

**THE DUTY TO LICENSE SOFTWARE IN A DOMINANT
MARKET POSITION –
The Essential Facility Doctrine**

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ABBREVIATIONS

ICT	Information and Communications Technology
i.e.	That is
IP	Intellectual Property
IPRs	Intellectual Property Rights
IT	Information Technology
CFI	Court of First Instance (renamed as General Court by the Treaty of Lisbon)
ECJ	European Court of Justice
ECR	European Court Reports
EEC	European Economic Community
E.g.	For example
EU	European Union
JO	Journal Officiel
PC	Personal Computer
TFEU	Treaty on the Functioning of the European Union
US	United States

1 INTRODUCTION

1.1 Preface

The significance of software has increased in today's digital society. More and more of the everyday functions are in a digital form. Payments are done via internet banking, cash registers are actually PC's which function with computer programs, most of the office work is done with computers and internet phones, authorities' registers are in an electronic form and we interact with our friends in the social media. Further, the core infrastructure of our society (heat and electricity production and distribution, traffic lights, alarm systems, communications networks, hospital systems, industrial plant automation systems et cetera) are either completely dependent on, or at least managed, in some degree, by a specialized software. This is a proof of how we depend on computer programs. The challenges caused by the incredible speed of digitalization have aroused many problems, and collusion or overlap of the different fields of laws has occurred because the applicable legislation and legal theory behind it struggle to keep pace with the speed of technological development.

1.1.1 The idea behind the software business

The software business is huge nowadays and a lot of money is involved. Software also plays an important role in the consumers' everyday lives. The software companies invest a lot of money and time in order to develop and bring new software products to the market. In addition to the commercial software products, the services around them (*for example* the maintenance and support of software) have become more and more important. The services are created in order to support the product itself and to enhance the value the customer gains from the software. Again a lot of money and time has been spent to ensure that services correspond to the customers' demand. For this reason it is very important for a software company that it can rely on its ability to price and leverage the additional value that they bring to their end customers in order to gain more revenue. Today, exclusive right given to a software company's product under copyright law is the primary legal tool for ensuring that goal. Without a mechanism such as the exclusive copyright, the software companies would not have an incentive to innovate

new products, to improve their existing products and at last to create supporting services for the products. At the end, all this creative work ends up improving consumer welfare.

The computer programs are copyright protected which ensures the software business. The essential part of that protection is an exclusive right to impose and exploit the product, *that is*, to decide who can use the product and for which price and terms, if any. Therefore, the other market players are forced to create products on their own in order to compete of the marketplace. From this perspective, the incentive to create new products can be seen coming from the nature of copyright.

The software companies usually exploit their software by license agreements. In this way their innovations benefit the companies financially. Based on the freedom of contract, the companies may choose with whom they conclude the contracts and what are the terms they set as the licensing conditions. As Pekka Takki has quipped, a copyright owner of a software product could say “*I got it, I sell it, I still got it.*”¹ This could be said to be the idea behind the commercial software product business.²

1.1.2 Competition law takes away what intellectual property laws are providing – or does it?

The software companies compete on software market by developing new and better products than their competitors in order to gain market share and become a market leader or maintain their position as market leaders. This competition is regulated under competition law in order to ensure effective and undistorted competition within the market. Both intellectual property laws and competition law have the same aim – incentive to new innovations. In a well-working marketplace, each system, competition law and copyright would contribute to the consumer welfare by bringing new, improved innovations and products to a constantly competed marketplace. One wants to be better

¹ Takki 2002, 47.

² The same logic does not necessarily apply to the so called “be-spoke system deliveries” where the software supplier creates a software product for the use of a single customer, or to a very limited customer base. In these cases, the software supplier is not necessarily able to leverage the intellectual property associated with the system even if it manages to retain the rights to the system, as the system itself may be of limited use to the other customers (in other words, there is no wider demand for the product than the single sale).

and have more market share than its competitors by products that are satisfying to consumers' demand.

The competition within the European Union is based on the active market in its Member States territory. More precisely, it is based on the four freedoms set down in the Treaty on the Functioning of the European Union (hereinafter TFEU), however, keeping consumers' interests in mind. For this reason, there is a need to regulate and limit certain competitive behaviors.³ The abuse of dominant position is prohibited in the Article 102 (TFEU) but a dominant market position itself is not denied therein.⁴ The goal of this prohibition is to try to protect the market from harmful effects where such harmful effects outweigh the benefits of unrestricted competitive behavior between the companies involved.

It has been stated that an exclusive right of the right holder under intellectual property rights in its own way restricts competition from an economic perspective. However, without incentive to innovations the product would perhaps never be created. Further, without some form of protection there would not be incentive effect to create new innovations.⁵ The exclusive right prevents the so called free riders of intellectual property and forces the competitors to develop new and independent items.⁶

The question of compulsory licensing has been raised, which basically means that the company is obligated to license its software to its competitors with non-discriminatory terms and reasonable price. There have been some situations where a company, as an owner of intellectual property, has been obliged to license its intellectual property to its competitors. Though this has been in a situation where the company has held a dominant market position on upstream market and it has prevented, by using this position, efficient competition on downstream market. Moreover, it has been considered that there is a failure of competition on the relevant market. The failure has aroused

³ Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union, Official Journal C 83 of 30.3.2010.

⁴ In this thesis will be used Article 102 to cover also previous Treaties corresponding Articles (82 and 86) Although many of the cases has been processed under previous Treaties this has been considered to be most coherent manner of presentation.

⁵ T. Mylly, *Tekijänoikeuden ideologiat ja myytit 2/2004*, 229. Original reference Gordon, Wendy: *Asymmetric Market Failure and Prisoner's Dilemma in Intellectual Property*, 17 *University of Dayton Law Review* (1992), 854.

⁶ T. Mylly, *Tekijänoikeuden ideologiat ja myytit 2/2004*, 229. Original reference Lehmann (1985), 538.

when a company holding a dominant position is not willing to license its product to its competitors. However, the precondition has been that the product has been so essential for the competitors that refusing an access to it has prevented the competition on the particular market.

The duty to license can be seen as a collision between the intellectual property rights and competition law and has received a lot of attention among legal debate. It is also a difficult subject as both of these legal concepts have the same goal but different means. First of all, the duty to license intervenes to the right holder's exclusive right to impose and exploit its own intellectual property and its freedom of contract. At the end, it is the nature of business to try to have a better product than the competitors or a product which the competitors do not have at all in order to benefit from the product by gaining a high profit margin and/or high revenues through gaining a large market share.⁷

The interface of competition law and intellectual property laws is not simple. It is very difficult to draw general resolution models from intellectual property and competition law cases because of the nature of intellectual property rights and because the decisions of the Courts of European Union are characterized by *ad hoc* consideration.⁸ However, this thesis tries to find the coherent points from decisions made in EU's case law. It can be asked whether the competition law takes away what intellectual property laws are providing.⁹

1.2 The research goals and scope of the thesis

This chapter outlines the goals and the scope of the thesis. The central research goal of the thesis is to study the legal framework which governs compulsory licensing of software in a dominant market position. The subject of the thesis combines two different fields of law. The scope of the thesis is limited to the problem whether a company in the dominant market position has obligation to license its software, and if so, on which grounds the obligation may materialize. However, this thesis will not research on what terms the license must be given and who decides the terms.

⁷ The writer of this thesis has experience in software business and therefore has perhaps business-oriented approach in this matter.

⁸ Alkio, M. ja Wik, C. 2004, 372.

⁹ L. Peepkorn 2003, 527 - 528.

The thesis studies the copyright protection of software, but only briefly goes through the other forms of protection, *that is*, the thesis does not research deeply other protection forms of software. The competition law part studies the abuse of a dominant market position under the Article 102 (TFEU) by concentrating to the refusal to supply. The dominant market position and its definition will be reviewed briefly, but the deeper survey is left outside of the scope of this thesis. Defining a dominant position in itself is a complex and case-by-case evaluation and gives a reason to leave it for another thesis to be researched.

The thesis reviews the subject under European Union law. Firstly, the software business is very international and is not usually limited to only inside one state area. Secondly, the competition legislation is harmonized in EU and the trade between the Member States is regulated by EU competition law. Thirdly, there exists case law on EU level where the subject of this thesis has been discussed. And fourthly, even though the copyrights are regulated under national laws they are still very similar in each member country, especially regarding software where the copyright provisions have been harmonized with a directive.¹⁰ As a consequence, the review of Finnish legal framework around the subject is mainly excluded by the author's conscious decision. The thesis aims to point out the substantial problems and rules under the subject without limiting its findings to the Finnish legislation.

The subject of this thesis has been because there is clear collision between the competition law and the copyright of software which can be seen problematic also from the software business side. In software business, the copyright is very essential and, basically, the core of business. For this reason, this thesis tries to have a pragmatic approach to the issue viewed from the point of view of the software business.

¹⁰ Council Directive of 14 th May 1991 on the legal protection of computer programs 91/250/EEC.

1.3 Methodology, source material and structure

This chapter outlines the methodology selected for the thesis and offers some arguments for the chosen approach. The structure of the thesis and the source material used in the research are also briefly introduced under this chapter.

This thesis will study the prevailing EU legal rules of copyright as well as the abuse of dominant market position. It will survey the current legal situation around the subject. The case law has an important role on EU level and therefore the case law around the subject will be studied. Based on the nature of the subject, some law and economics argumentation will be included to the thesis.

Chapter two goes first through the principles of copyright in general level, and further discusses the special features of software copyright protection. In this chapter, it will be discussed how the software protection has been developed and what is actually protected in software. In this connection the other forms and features of software protection are briefly reviewed. In chapter three the thesis will scrutinize the abuse of dominant market position under the Article 102 (TFEU). The substantial parts of the Article 102 are the concept of dominant market position as well as the concept of abuse. The thesis surveys the intellectual property rights and the abuse of dominant position in some extent to help the reader to understand the factors behind the duty to license.

Chapter four combines these two different parts together. In this chapter, the collusion of intellectual property rights and competition law will be discussed. The refusal of supply is one form of abuse of dominant position and the thesis concentrates to review this form of abuse. The essential facility doctrine is developed under case law concerning the refusal to supply in a dominant position, and this doctrine will be discussed to the large extent in chapter four. Under the same chapter, the important European case law around the subject will be presented. The European Union case law is stressed in this thesis as the duty to deal has been developed in case law.

The legal source material used in this thesis reflects the definition of the scope of this thesis. Therefore the majority of source material concentrates on EU regulation and relevant case law as well as to the legal literature around the subject.

1.4 Law and economics of intellectual property rights and competition law

One of the goals of intellectual property rights is to reward the creator of work financially. The economic reward acts as an incentive for new innovations and works.¹¹ At the end, the consumers benefit from this incentive effect because new and better products will be developed and offered in the market as long as the protection of invention does not substantially prevent or hinder the appearance of other competing inventions. If intellectual property rights did not act as an incentive, or if they were over-protective, there would be none or just few new innovations available in the market for the consumers. Therefore, it is important that the intellectual property protection is adequately measured; it should not be stronger or weaker than is necessary for incentive effect and to ensure adequate economic reward for its creator.¹² In an economic sense, protecting the creator is not an end in itself.¹³

With economic argumentation it is possible to argue for limiting the intellectual property protection. One such argument could be that if the only aim of the protection were to protect the creator, the period of protection would not be temporally limited.¹⁴ The protection cannot be too strong either. In that case, it would increase the costs of creating new products and be economically inefficient. This is one of the reasons why the idea under copyright can be later exploited in order to limit too strong exclusive right of the creator.¹⁵

In the United States the economic argumentation has more importance, especially in intellectual property cases concerning computer programs.¹⁶ Also in Europe the economic incentive to innovation argumentation is part of the intellectual property rights discussion.¹⁷ However, in Europe the economic perspective has lesser meaning because traditionally in Europe the intellectual property rights stress the moral rights of the creator.¹⁸ On the other hand, in connection with the software the moral rights do not

¹¹ Haarman 2005, 10.

¹² U.-M. Mylly 2006, 4.

¹³ The moral rights of the author can be seen to serve this purpose, but as they are not problematic from an economical or competition law point of view they are not a focus point in this thesis.

¹⁴ U.-M. Mylly 2006, 5.

¹⁵ U.-M. Mylly 2006, 5.

¹⁶ U.-M. Mylly 2006, 5.

¹⁷ Haarman 2005, 10.

¹⁸ Samuelson 2005, 4.

receive as much importance as in connection to the more traditional works. The software is meant for practical use.¹⁹ For this reason the economic matters related to the computer programs might weight more.²⁰

The economic argumentation is used widely as an argument in the competition law cases but, on the other hand, not in cases regarding intellectual property rights.²¹ Software companies spend remarkable amounts of money in developing new software and want to leverage their exclusive rights and get compensation from its use. After all, it is the idea of the business of commercial software products.

2 COPYRIGHT PROTECTION OF SOFTWARE

2.1 Copyrights in general

In the history of development of copyright, one of the most important aims has been to encourage literature and art. This aim has always been common for all nations' copyright thinking.²² This is still important goal of the copyright laws; nowadays the copyright has perhaps more significant role in the commercial business than in the encouragement of arts. Therefore this chapter will present the economic goal of copyright.

The object of copyright is the work itself. The work is a product of the spirit created by a human, and it represents individual creative contribution. Traditionally the copyright protection has covered for example books, paintings, compositions and other creative works. The copyright belongs to the person who has created a literary or artistic work. Nowadays, also the computer programs are included to these literary works.²³ Copyright gives an exclusive protection to its creator to exploit its work. One of the main rights of the right holder is the right to deny the use of its intellectual property from third parties.

¹⁹ Takki 2002, 41.

²⁰ U.-M. Mylly 2006, 5.

²¹ Samuelson 2005, 1.

