify products by reference to the trademarks, leading to product purchase. An example of this is the Apple Computer trademark of the “Apple”, many people buying the product on this alone. In Civil Law, the traditional artistic copyright gives the effect to natural law rights, to exploit the fruits of ones artistic endeavour, most IPR’s attract investment, as they know they will get something back in return.⁴³

ii: Trademark Right

The Irish Trade Marks Act 1996, s. 7, states under the registered trade mark act, a property right, obtained by registration, the proprietor has the rights and remedies provided by the act.

Section 13(1), states that the proprietor has exclusive rights in the trade mark if infringed without the proprietor’s consent, and the acts referred to in section 14.⁴⁴

iii: Infringement

Under s. 14(1), a person infringes on a trade mark if in the course of trade use a sign which is identical with the trade mark in relation to goods or services which are identical with those for which it is registered. Subsection 2, in the course of trade uses a sign where because (a) the sign is identical with the trade mark and is used in relation to goods or services similar to those for which the trade mark is registered, or (b) the sign is similar to the trade mark and is used in relation.

⁴³ Supra note 13

⁴⁴ Irish Trade Marks Act 1996, s. 14

iv: Infringement Action

Section 18(1), a trade mark is infringed; the infringement shall be actionable by the proprietor of the trade mark.

v: Duration of Trademark

Under s. 47 (1), a trade mark shall be registered for a period of ten years from the date of registration.(2) registration may be renewed in accordance with section 48 for further periods of ten years.

Section 48a states, subject to payment of the prescribed renewal fee, the registration of a trade mark may be renewed at the request of the proprietor.

vi: Effects of Trade mark Act on “parts” business

Although the laws for trademarks are very similar for each country, would a “part” business really benefit from its protection? In the authors opinion the trademark is not a way to protect “parts” from someone supplying it, but the protection of using a sign that may help people distinguish the maker of the “parts”, which in turn may persuade the consumer to buy from the company. For example; if you search for IPOD⁴⁵, you will find that Apple own the trademark for that name but have also trademarked anything to do with the product, whither on clothes or replacement parts. If the consumer sees that name on the product, they automatically will know it belongs to Apple and hence may purchase dependant on the name alone.

A company’s competitive strategy focuses on differences among companies rather than their common mission. It focuses on how the company can do it better than their competitor or instead of the competitor. Competitive strategy can normally trace to three routes: Superior Skills, Superior resources and

⁴⁵ Apple, search for Apple “IPOD” Trademark, US Trade Mark Office website, <http://tess2.uspto.gov/bin/gate.exe?f=search&state=4007:94t95r.1.1> (last accessed 16.08.2008)

Superior position. A Company's resources such as trademarks can be a very important advantage. Knowing whom a company is and what they stand for can attract business and help with relationships with suppliers and distribution channels.⁴⁶

E: Copyright Act

i: Copyright:

Irish Copyright and Related Rights Act 2000, was amended by the Copyright and Related Rights (amendment) Act 2007. For the purpose of this thesis the author will refer to "The Act 2000", unless where the Act of 2007 has amended particular parts used in this report.

The UK Copyright, Design and Patents Act 1988, the latest released Act, even though the Design and Patent act as amended.

The Irish Copyright and Related Rights Act 2000, s. 17 (2), Subsistence of Copyright, Copy right and Copyright works, describes Copyright as, (1) Original literary, dramatic, musical or artistic works, (2) Sound recordings, films, broadcasts or cable programs, (3) the typographical arrangement of published editions, and (4) Original databases.

UK Copyright, Design and Patents Act 1988, s. 1, states a copyright is (1) a property right which subsists in accordance with this part in the following descriptions of work, (a) original literary, dramatic, musical or artistic works, (b) sound recordings, films, broadcasts or cable programs, and (c) the typographical arrangement of published editions.

The US Copyright Law, 2007, s. 107(a), subsists in original works of authorship in any such way, expression, developed, perceived reproduced,

⁴⁶ Minzberg, Lampel, Quinn and Ghoshal (2003), The Strategy Process (Pearson Global 4th Edition), Advantages, page 83

communicated, either directly or with aid of a machine or device. Works of authorship include: (1) literary works; (2) musical works, including any accompanying words; (3) dramatic works, including accompanying music; (4) pantomimes and choreographic works; (5) pictorial, graphic, and sculptural works; (6) motion pictures and other audiovisual works; (7) sound recordings; and (8) architectural works

Some examples of copyright protection, to understand what the laws are stating are: Someone writing a book can protect against copyright what they have written, someone that writes a song can claim copyright. The Irish Act goes on to databases being protected; presumably this is the digital databases that store material on them.

The Irish Copyright and Related Rights Act 2000 s 17(3), copyright protection shall not extend to the ideas and principles which underlie any element of a work, procedures, methods of operation or mathematical concepts, and in respect of original databases, shall not extend to their contents and is without prejudice to any rights subsisting in those contents.

The US Copyright Act 2000 s. 107(b) In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work.

ii: Duration of Copyright

The Irish Copyright and Related Rights Act 2000, s. 17, subsection 24 (1), duration of copyright in a literary, dramatic, musical or artistic work or an original database, The copyright in a literary, dramatic, musical or artistic work, or an original database shall expire 70 years after the death of the author, irrespective of the date on which the work is first lawfully made available to the public.

UK Copyright, Design and Patents Act 1988, s. 12, duration of Copyright in literary, dramatic, musical or artistic works expires at the end of 50 years.

iii: Copyright and Registered Design

The Irish Copyright and Related Rights Act 2000, section 78 (1), the copyright in a work is not infringed by anything done, (a) pursuant to an assignment or license made or granted by a person registered under the Act of 1927 as the proprietor of a corresponding design, and (b) in good faith and in reliance on such registration and without notice of any proceedings for the cancellation of the registration or for rectifying the relevant entry in the register of designs. In section 2(1) “corresponding design”, in relation to a work, means a design within the meaning of the Act of 1927 which, if applied to an article, would produce anything which would be treated for the purposes of this section, as a copy of the work.

UK Copyright, Design and Patents Act 1988, s. 213 (1), states, a design right is a property right which subsists in accordance with this part in an original design. Section 2, a “design” means the design of any aspect of the shape or configuration (whether internal or external) of the whole or part of an article. Section 3, design right does not subsist in, (a) a method or principle of construction, (b) features of shape or configuration of an article which, (i) enable the article to be connected to, or placed in, around or against, another article so that either article may perform its function, or (ii) are dependent upon the appearance of another article of which the article is intended by the designer to form an integral part, or (c) surface decoration.

Under s. 4, a design is not “original” for the purposes of this part if it is commonplace in the design field in question at the time of its creation. Section.5, design right subsists in a design only if the design qualifies for design right protection by reference to, (a) the designer or the person by whom the design was commissioned or the designer employed (see sections 218 and 219), or (b) the person by whom and country in which articles made to the design were first marketed (see section 220), or in accordance with any Order under section 221 (power to make further provision with respect to

qualification). Section 6, design right does not subsist unless and until the design has been recorded in a design document or an article has been made to the design. Section 7, design right does not subsist in a design which was so recorded, or to which an article was made. The designer is the person who created it and in the case of a computer-generated design the person by whom the arrangements necessary for the creation of the design are undertaken shall be taken to be the designer.

iv: Exceptions of Protection:

The Irish Copyright and Related Rights Act 2000, s. 79, (1), the making of an object of any description which is in three dimensions shall not be taken to constitute an infringement in two dimensions when reviewed by a non expert in the object, to be a reproduction of the work Subsection 2, the act of reproducing an object of any description which is in three dimensions shall not be taken to constitute an infringement of the copyright in a work in two dimensions (other than a work relating to a work of architecture) where; (a) the lines, contours, colours, shape, texture and materials of the product itself or its ornamentation that appear in the work and are applied to the objects, are wholly or substantially functional; and (b) The object is one of a number, in excess of 50, of identical objects which have been manufactured and made commercially available by the owner of the copyright

Under the UK Copyright, Design and Patents Act 1988, s. 51(1), it is not an infringement of any copyright in a design document or model recording or embodying a design, for anything other than an artistic work. Making a typeface to make an article to the design or to copy an article made to the design, is also not an infringement. Section 2 states, nor is it an infringement of the copyright to issue to the public, or include in a film, broadcast or cable program service, anything the making of which was, by virtue of subsection (1), not an infringement of that copyright.

Korah, discusses a legal case in Germany, IMS Health GmbH & Co KG v NDC Health (C-418/01), 29 April 2004, [2004] 4 CMLR 1543., the judgment

said, if a company enjoys dominant position in a market place, in this case the product became the industry standard, even if they have copyright protection, they should license the product.

The conclusion in the reports takes the point, that firms with a dominant position may have a duty to supply:

- A former customer when a refusal would eliminate competition from the complainant,
- Third parties who have never been supplied before where circumstances are special,
- If refusal would induce parallel trade,
- In IMS and Microsoft, dominant firms may be required to grant access to a de facto industry standard.⁴⁷

v: United States DMCA

The US had to make a change to their laws due to the digital era. Hollywood had tried previously to get anti-circumventing legislation. Laws forbidding the manufacturer, sale, and use of black-box decoder boxes for viewing encrypted cable television or satellite transmissions were available before the DMCA. A white paper by the US administration endorsed this legislation, also observing copyright owners were investing in development and use of various kinds of technical measures to protect their works from digital networked environments.⁴⁸

⁴⁷ Supra note 13

⁴⁸ Samuelson, P. (2001), University of California at Berkeley, Towards more sensible anti-circumvention regulations, <http://www.springerlink.com/content/gxk81a6xu03099nu/> (Last accessed 27.08.2009), s. 1, Introduction

The US created a change to the Copyright Act by adding amendment to include the Digital Millennium Copyright Act (DMCA) in 1998. The purpose of the DMCA was to update copyright laws, taking into account the growing protected works being kept in digital form (on computers, recorded on CD and DVDs. International treaties developed by the World International Property Organization (WIPO), for standards in digitally stored materials, was the basis for the DMCA The DMCA three categories of acts of circumvention of copyright protections of digital works: (1) Circumvention of controls over access to the protected works, (2) Trafficking in technologies or devices that circumvent access controls, and (3) Trafficking in technologies or devices that circumvent rights protection⁴⁹

There are two kinds of rules for anti-circumventing in the DMCA. Section 1201 (a) (1) (A) outlaws the act of circumventing,⁵⁰ which is subject to seven specific exceptions and seven other more general limitations. The second kind outlaws the manufacture of distribution of circumvention-enabling technologies.⁵¹

Section 1201 (a) (2) pertains to technologies that “effectively control access to [copyrighted] works,” and 1201(b)(1) to technologies that “effectively protect a right of a copyright owner.”⁵²

Section 1201 states that that “no one can manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device,

⁴⁹ Stephan F. Blythe - The U.S. Digital Millennium Copyright Act and the E.U. copyright directive: Comparative Impact on Fair Use Rights (Tulane Journal of Technology and Intellectual Property, Spring 2006), front page

⁵⁰ Supra note 48, section III, DMCA’s Anti-circumvention Regulations, Circumventing –“ a technical measure that effectively controls access to a [copyrighted] work.”