²² Haarman 2005, 9.

²³ E.g. The Finnish Copyright Act 8.7.1961/404, Chapter 1 Article 1.

The copyrights are regulated under national laws, though there are also some EU level regulations as well as multinational copyright agreements.²⁴ Even when the copyrights are very similar, there might be differences between the copyright laws of the Member States. The common law countries focus more on commercial protection whereas in civil law countries the stress is in the right of the creator of a work to be recognized as such as well as in moral rights.²⁵ The copyright consists of both economic and moral rights.²⁶ The economic rights give to its creator an exclusive right to dominate how the intellectual property is used. The Finnish Copyright Act Article 2 includes right holders' economic rights. The copyright provides "*the exclusive right to control a work by reproducing it and by making it available to the public*".

2.2 Software protection

Computer programs have traditionally been protected by license agreements and still are, but in addition to that, computer programs are nowadays protected by copyright. License agreements have usually been used to give more protection to the software. Copyright laws and the Council Directive of 14 th May 1991 on the legal protection of computer programs 91/250/EEC regulates the minimum level of protection.²⁷ Further, the laws include mandatory provisions which contracting parties have to comply with.

Under the Software Copyright Directive Article 2 Section 1, "*the author of the computer program is the natural or legal person or group of natural persons who created it. Where collective works are recognized by the legislation of a Member State, the person considered by the legislation of that Member State to have created the work is deemed to be its author.*" If the computer program is created under employment

²⁴ The multinational agreements are e.g. the Berne Convention, Geneva 1978 and TRIPS-agreement, 1995.

²⁵ In Jones and Sufrin 2011, 709 e.g. in "UK copyright law covers performers' rights and similar rights but in most EU countries there is a distinction drawn between 'author's right' and 'neighboring rights' ...

²⁶ See Haarman 2005, 138 pp. The moral rights contains (1) the creators right to be acknowledged as author; (2) the work may not be altered or made available in a way which is prejudicial to creators literary or individual reputation (droit au respect); (3) the creator's right to see the work after it has been handed over (droit d'accès); and (4) creator's right prevent publishing the work if new certain factors have come up (droit de retrait) and make modifications to new edition (droit de modifier). According to Pirkko-Liisa Haarman by moral rights are nowadays understood often just as a protection of creator's personality. Difference to economic rights the moral rights are in principle non-assignable.

²⁷ Council Directive of 14 th May 1991 on the legal protection of computer programs 91/250/EEC. The directive is often called as the Software Copyright Directive and hereinafter this shorten form is used in this thesis as well.

relationship the employer alone is entitled to exercise all economic rights in the computer program.²⁸

According to the Software Copyright Directive Article 4, the author of the computer program has exclusive rights which include the right to perform or to authorize the reproduction of a computer program; the translation, adaptation, arrangement and other alteration of a computer program, as well as the distribution, including the rental, of a computer program or its copies.

The Software Copyright Directive also includes third parties' rights to the computer program. The person who has legally acquired the computer program is allowed to make a back-up copy insofar as it is necessary for that use. The person is also entitled to observe study or test the functioning of the program in order to determine the ideas and principles which underlie any element of the program if he does so while performing any of the acts of loading, displaying, running, transmitting or storing the program which he is entitled to perform. It also includes the exception which allows the decompilation of a computer program under certain limited conditions and with the aim of achieving the interoperability of an independently created computer program.²⁹

In the preparatory work of Finnish Copyright Act, the application of copyright to software by its flexibility is justified because it does not monopolize ideas. At the same time, when the copyright protects creative work, it promotes competition because the ideas and systems are available for everyone. If the ideas and principles were protected and that way monopolized, it would impede software industry's functionality and retard development.³⁰

Copyright protection makes software into a product. Without this protection it would not be worth to invest a lot of money and time to create software which is fast and cheap to copy and which is, though, value of money for the users. The protection differs from the more traditional forms of copyright protection.

²⁸ The Software Copyright Directive, Article 2 Section 3

²⁹ Council Directive of 14 th May 1991 on the legal protection of computer programs 91/250/EEC, Articles 5 and 6. See also Finnish Copyright Act (24.3.1995/446): Section 25j and 25k include third parties rights to computer programs.

³⁰ Government Bill to Parliament 161/1990, Section 1.3.4.

2.2.1 Development of software copyright protection

The computer programs have nowadays a more important position within the technology development. The development has been fast. The computer programs are protected by copyright. This was not a self-evident form of protection in the beginning. In early stage the computer programs were protected through license agreements. When computers became easily available to the consumers, the protection needed to be arranged by other means.³¹ It was then discussed how the software should be protected and it was debated whether the software should be protected by copyright, patent or something between those means.

In 1978 the World Intellectual Property Organization (WIPO) published a model law for computer programs which was based on copyright laws, but added there some elements which did not belong to copyright. After that WIPO prepared an international agreement which was supposed to be based on special provisions of the protection of computer programs. It was dismissed in 1983 due to lack of support. The United States decided to do necessary revisions to its own copyright Act in 1980 and was the first country where computer programs were protected by a copyright Act. It was the forerunner with the issue as in 1980s, different European countries began to add provisions concerning computer programs to their copyright acts as well. The copyright protection was generally accepted as problem-free and as the most popular alternative.³²

The Commission made a proposal of the Software Copyright Directive and it was accepted in 1991. The motives behind the Directive were to harmonize Member States legislations regarding computer programs and, especially, the economic interests' of software industry and the protection of investments.³³ In Finland the software copyright provisions were not taken into Finnish Copyright Act until 1991 and it was amended in 1992 after the Software Copyright Directive came into force.³⁴ The copyright protection

³¹ U.-M. Mylly 2006, 8.

³² Välimäki 2009, 9-10.

³³ Välimäki 2009, 11. See also Sections 2 and 3 of the Software Copyright Directive “...the development of computer programs requires the investment of considerable human, technical and financial resources while computer programs can be copied at a fraction of the cost needed to develop them independently...computer programs are playing an increasingly important role in a broad range of industries and computer program technology can accordingly be considered as being of fundamental importance for the Community's industrial development...”.

³⁴ The Finnish Copyright Act (8.7.1961/404).

was considered to be adequate for software. Copyright is flexible because it protects expression but leaves ideas outside the protection. This was considered to secure the competition as well as the protection of original creators at the same time.³⁵

2.2.2 Special features of software and software as a work

Copyright gives long protection to computer programs although the computer programs often become obsolete in commercial sense in relatively short time spans, sometimes even just after few weeks or a few years of the issuance.³⁶ Besides temporal protection, the material protection of copyright is limited. The limitations of copyright are much more important for business than the temporal protection. Copyright applies to certain usage of software listed in the Software Copyright Directive such as copying, distributing and modification of software.

Copyright protection requires from software that it exceeds a concept of a work. The concept of the work is not set high.³⁷ According to the Software Copyright Directive, it is required from the program that it is creators own intellectual creation.³⁸

Software receives protection under the copyright laws although the software is more often licensed by agreements than sold. However, the license agreements may, and usually do, give more exhaustive protection for right holder than copyright laws do. By licensing the creator can control copying of the software in order to obtain the revenue from it. This always means that the usage is restricted to certain limits in the license agreement, *that is*, the more the licensee gets rights under the license agreement the more the licensor gains money from it. Software business is fast developing due to the reason that the developers try to gain return of investments to their development in a short term.

³⁵ Committee Memorandum 1987:8, 158 – 161.

³⁶ In fact, losing in the fast paced competition in today's marketplace can even mean that a software product becomes obsolete before it is ever released into the marketplace if e.g. a competitor manages to develop a superior software product before the product is ever marketed or a technological shift removes the need for the product.

³⁷ Välimäki 2009, 19.

³⁸ Council Directive of 14 th May 1991 on the legal protection of computer programs 91/250/EEC Article 1 section 3.

2.2.3 What is protected in software?

What is then protected in software? The protection of software differs somewhat from other works protected by copyright. According to the established legal practice, the source code, reversed computer language and intermediate form of these two are protected by copyright in software.³⁹

The copyright does not apply to the whole computer program. It only gives protection to the visible parts of software, such as source, object code and graphic of user interface. According to the Software Copyright Directive, only the expression in any form of a computer program is protected. The ideas and principles which underlie any element of a program, such as logic, algorithms and programming languages, are not protected by copyright.⁴⁰ Also some other solutions are not protected such as solutions which are possible to execute only one way.⁴¹

The difference between protected expression and unprotected idea is not so clear. According to the Software Copyright Directive, *for example* the algorithms can be an unprotected idea in which case that part of source code is unprotected in software.⁴² It is always case-by-case consideration whether there is a question of idea or expression.⁴³ However, the visible parts of software, such as source, object code and graphic of user interface are protected. Otherwise it would be very easy for the competitors to copy the software and to sell it with a lower price than the original software without making huge investments.

2.3 Other protection forms of software

There are also other forms than copyright available for the protection of software. These will be briefly discussed under this chapter. The interoperability, network-effect and

³⁹ Välimäki 2009, 17.

⁴⁰ Council Directive of 14 th May 1991 on the legal protection of computer programs 91/250/EEC. See also Government Bill 161/1990 Article 1.

⁴¹ Patent protection is stronger form of protection than copyright. See e.g. U.-M. Mylly 2006, 9. The possibility to protect software by patent is possible, but patents are excluded from this thesis because its own special and wide form of protection.

⁴² Välimäki 2009, 20.

⁴³ Välimäki 2009, 21.

lock-in will be discussed under this Chapter as well. These are not forms of protection, but are affected and related to software copyrights.

2.3.1 Patents

There has been discussion that copyright has some lacks as a protection form of computer programs. Quite soon after revision of legislation of copyright, there became a need to protect the computer programs by patents which became one form of protection. The United States started to grant patents for computer programs in mid-1980s because it was not possible to protect operating features of software by copyright.⁴⁴ Nowadays, the patent protection is widely available also for software.⁴⁵ In 2005, there was also a directive proposal in European Parliament regarding patenting of computer programs. However, this proposal was not accepted.⁴⁶

The patent's protection is stronger than copyright protection. The protection is wider than only protection of source code, because it protects the particular methods of receiving the results but not the result itself.⁴⁷ Patent gives more wide exclusive right to the right holder because it protects also the idea. This means that the third parties cannot as easily create software to the same purpose of use.⁴⁸

2.3.2 Technical protection

The one form of protection is technical protection. Technical protection in its simplicity means the technical protection of software, so that the users cannot see the copyright protected parts of the software. Further, the users cannot see parts which do not receive protection under the copyright law because the technical protection prevents from seeing those; the user is unable to break the technical protection, regardless the law that

⁴⁴ Samuelson, Davis, et al. 1994, 2345, 2349 - 2350.

⁴⁵ U.-M. Mylly 2006, 9.

⁴⁶ U.-M. Mylly 2006, 9. See also footnote 40: Under European patent agreement and Finnish patent law it's not possible to patent computer programs. However, European patent authority has considered that when the software produces an extra technical effect in addition to its normal technical interaction between hardware and software, it might be possible to patent the software. European patent authority's Board of Appeal decisions T1173/97, 1.7.1998 "Computer Program Product/IBM" and T935/97, 4.2.1999 "Computer Program Product II/IBM".

⁴⁷ Samuelson, Davis, et al. 1994, 2345.

⁴⁸ U.-M. Mylly 2006, 9.

allows taking few copies from copyright protected work for own use. The technical protection makes it difficult to circumvent the protection and it is illegal to distribute tools which can circumvent the protection. The technical protection means that the software is protected two times, *that is*, software is protected by copyright law and the norms prohibiting distribution of the tools which circumvents the technical protection.⁴⁹

Technical protection gives perhaps greater protection than it is necessary. This would be in interest of many of the software suppliers in business manner, but perhaps technical protection does not fit together with the purpose of copyright laws. It could be asked though whether the copyright is, or is not, the right form of protection.

2.3.3 Interfaces and interoperability

Interoperability is a big issue in the field of computer technology business. Without interoperability, the computer programs would not function together. For this reason the decompilation is allowed in order to achieve interoperability between different computer programs.

However, decompilation was a debated issue under the Software Copyright Directive. The market leaders wanted to prevent competitors' possibilities to compete with them in the software market. Therefore the major US software companies wanted interface information under copyright.⁵⁰ On the other hand, mainly European software companies wanted to allow decompilation widely.⁵¹ The Software Copyright Directive ended up admitting decompilation as a mandatory provision.⁵² From the starting point, the decompilation is meant to be used for interoperability between both hardware and software.⁵³

The aim of the decompilation is to promote competition.⁵⁴ The Article 6 of the Software Copyright Directive concerns decompile of licensed software when it is necessary to

⁴⁹ U.-M. Mylly 2006, 9-10.

⁵⁰ Such as Microsoft, IBM, Apple, Lotus and some others.

⁵¹ Such as Amstrad, Bull, Fujitsu, Olivetti and some others.

⁵² Välimäki 2009, 57.

⁵³ Välimäki 2009, 62.

⁵⁴ Välimäki 2009, 60.

achieve interoperability between the programs, *that is*, the licensee can legally run the software to a form which approximates the source code.⁵⁵ Without the Article 6 the decompilation would be infringement of copyright.⁵⁶ The Article 6 allows the following measures:

Article 6 Decompilation

1. The authorization of the rightholder shall not be required where reproduction of the code and translation of its form within the meaning of Article 4 (a) and (b) are indispensable to obtain the information necessary to achieve the interoperability of an independently created computer program with other programs, provided that the following conditions are met:

(a) these acts are performed by the licensee or by another person having a right to use a copy of a program, or on their behalf by a person authorized to so;

(b) the information necessary to achieve interoperability has not previously been readily available to the persons referred to in subparagraph (a); and (c) these acts are confined to the parts of the original program which are necessary to achieve interoperability.

With “other programs” is meant not only the licensed software but also the software which competes with the licensed program.⁵⁷ The Article 6 applies when the company refuses to make interoperability information available in a situation where it is necessary to achieve interoperability between different software.⁵⁸ The section 2 of the Article 6 does not deny developing of competing products but it sets out three limitations for decompilation:

⁵⁵ The Finnish Copyright Act Article 25k.1 is equivalent to Article 6 of the Software Copyright Directive.

⁵⁶ Jones and Sufrin 2011, 779, Footnote 325.

⁵⁷ Jones and Sufrin 2011, 779.

⁵⁸ Commission staff working paper on the review of the EC legal framework in the field of copyright and related rights, SEC(2004) 995 2004, 9.

2. *The provisions of paragraph 1 shall not permit the information obtained through its application:*

(a) to be used for goals other than to achieve the interoperability of the independently created computer program;

(b) to be given to others, except when necessary for the interoperability of the independently created computer program; or

(c) to be used for the development, production or marketing of a computer program substantially similar in its expression, or for any other act which infringes copyright.

Through the interoperability it is possible to divide market share between the competing companies. In this, the decompilation may be the only tool to receive this goal.⁵⁹ The Article 6 was applied in *Microsoft* case in which Microsoft refused to provide interoperability information to other developers who wanted to create workgroup server operating systems that would interoperate with Microsoft's Windows system. The Commission considered that *"the information necessary to ensure that the decompiled program works as intended in interoperating with the independently created program is information covered by the derogation provided by Article 6."*⁶⁰

Interoperability benefits the consumers as they have more options of usable computer programs to interoperate with other programs and systems. Also a possibility of monopoly pricing decreases because the entry barriers decrease due to the new suppliers on the market.⁶¹ Decompilation is clearly legal nowadays, even though sometimes the software companies still try to influence to the development of the interoperability between the products.⁶²

⁵⁹ Välimäki 2009, 60.

⁶⁰ Microsoft Corp. v Commission of the European Communities 2007, paras. 226 - 7, 762.

⁶¹ U.-M. Mylly 2006, 6 – 7.

⁶² Välimäki 2009, 63.

2.3.4 Network effect and lock-in

The network effect means the value increase of a product. The increase is the consequence of usage by a large group of people of the same product or products which are interoperable with that product. The users are able to communicate with a bigger group of users and a larger amount of interoperable hardware and software with the product is available. The possible problem of the network effect can be that the market power accumulates for one supplier or for one technology. This might lead to the monopoly position of the supplier or technology owner.⁶³ In case there is interoperability between different computer programs, everyone benefits from the network effect. However, because the right holder of the original software also faces competition, the right holder may want to prevent the interoperability between its software and other suppliers' software in order to keep its market position.⁶⁴

One element of the network effect is lock-in situation. Lock-in means that consumers do not change to other products even if the other product would be better than the product which a consumer is using currently. The reason for this is that there will incur costs from the change. This might mean *for example* that the consumer has to invest to a new operating system in order to be capable to use the software he wants or that it is not possible to use existing files in the new software or operating system.⁶⁵ Lock-in is a negative phenomenon when the actual benefit of using the new software would be higher than the actual cost as a consequence of changing to the new software for the reason that the consumer continues to use the old one.⁶⁶ The lock-in can cause considerable entry barriers and prevent the consumer from choosing technically better products.⁶⁷

As presented above, the network effect and lock-in can prevent consumers to change to other competing products even though the competing products were better. The cost of

⁶³ U.-M. Mylly 2006, 6 – 7.

⁶⁴ U.-M. Mylly 2006, 6. Original reference is Katz, Michael and Shapiro, Carl, Antitrust in Software Markets, p. 33, in book Eisenach, Jeffery A. and Lenard, Thomas M., Competition, Innovation and the Microsoft Monopoly: Antitrust in the Digital Marketplace, Kluwer Academic Publishers 1999), 29 – 81.

⁶⁵ Välimäki 2009, 252.

⁶⁶ Liebowitz and Margolis 2001, 161.

⁶⁷ U.-M. Mylly 2006, 7.

change can increase so high that it is not profitable for a consumer to change, including the time which it would take to learn the new product.

3 ABUSE OF DOMINANT MARKET POSITION

3.1 Purpose of regulation of dominant market position and abuse of it

Behavior of companies in a dominant market position is regulated under the Article 102 the Treaty of on the Functioning of the European Union (TFEU). The dominant market position itself or gaining a dominant market position is not prohibited. However, if a company has a dominant market position it means that the other companies depend on it. A dominant company has stronger position than its competitors and it has possibility to close its competitors from the market or prevent an entry to the market. A dominant company is also able to take higher prices from its competitors, prevent the competition and act against the consumers benefit by decreasing operation or efficiency.

For that reason, certain responsibility from the company in a dominant position towards its competitors and the consumers is expected. The dominant company should not conduct in a way which impedes competition in a relevant market. Under the Article 102, an abuse of a dominant position is prohibited in internal markets, *that is*, the abuse is prohibited within internal market when it affects to the trade between the Member States of European Union.

3.2 Article 102 TFEU

The Article 102 is applied to monopoly and market power. It concerns behavior of a company in a dominant market position.⁶⁸ The Article 102 regulates the abuse of a dominant market position. It prohibits the abuse of a dominant position within the internal market of EU or in a substantial part of it when it may affect to the trade between the Member States. A company has been interpreted to concern every company

⁶⁸ Jones and Sufirin 2011, 259.

engaged in an economic activity. It is applied to either one company or more companies which hold a dominant market position.⁶⁹ This means that in certain circumstances, legally independent companies can together collectively hold a dominant position on the market.⁷⁰

Article 102 TFEU

Any abuse by one or more undertakings of a dominant position within the internal market or in a substantial part of it shall be prohibited as incompatible with the internal market in so far as it may affect trade between Member States.

The aim of the Article 102 is to maintain an efficient competition within the common markets. It aims to prohibit situations where the companies in a dominant market position abuse their position and distort competition which affects to the internal markets, *for example* by charging unfair prices, by limiting production or refusing to supply to the prejudice of consumers.⁷¹

The prohibition sets obligations to the companies towards their business partners and competitors. The Commission focuses to conduct which most harms the consumers. In its enforcement, the Commission focuses also in ensuring that the markets are functioning properly, and that the consumers benefit from the efficiency and productivity resulting from the effective competition. This means that the consumers benefit from the efficient competition through lower prices, better quality and larger choice of new or improved products and services.⁷² The dominant position and abuse of it has been subject to many interpretations in the legal analyses.⁷³

⁶⁹ Jones and Sufrin 2011, 265.

⁷⁰ Jones and Sufrin 2011, 266.

⁷¹ Ojala, EU-kilpailuoikeus 2011, 257.

⁷² Communication from the Commission - Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (Text with EEA relevance 24/02/2009, section 5.

⁷³ Ojala, EU-kilpailuoikeus 2011, 258. See also Jones and Sufrin 2011, 267. Company's dominant position has to be held within internal market or within a substantial part of it in order to exclude from Article's scope purely localized monopoly situations. In EU's interest is to control monopolies which affects to the trade between internal market and localized monopolies which are under local legislation of member state, are left under consideration of national authorities.

As set above, the Article does not prohibit the dominant market position itself. The market structure that is lacking competition or where the competition has decreased, behavior that leads to the dominant market position is not prohibited. The Article only prohibits behavior which harms the competitors, the clients and, at the end, the consumers.⁷⁴ This is because in a normal business situation the companies aim to increase their market share and to be more efficient than their competitors.⁷⁵

The Article 102 includes list of abuses. The list is considered to be an example list and it is not exhaustive.⁷⁶ In addition, other forms of abuses have been defined in the applicable case law compared to what is listed in the Article 102 (a-d).

The Article 102 includes a list of abuses:

Such abuse may, in particular, consist in:

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions;

(b) limiting production, markets or technical development to the prejudice of consumers;

(c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

The Article 102 intervenes to abuse afterwards.⁷⁷ Under the case law, the abuse of the dominant position can mean both behaviors which damage directly the consumers and

⁷⁴ Jones and Sufrin 2011, 265.

⁷⁵ Ojala, EU-kilpailuoikeus 2011, 261.

⁷⁶ Jones and Sufrin 2011, 261.

⁷⁷ Ojala, EU-kilpailuoikeus 2011, 258.

behaviors which damage the consumers through restricting competition.⁷⁸ The Commission and the European Court of Justice (ECJ) have applied the Article 102 in highly controversial ways.⁷⁹ According to Jones and Sufrin, the application of the Article 102 has suffered for the reason that there has not been enough proper theoretical framework and because of the confusing policy goals. The protection of competitors can be considered as a disadvantage to the consumers when it penalizes the efficient pro-competitive behavior. Also the protection of competitors in order to protect competition has been done without a sufficient analysis of the real impact on the consumers. Further, it is argued that there is a danger of too many “false positive” errors, *that is*, over-enforcement which stops competition and harms the consumers.⁸⁰

Even if the Article is applied to the abuse of dominant position, it does not include the definition of dominant market position.⁸¹ It only prohibits the abuse of the position. The definition is set out in the European Union case law.⁸² Before any consideration of abuse under the Article 102, the following criteria must be established: a) one or more undertakings; b) a dominant position; c) the dominant position must be held within internal market or a substantive part of it; d) an abuse; and e) an effect on inter-State trade. To determine whether a company holds a dominant position and/or whether it has abused that position are both difficult questions and difficult to determine.⁸³

3.2.1 The concept of dominant market position

A dominant market position is a condition for applying the Article 102. However, the Article 102 does not include the definition of the dominant market position.⁸⁴ The definition is clear when it is a question of a natural monopoly, but in the other market situations, the definition of the dominant position is set out in the European Union case

⁷⁸ Ojala, EU-kilpailuoikeus 2011, 261.

⁷⁹ Jones and Sufrin 2011, 260.

⁸⁰ Jones and Sufrin 2011, 281.

⁸¹ Jones and Sufrin 2011, 259 “*The way in which the Commission and the Court have interpreted the Article 102 has been extremely controversial. Article 102 has mainly been applied to “exclusionary abuses”, i.e. to conduct which impedes effective competition by excluding (foreclosing) competitors. It has been applied on the form of the conduct and drawing presumptions from that, rather than analyzing the actual effects on the market. Further, it has often been applied in order to protect competitors rather than to protect the competitive process for the benefit of consumers.*”.

⁸² Jones and Sufrin 2011, 267.

⁸³ Jones and Sufrin 2011, 261.

⁸⁴ See Kuoppamäki 2003, 632.

law.⁸⁵ The difference between a dominant position and a monopoly is that in monopoly situation there is no competition on the relevant market. However, when one company or a group of companies holds the dominant position, there is still competition on relevant markets but a company or a group of companies have the power to influence to the competition significantly.⁸⁶

The dominant position has been defined in *United Brands* case by the ECJ.⁸⁷ Since *United Brands*, with dominant market position is usually meant an economic strength of a company that makes possible for it to prevent an actual competition on the relevant market. Further, because of the economic strength the company has an opportunity to operate independently from its competitors, customers and consumers to the significant extent. The existence of dominant position is a consequence of a group of factors which would not necessarily be crucial alone.⁸⁸ The ECJ has put its focus to company's market power, market share, pricing and stability of dominant position.⁸⁹ The most important of these factors is the market share.⁹⁰

Later in 1979 *Hoffman – La Roche* case, the ECJ specified the definition set out in *United Brands*.⁹¹ It stressed that a dominant position did not exclude all of the competition and it particularly focused on the ability of the company to influence the conditions of competition occurring on the market.⁹²

The Commission's Notice on the definition of relevant market for the purposes of Community competition law includes the definition of dominant position.⁹³ According to the Notice "a dominant position is such that a firm or group of firms would be in a position to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers." Further, the Notice continues that usually the

⁸⁵ See Ojala, EU-kilpailuoikeus 2011, 259. Natural monopoly occurs where a single company provides product or service on the market. This is for the reason that to entry to the field of business is too expensive and inefficient.

⁸⁶ Ojala, EU-kilpailuoikeus 2005, 255.

⁸⁷ *United Brands Company and United Brands Centinaal BV v Commission of the European Communities* 1978.

⁸⁸ *United Brands Company and United Brands Centinaal BV v Commission of the European Communities* 1978, paras. 65 and 66.

⁸⁹ Ojala, EU-kilpailuoikeus 2011, 268.

⁹⁰ Ojala, EU-kilpailuoikeus 2011, 266.

⁹¹ *Hoffmann-La Roche & Co. AG v Commission of the European Communities* 1979, para. 91.

⁹² Jones and Sufirin 2011, 285.

⁹³ Commission Notice on the defenition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 005-0013.

dominant position arise if a company or a group of companies accounts a large share of the supply in a given market and that other factors analyzed in assessment, such as entry barriers, customer's capacity to react point in the same direction.⁹⁴

In competition law, the economic power of the company cannot be measured by the company's profitability. The small profit margin or occasional losses are not controversy with dominant position. Because it is possible to gain remarkable profits in an efficient competition, the overall situation needs to be taken into account when defining a dominant position. There are several factors for the dominant market position in case law. A large market share is a remarkable matter from these factors, but it is not an evidence of the dominant position in itself.⁹⁵

Below it is briefly presented the defining of a dominant market position and relevant markets. It is not possible to study the subject more deeply in this thesis as defining the dominant position itself is not a simple task. However, the defining of a relevant product and geographical markets will be shortly reviewed below as those are considered to be the base of defining dominance.