⁵¹ Supra note 48, section III, DMCA’s Anti-circumvention Regulations

⁵² Supra note 51

component, or part thereof” if it has one or more of the following three conditions: (1) if it is “primary designed or produced for the purpose of circumventing protection,” (2) it has “only limited commercially significant purpose or use other than to circumvent protection,” or (3) is “marketed by that person or another acting on its behalf with that person’s knowledge for the use in circumventing technical protection.”⁵³

vi: Exceptions of DMCA

Three of the exceptions are from one or both of the anti-device rules. It is okay to circumvent if it is done during: (1) legitimate encryption research; (2) computer security testing, (3) technical protection system when necessary to achieve interoperability among computer programs; (4) legitimate law enforcement and national security activities by government actors. The other 3 pertain to information privacy protection, parental control of access to harmful material by children, and certain acts by libraries.⁵⁴

vii: Effect of Copyright Act on “part” business

The Copyright Act does not protect the “part” business, even though there are some provisions in the act for “Designs”. The protection in terms of “Designs”, it is best to refer to the Design Act for that country, in the US refer to the Patent Act.

The Irish Copyright Act 2000, s. 79 (1) states it is not an infringement to copy a design that is in 2D and change it to a 3D design. This would suggest that if a company has engineering drawings of a part, then it would not be an infringement if that drawing, reproduced in a 3D functional object.

⁵³ Supra note 51

⁵⁴ Supra note 51

Considering the Irish Copyright where it is not an infringement to reproduce a 3D design from a 2D design, someone could perceivably copy a drawing to produce a “part”.

Today many drawings, now designed on computer programs, allow the user to draw the object in 3D. If a drawing was produced in 3D, would this represent the object and stop anyone from copying it?

A company’s competitive strategy is very important in terms of a competitive advantage over competitor. Competitive advantage does not last forever, in most cases, other company’s are always trying to imitate what is good about a company who is leading. Review a company’s competitive strategies regularly to keep the company’s competitive advantage.

F: Conclusion of Acts effect on “parts” business

Therefore, the best way to protect a “parts” business is to request a “patent”, if it is inventive and new and has individual character.

Protection of “parts” by patents not only allows the user to protection for up to 20 years but, the user receives an exclusive right. One interesting point to note, patents will only last for the duration if the renewal fees are paid. It is also up to the right holder to renew the application within the required period as they are not informed of the lapse of the patent.

It is the right of the owner to allow others to use the patent by means of licensing, but in many cases after 3 years the controller can decide that a patent not used and override the protection, granting a license and in extreme cases cancelling the right.

In case of getting a patent for “parts”, it is likely to succeed as long as it is meeting the criteria, suggesting that it would be during a new invention that you would look to secure the patent.

Design rights are another way to protect “parts” business. It is the author’s opinion that this right however has some loopholes that allow third parties to

benefit from others rights. The design right also allows in the UK a right to replace parts if it is for the repair of another piece of equipment. This allows third parties to supply parts not protected by patents, for example; the piece of equipment received Design protection for the contours but that specific part fails, within the equipment, then it is by UK law not an infringement to replace that part.

The Copyright Act suggests that the protection is more for protection of literature works, dramatic, music and films than for parts business. There are possibilities to use copyright in a drawing and infringe on it to make a “parts” as long as the drawing is in 2 dimension and the “parts” made are in 3 D.

Trademarks are more for protection of a sign used to help people distinguish the maker of the “parts”, which in turn may persuade the consumer to buy from the company.

Nihoul says that IP encourages innovation but stresses, under European law and from what the author can gather in other countries, IP can be suspended if it would prevent emergence of further innovation.⁵⁵ He goes on to say, IP should not create a situation not favorable to consumers, discussing “Microsoft case”⁵⁶ suggesting that consumers were affected by limitations placed on them.⁵⁷

Korah says that the competition in innovation is more important than the competition from someone providing the same product. This is extremely important to understand in the author’s opinion, for example, when a

⁵⁵ Supra note 8, page 7

⁵⁶ Microsoft v Commission of the European Communities (T-201/04) [2007] 5 C.M.L.R. 11, P652, as cited in Paul Nihoul, 32 Fordham Int’l L.J. 489, The limitation of intellectual property in the name of competition, page 8

⁵⁷ Supra note 8, page 8

technology company's strategy is to stay ahead of the competition. If that company is stuck in battles of supplying "parts" with a competitor, they may loose out in the development of new inventions, where redirecting the funds dealing with the infringement instead of in Research and Development programs. In the author's opinion it is important to work both directions of the business as the funds received from the "parts" business is extremely important in allowing companies to fund for the future. However, it is very important to invest for the future, so it knows were to have the cut off point so that they also protect what keeps the company running today.⁵⁸

Competition and consumer rights in the 1990's favoured the competitor, many due to officials not understanding the difference between protecting consumers and the competitor. Typically, the government looked on the side of the competitor but did not look at how the limit of competitors in the market place would affect the consumers. This can come into play a great deal when looking at the replacement "parts" market. If there is no competition it allows suppliers to charge what they feel fair for a product, most likely leading to increase prices.⁵⁹

The general conclusion of the rights was competition and property fundamentals aimed for the same thing, which is consumer welfare and increase in future investment. The granting of exclusive rights (patents) is in the hope that companies will invest in things people want to use. The investor gets the benefit of the investment by renting it out or selling it to others.

According to the European Court of Justice (ECJ), they stress that dominant positions are very strong. Allowing companies to refuse licensing, the refusal to supply would have an effect in investment.⁶⁰

⁵⁸ Supra note 13

⁵⁹ Supra note 13

⁶⁰ Supra note 13

Awarding of IPR, operate as barriers to entry, sometimes very important assets. In the US, antitrust has not attempted to allow access to refusal to license in monopolisation, but in Europe the laws has been willing to allow access to strong monopoly's and where the a stranglehold is important to a complaints business.⁶¹

The report gives a great aspect of Intellectual Property Rights, issues companies face from different angles. It discusses issues with granting of patents, monopoly situations, licensing and future investment.

The discussions in relation to licensing is extremely important, discussing "parts" business, the rights of patent owners not to grant licensing and the effects this can have on future investment.

Looking at how someone else sees Intellectual Property Rights, opens ones eye's to how they perceive what it does to industry and why if there was a better way to control the way rights are granted that we all might be in a better position. In the authors opinion though it is important to grant the person who is willing to invest in research and development a way to promote what they have discovered and the Intellectual Property Rights are most likely a good place to start.

⁶¹ Supra note 13

Chapter 3: Legal Case's:

In the following chapter, the author will review legal cases in the last twenty years that have been in relation to “parts” and intellectual property rights. The author will use the information to decide if anything learnt from the legal case studies can benefit companies trying to protect their ”parts” business.

A: Review of Legal Case

i: British Leyland Motor v. Armstrong Patents Company⁶²

Case History:

High Court of Justice (UK), [1982] F.S.R. 481, Reversed by

Court of Appeal (UK), [1983], UKHL, [1986] F.S.R 221, Heard by Lords Scarman, Edmund-Davie, Bridge of Harwich, Templeman and Griffiths

a) Summary

In the case BL v Armstrong the case is in relation to the copying of BL’s exhaust system used in the Marina car. Originally heard in the High Court of Justice, BL had won an order by the courts stopping Armstrong and others from infringing in their copyright of their drawings and reproducing new “parts”. Armstrong appealed against this order, in the House of Lords, stating that they had never infringed on any copyright in drawings, which they had never seen.

The Five Lords agreed to allow the appeal in favour of Armstrong. Law Lord Scarman believed that there was no infringement on a patent or design and there was no copyright protection in an article. Law Lord Edmund Davies found that Armstrong had infringed on the copyright of the drawing but found in favour of Armstrong on grounds of the spare part exception. The spare part

⁶² [1986] FSR 221

exception is based on the implied license that the owner of the part gets when he purchase a product. He believes that this implied license allows him to repair the product as he sees fit. Lord Harwich agreed that there was an infringement of copyright but found that unacceptable; finding in favour of Armstrong, believing the owners of the cars had a right to repair. Law Lord Templeman and Law Lord Griffiths also found there was no right for protection to the copyright.

Armstrong won the case allowing them to make replacement exhaust parts for the BL Marina car.

b) Case Review

BL claimed in the original case that they were entitled as owners of copyright from various BL parts, restricting other manufacturers of “parts” from making copies of the parts without license from BL.

BL first used copyright as protection to their “parts” business back in 1973. They managed to persuade competing manufacturers to license manufacture of copy “parts” in return for royalty payments based on sales revenue.

One of the manufacturers of the exhaust system, a company called Armstrong Patent Ltd. Armstrong rejected the agreement that they were required to license the parts, continuing to manufacture the parts: BL subsequently sued.

The first case found in favour of BL, deciding that parts that had protection by copyright in the drawings, protected by law. It was common ground, that copyright subsisted in the drawings of BL exhaust system and Armstrong had indirectly copied these drawings by “Reverse Engineering”, even if Armstrong had never seen them. BL won an injunction against Armstrong, to stop them making and providing replacement exhaust parts.

Armstrong appealed against the injunction arguing:

(1) The purpose of copyright in a drawing is to act as a blueprint from which a three-dimensional construction of a functional or utilitarian value, with no

aesthetic or decorative element, not infringed by reproduction of the three-dimension article. Meaning that the drawing itself can not be reproduced but you can take an object that is already three-dimensional and not protected, and manufacture a similar product, it is not an infringement of any copyright protection and,

(2) Special consideration apply to manufacturers of replacement parts necessary to repair cars, or machinery which operates in patent law, the owner of the copyright from which original parts where made from enforces copyright to maintain a monopoly.

BL claim was in relation to the definition of “artistic work”. Under, s. 3(1) of the UK Copyright Act, 1956, covers the following, “irrespective of artistic quality, namely painting, sculpture and drawings.” Under s. 3(2) “every original artistic work which is unpublished, and of which the author was a qualified person at the time when the work was made”, defines the substance of copyright. In s. 48(1), the definition of drawing includes any diagram, map, chart or plan and reproduction in artistic work, includes a version produced by converting the work in a three-dimensional form, or, if it is in three dimensions, by converting it into a two dimensional form. Section 49(1) provides that “any reference to a reproduction, of a work, shall be taken to include a reference to a reproduction, of a substantial part of the work. Using the definitions this is the basis of BL’s claim, meaning that, Armstrong’s exhaust system are, versions produced by converting into three-dimensional form drawings of which BL own the copyright and which fall squarely within the definition of “artistic work”.

The author agrees that the copyright exists in drawings and that reproducing the drawings in 3-dimension form, as mentioned in s. 48(1), is an infringement of the act. The question that might be open in the author’s opinion, why would you get life plus seventy years protection for “parts” for copyright, when a patent only gives up to twenty years?

The appeal case was reviewed by five Law Lords, which found in Feb, 1986, that Armstrong are free to make a replacement exhaust system for the Automotive system. The case of patented parts was discussed but since the exhaust system was not patented this did not figure in the judgement of the case. It was however, discussed in relation to copyright protection.

Law Lord Scarman, suggest that the case brought to them was in relation to the Copyright Act 1956, the drawings of exhaust parts, are not covered by patent law; as they do not have a new invention associated with them, neither are they protected by Industrial Design Laws, as they do not have “eye appeal”.

Law Lord Scarman, suggestion the question that he needed to answer was, did legislation protect exploitation by copyright of a drawing? Answering this question would require review of the current legislation at the time, the Copyright Act, 1956. He found copyright, cannot be used to protect an article such as a motor vehicle or other “consumer durable” from a user accessing a market for spares required to keep it running, finding in favour of Armstrong.

Law Lord Edmund-Davies based judgment on two questions: (1) Did Armstrong indirect copying of BL copyright in drawings allow reproduction within the meaning of the Copyright Act 1956 and, (2) Even if answer to (1) is true, should the Act allow BL to stop Armstrong from producing their own.

For question 1, finding Armstrong had infringed on the copyright of the drawing but mentioned that, the reason for this due to the way the legislation was written and in relation to the findings in another case.⁶³ In Armstrong opinion, this case had huge impact on industry for the last twenty years and that the court should not use this case. The copying of a design of a plastic knock down drawer system by using the drawer as the model was a way of indirectly copying the drawings, the court finding, this was not an infringement of the drawings. The house agreed due to their feeling that the law was

⁶³ L.B (Plastics) Ltd v Swish Products Ltd [1979] R.P.C. 551

unsatisfactory. It would allow copyright protection abuse for functional designs, an advantage over a patent monopoly, without having to meet the conditions of patent registration. Protection of an industrial designer, who only contributes a small portion to a design, versus an artist who is the “whole” designer, awarding conversion damages for infringing industrial copies would be irrational.

For question 2, the Law Lord found in favour of an argument of Armstrong, who used an argument of “spare part exception”. Armstrong had argued that since the exhaust system was not patentable and that it was not possible to rely on copyright to prevent copying, and that every owner of a car was entitled to repair it, which allows them to provide “parts”. The author believes that this statement was in relation to “parts” not covered by patents and would have had a different result if the “exhaust” were patentable.

Law Lord Bridge of Harwich agreed that copyright exists in the drawings of BL’s exhaust systems manufactured by Armstrong. He also discusses Armstrong’s argument of copyright in a drawing is only a blueprint.

Armstrong argued that special consideration applies to the manufacturing of “parts” necessary to repair cars, or indeed the machinery, suggesting that enforcing copyright in the drawings allows the owner to create a monopoly for him and licensees. The Lord agreed that in law that there was a case to answer to this consideration.

Looking at the reproduction of BL drawings into a material form, Law Lord Bridge of Harwich looked copyright in the drawings of a case involving “Popeye the Sailor”.⁶⁴ The business strategy of the company was to license the manufacturing of dolls and brooches. Without license, the company made a three-dimensional copy of another, three-dimensional object, infringing on the

⁶⁴ King Features Syndicate Inc. v O&M Kleeman Ltd [1941] A.C. 417

copyright. The judge found a reproduction of a drawing entitled copyright protection, did in fact infringe the copyright.

Armstrong argued that BL's exhaust system and drawings are not be protected by registered design, under the Act of 1949 and Act of 1956, fifty years term for artistic work and liability for conversion damages. Arguing that comparison of a skill of a drafter's copyright drawing of a functional article and the skill of the engineer who came up with the design in terms of its functionality, which one relates more to the value of the object. Arguing, copying a utility or functionality of the object by reverse engineering is not using the skill of the drafter and is not an infringement of the copyright part of the drawing.

Under s.9(8) of the 1956 Act, "the making of an object of any description in three dimensions, not be taken to infringe the copyright in an artistic work in two dimensions, if the object would not appear, to persons who are not experts in relation to objects of the description, to be a reproduction of the artistic work." Depending on how one interprets this, it suggests, that it is okay to make a three-dimensional object if a person not familiar with drawings, does not realise that this was a reproduction of an artists work. In the author's opinion this contradicts BL's claim of "reproduction" is an infringement of the Copyright Act s. 48.⁶⁵

Law Lord Bridge of Harwick, reviewed the second argument, referencing two cases⁶⁶ of "implied license" which, verdict was "you may prolong life of a licensed article but you must not make a new one under cover of repair." A third case argued,⁶⁷ the right to repair of copyright in engineering drawings

⁶⁵ UK Patent Act, 1956, s. 48(1) BL use the interpretation of "reproduction" of an artistic work but do not use it along with s. 9(8) to argue the case.

⁶⁶ Dunlop Pneumatic Tyre Co. v Neal [1899] 16 R.P.C. 247 and, Sirdar Rubber Co. Ltd. v Wellington Weston & Co [1970] 24 R.P.C. 539

⁶⁷ Solar Thomson Engineering Co. Ltd. v. Barton [1977] R.P.C. 537

infringed both patent and copyright. The conclusion was; the owners implied license protects a repair of patented machinery and manufacturing the replacement part.

Law Lord Bridge of Harwich found that although he agreed that it made sense to allow the owner of the machinery to repair it, he believed it would be hard for Armstrong to mount a defence. Implying that a license is open to anyone to supply “parts” (owner of the product and any company to manufacture) would infringe on the original manufacturers rights to copyright. The right to repair is open to the individual to make the part as long as it is a repair and not a new part. The argument in relation to another company manufacturing more than one part is what the courts need to look at.

The owner’s right to repair by instructing the blacksmith to do the work would be no value of the owner. It would most likely be expensive, so the owner would not have value. The other side is it is the right of the copyright to see fit what he wishes with the monopoly credited by the right.

Law Lord Bridge of Harwich agrees that in some cases the right of copyright in “parts” must give way to the maintenance of a supply of “parts” to sustain the right to repair. For example, he found it hard to agree that a car manufacturer can decide to discontinue a supply of “parts” every five years after it ceased production. It would be unfair to grant copyright for these parts. He said that although the copyright of the parts is law it is unacceptable. He feels that BL have achieved the benefits of the copyright by selling the cars fitted with the exhaust system. By selling the cars, BL have created a community of owners who have the right to repair the car by replacing the exhaust whenever necessary and in the economic way.

The ruling made in favour of Armstrong where, a specific component of a car subject to a patent or registered design, an alternative component can replace, which does not infringe on the right. If a new component is required then if it meets with the statutory monopoly of the patentee or designer will prevail. In a

copyright in drawing, any party could use the monopoly of the patent or design, to protect the manufacturing of the part.

Law Lord Templeman said that it should not be possible to protect under the copyright act more in the constructional or functional field than is protected under the Registered Design Act.

Law Lord Griffiths explains that Armstrong did not copy BL mechanical drawings, which means they did not infringe on the copy right of the drawings. What they did do, reverse engineer from a copy of the BL exhaust pipe.

Law Lord Griffiths goes on to discuss that he believes that a manufacturer should not get protection of a functional object for parts that were not patentable or a registered design. The BL exhaust pipe was neither new nor involve an inventive step. It also was not possible to protect certain objects by design copyright.

In the statement of the ruling, he says that he does not hold that “reproducing” is an extension of the meaning “indirect copying” in case of mechanical drawings of a functional object. This argument used in other cases to justify companies copying functional objects protected by copyright. Giving this reason, he found that Armstrong did not infringe the rights of BL.

c) Authors Comments

The Law Lords all agreed on the outcome of the case. They did not all agree in regards to the infringement of the copyright drawings. Some Law Lords found, there was an infringement of the copyright of the drawings, but made reference to the wording in the law, question if the British Parliament had meant for it to be in this way. In the authors opinion, the issue is that the law does not break down the artistic rights to clearly state if engineering drawings and the act of copying them is an infringement. This was also clear in the debate of whether copyright of the drawings could be reproduced in a three-dimensional functional object.