3.2.2 Defining the dominant market position

The ECJ has emphasized in the *Continental Can* case that the dominance can only exist in relation to a particular market and not in the abstract. The ECJ found that “*the definition of the relevant market is of essential significance*” to find out whether the company holds a dominant position or not.⁹⁶ Based on the *Continental Can*, the Commission follows two-stage procedure to examine the dominance. Firstly, it identifies the relevant market and secondly, it scrutinizes the company's position on that market and analyses the competitive constrains which the company faces.⁹⁷

The ECJ makes the assessment based on the market share of the company and other factors which are indicating the dominance, such as an entry barrier. However, the

⁹⁴ Commission Notice on the definition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 005-0013, section 10.

⁹⁵ Ojala, EU-kilpailuoikeus 2005, 256.

⁹⁶ *Europemballage Corporation and Continental Can Company Inc. v Commission of the European Communities*. 1973, para. 32.

⁹⁷ Jones and Sufin 2011, 292.

assessment is problematic. The markets are difficult to define, and the process of market definition can be difficult to separate from what is supposed to be the second step, *that is*, assessing the company's market power on that market. It can be difficult to know which factors should be taken into account when defining the markets and, on the other hand, which factors relate to the assessment of company's position on the market.⁹⁸ The Commission's practice has been criticized of defining the markets too narrowly. This leads easily to an interpretation that there exists dominance even though the company had little market power in reality.

The Commission's Notice on market definition sets out three different competitive constraints to which the company is subject. Those are demand substitutability, supply substitutability and potential competition.⁹⁹ If a company can prevent an actual competition and operate independently in the relevant markets in relation to its competitors, customers and finally consumers, the company most likely has a dominant market position in those relevant markets. In case the customers can easily change to other producers substitute products or change the supplier, the conditions for dominant position are not fulfilled. Also if the competitors can easily and in a short time start to produce substitute products and operate in the same market with the company, there is no question of dominant position.¹⁰⁰

Defining the markets is difficult to the competition authorities and it is difficult to the companies as well. In practice the companies can define their relevant markets to be very different from the authorities' definitions. The company may consider its product market much wider than the Commission does. It is, of course, for their benefit but can also be the general understanding of the business.¹⁰¹ It should not be forgotten that the companies compare all the time their market shares to each other's. However, this misinterpretation can lead to very serious consequences for the company. The assessment can be seen as a risk to the companies.

⁹⁸ Jones and Sufrin 2011, 292.

⁹⁹ Commission Notice on the definition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 005-0013, para.13.

¹⁰⁰ Ojala, EU-kilpailuoikeus 2011, 262.

¹⁰¹ E.g. the company may consider that cash system is one relevant product market but the Commission could consider that cash system of each branch of business are own relevant markets. The difference between these two definitions is significant.

The relevant market where a company is alleged to hold a dominant position has to be defined. If the relevant markets are not defined, it is impossible to assess whether the company really is in a dominant position. It has been described above that the dominant position is not evaluated only based on market share, because the relevance of the market share varies case by case. However, the company's market share on the relevant market is an essential factor in the evaluation.¹⁰² This means that to find out whether or not a company has a dominant position, the relevant product and geographical markets need to be defined.

3.2.2.1 The product market

The purpose of defining relevant product markets is to find out whether the product has substitutes to which the customers could easily turn. It has been considered in legal practices that the circumstances of competition and demand and supply structure are significant when assessing whether it is possible to substitute a product with other products.¹⁰³ The European Union's case law has put importance on the characteristics and intended use of the product when assessing this substitutability from a consumer's side. The Commission's Notice on market definition includes the quantitative SSNIP (Small but Significant Non-transitory Increase in Price) test as the preferred mechanism for defining substitutability.¹⁰⁴

The relevant product markets have been defined in the following way in the Commission's Notice on market definition:

“A relevant product market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use.”¹⁰⁵

¹⁰² Ojala, EU-kilpailuoikeus 2011, 262.

¹⁰³ Tetra Pak International SA v Commission of the European Communities 1996, para. 5.

¹⁰⁴ Commission Notice on the definition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 005-0013, para. 17. SSNIP test essentially asks whether a small (5 – 10 percent), but non-transitory increase in price if one product (product A) will cause purchases to purchase sufficient of another product instead (product B) to make the price increase unsustainable. See also Jones and Sufrin 2011, 294.

¹⁰⁵ Commission Notice on the definition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 005-0013, para 7.

A company may hold a dominant position as a buyer or a seller for one or more products. Usually it is considered that a company abuses its position on the product market where it holds a dominant position.¹⁰⁶ There also exist primary and secondary product markets. The secondary products mean products that are purchased after the primary product to which they relate.¹⁰⁷ Competition matters arise when a primary product owner also supplies the product or service on the secondary market, the aftermarket. Relevant in relation to the subject of this thesis is the scenario where the supplier is only source of the product or service in the aftermarket which is compatible with the primary product.

3.2.2.2 The geographical market

The relevant markets have also a geographical dimension. The relevant geographical markets are defined in the Commission Notice as follows:

“The relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighboring areas because the condition of competition are appreciably different in those area.”¹⁰⁸

The Article 102 also sets out the limitation of geographical market. According to the Article, an abuse needs to exist within the internal market or in a substantial part of it.¹⁰⁹

3.2.3 Abuse as a concept

After the relevant markets have been defined, it is possible to assess whether a company abuses its position on the relevant markets. The question what is abuse is a vexed question.¹¹⁰ It should be noticed that the questions whether a company holds a dominant

¹⁰⁶ Ojala, EU-kilpailuoikeus 2011, 263.

¹⁰⁷ Jones and Sufrin 2011, 80.

¹⁰⁸ Commission Notice on the definition of relevant market for the purposes of Community competition law. Official Journal C 372, 09/12/1997 P. 005-0013, para 8.

¹⁰⁹ Ojala, EU-kilpailuoikeus 2011, 263.

¹¹⁰ Jones and Sufrin 2011, 262.

position and whether it has committed an abuse under the Article 102 may be interrelated and intertwined.¹¹¹

The Article 102 includes an example list of abuses of dominant position. The list is not exhaustive.¹¹² The list does not include for example behaviors which have been considered to be abuses in the EU legal practice. The examples concerns mainly situations where the company unreasonably exploits its market power in its business. In the beginning of the Commission's practice regarding the Article 102, the Article was interpreted in a way which protected dominant company's trade partners from misuse. Later on the Article has been interpreted to cover also other practices, *for example* when the company abstains from supply or refuses to license without a justified reason as a consequence of removing all possible competition from the market.¹¹³ Peculiar for abuse is that it reduces further competition on markets where a company's appearance has already impeded it.¹¹⁴

There occur two different main types of abuse of the dominant market position. Those are exclusionary abuse and exploitative abuse. Exclusionary abuse means behavior of a company in order to foreclose its competitors from the market and this way impeding competition. Exploitative abuse is in question when the company advantages its market power to exploit its customers. However, the cases where the Article 102 has been applied have mainly concerned exclusionary abuses.¹¹⁵

The Article 102 is applicable only when the abuse appreciably affects to trade between the Member States. The behavior will affect to the trade between the Member States if it interferes with the pattern of trade between the Member States or the structure of competition on the internal market.¹¹⁶

¹¹¹ Jones and Sufrin 2011, 262.

¹¹² Jones and Sufrin 2011, 261, footnote 6 "*It has, however, been argued that the list of categories of abuse in Art. 102 is exhaustive*".

¹¹³ Ojala, EU-kilpailuoikeus 2011, 273.

¹¹⁴ Ojala, EU-kilpailuoikeus 2011, 274.

¹¹⁵ Jones and Sufrin 2011, 269.

¹¹⁶ Jones and Sufrin 2011, 269.

3.2.3.1 Neighboring markets

Under the Article 102, also the behavior of a dominant company on a relevant product market which affects neighboring markets has been considered as abuse. The Article does not define in which product markets the abuse of dominant position has to occur.¹¹⁷ The Article 102 can be applied if a dominant position on one market makes possible an abuse on other markets, *that is*, a company in a dominant position on one market can prevent the competition on other markets.¹¹⁸ Condition for applying the Article 102 in these situations is that there has to be a connection between a dominant market position and the alleged abuse.¹¹⁹

4 DUTY TO LICENSE IN DOMINANT MARKET POSITION

4.1 Collusion between intellectual property rights and competition law

In chapter two was reviewed the copyright protection of software. The third chapter discussed about the definition of dominant market position and what is meant by abuse of it. In this chapter four will be reviewed the main question of this thesis; whether a dominant company is obliged to admit a right to use its intellectual property rights to its competitors and if so in which situations. However, first in this chapter will be reviewed whether there is a collision between intellectual property rights and competition laws.

The intellectual property rights and competition law have different grounds. Under intellectual property laws the right holder has the exclusive right to dominate its intellectual property regardless of the market power it has. Competition law on the other hand takes in to account markets and market power of the company. According to Mikko Välimäki, from the point of view of economics, it can be said that the aims of intellectual property rights and competition law are converging and there exists only an

¹¹⁷ Ojala, EU-kilpailuoikeus 2011, 264.

¹¹⁸ Kuoppamäki 2003, 650. See also Tetra Pak International SA v Commission of the European Communities 1996.

¹¹⁹ Ojala, EU-kilpailuoikeus 2011, 265.

apparent conflict between these two fields of laws.¹²⁰ After all, both of them have the same objectives; they aim to intensify competition through new innovations for the consumers' welfare.

Intellectual property rights are generally regulated under the national laws, though there is also some EU level regulation. The Member States intellectual property laws have sometimes created a tension with the EU competition rules. Although intellectual property rights have a great importance in a modern commercial world their interaction with EU competition law is complex.¹²¹ The complexity can be seen not only in relation to competition law but also in relation to the free movement of goods and services and the operation on single market. Firstly, the exclusive right can be used as a mechanism to prevent importation of goods and services from another Member State. Secondly, intellectual property rights can constitute an entry barrier on the market and lead to an abuse of a dominant market position in the purpose of the Article 102. Thirdly, the terms of license agreements between business partners may include restrictions of competition when the object of the agreement is intellectual property.¹²²

The possession of intellectual property rights do not create automatically a dominant market position, and holding a dominant market position is not prohibited under the EU jurisdiction, *that is*, a holding a dominant market position does not create assumption of abuse of it. Intellectual property right may, though, strengthen a lot company's competition position especially when the intellectual property is the core business of the company. The abuse of the dominant market position can come into the question when there are no substitute products for intellectual property or substitute products exist but only in a very limited amount. The conflict of intellectual property rights and competition law normally exists when used a narrow market definition. In this case the substitute of supply has also meaning, *that is*, whether the competitors can easily begin to supply substitute products.¹²³

The creator of an intellectual property has the exclusive right to its product and this can lead to a legal monopoly. The legal monopoly leads to market power and even

¹²⁰ Välimäki 2009, 169, footnote 351.

¹²¹ Jones and Sufrin 2011, 706.

¹²² Jones and Sufrin 2011, 707.

¹²³ Kuusniemi-Laine 2/2003, 1.

monopoly under competition laws. According to Luc Peeperkorn there can exist a matter under dispute “*that competition law would take away what IP law is providing*”. If there exist early copying of an innovation and free riding on an innovator’s efforts this harms the incentive to innovate. It should be remembered that intellectual property laws grant to the innovator a legal monopoly. However, according to Peeperkorn both intellectual property rights and competition law aims to the same which is promoting the consumers’ welfare. Intellectual property rights’ aim is not to promote an innovator’s welfare, but incentive the technical progress to the benefit of the consumers.¹²⁴

The lack of the incentive effect would create follow-on innovations and unnecessary long periods of high prices for the consumers. Unnecessary long periods for high prices would be in hand when the right holder obtains market power and where the intellectual property rights protects this monopoly position longer than is needed to incentive innovations. In order to have a right balance between over- and under-protecting of the innovators’ efforts there should be taken into account that intellectual property rights differs from and are normally less absolute than tangible property rights. The intellectual property rights are often limited in duration; not protected against parallel development by others; and they can lose their value once they become public. The competition policy aims to promote the consumers’ welfare as well but by protecting competition as a driving force of efficient markets and providing the best quality at the lowest price. For this reason the relevant question is not one of the conflict but a complementarity and possibly adjustment in the individual cases.¹²⁵

From the point of view of competition the intellectual property rights give the exclusive right for the right holder and protection against third parties. This protection does not automatically mean that the company has a dominant position. It is not against the Article 102 either that the company in a dominant position uses its exclusive right, provided the company does not abuse its position.¹²⁶ According to traditional paradigm based on industrial production the purpose of intellectual property rights is to produce the exclusive right for its right holder as a reward from a generally profitable development work. The industrial companies, especially software companies, invest to

¹²⁴ L. Peeperkorn 2003, 527, 527 - 528.

¹²⁵ *Ibid.*

¹²⁶ Ojala, EU-kilpailuoikeus 2011, 455.

research and product development and this way succeeds to improve production methods. The company can exploit its exclusive right by itself or it can license it for other companies against compensation.¹²⁷

In the EU's legal practice the abuse of intellectual property rights can mean situations where the company dives markets or charges too high license fees. Other situations where the company can abuse its intellectual property right are the refusal to use its intellectual property rights and the refusal to license it to third parties or by other methods excluding its competitors from the market and preventing new technologies.¹²⁸

There are two important points of view when applying the Article 102 to intellectual property rights. Firstly, what is the extent of intellectual property which is considered to be required to keep the intellectual property owner having a dominant market position? Secondly, there is the question whether the holding or exploitation of intellectual property rights can constitute an abuse of a dominant market position, and if so in which circumstances. In case a protected product is a part of wider market the intellectual property rights does not itself comprise the dominant position. But if the relevant market comprises only a product protected by the intellectual property rights then there will be a *de facto* dominance for the reason that the intellectual property rights will constitute an entry barrier preventing the supply or entrants.¹²⁹

The tension between intellectual property rights and competition law is a consequence of the exclusive right of the intellectual property's owner which prevents the competitors to exploit the protected product due to the right holder has a right to refuse licensing its product. However, Petri Kuoppamäki does not see there is tension because the objectives of both competition law and intellectual property rights are converging. The both legal fields aim to dynamic efficiency and economic welfare in general. However, intellectual property rights and competition law can be in contradiction in individual cases even they are not in contradiction in objective level.¹³⁰

¹²⁷ Kuoppamäki 2003, 835.

¹²⁸ Ojala, EU-kilpailuoikeus 2011, 455. Original reference Händelin, Markus, Huopainen Toni, Keturi Kari and Luostarinen, Jukka, Kilpailuoikeuden käsikirja; Helsinki 2001, 129.

¹²⁹ Jones and Sufrin 2011, 780.

¹³⁰ Kuoppamäki 2003, 831.

The convergence of intellectual property rights and competition law can be considered also as a classic question. It can be asked whether the competition law receives priority over intellectual property rights or the other way around; whether intellectual property rights should be considered as any other property; or the question should be argued with cost-benefit-analysis.¹³¹ Kuoppamäki considers that when applying competition law the intellectual property rights should be considered as any other property. It is one form of asset types. Intellectual property right possess the same freedom of contract and protection of property as do tangible property, and the same principles of competition law applies to the use of both of them. However, the special features of intellectual property right need to be taken into consideration. It is true that competition law restricts a dominant company's possibility to exploit fully its intellectual property rights but by competition law it is also possible to protect the intellectual property rights of a weaker party.¹³²

The relationship of intellectual property rights and competition law is sometimes complex. Especially when competition law has required dominant companies to license their rights to third parties against dominant companies' will. As stated before, owning an intellectual property does not automatically lead to an abuse of dominant market position, still when certain circumstances are present holding an intellectual property can be an abuse under Article 102.

The fundamental question, however, is whether intellectual property rights and competition law are in conflict or whether they have same goal but different routes. It can be seen that both aims to protect consumers' welfare and both have the same objective. In order to get complete picture how intellectual property rights operates under the Article 102 these two needs to be reviewed together.¹³³ Therefore these will be treated together under this chapter four.

¹³¹ See Kuoppamäki 2003, 836 where he lists four different options how approach integration of competition law and intellectual property rights. Ilkka Rahnasto has treated these options in his doctoral thesis. See more Rahnasto, Ilkka, *How to Leverage Intellectual Property Rights. Intellectual Property Rights, External Effects and Antitrust in the Communication Industry*. Yliopistopaino, Helsinki (2001), pp.18.

¹³² Kuoppamäki 2003, 840.

¹³³ Jones and Sufrin 2011, 780.

4.1.1 Refusal to supply

Refusal to supply has been considered to be one form of abuse under the Article 102. If a dominant company refuses to supply its products or services or grant access to its premises the dominant company may infringe the Article 102.¹³⁴ Also if a dominant company is willing to supply its product or services or grant access to it premises but knows the offer includes terms which are unacceptable for the company may be considered to infringe the Article 102, *that is*, the company practically refuses to supply because it knows the customer will not purchase the product or service with the terms it offers.¹³⁵ These kinds of behaviors are an example of prohibited based on a dominant position. In other words a non-dominant company does not infringe the Article by unilateral refusal to supply. Though, the dominant company has no absolute obligation to supply everyone who requests a supply.¹³⁶

The refusal to supply is normally classified as an exclusionary abuse. This means the dominant company refuses to supply a product or service or grant an access to its facilities which the other party needs to be able to compete on the market. Often a company has a dominant position in an upstream market but operates also in downstream market and refuses to deliver the facilities to competitors on that downstream market.¹³⁷ The refusal to supply may also mean, *for example*, supplying with discriminatory terms or in a way that exploits the upstream dominance to the prejudice of the competitors. In other words the refusal to supply does not need to be absolute. There are also other forms of abuses such as tiding which can be seen as a

¹³⁴ See Jones and Sufrin 2011, 480: “*The idea that a dominant company has a duty to supply, and that refusal to do so will be an abuse, is contrary to deep-seated notion of freedom of contract which decree that one should be free to deal with whom one chooses. The EU position on when and why in the name of competition that freedom should be limited has been developed in stream of decisions and judgments beginning with Commercial Solvents in 1973.*” See also Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission of the European Communities 1974.

¹³⁵ E.g. Napier Brown - British Sugar 1988, where British Sugar offered to the downstream competitor special grain instead of industrial sugar and very high price that the competitor could not use it.

¹³⁶ Jones and Sufrin 2011, 479 - 480.

¹³⁷ This refusal to supply is dealt with in Guidance Paper and is the only refusal to supply dealt in it. Communication from the Commission - Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (Text with EEA relevance), 24/02/2009, para. 77.

refusal to supply.¹³⁸ These forms of infringements are, however, left outside the scope of this thesis.

As said the refusal to supply is an abuse of dominant position in certain situations. If the company has a justified reason not to supply, it should not be obliged to deliver. However, it has been very difficult for the companies in dominant position to prove that the refusal to supply an existing customer is objectively justified.¹³⁹ *Commercial Solvents* case was the first case where refusal to supply was considered to be infringement of the Article 102. In this case Commercial Solvents which was in a dominant position on upstream markets excluded competitors from downstream markets by its refusal.¹⁴⁰ It concerned outright refusal to supply existing customers. Later in *Telemarketing* case refusal to supply was expanded to concern new customers as well.¹⁴¹ In both cases the refusal concerned competition on a downstream market.¹⁴²

In *Volvo v. Veng* the ECJ found that refusing to supply when it is appealed to intellectual property rights was not abuse of dominant position.¹⁴³ In here Volvo refused to admit user right to car's reconditioned units to third parties. Volvo had a model right to those reconditioned units and it wanted to deny from third parties the possibility to supply these reconditioned units for car repair. The ECJ decided Volvo had a right to base its refusal on its intellectual property rights. However, the ECJ noted that in exceptional circumstances the refusal to supply can be considered infringing the Article 102. Further, the ECJ stated that it may have been abuse of dominant position if, a) refusal to supply reconditioned units for an independent garage was based on arbitrary; b) there would exist unreasonable pricing; and c) a company decides to stop producing spare parts for a car model which is still commonly used.¹⁴⁴

¹³⁸ Jones and Sufrin 2011, 480.

¹³⁹ *Ibid.*, 480. Though, in *Bp v. Commission* case the EC J saw the refusal to supply was justified with circumstances in hand. See *Benzine en Petroleum Handelsmaatschappij BV and others v Commission of the European Communities* 1978.

¹⁴⁰ *Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission of the European Communities* 1974.

¹⁴¹ *Centre belge d'études de marché - Télémarketing (CBEM) v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB)* 1985.

¹⁴² Jones and Sufrin 2011, 486.

¹⁴³ *AB Volvo v Erik Veng (UK) Ltd* 1988.

¹⁴⁴ Jones and Sufrin 2011, 499.

Later the ECJ decided in *Magill* case that refusing to license intellectual property rights can be abuse of dominant position.¹⁴⁵ The ECJ noted that refusal to license itself is not abuse of dominant position but in *Magill* was question of exceptional circumstance and for that reason it could be considered as an abuse of dominant position. If the right holder produces by itself a product based on its intellectual property rights the company may be obliged to license its intellectual property if the right holder is not able to correspond to demand.¹⁴⁶ *Magill* case will be reviewed later more closely because of its importance as an essential facility case.

In *Tiercé Ladbroke* case a Belgian betting company, Tiercé Ladbroke, wanted TV-broadcasting rights for horseraces arranged in France in order to exercise betting business in Belgium. The Court of First Instance (CFI), however, decided that broadcasting rights were not necessary for betting business activity.¹⁴⁷ In here were set out the grounds when refusing to license could be abuse of dominant market position. The CFI found refusal could be against the Article 102 when: a) it is a question about a product or service which is necessary for exercising the business and there exists no substitute product or service; or b) entry of a new product or service is prevent despite of the fact that there is special, ongoing and regular consumer demand for the product or service.¹⁴⁸

A dominant company has not an absolute obligation to supply, but in certain situations the refusal to supply may be infringe the Article 102. There is cases where the refusal to supply has been considered an abuse but also cases where it has been found not to infringe the Article 102. In practice the company chooses to whom they conclude the license agreement and with which terms. If a company considers it is unfavorable for it to conclude a contract with certain customers it can refuse not to. However, if the refusal to supply may be considered an abuse it leads to the situation where the company should not refuse to supply in order to ensure it does not infringe competition laws.

¹⁴⁵ Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities 1995.

¹⁴⁶ Ojala, EU-kilpailuoikeus 2011, 456.

¹⁴⁷ Tiercé Ladbroke SA v Commission of the European Communities 1977.

¹⁴⁸ Ojala, EU-kilpailuoikeus 2011, 457.

4.1.2 Duty to license

The first case where the duty to supply was dealt with was *Commercial Solvents* case in 1973.¹⁴⁹ After that duty to supply has been developed in the EU case law. By duty to license is meant that a company in a dominant position may have a duty to supply in some situations in order to effective competition. In regard to the case law the duty to license can be seen as a remedy under essential facility. In other words if refusing to license is not an abuse, a duty to license is not a right remedy. However, there should be some other abusive behavior than only refusal to license in order to oblige a company in a dominant position to license.¹⁵⁰ The questions are here when and why a company has a duty to supply due to effective competition. The duty to supply interferes to the principle of freedom of contract that the one should be free to conclude agreements with whom one chooses.¹⁵¹

Duty to license has been under the Commission's scrutiny in several cases. In *IMS Health* case IMS Health was considered to have a dominant market position in sales statics market.¹⁵² Further, the Commission considered IMS Health abused its dominant position due to IMS Health removed all competition from the relevant market by denying to license its system. IMS Health appealed that it has a right not to admit license, due to its copyright, for its competitors in those markets where the copyright relates to. The Commission however found that copyright was not a justified reason for refusal when it prevents all competition on the market. The Commission obliged IMS Health to license its product to its competitors. After *IMS Health* case the precondition to order duty to license is that the company wanting to license a product has to bring new products including new features demanded by consumers onto the markets and the product has to. In legal research it has been noted that *IMS Health* case extended the scope of duty to license set in *Magill* case.¹⁵³

The latest example of applying the essential facility doctrine in intellectual property field is *Microsoft* case. *Microsoft* had a dominant position in operating systems and

¹⁴⁹ Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission of the European Communities 1974.

¹⁵⁰ Lang, 517.

¹⁵¹ Jones and Sufrin 2011, 480.

¹⁵² NDC Health/IMS Health: Interim measures 2001.

¹⁵³ Ojala, EU-kilpailuoikeus 2011, 456 - 457.

refused to give interface information to its competitors. The Commission decided 2004 that *Microsoft's* behavior restricts technical development to the detriment of consumers.¹⁵⁴ To be able to produce software which runs in the operating system the interface information is necessary. In 2007 the CFI decided that frustration of technical development beside the entry to the market of new product or genesis of a new market may be considered a reason for compulsory licensing when it is question of a company in a dominant position.¹⁵⁵

The duty to supply should not be applied to intellectual properties as it is applied to physical products. When it is necessary to intervene to intellectual properties and use it by means of competition law, the aims and content of intellectual property rights needs to be taken into account. Obligation to license can mean to a company invalidation of the monetary value of its intellectual property rights.¹⁵⁶

4.2 The essential facility doctrine

4.2.1 Essential facility as a concept

In legal practice a dominant company's refusal to supply its assets to its competitors on neighboring markets has been considered to be an abuse of dominant market position when the asset has been essential for competitors in order to compete on the relevant markets. In these situations a company has been obliged to grant access to its assets if there have been exceptional circumstances in hand. Under these cases has been developed the essential facility doctrine.¹⁵⁷

By essential facility is meant something owned or controlled by a vertically integrated dominant company to which other companies need access in order to provide products or services to their customers.¹⁵⁸ The essential facility is considered to be hardly or impartibly duplicable or it is not profitable to duplicate it. The essential facility is also

¹⁵⁴ Microsoft 2004.

¹⁵⁵ Microsoft Corp. v Commission of the European Communities 2007.

¹⁵⁶ Kuusniemi-Laine 2/2003, 3.

¹⁵⁷ Ojala, EU-kilpailuoikeus 2011, 293. See also Oscar Bronner GmbH & Co. KG v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and others 1998, para. 38; and IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG 2004, paras. 40 - 45.

¹⁵⁸ Jones and Sufrin 2011, 486. This is called sometimes also as a "bottleneck monopoly".

so important for competition that the effective competition is eliminated without access to it. Typically, there exist two different markets; the upstream market where the essential facility is held and the downstream market where the competition is eliminated.¹⁵⁹ A dominant company's refusal to grant access to an essential facility which it holds over is a breach of the special responsibility of the company.¹⁶⁰

The essential facility is an exception of the general rule that a company has no obligation to deal with its competitors. For this reason it has been developed in the case law the four cumulative conditions under the essential facility doctrine. These four cumulative criteria have to be met before the dominant company can be obliged to grant access to its asset: 1) the access to the facility is indispensable for competitor in order to exercise competition on the relevant market, provided there is no substitute and it is practically impossible for competitor to develop a substitute alone or together with other competitors; 2) refusal to supply eliminates competition on the relevant market; 3) refusal prevents appearance of a new product for which there is potential consumer demand; and 4) there is no objective justification for refusal.

The facility has to be indispensable for competitor in order to provide products or service to the customers. Whether the facility is indispensable the following issues need to be evaluated. First, it needs to be evaluated whether there exist substitutes for the facility from competitor's perspective.¹⁶¹ If so the facility cannot be considered essential. In addition the facility should be a "*strict complement*" in competitor's production process or in operation.¹⁶² Thirdly, indispensability requires consumers' demand. If consumers consider there is no substitute for asset on the market there is consumer's demand.¹⁶³ And fourthly, it is not possible for competitors alone or together to produce a substitute.¹⁶⁴ This means that the essential facility is hardly or impracticably duplicable or it is not profitable to duplicate it. According to Reiffen and

¹⁵⁹ T. Mylly, *Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law*. 2009, 502.