The Law Lords found that it was not the intention of parliament to give copyright protection to a functional object, which would last for up to one hundred years. Giving this stance, they looked at the protection in terms of patent, design law, and found that it is possible for someone to repair an object if it is to keep the equipment running. For example; an expensive piece of manufacturing equipment may have a lifetime of twenty years but it is known that a part of that equipment may fail frequently during the lifetime then it is the owners right to be able to repair the equipment.

It is not the intention of the copyright to create a monopoly that was unfair competition in term of replacement parts and that BL had in fact been able to monopolise by providing the exhaust system when selling the car.

iii: Canon Kabushiki Kaisha v. Green Cartridge Company Limited⁶⁸

Case History:

High Court (Hong Kong), [1995] F.S.R 877, Reversed by

Court of Appeal (Hong Kong), [1996] F.S.R. 874, Reversed by

Appeal Court (Hong Kong), [1997] F.S.R 817, Heard by Lord Browne-Wilkinson, Lloyd of Berwick, Hoffmann, Hope of Craighead and Hutton.

a) Summary

Canon (C) claimed that the respondent, Green Cartridge Company (GCC), had infringed on certain patents, which it held for some of its parts of the cartridge. C also claimed that GCC had infringed the making of cartridge parts, which C were entitled to artistic copyright in the drawings and by agreement with sections 1(1) and 3 (5) (a) of the UK copyright Act, 1956, giving them the exclusive right to reproduce the drawings any material form.

⁶⁸ Canon Kabushiki Kaisa v Green Cartridge Co. [1997] F.S.R. 817

In the first case, the court found in favour of Canon stating that Green Cartridge Company had infringed in their patents and copyright. GCC appealed Canons injunction refraining them from producing cartridges and subsequently won the case on the right of repair. Canon appealed this decision and the courts found that GCC had infringed in the copyright of Canon and that GCC right to repair was not strong enough, as Canon had not created a monopoly situation.

b) Case History

In the first case⁶⁹, the court found in favour of Canon, stating that GCC had infringed on patents that C had for the printer cartridge. The court found that GCC had no protection to the infringement due to the argument of replacement/spare part for repair by reengineering the cartridge, infringing on Canon's copyright in the drawings, finding that the right to replacing cartridges is not a repair when there was no damage to the laser printer or photocopier.

GCC appealed this decision on a "spare part exception" and won the appeal.⁷⁰ Using the British Leyland versus Armstrong Patents Co⁷¹ the court found that manufacturing the cartridges did fall within that exception, stating that they have a right to supply "parts" for repair of the printer, the first case focusing on the repair of the cartridge and not the repair of the printer. This refers to the UK Copyright Act, 1956, s. 1(1): "in this Act 'copyright' in relation to a work....means the exclusive right, by virtue and subject to the provisions of this Act, to do, and to authorize other persons to do, certain acts in relation to that work in the United Kingdom or in any other country to which the relevant provision of this Act extends" and s. 3(5): "The acts restricted by the copyright in an artistic work are – (a) reproducing the work in any material form; GCC won the appeal and the appeal case was set.

⁶⁹ Canon Kabushiki Kaisha v Green Cartridge Co. [1995] F.S.R. 877

⁷⁰ Canon Kabushiki Kaisha v Green Cartridge Co. [1996] F.S.R. 874, Court of Appeal, No. 75

⁷¹ British Leyland Motor Corporation v Armstrong Patents Co Ltd [1986] F.S.R. 221

One thing to note at this point is the UK Copyright Act, 1988, amended from the 1956 Act, in the author's opinion, a clearer definition of what an infringement of a copyright is. In the UK Copyright Act 1956, s. 3 (5) (a), "reproducing the work in any material form" now reads in the UK Copyright Act 1988, s. 17 (3) as "copying of the work is an act restricted by the copyright in every description of copyright work

Canon appealed the second case ruling in the appeal case.⁷² The court reversed the appeal won by GCC, and found in favour of C, for (1) that a company could not use the spare part exception when the company had infringed on (a) infringement of the Canon Patents and (b) Infringement of the Canon Copyright protection of their drawings of the cartridge.

The court found the British Leyland case was unbiased towards the customer and an abuse of monopoly power. This discussions lead to the repair of the printer. If someone had purchased an item, which broke, then they could repair it by themselves by purchasing the parts and installing them on their own. For a printer however, as changing the cartridge did not mean that the printer needed repaired.⁷³

There was one more argument, relating to competition. C did not abuse its intellectual property rights to obtain a dominant position in the market as they were competing in the refill market with other companies. They did not use their rights to try to stop competition in this market. Instead, they used their superior product to compete against competitors who in most cases supplied an inferior product.

⁷² Supra note 70

⁷³ Supra note 71

c) Authors comments

In this case the right to supply “parts” is something that becomes an interesting subject in terms of patents. Can a company supply “parts” that has a patent or copyright protection?

The law in relationship to the coverage of a patent and copyright has been changed since this case. In the case of patent protection, UK Patent Act 2006, s. 60 (5), states the infringements of a patent does not include things done for private use or not commercial purposes. In the authors opinion this change in the law, agrees with the result in the case, that patent protection does protect against someone supply “parts” for replacement in the printer, if it is protect by the patent.

Canons business strategy in the author’s opinion is to develop new innovative products and protect them by intellectual property rights. In this case it appears they are also conscious to competition by protecting their rights but are also aware of their moral obligation by allowing others to license their “parts”.

iii: The Chamberlain Group, Inc v. Skylink Technologies, Inc.⁷⁴

Case History:

United States Northern District Court of Illinois, Eastern Division, 292 F. Supp. 2d 1023, 2003, Reversed by

United States Northern District Court of Illinois, Eastern Division, 292 F. Supp. 2d 1040 (No. 02 C 6376), 2003, Heard by Judge Rebecca R. Pallmeyer, Reversed by

United States Court of Appeal for the Federal Circuit, Case 04-118, Heard by Gajarsa, Linn and Prost (Circuit Judges), Decided: August 31, 2004

⁷⁴ Chamberlain Group, Inv v Skylink Technologies Inc [2004] 381 F.3d 1178

a) Summary

In the first case⁷⁵, Chamberlain (C) sued Skylink (S) for infringement of patent and copyright granted for their Garage Door Openers (GDO) by using the Digital Millennium Copyright Act (DMCA) legislation for circumventing. The court found in favour of S stating that they had not infringed on C's DMCA claim and dismissed claims on patent infringement.

In the appeal case⁷⁶, C did not appeal against the previous judgement in the patent finding but felt the court misinterpreted the DMCA by making C prove that they had protection of copyright and proving that S had violated that right. The court found in favour of S, stating that the DMCA was not to protect against copyright infringement for which there was already a law. It was to stop circumvention, which the court felt that Chamberlain had not proved.

b) Case History

In the original case Chamberlain alleged its GDO and transmitter which both incorporate computer programs are activated by rolling codes which is a technological measure that controls access to the programs, protected by patent and copyright were infringement by the DMCA article 1201 (a) (2).⁷⁷ This article pertains to technologies that "effectively control access to copyrighted works".⁷⁸ C claims that S had infringed on eight counts, including three patent infringements.

⁷⁵ Chamberlain Group, Inc v Skylink Technologies Inc [2003, Nov] 292 F. Supp. 2d 1023, United States Northern District Court of Illinois, Eastern Division

⁷⁶ Supra note 74

⁷⁷ US DMCA article 1201 (a) (2) - Pamela Samuelson, University of California at Berkeley, Towards more sensible anti-circumvention regulations, section III, DMCA's Anti-circumvention Regulations

⁷⁸ Supra note 77

The dispute involves Chamberlain's Security+ line of GDOs and Skylink's Model 39 universal transmitter.⁷⁹ The Model 39 does not have rolling code but does allow users to operate Security+ openers. C claims that S transmitters make the Security+ insecure by allowing unauthorised user access and that they violate anti-trafficking clause of the DMCA's anti circumvention provisions 1201 (a) (2). The author suggests reviewing the case for more information on the technical aspects of how the rolling code works.⁸⁰

In the aftermarket, consumers can purchase replacement or spare transmitters. Universal transmitters are for operating with many different makes and models of GDO. C and S are the main distributors of universal transmitters. C makes a product that operates with C's GDO and other suppliers GDO products. C does not place any restriction on the type of transmitter's requirements when someone purchases the GDO system, leading to the consumer right of being able to use the GDOs and embedded software, which copyright and other laws provide.

Skylink have marketed and sold universal transmitters since 1992, designed its Model 39 in 2002 to operate with common GDOs. The Model 39 operates with two component of code operating the GDOs. The first identifies the transmitter; the second simulates the effect of the rolling code. Initially the transmitter must be setup to use with the Chamberlain GDO. When the owner uses the transmitter, it sends three signals in succession. The first identifies the transmitter with the receiver, the second subtracts 1800 from the first signal and the third adds three to the second signal. The three signals when used will

⁷⁹ The GDO consists of a hand-held portable transmitter and a garage door-opening device mounted in the garage. The opening device includes a receiver with associated signal processing software and a motor, which opens/closes the garage door. To open the door, pressing the handheld device activates the transmitter; sending a signal to the garage door receiver, if valid, the motor opens or closes the door.

⁸⁰ Supra note 74

either cause the Chamberlain GDO to operate with the transmitter or cause it to resynchronise and operate in response to the second or third signal. C claims that S markets the Model 39 for use in circumventing its copyrighted rolling code program, pointing to the setting that operates on C rolling code GDOs.

Chamberlain's argument was on three accounts:

- Skylink designed or produced Model 39 for the purpose of circumventing the rolling code technologic measure that controls access to copyrighted computer programs, which is an infringement of 1201 (a) (2).
- Model 39 has limited commercial purpose or use, other than circumventing the rolling code technologic measure that controls access to copyrighted computer programs, which is an infringement of 1201 (a) (2).
- Skylink marketed the Model 39 "for use in circumventing the rolling code technologic measure that controls access to copyrighted computer programs, which is an infringement of 1201 (a) (2).