¹⁶⁰ Jones and Sufrin 2011, 486.

¹⁶¹ Oscar Bronner GmbH & Co. KC v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and others 1998, para. 46 of the Advocate General's Opinion; and para. 43 of the ECJ's judgement.

¹⁶² This fact was lacking in *Ladbroke* case.

¹⁶³ T. Mylly, *Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law* (2009), 509 – 510.

¹⁶⁴ Oscar Bronner GmbH & Co. KC v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and others 1998, paras. 65 and 68 of the Advocate General's Opinion; and paras. 44 – 46 of the ECJ's judgment.

Kleit, "if assets cannot be economically reproduced by another company but are economically essential to all producers of same good, then all producers of that good should have equal access to the asset."¹⁶⁵

The concept of essential facility requires two different markets, the upstream market which possess the facility and downstream market where the competition is prevented. Usually in the essential facility cases question is vertically integrated companies which operates both on upstream and downstream markets.¹⁶⁶ It is not a question of essential facility if there does not exist competition in the downstream market regardless of refusal to supply.¹⁶⁷

The refusal to admit access to an essential facility may constitute an infringement under the EU competition law. In this kind of situation it is possible to oblige an infrastructure holder to admit a license to infrastructure with reasonable and non-discriminable terms. The common opinion actually is that the facility holder should be obliged to admit a license in case the refusal would lead to an entry barrier or cause serious and permanent harm in consequence the business would be unprofitable.¹⁶⁸ However, granting an access has to be technically possible without extra investments or capacity increases.¹⁶⁹

According to Jones and Sufrin, there should be some kind of way of identifying facilities to which access by competitor is truly essential rather than merely desirable. They considers that even the facilities are identified there may be practical problems about access and sharing. Granting an access has to be technically possible without extra investments or capacity increases.¹⁷⁰ Because some facilities have limited capacity such as ports, it should be then decided which competitors should be given the access to that facility.¹⁷¹

¹⁶⁵ Reiffen and Kleit 1990, 419.

¹⁶⁶ T. Mylly, Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law (2009), 502.

¹⁶⁷ Kuoppamäki 2003, 791.

¹⁶⁸ T. Mylly, Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä? 2002, 359.

¹⁶⁹ Lang, 439 and Jones and Sufrin 2011, 489.

¹⁷⁰ Lang ,439 and Jones and Sufrin 2011, 489.

¹⁷¹ Jones and Sufrin 2011, 489-490 There also comes question which are the terms by the company has to give access to the facility , *that is*, are the parties able to settle the fair price or is it the authority which will act as a price regulator. See also Jones and Sufrin 2011, 490, footnote 555. In Microsoft case T-201/04 Commission had left the decision of reasonable terms to Microsoft, but later found that Microsoft had not supplied interoperability information on reasonable terms.

4.2.1.1 The development of the essential facility doctrine under US law

The essential facility doctrine has its origin in US antitrust law.¹⁷² The first essential facility doctrine case is *Terminal Railroad Association of Saint Lois* by the US Supreme Court from 1912.¹⁷³ The Terminal Railroad Association of Saint Lois had bought three independent terminal facilities operating the railroad traffic through St. Lois over Mississippi river. The association was controlling all railway bridges and switch yards into and out of St. Lois. St. Lois was significant junction for east-west rail traffic. For particular railroads, which were non-owners of terminal, were denied access to the terminal, and this way excluding them from competing with the owners of terminal or they were required to pay higher prices than the owners paid.¹⁷⁴ The Supreme Court found that when a private company or a joint of companies holds a facility which is sufficiently essential for its competitors and for functioning competition on the relevant market, the facility may not be used to prevent the operation of competitors neither impede functioning competition on the markets which are dependent on the facility.

One of the leading essential facility cases in US antitrust law is *MCI Communications Corporation v. AT&T* case from 1983.¹⁷⁵ AT&T was a monopolist telecommunication provider. MCI wanted the access to AT&T's local service network in long distance services which AT & T denied from it. By refusal AT & T limited those services which MCI would offer to its customers. The refusal to grant access was found unlawful and the court based on its decision to the essential facility doctrine. Under this case was developed a four cumulative conditions. The company holding an essential facility have the duty to grant access to essential facility with non-discriminatory terms, provided the following four conditions are present: 1) a monopolist controls the facility; 2) a competitor is not able to practically or reasonably to duplicate it; 3) the monopolist denies the use of the facility; and 4) it is feasible to provide the facility.¹⁷⁶ These four

¹⁷² Kuoppamäki 2003, 795.

¹⁷³ United States v. Terminal Railroads Association of Saint Lois 1912.

¹⁷⁴ Reiffen and Kleit 1990, 420.

¹⁷⁵ MCI Communiations Corporation v. AT&T 1983.

¹⁷⁶ MCI Communiations Corporation v. AT&T 1983, para 32. See also Pitofsky, 6.

cumulative conditions have been applied and developed later on in essential facility cases.¹⁷⁷

The essential facility doctrine has been developed mostly in practice of lower courts' and in legal literature where some of the US Supreme Court cases have been classified to be essential facility cases. The essential facility doctrine has been developed in three steps. In first step were the US Supreme Court's decisions where a company holding an infrastructure or bottleneck was obliged to admit access to its facility. In second step, the US Supreme Court's decisions were studied in legal science when the concept of essential facility was discovered. At the last stage lower courts started to apply essential facility doctrine in their decision.¹⁷⁸ However, the US Supreme Court hasn't explicitly used essential facility in its decisions.¹⁷⁹ This same applies to the European Court of Justice and will be discussed below.

4.2.1.2 The development of the essential facility doctrine in EU

The essential facility doctrine became a significant trend in EU's competition law in 1990s.¹⁸⁰ The Commission made first reference to the essential facility doctrine in 1992 in *B&I v. Sealink* case.¹⁸¹ In here the Sealink was on owner and operator of the port of Holyhead as well as a ferry operator at the same route than B&I. Because of the structural factors of the harbor the timetable changes of the harbor hindered B&I's loading and uploading actions in benefit of Sealink. The Commission laid down in its decision that a dominant company which holds an essential facility may have to provide access competitors with non-discriminatory terms.¹⁸² In *B&I v. Sealink* the essential facility was defined as "a facility or infrastructure without access to competitors cannot provide services to their customers".¹⁸³ In another harbor decision *Sea Containers/Stena*

¹⁷⁷ T. Mylly, *Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law* 2009, 505.

¹⁷⁸ Kuoppamäki 2003, 795 - 796.

¹⁷⁹ T. Mylly, *Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä?* 2002, 363.

¹⁸⁰ Kuoppamäki 2003, 791.

¹⁸¹ *Sealink / B&I Holyhead: Interim Measures* 1992. See also Jones and Sufrin 2011, 486. The essential facility doctrine principle was used in *Commercial Solvent* and *Telemarketing* cases and gave rise to the development of the concept in EU law.

¹⁸² *Sealink / B&I Holyhead: Interim Measures* 1992, para. 41.

¹⁸³ *Sealink / B&I Holyhead: Interim Measures* 1992.

Sealink the Commission confirmed that the duty to supply essential facilities set out in *B&I v. Sealink* apply to new as well as existing customers.¹⁸⁴

The essential facility was used first time by the ECJ in *Oscar Bronner* case.¹⁸⁵ *Bronner* can be kept a leading essential facility judgment of the ECJ. In here the ECJ set out the limited circumstances in which the access to a facility will be commanded.¹⁸⁶ The case will be studied more closely in the next chapter. As stated above the European Court of Justice has not explicitly referred to the essential facility doctrine even though the doctrine has effected to EU's competition law, having actually an important role, by the practices of the Commission.

It can be seen that the object of the essential facility doctrine has changed in last 100 years from railways to telecommunication and further to networks, intellectual properties and information services which are essential for the information technology society. In chapter 4.3 will be continued studying of the essential facility doctrine's development in relation to intellectual property rights.

4.2.1.3 Oscar Bronner case

Oscar Bronner case is one of the early cases where the essential facility doctrine was applied by the ECJ though without mentioning doctrine itself in its arguments.¹⁸⁷ The case has been considered to be one of the clearest essential facility doctrine cases in the European case law.¹⁸⁸ In *Bronner* was the question about whether the respondent, Mediaprint, abused its dominant market position when it rejected to offer a home delivery service of daily newspapers for Bronner against reasonable compensation. Bronner was Mediaprint's competitor. The ECJ needed to answer to the question considering the Article 102 whether Mediaprint, which has a remarkable market share in the Member State's daily newspaper markets and Member States only home delivery service system covering whole country, committed to abuse of the dominant market

¹⁸⁴ Sea Containers Ltd/Stena Sealink 1994. See also Jones and Sufrin 2011, 489.

¹⁸⁵ Oscar Bronner GmbH & Co KG v. mediaprint 1997, Oscar Bronner GmbH & Co. KC v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and others 1998.

¹⁸⁶ Jones and Sufrin 2011, 491.

¹⁸⁷ Oscar Bronner GmbH & Co. KC v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and others 1998. See also T. Mylly, EY:N TUOMIOISTUIMEN RATKAISUJA 3/1999, 19.

¹⁸⁸ T. Mylly, Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä? 2002, 366.

position when denying to offer this system to its competitors. Bronner appealed that it wouldn't be economically wise for it to provide own home delivery system or provide it jointly with other competitors.

Mediaprint published daily newspapers *Neue Kronen Zeitung* and *Kurier* which have significant market share in Austria. Beside the significant market share Mediaprint provided a home delivery service established for its newspapers covering the whole state. It was only this kind of system in Austria. The idea was that the newspapers were delivered straight to customers early in the morning.

Oscar Bronner, however, published and delivered a daily newspaper called *Der Standard*. It claimed Mediaprint should be obliged to stop abusing of its dominant market position and take *Der Standard* part of its home delivery system against reasonable compensation. Bronner argued that mailing through the post is not equal to home delivery system because the customers would receive their magazines at noon, not early in the morning. Bronner also argued that it wasn't profitable to provide own home delivery system as there wasn't so many customers who ordered *Der Standard*-magazine. Bronner argued that Mediaprint hold an essential facility and it was obliged to offer access to the services for competitors against the terms which equals normal market terms.

Mediaprint responded that to start up the home delivery system required major investments from it. Also the capacity of the systems would be exceeded if all publishers would be attached to the system. Mediaprint argued the dominant position does not oblige it to support competition by favoring its competitors. It continued that also in dominant position the company can freely decide with whom it wants to deal. It referred to *Magill*-case that duty to license can be applied only in the exceptional circumstances. Moreover, Mediaprint argued it had an objective ground for its denial. The system could be overloaded if *Der Standard* would be attached to it; or it could be even impossible to attach *Der Standard* to the system.

The ECJ considered referring to *Magill* that the four factors which would have to be present before the refusal could be an abuse were not fulfilled in here.¹⁸⁹ Those factors are: a) the denial would eliminate all competition in the downstream market from the competitor; b) there is no objective justification for denial; c) the access has to be indispensable for company's operation on the market, *that is*, meaning the system could not be replaced factually and possibility with any other system; and d) there are no actual or potential substitute for facility.¹⁹⁰

The ECJ was restrictive toward the obligation to grant an access to facilities. It emphasized that the denial must be likely to eliminate all competition from the company wanting the access, not to make the competition harder. Access must also be indispensable because there must be no actual or potential substitute. The ECJ argued there exist other ways to deliver daily newspapers and there was no technical, juridical or economic reasons which would prevent or make unreasonably difficult to establish an own nationwide home delivery system alone or jointly with other publishers. In here the access could have been indispensable only if it was not economically viable to create a home-delivery system for a newspaper with a comparable circulation to the dominant company's.¹⁹¹ In *Bronner* the Opinion of General Advocate Jacobs reminded the Court for the fact that the primary purpose of the Article 102 was to protect the consumers, not the competitors.¹⁹²

In *Bronner* many questions were left open such as problems of pricing, how the company owning the facility should deal with competing claims for access or the role of competition authorities in essential facilities scenarios. However, in *Bronner* the ECJ touched on the question whether the case law on intellectual property rights (, *that is*, *Magill*) is applicable to other property rights.¹⁹³

Bronner was a quite simple case in itself. It concerned a private company's facility. The facility was built up with its own resources and the competing company was operating satisfactorily on the downstream market without access to the facility. The ECJ made

¹⁸⁹ Oscar Bronner GmbH & Co. KG v. Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG and others 1998, para. 41.

¹⁹⁰ *Ibid.*

¹⁹¹ *Ibid.*, paras. 45 – 46.

¹⁹² Jones and Sufrin 2011, 492.

¹⁹³ *Ibid.*, 494.

clear that facilities are not lightly to be defined essential or access lightly required. The situation would be different if the ECJ had considered in *Bronner* the situation suitable for the application of the doctrine.¹⁹⁴ *Bronner* wasn't dependent in Mediaprint's home delivery system in its publishing and delivery operation. Access to the system would probably make *Bronners* business more efficient, but the purpose of competition law is to protect competition, not individual competitors.

It has been argued that the decision of *Bronner* case will lessen appealing to abuse of dominant market position in the cases where competitor wants to exploit investments of the dominant company to easy or increase the efficiency its own business. However, Tuomas Mylly stresses the fact that every situation is different and the evaluation is always made separately on each market and competition situation.¹⁹⁵

4.2.2 Essential facility doctrine and intellectual property rights

The essential facility doctrine has traditionally been applied to tangible property as presented above. However, the doctrine is nowadays applied to intellectual properties as well. This has aroused discussion whether the doctrine can be applied to intellectual properties at all. In other words can intellectual properties such as software or technical standards or interoperability information be kept an essential facility?¹⁹⁶ The fact is however that the essential facility has been applied to intellectual property rights. Moreover, many central facilities are nowadays protected by intellectual property rights which mean those are also more important for competition. The intellectual property may imply that the requirement of indispensability is satisfied quite easily in situations of unique information and standards.¹⁹⁷

The same four cumulative criteria are applied to intellectual property rights than tangible property. The specific characters of intellectual properties protected under relevant laws should be, however, the central competition law principles underlying the essential facility doctrine can be applied. These characters are discussed in this

¹⁹⁴ Jones and Sufrin 2011, 494.

¹⁹⁵ T. Mylly, EY:N TUOMIOISTUIMEN RATKAISUJA 3/1999, 22.

¹⁹⁶ Kuoppamäki 2003, 793.

¹⁹⁷ T. Mylly, Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law. 2009, 515 – 516.

chapter.¹⁹⁸ The logic of four cumulative criteria is not absolutely clear. One way is to review the criteria is that the indispensability covers also the elimination of competition criterion.¹⁹⁹ This is the logic which has been used in here.

Indispensability analysis has been similar in cases which concerns tangible properties and intellectual properties.²⁰⁰ It has always been investigated in the essential facility cases whether or not there exist substitutes for the product. If there is a substitute for intellectual property on the market, it is not indispensable. The sufficient argument cannot be that the other intangible facility is less advantageous for the perspective of competitor. As required in regard to tangible products, the competitor has to modify its operation or production for the already available facility if that kind of exist. The purpose is not to give the access just because it is the easiest and cheapest option for the competitor. However, it is provided that the available facility enables entry to the market and maintenance effective competition on the market.²⁰¹

One requirement for indispensability is that the facility protected by intellectual property rights has to bring a “*strict complement*” to competitor’s operation and production process. In *Tiercé Ladbroke* case this requirement was not met.²⁰² It is also required that there is consumers demand for the new product. If from consumers’ point of view there are enough substitutes on the market, the facility is not considered being indispensable in general to competition. It is not enough that it is indispensable just for some competitors but it has to be indispensable in general to competition.

The indispensability requirement which has been applied, *for example*, in *Bronner* applies to intellectual properties as well. The requirement set out in *Bronner* is that if it is practicable and economically feasible for competitor alone or with other competitors to develop a substitute enabling the competition the facility is not indispensable. The development of substitute should considered preference over duty to license.²⁰³

¹⁹⁸ T. Mylly, *Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law*. 2009, 515 – 516.

¹⁹⁹ *Ibid.*, 508.

²⁰⁰ *Ibid.*, 515 – 516.

²⁰¹ *Ibid.*, 516.

²⁰² *Ibid.*, 516.

²⁰³ *Ibid.*, 517.

The new product criterion has been set in the case law concerning intellectual property rights. It was developed in *Magill* by the ECJ. In this case it was considered to be a part of the cumulative criteria and used later in *IMS Health* and *Microsoft* cases. New product criterion can be seen as an additional criterion beside the four cumulative criteria, *that is*, if the company prevents entry of a new product on the market by refusing to license its facility it can be considered an abuse of dominant position. It is however provided that there is demand for the new product among the consumers. In *Microsoft* case the new product criterion was developed further. It has been argued that list of exceptional circumstances of situations where the duty to license is possible was not an exhaustive list. After *Magill* it has been modified in other cases such as in *Microsoft*. The new product criterion is however not applicable in all intellectual property cases.²⁰⁴

As said above in *Microsoft* the new product criterion was developed further. In here the new product criterion could not become in question because Microsoft itself was producing its own software on work group server operating system market.²⁰⁵ The Commission however found that there is limitation of technical development to the prejudice of consumers and that was considered to fulfill the new product criterion.²⁰⁶ In other words the limitation of technical development prevented entry of new products.

Under the new product criterion has been also evaluated the incentive to innovation from competitors side. In *Microsoft* it was evaluated does the refusal to license reduces competitors' incentive to innovate.²⁰⁷ The refusal to license could affect negatively to the development on the relevant markets on the basis of competition on the development of products which are different than the facility of a dominant company.²⁰⁸

The incentive of Microsoft to innovation was discussed under objective justification argumentation.²⁰⁹ Microsoft argued that its refusal to license is objectively justified due to its intellectual property right. It considers the duty to license would affect as

²⁰⁴ *Ibid.*, 517 – 519.

²⁰⁵ *Ibid.*, 519.

²⁰⁶ *Microsoft Corp. v Commission of the European Communities* 2007, para. 665.

²⁰⁷ T. Mylly, *Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law*. 2009, 523.

²⁰⁸ *Ibid.*, 523.

²⁰⁹ *Microsoft Corp. v Commission of the European Communities* 2007, para. 659.

disincentive for its future invest in creation of more intellectual property.²¹⁰ However, it was considered that the intellectual property right itself is not objective justification when the exceptional circumstances exist.

Essential for intellectual property is that it does not diminish in use. The owner of intellectual property can continue to exploiting, *for example*, software also after licensing it for third parties. Because of this non-rivalrous nature of intellectual properties it is also possible to share and give access to it. It is feasible to admit user right to the intellectual property, especially to software, and there does not come up same kind of technical obstacles to share it as with tangible products.²¹¹

The same four cumulative criteria can be applied to intellectual property as has been applied other properties. However, the special characters of intellectual property rights should be taken into account when applying essential facility doctrine.

4.2.3 Criticism toward essential facility doctrine in relation to intellectual property rights

Duty to license intellectual property rights includes certain problems. The question of the interaction of competition law and intellectual property rights is much disputed in competition law.²¹² Some of the legal writers consider the essential facility doctrine does not apply to intellectual property rights.²¹³ For example in Germany where essential facility doctrine is part of German's competition law has left the intellectual property rights outside the doctrine.²¹⁴ These legal writers consider that the questions regarding incentive effect and balance should be solved by intellectual property right rules; therefore competition law should not be applied to intellectual property rights as the intellectual property legislation should be able to solve these questions by its own

²¹⁰ T. Mylly, *Intellectual Property and European Economic Constitutional Law. The Trouble of Private and Informational Law*. 2009, 526.

²¹¹ *Ibid.*, 515.

²¹² Jones and Sufrin 2011, 497.

²¹³ T. Mylly, *Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä?* 2002, 392.

²¹⁴ *Ibid.*, Original reference Ullrich, Hanns: *Intellectual Property, Access to Information, and Antitrust; Harmony, Disharmony and Intellectual Harmonization*. In *Expanding the Boundaries of Intellectual Property, Innovation Policy for Knowledge Society*. Dreyfuss, Rochelle; Zimmerman, Diane L and First, Harry 2001), Oxford University Press.

rules.²¹⁵ The debate in this matter concerns whether intellectual property rights are already provided by own law and that compulsory licensing of intellectual property rights is a dangerous disincentive to innovation.²¹⁶

Each company on the market aims competitive advantage compared to its competitors by creating new and better products in order to achieve the goal. Developing new products requires huge investments and is time-consuming and therefore the company should be compensated for its efforts and investments. These investments are rewarded by exclusive right. This constitutes for competitors a need to develop optional technologies and technical solutions. If the company is obliged to license its intellectual property there is risk that competitors “free rides” at the expense of its innovations. The duty to license the software could have the opposite effect than incentive for new innovations what is the aim of intellectual property rights and competition law.²¹⁷ Neither it is against Article if a company wants to keep its dominant position. It does not abuse its dominant position just by refusing to license the software.²¹⁸

According to Kuoppamäki, however, the debate of the essential facility doctrine relates to meaningful of competition law, the market power which is required for application of doctrine as well as realistic measures of competition authority. When applying the essential facility doctrine there has to be weighed the freedom of the contract against importance of entry to the market.²¹⁹ In other words there needs to be weighed two different collective goods against each other. If the duty to license is ordered, the question is on which kind of terms the access is granted and who will set the terms. If it is the assets holder the terms might end up be unreasonable or if it is the Commission the authority will act as a price regulator.²²⁰

The intellectual property rights and competition law have a different approach. Intellectual property law does not take into account market power, the structure of markets and dynamic level of these. Intellectual property rights are applied in a same way in each situation. However, the competition law is based on defining the markets

²¹⁵ T. Mylly, Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä? 2002, 393.

²¹⁶ Jones and Sufrin 2011, 498.

²¹⁷ *Ibid.*, 490. See also Kuoppamäki 2003, 792.

²¹⁸ Jones and Sufrin 2011, 490.

²¹⁹ Kuoppamäki 2003, 792.

²²⁰ Jones and Sufrin 2011, 490.

and evaluating effect of companies' actions' to markets in each case separately. This means it is easier to take into account a market situation and dynamic side of markets in competition law.²²¹

Finally, according to Mylly the main debate should not be whether the essential facility doctrine applies to intellectual property rights.²²² The precedents of the essential facility doctrine should not be seen as rule type precedents, which frame a coherent and general suitability of criteria of the essential facility doctrine. The essential facility doctrine should rather be seen as a description of a category of situations where it may be grounded to apply the basis competition law norms.²²³ Intellectual property rights should be considered as any property right but the special features of intellectual property rights should be taken into account in order to give relevance to intellectual property rights incentive function. Mylly sees this as a way to avoid conflicts between intellectual property rights and competition law target systems level.²²⁴

The essential facility doctrine has been a debated issue under the US law. Areeda has considered under the US law that the essential facility doctrine should be used with extremely carefulness, especially because it can be a barrier for new innovations. Areeda has a critical point of view to the doctrine because of doctrines' dangerous disincentive to innovations. He has set out six principles that should limit application of the essential facilities concept. First of all, there is no general duty to share. For this reason compulsory access is and should be very exceptional. Secondly, company's facility is essential only when competitor(s) cannot compete effectively on the market without it and there is no duplication or practical alternatives available. Further, the competitor has to be essential for competition on the market. Thirdly, a company shouldn't be obliged to deal unless it is probable that the obligation substantially improves competition on the market by reducing prices or by increasing output or innovation. Fourthly, even if above mentioned three conditions are satisfied, denial for access is never per se unlawful; legitimate business purpose always saves the company. Also the intention of company is meaningful. It should be asked whether the company had an intention to exclude the competitors from the market by improper means. And

²²¹ T. Mylly, Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä? 2002, 394.

²²² *Ibid.*, 395

²²³ Lang, 483.

²²⁴ T. Mylly, Mikä on olennaista kilpailuoikeuden opissa olennaisista toimintaedellytyksistä? 2002, 397.

finally, the courts should impose a duty to deal that cannot explain or adequately and reasonably supervise. The problem should be deemed irremediable by competition law when compulsory access requires the court to assume the day-to-day controls characteristic of a regulatory agency.²²⁵

Also Herbert Hovenkamp sees the essential facility doctrine complicated:

*“So-called essential facilities doctrine is one of the most troublesome, incoherent and unmanageable bases for Sherman section 2 liability. The antitrust world would almost certainly be better place if it were jettisoned, with a little fine tuning of the general doctrine of the monopolist’s refusal to deal to fill in the resulting gaps”.*²²⁶

The assets to which access by competitors is truly essential need to be identified. However, it may not be always possible to access or share the assets. If the facility may have a limited capacity the question is to whom the access should be given.²²⁷ Over-enthusiastic approach to essential facility may lead companies to share its assets which the company has developed over several years at great expense with competitors’. This might remove incentives to innovations and injure the public interest.²²⁸

4.3 European Union case law

Under this section is reviewed decisions of the European Union Court of Justice, the Court of First Instance and the Commission which includes intellectual property rights and applying the Article 102. The essential facility doctrine has been developed under these cases in relation to the intellectual property rights.

²²⁵ Areeda 1990, 841, 852 – 853.

²²⁶ Kuoppamäki 2003, 798. Original reference Hovenkamp, Herbert , Federal Antitrust Policy: The Law of Competition and Its Practice (1994), 273.

²²⁷ Jones and Sufrin 2011, 489.

²²⁸ Jones and Sufrin 2011, 490.

4.3.1 Magill case

The ECJ made decision in *Magill* case in 1995.²²⁹ The case considered the relation of the intellectual property rights, more precisely copyright, and the competition law. The ECJ considered in *Magill* that the intellectual property rights were used against EU competition law rules. The real questions in here were the definition of dominant market position and the refusal to license intellectual property rights. The decision received a lot of attention. There was also a concern that the decision would shrink protection of the intellectual property rights.

The case concerned three television broadcasting companies; RTE, an Irish publisher having a statutory monopoly over TV broadcasting in Ireland, and ITV and BBC having a duopoly over TV broadcasting in UK. Most of the TV viewers in Ireland and Northern Ireland could receive the channels of all these broadcasting companies. RTE and BBC owned the copyright in the program listings for their own channels and ITV owned IBA franchise channels. These three companies each published a weekly program guide including only their own individual program listings. However, companies gave lists of their daily programs for the daily newspapers without any charge but with strictly enforced licensing conditions. The license allowed reproduces of the information but only for one day program listings information at the time. In market of Ireland and North-Ireland were not any weekly TV program magazine which would have included weekly program information of these three companies and, in fact, these companies demanded copyright protection for the information so that no one could publish information without their permission.