Skylink's defense was:

- Model 39 transmitter serves a variety of functions that are unrelated to circumventing
- Chamberlain have failed to demonstrate that the GDO contain computer program protected by copyright
- Consumers activate the Model 39 to activate Security+ GDOs with Chamberlains consent
- Skylink have not violated the DMCA because it falls within a safe harbour provision per 1201 (f)

- Chamberlains rolling code computer program does not protect copyrighted computer program but instead protects an un-copyrightable process.

The District Court based its ruling only on the argument on Skylinks defence of authorisation and consent.

Chamberlains submitted two arguments:

- Skylink bore the burden of proving that its behaviour was authorised, therefore Skylinks defence was an agreement defence rather than a defect in its own proceedings
- It never gave consumers explicit authorisation to program competing universal transmitters into its rolling code openers

The District Court noted that “circumvent a technology measure,” meant to descramble a scrambled work, bypass, and remove, etc, without the authorisation of the copyright owner 17 U.S.C. s. 1201 (a) 2 (A). The Court of Appeal reversed this decision. It concluded that 17 U.S.C. s. 1201, was a new violation, by trying to access an article that had copyright protection. They said that Congress had meant to create new clauses for action for circumventing and for trafficking in circumvention devices. Congress did not choose to create property rights. The result in Chamberlain’s defence of using the right as a new property right rather than an infringement of their copyright was not what Congress had intended for the DMCA. Using the construction in s. 1201(a)(2), they found that Skylink had not infringed on the 4th element; without authorisation.

The Court agreed that Chamberlain’s unconditioned sale implied authorisation finding in favour of Skylink; at the time of sale, there were no terms or conditions of how the product is used. The court noted, someone buying a Chamberlain GDO, own it, and the right to use it to access his or her own garage.

c) Authors Comments

The case although brought about by possible violation of patent rights turned into a right to protect access to copyright in a computer program. The protection used in the Digital Millennium Copyright Act, was not a new protection right but a violation, for example, accessing something protected by copyright is an infringement.

The GDO transmitter and associated components, protected by patents and copyright, did not stop companies from reverse engineering and providing “parts”. The patent right protection, were rejected in the first case,⁸¹ as Chamberlain had not protected against the patent infringement, in an earlier case. The court refused to hear the claim for patent in this case. The right of patent takes into account earlier cases. It is important to win earlier cases otherwise; they will take precedent over future cases.⁸²

Since the company had not explicitly set the terms and conditions of purchasing the GDO kit, which, they left the door open, so to speak, in allowing the owner to second source They did not say in the contract (documentation) that anyone purchasing this kit were required to purchase their equipment if anything failed.

The author’s opinion is patents and design rights may protect “parts” but there are rights that the purchaser must have to keep the equipment they purchase in working order, this alone requires a market for replacement/spare parts, but it is important not to infringe on patents.

⁸¹ Chamberlain Group, Inc v Skylink Technologies Inc [2003, Nov] 292 F. Supp. 2d 1044

⁸² UK Patent Act 1977 (as amended), s. 68, Infringements of proceedings states that the proprietor of an infringed product must register the complaint within 6 months of the event

iv: Dyson Limited v. Qualtex (UK) Limited⁸³

Case History:

Court of Appeal - CA (Civil Division), [2006] EWCA Civ 166, Case No: A3/2005/0406, March 8, 2006, 2006 WL 1333370, Heard by Lord Justice Tuckey, Lord Justice Jacob and Lord Justice Lloyd LJJ, On Appeal from

The High Court of Justice Chancery Division, Case No: HC 03C 01654, Heard by: The Hon Mr. Justice Mann, December 21, 2004

a) Summary

The case is about infringement of Dyson's "parts" for vacuum cleaners. The "parts" are known as pattern parts, replicas of the original parts, made deliberately so, to look as close as possible to the original parts.⁸⁴

Dyson claimed that Qualtex provided exact copies of Dyson's parts. Qualtex failed in their attempt to defend the infringement due to a white paper on Intellectual Property and Innovation of April 1986, which the Monopolies and Mergers commission suggested a five-year period of protection for spare parts plus additional five years of compulsory license - Copyright Designs and Patents Act 1988.⁸⁵

The court found in favor of Dyson, providing a clear indication that there is strong design protection available in the UK for spare parts under the

⁸³ Dyson Ltd v Qualtex (UK) Ltd [2006] R.P.C. 31

⁸⁴ Supra note 83, page 1, paragraph 1

Dyson Ltd v Qualtex (UK) Ltd [2005] R.P.C. 19

⁸⁵ Supra note 83, page 12, paragraph 3, mentions the white paper as a source to changing the and page 27, paragraph 2, talks about the decision being related to the UDR.

unregistered design right provisions of the Copyright Designs and Patents Act 1988.

b) Case History

Qualtex are one of the largest manufacturers of vacuum cleaner spare parts in Europe. Dyson are a manufacturer of vacuum cleaners. Qualtex supplies identical parts and non-identical parts for Dyson's vacuum cleaners.⁸⁶

Qualtex did not deny producing exact copies of the Dyson parts, they believed they had to do so as, the consumer wanted to keep the look of the Dyson vacuum cleaner and to provide replacement part confidence. In essence they state that spare parts should not be protected under any unregistered design law.⁸⁷

Qualtex alleged that some of the Dyson designs under consideration were derived from earlier designs and that there were insufficient differences between the two, to confer originality. Qualtex argued that the test for originality should be "are there any differences between the earlier and later designs which are visually significant". This test being derived from *Interlego AG v Tyco* [1989] AC 217,⁸⁸ but was rejected as *Interlego* drawings had started as copies of earlier drawings and Designs hadn't.

Must-fit

Mann J commenced his consideration of the "must-fit" provisions by pointing out that the statute does not actually use the words and is misleading in the case.⁸⁹ The shape of an item either allows two pieces to be put together or it

⁸⁶ *Dyson Ltd v Qualtex (UK) Ltd* [2004] EWHC 2981 (Ch) s. 1

⁸⁷ *Supra* note 86, s. 14

⁸⁸ *Supra* note 86, s. 23

⁸⁹ UK Design Act, 1988, s. 213(3)(b)(i)

does not. There is no requirement that a fit should arise from any necessity. Mann J also pointed out that the “must fit” exception ignores the functional test "so that either article may perform its function".

Qualtex using the Ultraframe case ⁹⁰ attempted to use this ruling that rejected that “parts of the design which are between, or away from, the conjoined parts, do not fall within the "must-fit" exclusion”. They were trying to prove that a large number of the features of the Dyson designs should be excluded from protection due to the fact that they included features which fell within the "must-fit" exclusion. Dyson argued that it is only the precise features that facilitate the fit that should be excluded. Mann J concurred with Dyson that it is only the features that allow the fit that are excluded and rejected

Must-match

The "must-match" provisions were the principle area of the Dyson case to attract attention. Mann J considered the inadequacy of the "must-match" shorthand in much the same way as he did for the "must-fit" provisions.

The first issue to be considered was what is meant by "other article". After reviewing the existing authorities Mann J held that the "other article" should be the whole article with the “parts” included, and not the so called (N-1) approach in which the "other article" is the article without the “parts” in place.

The second aspect to be considered was the meaning of "dependent". Mann J noted that most articles are designed as a harmonious whole and therefore any single part might be said to be dependent upon the appearance of the whole. However, he pointed out that if this is the case the must-match exclusion would always apply.

When considering this point, Mann J used the example of a car stating that a car body panel fills in a gap in a continuous and evident shape. However, Mann

⁹⁰ Ultraframe v Clayton [2003] 23 RPC 435

J said that this is unusual and proposed that case law in this area has been distorted by car body panel cases.

Qualtex argued that the opposite too "dependent" is "independent" and that therefore, unless a feature is independent of the whole, it should fall into the "must-match" exclusion. Qualtex contended that dependency is designer created. Mann J thought that the "independent" argument had merit but said the more thoughtful the design the less likely it would be to attract protection. Mann J considered that a middle ground was required since the wording of the provision does not demonstrate a clear intention to exclude all visible spare/replacement parts.

In Ford Motor Company Limited's Design Applications [1993] RPC 399⁹¹ the idea of "radically affecting the appearance of the vehicle" was introduced. Mann J adopted this as a helpful approach to the question of design dependency. He also noted that sale ability is a useful guide although not determinative.

Mann J identified design dependency as the key criterion for the "must-match" exclusion. He applied his own test to each of the "parts" in issue, determining in each case whether a non-identical "parts" would make the appearance of the whole article "radically different". If it did, that indicated design dependency, but if not then there was no dependency.

Surface Decoration

The surface decoration arguments were concerned with ribbing on the Dyson parts.

Mann J held that there is a distinction between features that are part of the overall shape and configuration of an item and those that merely decorate it. This is a question of degree as often function and decoration are combined.

⁹¹ Ford Motor Company Limited's Design Applications [1993] R.P.C. 399

Mann J held that a subsidiary functional feature will not take that feature out of the surface decoration exemption, but this only applies if the functional purpose is subsidiary. If the feature serves a functional purpose as well as a decorative purpose it will be difficult to argue that the functional purpose is secondary.

Mann J also held that evidence from designers is admissible as relevant but not determinative. In the Dyson case Mann J accepted the designers' evidence that the purpose of the ribbing was to provide grip and to cover up variations in the profile.

The Court found in favor of Dyson, that Qualtex had infringed on the design rights of different components of the vacuum cleaner.

Court of Appeal - CA (Civil Division), [2006] EWCA Civ 166⁹²

In the appeal court it was agreed after initial arguments that the case would be based on 6 designs and the features identified by Mr. Arnold (Qualtex lawyer).

The arguments centered on the Intellectual Property White Paper, with the judge agreeing that it definitely mentioned “parts”, and issues surrounding them. The white paper also rejected that “parts” should be exempt from any protection and rejected that “parts” should be subject to some special regime. They were to be dealt with like all other functional articles, though it was apparent that one or two provisions have particular application to “parts”.⁹³

The court said that in the white paper that British industry relies on innovation, most of the products are costly but some do not have patentable rights. They mentioned that some protection should be given to the protection to companies who are investing in the design of new products. The report concluded that

⁹² Dyson Ltd v Qualtex (UK) Ltd [2006] R.P.C. 31

⁹³ Supra note 92, page 1, paragraph 1

some protection should be given to “parts” but not the full right as given by copyright.

The decision of not giving full copyright protection to “parts” was in the author’s opinion the correct decision, it would be unfair to give protection to something that wasn’t patentable and allow up to seventy years of protection as in the case of copyright.

Another alternative and one that the government intends to follow, provide copyright principles with objectionable features. Where the functional article are “parts”, the potential for monopolistic abuse should be avoided by giving to protection outside patent and registered design systems. However the Monopolies and Mergers Commission, in its final report on the Ford Motor Company recommended that the term of protection should be five years. The law must deal with classes of articles. Since it is hard to distinguish between articles the government considers that all original designs deserve a period of protection to give the designer a market lead over the copier.⁹⁴ The government said that it was hard to use this right as they felt they needed to have a clear construction.

The report discusses the “must-match”, saying that this would lead to third parties being open to produce all parts which would make up the external appearance of the machine. The construction of “must-fit” could open the door to all components of the machine being copied.

The arguments went on to discuss the Unregistered Design Act in terms of the “parts” that were agreed to be discussed and the relationship to the “must-fit” argument. The judge felt that once you remove the argument for must-fit there are not many features left. The judge mentions that if a design right owner has to use design in a product to make it or interface then it doesn’t command

⁹⁴ Supra note 92, pages 2-3

design rights. In simple terms if you design one part to allow another to fit into it, to enable it to function, then you should not get protection.

The court reviewed the “parts” in the case for must-fit exception, with Qualtex lawyers arguing that the certain functions of the designs were there to make the parts fit. The must-fit exception would then not be infringing the design in this case. The court using s. 213(3)(b)(ii) of the UK Patent Act 1988⁹⁵ said that the parts could function independently.

In the ‘Must-match’ arguments it was agreed, “parts” within a complex system can not be protected, the protection is for the full object. The example given is the car with a door missing. The door was designed to be part of the full car. If you break the components down to separate parts then the door would be of no use so could not be protected. The door is dependant on the rest of the car to be a feature of shape. In the other hand, a mirror for the car door, it was agreed that they could be independent if the owner want to make the car sportier he could purchase something that changed the look of the car. However, if he wanted the mirror to blend in then it would be part of the shape and dependant on the rest of the car. This dependency would mean that the part could be covered by design protection in terms of the must-match exception. A part that does not depend on another to function should not be copied in its exact form; there is no reason to copy the shape for the part to function. For the must-match exception the court failed to see why Qualtex had to copy Dyson’s parts, finding in favor of Dyson.

⁹⁵ UK Copyright, Designs and Patents Act 1988, s. 213: Design right does not subsist in— (a) a method or principle of construction, (b) features of shape or configuration of an article which— (i) enable the article to be connected to, or placed in, around or against, another article so that either article may perform its function, or (ii) are dependent upon the appearance of another article of which the article is intended by the designer to form an integral part, or (c) surface decoration.

The judge agreed with the earlier decision. He said that it was extremely important that when applying for a design right that all aspects of the design be called out. Calling out every detail will protect against infringement. In his closing statement he mentioned that, the exceptions in the Unregistered Design Act are something that must be viewed with caution. He mentions that someone wanting to supply spare parts during the design protection period must design their own parts.

c) Author's Comments

In the author's opinion the court was right to protect a company that had invested by designing "parts", whether they had registered them or not. They had put a lot of money into design and should get some reward for that. For the consumer though it should be allowed to purchase something that can be used to repair a system that has failed due to a faulty component. The court however was right to say that the design of a second-source manufacturer should be their own and not an exact copy of OEM "parts".

There is some uncertainty as to the future of this protection as there are renewed moves afoot at the European level to exclude "parts" from registered design protection in all member states.⁹⁶ It is therefore questionable how long the UK can maintain a separate unregistered design right which offers spare part protection when registered design rights will not be allowed to provide the same protection anywhere in the Community.

⁹⁶ European Community (EC): Designs, Directive, 13/10/1998, No. 98/71, http://www.wipo.int/clea/en/text_html.jsp?lang=EN&id=1441 (last accessed on 27.08.2009)

v: Lexmark v. Static Control Components⁹⁷

Case History:

U.S. Courts of Appeal for Sixth Circuit Court No. 03-5400, Jan 30, 2004,
Decided Oct 26, 2004. Appealed from

United States District Court for the Eastern District of Kentucky at Lexington,
No. 02-00571, Heard by Karl S. Forester, Chief District Judge

a) Summary

Lexmark (L) state that Static Control Components (SCC) infringed in their copyright by copying the computer program used to control the printer cartridge in the L printer by reproducing L's Toner loading program on its Microchip. This violated DMCA by selling a program that circumvents access controls on the program and selling a product that circumvents its controls on the Printer Engine Program

The District Court found in favour of L stating that they had established a likelihood of success to prove that SCC had a case to answer in relation to copying L's Toner Loading Program and supplying them to manufacturers of the ink cartridges.

The Court of Appeal, Sixth Circuit Court found in favour of SCC, finding that the District Court had made errors in determining the likelihood of L's copyright claim.

The court found that SCC had used the program it was required to gain access to the printer. It was not an infringement of the copyright of the Printer Engine Program; the printer required these two programs to function. The purchaser of

⁹⁷ Lexmark v Static Control Components [2004], <http://www.eff.org/cases/lexmark-v-static-control-case-archive/attachments/sixth-circuit-ruling> (last accessed 27.08.2009)

a printer to keep it functioning allows the owner to use the two programs to keep it in working order.

b) Case History

Lexmark are a leading manufacturer of laser and inject printers. It has sold printers and cartridges for its printers since 1991. They sell two types of cartridges:

- A pre-bate which is sold to business at a discount in return for the company to use the cartridge only once and to return the cartridge back to L. This product had a microchip designed to prevent others from refilling the cartridge and using with the L printer. SCC, who make different technological products, mimicked this chip and sold it to companies who were involved in selling replacement ink cartridges, and
- A non-pre-bate cartridge, with no restrictions and can be refilled with toner and reused by anyone.

The case involved 2 computer programs that L have copyright protection for, which SCC had copied as part of a solution to supply computer chips to be installed in toner cartridges for use in printers. The programs involved in this case were L's Toner Loading Program and its Printer Engine Program, both registered with the Copyright Office. Both programs can be read/copied from its memory chip.

The Toner Loading Program calculates the toner level in printers manufactured by L. It determines the amount of toner by verifying the torque on the cartridge wheel using the Program. If the torque varies dependant on how much toner is in the cartridge. Using the calculation in the program it determines if the cartridge is full or is nearly empty and requires replacing. The program is located in a microchip as part of the toner cartridge.

The Printer Engine Program controls the functions of the L printer. Part of the printer is the Printer Engine Program controlling different features of the printer, such as the paper feed and the motor control.

Lexmark brought action against SCC for copyright dispute involving:

- The two computer programs,
- Two federal statutes
 - General Copyright statute, 17 U.S.C. 101a, which grants copyright protection to “original works of authorship” and 102b, which does not “extend to any idea, procedure, process, system, method of operation, concept or discovery, and
 - The DMCA, 17 U.S.C, 1201, for the sale of products used to “circumvent a technological measure to control access to a work” protected by the copyright statute.
- Three theories of Liability
 - SCC chip copied Toner Loading Program in violation of the copyright
 - SCC chip had violated DMCA by circumventing a technological measure designed to control access to the Toner Loading Program
 - SCC chip had violated DMCA by circumventing a technological measure designed to control access to the Printer Engine Program

SCC competing microchip called “SMARTEK” contains a copy of the L’s Toner Loading Program which SCC claim is necessary to make its product compatible with L’s printer by satisfying Lexmark’s authentication sequence. SSC admits it copied the computer program and comparison of both files show no difference in either program. Part of SCC advertising campaign boosts it

breaks L “secret code”. This allows them to sell the chip to customers who remanufacture cartridges that replace the pre-bate cartridges at a low cost.

Both companies agree Lexmark’s printer perform a second calculation independent of the authentication sequence. The Printer Engine Program downloads a copy of the Toner Loading Program from the cartridge to the printer in order to measure the toner levels. This program performs a checksum to check for compatibility of the cartridge and if it passes, the toner cartridge is operational.

The court found that L established likelihood of success on its copyright infringement claim; SCC had copied its Toner Loading Program. The court said that computer programs are “literary works” and protected by copyright law. It did mention that the level of creativity and complexity of the program might be low but still should benefit from the protection.

Court found that SCC had also infringed on the DMCA claim of circumventing (bypass, trick, go around) finding that the authentication sequence was a “technological measure” controlling access to two copyrighted works (the two programs), controlling the user’s use of the programs. SCC chip had circumvented the authentication sequence, the commercial purpose of the chip and marketed the chips as doing this, violating the DMCA prohibitions on marketing circumvention device.

The court reject SCC’s claims that the Toner Loading Program was not a “lock-out code” as it was possible to use any Program and still have authentication sequence and check sum. Even if the program was a “lock-out code”, it was still an infringement of the program; security systems are like any other program and should benefit from these rights. The court also rejected SCC’s “fair use” defence, as they believe that SCC had benefited commercial from the copying. It also rejected the third claim that L had misused the copyright law, securing exclusive rights or monopoly.

The court also found that the DMCA’s clause for reverse engineering did not apply to the case: producing circumvented devices and making them available

to others, which allows created programs to work with others made by someone else. The SMARTEK chip not considered independently created computer program.

The court found that L had established a likelihood of success and granted the preliminary injunction.

When the case came to court both sides agreed on the following

- Computer programs may be entitled to copyright protection as “literary works” under 17 U.S.C. 101 and protected against infringement under 17 U.S.C 106.
- Lexmark have registered the Toner Loading Program with the Copyright Office. This means that SCC have to prove the program copyright is not valid.
- Agree, the way to prove copyright infringement:
 - Ownership of valid copyright
 - Defendant copied protected elements of works.

Even if the all the above are agreed and copyright does exist in the program it protects, Congress has established a fair use defence to infringement claims so that it protects the advancement of Science and Arts. Congress has permitted others to use copyright protected works including reproduction when it determines it to be fair. Determining if this is in deed fair they look at

- The purpose and character of use (including commercial nature)
- Nature of the copyright work
- The amount and substantiality of the portion used
- Effect on the potential market

It was determined that the District court made an error in its judgement that L had made a likelihood in proving its copyright claim; copyright claim that the program could be written in a number of different ways means that it can be protected by copyright. They should have looked at compatibility requirements, industry standards and efficiency

In case of the Toner Loading Program, it found that even though SCC could have made another program it was more for compatibility than having to use the L Toner Loading Program. It uses this program to allow the printer to function with the cartridge.

In another point, the court said that the sequence of the program to gain access to the Printer Engine Program is not what protects access; it is actually the printer itself. Anyone who buys a printer has the right to access the Printer Engine Code, directly from the printer and make free copies of the program. Nothing can protect that and no device requires circumventing, to allow this to happen.

Lexmark failed to prove that Static Control Components had infringed in its copyright. The court found in favour of SCC, stating that they used the program only to gain compatibility with the printer itself.

c) Authors comments

The case dealt with the copyright of computer programs which were used in the ink cartridge business. Both companies agreed that a copyright existed on the computer programs but the extent that protection of that copyright to the program was what was at contention.

The question of whether the program was infringement of the copyright is something personally asked in the authors working live. Is it okay to take a copy of a program from one component and put it onto another. The question that seems answered here is that it depends on what piece is operating the code. The code in this case was to make the functionality of the cartridge work with the printer.

There was no protection of the product by patent or registered design laws, so it was okay for other companies to copy the cartridge.

The cartridge itself even though was a replacement of the Lexmark original, was not debated in the case. L agreed that there was already a market for this business and Lexmark did not contest that a company could make similar replacement parts for its printers. They brought the case to court for distributing “Smartek” chips, which violated their copyright statute. Protection of their copyright could protect part of their business in selling replacement cartridges.

Lexmark used a commercial program strategy for selling replacement cartridges to business at a reduced price in turn for the company to use the cartridge once and return it to the company. It competed in this market with other manufacturers and used the commercial program as a way to maintain business.

Maybe that is one viable way to protect the “parts” business by protecting business by commercial purposes. Supply quality product at a reduced price in return for a contractual agreement e.g. in this case reduced cost of cartridge for use only once agreement. If the consumer decides to use the cartridge more than once, it is possible to pay less for that cartridge but the quality of the product will depend where purchased.

vi: Case Law and the “parts” Business

Reviewing the case law suggests that companies whose “parts”, granted patents or design rights are protected by that law when used as a one off piece. It appears in some case that when this part becomes part of a larger piece of equipment that it might be possible for companies to second source these “parts” from other suppliers.

In the printer market it appears all companies involved in manufacturing printers and supply the cartridges agree that there is a market for replacement cartridges. Not only the OEM supplies the replacements but other companies

who either refill the OEM cartridge or even manufacture their own and sell these in competition to the OEM. This was a highlight in the Lexmark versus SSC.

In Canon versus Green Cartridge Company was not contested on the right to compete in business but instead the focus was on infringement of patents on the ink cartridge. Canon proved that it was their right to protect their parts that had patent and copyright protection.

GCC used a right to repair, rejected because they had infringed on Canon's patent and copyright. The right to repair is one defence used in more than one case, in this specific one, was rejected. The law in the U.K. has since changed, now confirming that it is an infringement of the patent, reproducing a part when patent rights cover it.

In British Leyland case, they also had claimed that Armstrong Patents had copied their drawings and used them to reverse engineer the exhaust system used in the Marina car. In the original case, the court had found in favour of BL, suggesting that copyright in a drawing did protect the parts but in the appeal case, found that reproduction of a 2D drawing into a 3D model was not an infringement of the law. The decision, based on the interpretation of the law and legislation, which the Court believed that the legislation, not written to protection to a functional object. The exhaust part was not registered as a Registered Design, as it was felt that giving a term of fifty years or more of protection to an object that was only lasting for a few years would be wrong.

The decision of not allowing registered design as part of the argument would suggest that in the "parts" world, are known to have a limited lifetime should not be protected by design right. In the Dyson case, the design protection in the UK states; a part that fits to another item, a product that requires this "must-fit" requirement, to function, then, this right should not cover for design protection. This is also true for the "must-match" exception brought about by the case; design rights cover a part, which requires a match with another part, creating the design. Designing a product, which can replace the "must-match" criteria,

does not infringe on the design right, if that product distinguishes the new design by different features.

Copyright for the protection of works of art, literature and now for digital media enable companies to protect their business, not intended to protect copying of functional products. They realised that other protection such as patents and design rights did not protect them, for example: they had not taken to court companies who had infringed on their product earlier, hence the market for ink cartridges. Copyright protection was for protection of up to seventy years, which is very long for products that can change very rapidly and unfair on consumers who may only use a product for a few years before they are discarded. In the Lexmark case, they tried to use protection by stopping Static Control Components from circumventing their Printer cartridge program. The court said that circumventing was not a new protection right but to was released to bring the Copyright up to date on infringements, it was an additional measure to check for clarification if an infringement had happened.. The court said, it could not be used to protect Lexmarks computer program.

Protection of a companies business is very important; a company investing in the research and development should benefit from the exclusive rights granted to them for making public the innovation behind the product. Benefiting from the exclusive rights can allow the company to get a return on their investment, if the product is commercially viable i.e. a purchased product. A return on investment and protection for companies that innovate, breeds innovation, breeding innovation enables new technologies and new research, which can benefit us all.

Chapter 4 – Strategy

Strategy is the direction and scope of an organisation, over the long term. It achieves advantage in a changing environment through its configuration of resources and competences with the aim of fulfilling stakeholder expectations.⁹⁸

In the case of a “parts” business, the company’s strategy might be the number one supplier of “parts” (competency) within the automotive industry or maybe in the case of printers, to be the largest ink cartridge (competency) supplier of replacement ink cartridges.

The Corporate level strategy decides what business the company will be in. For “parts” their business maybe the design of equipment and then selling the parts as another unit of their business. The competitive (Business) strategy deals with how the company is going to compete within the company’s business. It is using what they have that gives them competitive advantage to keep the company ahead. The functional strategy deals with short-term, goal oriented decisions a company needs to deal with. For example how to be competitive, do they need to research and develop new products to reach the company goal? An example of this in the “parts” business, do they need to develop new products to gain market share? The author believes that to be competitive or to have a competitive advantage they must look for new opportunities, which might include making new “parts”. An important thing to remember at this point is that the intended strategy (plan) might change over time creating a realised strategy (pattern) once the obstacles not thought of, come into play.

⁹⁸ Johnson, G. Scholes, K, (2006), Whittington, R., Exploring Corporate Strategy (Prentice Hall, 7th Edition), s. 1 (1) (1), page 9

Analysing the External factors using different frameworks can help the company decide on the direction it wants to go. A STEP analysis⁹⁹ enables the company to analyse external forces (macro) looking at Political/Legal that may affect the company doing what it is setting out to do, such as copying another company's "parts", what are the effects of the legal legislation by doing this?

Economic situations, such as the global downturn influence the strategy you want to implement, people are unlikely be buying new printers when they do not have money to spend.

Socio-cultural is the change of values and cultural dealing with the effects that this may have on the business. If the consumer decides that the most important thing in their life is the environment and waste management, then they will look at reducing the effects that companies have on them meeting this goal. How many pages can an ink cartridge run? If they can find for example an ink cartridge that lasts twice as long maybe they will purchase that ink cartridge if it is viable with cost.

Technological is the review of patents, research initiatives, which will give them an understanding of what is happening and what competitors are doing.

Once the company knows what external forces, affecting its business, the company can look within its own industry. Porter suggests using the five forces model to look at the company's competition.¹⁰⁰ This is extremely important for companies to understand who and what they are competing against, for example, why enter the "parts" business when there are already too many entrants that leave only a small piece of market share, or why enter an industry that is protected by patents, it just wouldn't make sense.

⁹⁹ Courtney, H., Kirkland, T., Viguerie, P. (1997), Strategy under uncertainty, Harvard Business Review, November/December

¹⁰⁰ Supra note 98

Completing a company's internal strategic audit, gives the company an idea of how well it is doing; are they gaining market share; sales growing. Once the company knows how well its doing it can look at the resources that are helping to achieve its strategic goals or are harming it.

Core competency strategy allows a company to play to their technology strength. For example, a company core competency might be optics technology, focusing on this competency a company can enter other markets¹⁰¹, difficult for competitors to imitate and can contribute to customer satisfaction. This can be true for a company who supplies "parts". They can use their expertise to research markets/products opportunities to exploit the core competencies. Once they know the markets they can enter, they can decide on the entry strategy (such as low cost ink cartridge) and the specifications of the product (how many pages they believe an ink cartridge will print).

There are different ways to acquiring the technology, to add to the company's competencies. A company can do their own research and development, which Cooper reports, 46% of all expenditure on R&D, wasted on failed projects.¹⁰²

When a company decides on research and development they have to pay all costs upfront, it can be a long time to market for the product, costs can overrun by as much as 3 times, the product might not be successful, but at least you do not have to look for technical assistance or pay royalties. It is a medium to high-risk strategy, if it pays off it can have huge benefits for the company. Supplying "parts" as your primary business could have costs associated to research and development but more related to reengineering the product than

¹⁰¹ Ackenhusen, M. (2003), Canon: Competing on capabilities, Minzberg, Lampel, Quinn, Ghoshal, The Strategy Process, (Pearson 2003, Global 4th Edition), Canons core competency was microelectronics and optic imaging Case 9, page 83

¹⁰² Supra note 26, page 11

developing from scratch. The benefit to this is that the hard work of making the product work, is already been done.

Porter suggests that temporary advantage can be gained by company that posses rare and valuable resources and capabilities. Firms competing against these resources and capabilities can face cost disadvantages in imitating these resources and capabilities. He suggests that imitating can happen in at least two ways, duplication and substitution. Duplication is when a company has the same resources as the company it is imitating. He explains that if a company's competitive advantage is research and development then a duplicating firm will try to imitate it. Substituting is when you replace a resource with another to compete with the competitor, which can lead to competitive parity.¹⁰³

Intellectual Property as in a patent provides, exclusive rights and protection from law, giving a competitive advantage; a superior "resource" in competitive strategy, in return for the know-how of how the invention works. The exclusive right cannot be reengineered without infringing in the patent.

Chapter 5 – Conclusion and Recommendations

Strategy is the direction and scope that an organization wants to achieve over the long term. Formulating a company strategy will in many ways be related to the structure or layout of the company, its people and culture. When the company knows its weaknesses, strengths, resources and even threats, it can go about deciding what products it wants to sell and the markets it wants to compete in. Implementing the strategy is more about analyzing and planning than implementing. If the process of what a company wants to achieve is analysed first, it is more likely to succeed and if there is a possibility of failure this should be highlighted earlier in the analyzing phase. Strategy can be the company's own Intellectual property, the trade secret of what and how they

¹⁰³ Porter, M. E. (2003), How Competitive Forces Shape Strategy, Mintzberg, Lampel, Quinn, Ghoshal, The Strategy Process (Pearson, Global 4th Edition)

want to succeed in a market; this can be their competitive advantage over their competitors.

Once the strategy is formulated the company can now turn its attention to achieving a competitive advantage in the products it supplies or wants to supply, in its primary business or an ancillary business or both. Creating a competitive advantage can be down to the competencies that the company has. A company's competencies can be derived from designing its own products or imitating someone else's or substituting their products for someone else's. All of these can be protected by intellectual property from patents, designs and again trade secrets, how it gained a product to commercialise. In a primary business the intellectual property could come from its own product designs, protected by patents and trade secrets, etc, which can be used to protect its ancillary spare parts business, as noted in the intellectual property Table 1, at the end of this chapter. An ancillary business can support the process of innovation of newer products, which will provide new intellectual property rights, creating a revolving process, starting with intellectual property, using it to gain advantage, and to sell products, using some of the profits/income to reinvest in more intellectual property and with new products start the process over again.

Another source of primary and ancillary "parts" business could be as a second source supplier but the question that goes along with this is how companies will protect against others imitating your business. Protection of ones business and intellectual property becomes extremely important for a company to achieve its goal, keep its competitive advantage over its competitors and satisfy the shareholders/owners of the company.

To protect a company's income from the products it sells, one can use the protection of its intellectual property by a grant of an exclusive right protected by law. Having a protected right gives the company an advantage over their competitor as it is a protection over infringement. Protecting this business from infringement is important as noted in the British Leyland case, when it mentions the possibility of millions made from their "parts" business only, and

in the Demag financial report where a down turn in the economy cost them a reduction of millions in revenue, companies really don't want to loose more by unwanted infringement of their rights. The law provides the exclusive rights in the protection in the way of patents, trademarks, design and the right to stop someone copying your literature, including computer programs, in protection by copyright.

The protection of a company's intellectual property rights can deter a competitor from entering the sector. A company taking a chance in infringing on other companies rights must have seen a loophole in the right as the courts will likely protect the company that has lawful protection. In some cases the company will be infringed as they think they will get away with it, this is why it is important to monitor the market place for products that may infringe on your rights. The courts take into consideration the legislation relating to the protection of the intellectual property right and only when they feel that the law provides an inadequate conclusion, due to the way it is written or interpreted, will they review legal cases for similar infringements, as a means to finding the conclusion for the case. The author believes that the courts will lean towards the legislation interpretation, using the rulings of other cases and their judgment on what they believed the government meant in the legislation. In addition, they will review the affect on public policy and in some cases may decide based on how it negatively affects them, for example, the cost of a product set by the company that merits only 50% of the price, will have an affect on public policy. In British Leyland case using copyright to protect an exhaust with copyright was rejected as the court felt that it did not protect functional objects, for life plus seventy years. In the Lexmark case, the use of a "security" program, claiming an infringement of DMCA which was not meant to be a protection right to stop others competing in "parts" for printers. In Dyson, who didn't register their designs, the court found that unregistered designs were protected from infringement and that they could have protection of independent parts.

A company can use patents to protect inventions against infringement. Anyone can apply for a patent if the product or "parts" are new, inventive and capable

of industrial application. Companies should register in as many countries as possible, which is now made easier by the European Community Patent and the Patent Co-operation Treaty; most likely the company's strategy will determine where to register. A patent allows the right holders do as they want; commercialize it for your own company or even license it to others and earn from the royalties. Downside to a patent is a patentee needs to monitor for infringement of the property right. Factor this into the company strategy as a need for more resources maybe required. A patent is an excellent way for a company to protect their business and products.

Design rights are good for protecting aesthetic features rather than technical function. Intellectual property in a design is a company's or persons, creative thinking of how a product should look. A company can register designs which can protect them from infringement. Protection of "parts" is possible under the unregistered design act but they must have the aesthetic features of lines etc and must function independently. If it's not possible to protect by a patent, design the parts to have design protection, an intellectual property protection for a design product is longer than a patent. The downside to the design is that another company can create their own design to replace "parts" designed by other companies, for example the wing mirror on a car.

The protection of a trademark is also an exclusive right that no one else can use. Trademarks do not cover the functional aspect of "parts" but used to protect a distinctive name, logo or graphics for "parts". They are a good way to protect the marketing aspect of the product, as they connect "parts" with the owner, which may persuade a consumer to purchase a product against another. It is wise to protect a company's trademark as it assists in establishing ownership. A good example of a trademark is Coca-Cola.

Copyright is the right to produce your own work. The work must be original, literary (including computer programs), dramatic, musical or artistic. It does not need to be unique as in a patent as it is not an exclusive right. Companies should register their drawings, software for copyright protection. It is not required to register the copyright but it is useful to have on file. This can act be

used in a case of infringement, showing the date that it was registered to stop any confusion in a legal case, protecting against someone reproducing them without permission. It does not stop it from being used in its original function when purchased for that reason.

Trade secrets are the know how of what a company does and how they do it. It is possible to protect these if required but is a company's own protected, exclusive right, which can gain competitive advantage. It remains secret as long as it stays within the organisation. One can license their trade secrets but only done with extreme care, that it stays out of the public domain. Trade secrets do not cost you anything but are extremely important to keep them within the company or to protect them in such ways as licenses and non-disclosure agreements. Trade secrets are the company's intellectual property and can be a great way to protect a product, business process without having to give the knowledge away, awarded by a grant for providing the expertise, such as a patent, which now becomes common knowledge and opens opportunities for others to use this information to innovate.

A company in the business of "parts" should consider as part of the business strategy, the protection of products by Intellectual Property Rights, in many cases this will grant an exclusive right. One should design products to have aesthetic features and not just technical function which will cover them by design rights. Companies should patent "parts" as this can protect against infringement, even if they are used within a complex piece of equipment. A company's know-how (trade secrets) can give advantage over a competitor, keep it secret and when required protect it with non disclosure agreements, licenses and contracts. Think about the consequences of swapping this intellectual property right for an exclusive right protection, as this may hurt in the long term. Companies should consider licensing products to others if they don't meet the companies business requirements; this keeps them protected and gives you an income, which can be reinvested for innovating new products. If a company can not protect the "parts" they supply with intellectual property, they could modify them so that they are not easy to copy, use non standard parts when designing, if it is hard for someone to reproduce, they will purchase your

“parts”. Companies should use contracts with suppliers that provide them “parts” and within the contract stipulate they can not supply to your customers. Research products that the company does not own and make sure you don’t infringe on Intellectual Property rights.

In the author’s opinion intellectual property rights are an excellent way to protect a company’s “parts” business but it is extremely important to consider the company’s strategy as its intellectual property for protecting “parts” not covered by these “exclusive rights”.

	Patent	Copyright	Design Right	Trademark	Trade Secret	Intellectual property
Monopoly	Yes	No	Yes	Yes	Possible	Can be
Duration	17 - 20 years	Life plus seventy years	25 years	10 years with option to renew Can be indefinite	Protected as long as it is secret	Depends on the right
renew registration	Yes	No	Yes	Yes	No	refer to other IP
Description	Invention	Reproduce own original work	Appearance or whole of product relating to the lines, contours, colour, shape, texture, material use	Distinguishes goods by words, designs, shapes and packaging	Secret or proprietary information on protecting goods	
Criteria	Novel (state of the Art), inventive step, Industrial application	Must be original, literary, dramatic, musical, artistic (including Computer programs)	must be novel and have individual character	Distinctive character	No criteria	
Protection of parts	yes as long as it meets the criteria	No	Yes if it one can meet the criteria above and the part can function independently of the design	Not usually, but possible protection for packaging and names	Possible	
Commercial Exploitation	No	No	No	No	No	
Public Policy Issues	Yes		Yes	Yes	Yes	
License	Yes	Yes	Yes	Yes	Possible	
license Stipulations	After 3 years in the UK anyone can apply for a license.	No		No	No	
Infringement Actionable	Patentee	Owner	Proprietor	Proprietor	Possible	
private or non commercial infringement	No	Can be	No	No	No if they know what it is	
Protection in other countries?	Depends on application. European patent covers European Union countries. UK patent covers only UK but can be considered in other jurisdictions	Yes	Depends on application. European designs covers European Union countries. UK patent covers only UK but can be considered in other jurisdictions	Depends on application.	YES	

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