The Irish publisher, *Magill*, started to publish a weekly magazine of certain TV programs broadcasted in Ireland and Northern Ireland. RTE, ITV and BBC wanted to deny using their list of programs and obtained injunctions against *Magill* in a national court. The national court supported TV companies' denial. *Magill* complained to the Commission that the three companies were infringing the Article 102 by refusing to give advance listings of their weekly programs and by protecting their listings by enforcing their copyright. The Commission considered that the companies were acting

²²⁹ Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities 1995.

against the Article 102. The Commission considered also that all three companies were each dominant on the market for their weekly programs listings and that they wanted to protect their own individual weekly program guides in the downstream market by restricting the information. The CFI upheld the Commission's decision. RTE and ITP appealed.²³⁰

Also the ECJ found that there was an infringement of the Article 102; however, its judgment was very narrow.²³¹ It saw the case as a straightforward refusal to supply matter.²³² The ECJ stated that in exceptional circumstances, a refusal to supply material protected by intellectual property rights could be considered as an abuse under the Article 102. The ECJ considered that exceptional circumstances in *Magill* were the following: 1) there was no substitute for a weekly TV guide, for which there was a specific, constant and regular potential consumer demand; 2) the refusal was preventing the entry of new products for which there was consumer demand; 3) there was no objective justification for refusal; and 4) the refusal excluded all competition on a secondary market by refusing access to the essential raw material.²³³

The refusal to license an intellectual property is not as such an abuse of dominant position because an exclusive right to replicate the work is important part of the intellectual property rights.²³⁴ These four criteria were very important and have been developed further after the decision. However, it was not clear if these four criteria were cumulative in this case. This question became a major issue.²³⁵ It left open the question whether the new product criterion is essential when finding a refusal to supply abusive in intellectual property rights related cases. The reason is that the ECJ found that there

²³⁰ See Jones and Sufrin 2011, 499, footnote 586: "The relevant UK law is now the Copyright Designs and Patents Act 1988, s 3(1), although at the time of the *Magill* decision it was still the Copyright Act 1956.... The Broadcasting Act 1990, s. 176 specifically provides that the persons broadcasting television and radio programmes in the UK have to make information about the programme schedules available to any persons in the UK who wants to publish it: the actual dispute in *Magill* therefore became a dead end issue as regards the UK during the course of the case, which is why the BBC was not party to the appeal to the ECJ" EU has not yet harmonized the substantive copyright laws in Member States. The ECJ therefore has stated that where the intellectual property laws are not harmonized EU law recognizes the existence of rights granted by the Member States".

²³¹ *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities* 1995.

²³² Jones and Sufrin 2011, 500.

²³³ *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities* 1995, paras. 52, 55 and 56.

²³⁴ *Ibid.*, para. 49.

²³⁵ Jones and Sufrin 2011, 502.

would not be a question of a new product if the TV companies had already produced that kind of weekly guide, though they would still reserve all a special part on the secondary market for themselves. Neither had it been clear whether the barrier of new product were necessary or a separate and adequate ground to keep the refusal an abuse.²³⁶

The main consideration was that the ECJ did not mention the intellectual property rights in its discussion of a dominant position and it did not mention essential facilities term in its consideration. It referred to *Commercial Solvents* as an example of established abuse of a company on one market preventing the competition on a downstream market.²³⁷ In *Magill* the ECJ did not give any choices on how the company could avoid committing an abuse. The decision established that the norm is that refusal to license is not generally an abuse.²³⁸ It was neither required that the behavior of the companies has factually effected significantly to the trade between the Member States. It was enough that the behavior might affect this way. The possibility of the effect is shown if companies can prevent competitor's operation on the geographical market.²³⁹

4.3.2 Tiercé Ladbroke case

Tiercé Ladbroke concerned also a refusal to license intellectual property rights.²⁴⁰ The case did not go all the way to the ECJ's consideration, so there is only the decision of the CFI. In *Tiercé Ladbroke* a Belgian betting company, Tiercé Ladbroke, wanted TV-broadcasting rights in its betting shops for horse races arranged in France in order to exercise betting business in Belgium. The French race course societies (Sociétés de courses) and the associated companies had exclusive duty for organizing off-course betting in France, taking bets abroad on French races, taking bets in France in races run abroad and exploding pictures televised outside France (including information about the French horse races).

²³⁶ Jones and Sufrin 2011, 502.

²³⁷ *Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities* 1995, paras. 47, 53 and 56.

²³⁸ Jones and Sufrin 2011, 502.

²³⁹ *Oesch* 1996/3, 548.

²⁴⁰ *Tiercé Ladbroke SA v Commission of the European Communities* 1977.

The CFI saw the situation differing from *Magill*. Because sociétés de courses was not in betting shop business in Belgium, the CFI found that there were no downstream market as it was the question in *Magill*. The CFI also considered that it is not necessary to show films in connection of betting shop. The copyright owners were not infringing the Article 102 as they did not admit license to anyone in the relevant market in Belgium. The refusal would have constituted an abuse if the product or service would be essential to the betting shop or a new product by consumer demand was prevented to entry on the market. The CFI understood here the exceptional circumstances set out in *Magill* as severable, not cumulative. Thus it nominated that the refusal to supply which foreclosed the entry of a new product to the market might constitute an abuse for that reason alone, even if the access was not essential for the demander.²⁴¹

4.3.3 IMS Health case

The *IMS Health* concerned a system for representing regional pharmaceutical sales data in Germany.²⁴² This so called 1860 brick structure based on small geographical areas (bricks) was based on factors including postcodes, administrative and political boundaries and the location of doctors and pharmacies.²⁴³ *IMS Health* collected pharmaceutical sales information from wholesalers and formatted it in accordance with the 1860 brick structure, so that it was possible to analyze the information in several ways. *IMS Health* has been collaborated in the brick structures development which lasts several years.²⁴⁴ The Commission considered that the brick structure had become an industry standard.²⁴⁵ *IMS Health*'s competitors tried to develop the same kind of brick structures but *IMS Health* claimed that these infringed its copyright and obtained interim injunctions in the national court aiming to prevent their use.

The competitors complained to the Commission. They claimed that the refusal to license prevented them from providing pharmaceutical data services because they could not present the data in a way that would be acceptable to the customers without

²⁴¹ Jones and Sufrin 2011, 503.

²⁴² NDC Health/IMS Health: Interim measures 2001 and IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG 2004.

²⁴³ Jones and Sufrin 2011, 503. See also footnote 596 “*German privacy laws prevent the production of data which can identify sales in individual pharmacies.*”.

²⁴⁴ Though there was a debate of the amount of collaboration.

²⁴⁵ NDC Health/IMS Health: Interim measures 2001.

infringing IMS Health's copyright. It was also clear that the customers were not willing to change to a radically different structure. The customers' had done changes to their IT-systems to correspond the 1860 brick structure.

The Commission found that the 1860 brick structure was indispensable to operate on the relevant market because there was no actual or potential substitute for it. Neither there was objective justification for refusal to license. Moreover, there were exceptional circumstances in *Magill* sense. The Commission ordered interim measure by which IMS Health was obliged to license on a request and on non-discriminatory bases to third parties on the German regional.²⁴⁶

At the same time there was litigation between IMS Health and NDC Health where the Landgericht of Frankfurt am Main asked preliminary reference from the ECJ about the interpretation of the Article 102 in relation to the refusal to license. The ECJ set out the conditions when the refusal to license copyright would be an abuse of dominant market position. According to the ECJ, if the three cumulative conditions were fulfilled the abuse was in hand. Firstly, there has to be a new product for which there is a potential consumer demand in question. Secondly, the access has to be indispensable, *that is*, without the access all the competition on a secondary market is prevented. And thirdly, the refusal is unjustified.²⁴⁷ However, the ECJ did not solve if these conditions were fulfilled but left this decision to the national court.

The ECJ however stressed that a refusal to admit a license is not itself an abuse of dominant position.²⁴⁸ Further, the compulsory license can come into question only in exceptional circumstances.²⁴⁹ It considered the indispensability condition in *Bronner* sense but demanded that there has to be a question of a new products or services for which there is the customer demand. Again, the obligation to license is not to protect the competitors but to protect the consumers.

²⁴⁶ Jones and Sufrin 2011, 504. The execution of the decision was suspended pending the appeal for the reason the president of the CFI and the ECJ were concerned that, the decision went beyond the exceptional circumstances in *Magill*.

²⁴⁷ *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* 2004, paras. 38 and 52.

²⁴⁸ *Ibid.*, para. 34.

²⁴⁹ *Ibid.*, para. 35.

The important issues in the case were that firstly, there was a weak copyright in question as was in *Magill*. Secondly, the new product condition was not so clear. The Commission found that the products “differ markedly”. The products should not “essentially duplicate” the right holder’s product. The ECJ finally stated that only situation where the free competition can override the copyright holder is where the denial prevents the development of new product on the secondary market to the detriment of consumers.²⁵⁰ The duty to license is for the consumers’ protection.²⁵¹

From first sight it looks that there was one market. The ECJ held on the requirement of “*two different stages of production*“, it did not require separate upstream and downstream markets. The ECJ considered that it was enough that if “*potential or even hypothetical*“ market can be identified as upstream.²⁵² The findings of *IMS Health* have been developed further in *Microsoft* case which is studied below.

4.3.4 Microsoft case

Microsoft case is the latest case concerning the refusal to supply in relation to the information technology and it has received a lot of attention. In *Microsoft* was followed the four cumulative criteria set in the earlier cases but the Commission and the CFI extended those conditions in their decision. The case concerned interoperability, *that is*, interface information and whether Microsoft was obliged to disclose the interface information to its competitors. The interface information is necessary for the software to operate in other systems and programs.²⁵³ The interface information may be protected by copyright; however the interface information can be obtainable by reverse engineering, but it can be extremely difficult or not practically or economically feasible.²⁵⁴ In this case the reverse engineering was found impossible or not practically or economically feasible. In situation where the software market is dominated by one company with a significant market power, it may be necessary for the competition that

²⁵⁰ *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* 2004, para. 48.

²⁵¹ Jones and Sufrin 2011, 507.

²⁵² *IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG* 2004, para. 44.

²⁵³ See Graf 6.10.2009, 9: “*Servers are computers that perform centralized services in a computer network. User & group administration, file, and print. To perform their task server operating systems need to be able to communicate, i.e. interoperate, with PC operating systems. Because Windows has a near monopoly in PC operating systems server operating systems need to interoperate with Windows.*”.

²⁵⁴ Jones and Sufrin 2011, 509. See also Chapter 2.3.3. above.

other suppliers' software interoperates with the software or the system of the dominant company.²⁵⁵

Microsoft case sets out the clear limits for the duty to license situations.²⁵⁶ For the first time the similar case was under the Commission's consideration in 1984 where the Commission found that IBM abused its dominant position due to its refusal to supply the interface information to other suppliers who needed the information to develop compatible products to work with IBM's System/370. The Commission and IBM settled the case with the grounds that IBM undertook to disclose the sufficient interface information to enable its competitors in the EEC to attach hardware and software products of their own design to System/370.²⁵⁷

In *Microsoft*, Sun demanded that Microsoft should disclose to the suppliers who provided server operating systems the adequate interface information to enable them to develop workgroup server operating systems that would operate with Microsoft's Windows desktop and server operating systems.²⁵⁸ Sun complained that the *Microsoft* held a dominant position on the PC-operating system market (>90% market share).

Microsoft responded that the interoperability information is protected by intellectual property rights and there are other ways to secure interoperability, *for example* reverse engineering. Microsoft also argued that there was competition in workgroup servers' market. The importance of refusal to license was that the competitors could "clone" Microsoft's products if it was obliged to license the information and there would be damage to the incentives to innovate from Microsoft's side.²⁵⁹

The Commission found that Microsoft had a dominant position both in the PC-operating systems market and in the workgroup server operating systems market. Therefore, it stated that Microsoft had abused its dominant position by refusing to supply the

²⁵⁵ Jones and Sufrin 2011, 509.

²⁵⁶ Graf 6.10.2009, 2.

²⁵⁷ Jones and Sufrin 2011, 509.

²⁵⁸ Jones and Sufrin 2011, 509. It should be noted in here that Microsoft had provided full interoperability information to suppliers of servers before Microsoft itself entered to that market. See also Graf 6.10.2009, 10 Sun wanted to enable its Solaris operating system to interoperate with Windows in a server/client network. Sun's demand was concerning just the communication among independent systems.

²⁵⁹ Kramler 6.10.2009, 13.

interface information.²⁶⁰ The Commission considered that the criteria set out in *Bronner* and *Magill* were fulfilled and ordered Microsoft to disclose the relevant interface information to the companies on the workgroup server operating systems market and keep the information updated and fined Microsoft. However, the Commission considered that *Microsoft* differed from earlier cases because in this case it was the question of the distribution of previous levels of supply. The Commission took in its consideration an effect-based approach.²⁶¹ The CFI considered that the exceptional circumstances set out in *Magill* and *IMS Health* were fulfilled and upheld the Commission's decision.

Both the Commission and the CFI ended up to a detailed analysis of the facts supporting a duty to license. The Commission found the information was indispensable. Firstly, interoperability with Windows non-Microsoft work group servers was required in order for the competitors to be able remain viably on the market. Secondly, it evaluated whether the information was indispensable attaining that. There were no found substitutes for disclosure by Microsoft. The Commission considered that the reverse engineering was not practically possible because it required “*considerable efforts with uncertain chances to success*”.²⁶²

The Commission found that Microsoft's refusal to supply eliminated competition. The competitors were “*at a strong competitive disadvantage...to an extent where there is a risk of elimination of competition*”.²⁶³ The Commission considered that the refusal to disclose the information would impact on technical development to the prejudice of consumers.²⁶⁴ The Commission did not find that the condition of objective justification was fulfilled here. It considered that the copyright protection was not an objective justification and that disclosure would not have negative impact to Microsoft's incentive to innovation. Rather the disclosure effects positively to whole industry's incentive to innovate..²⁶⁵

²⁶⁰ Microsoft 2004, para. 435.

²⁶¹ Jones and Sufrin 2011, 509.

²⁶² Microsoft 2004, para. 685.

²⁶³ *Ibid.*, para. 589.

²⁶⁴ *Ibid.*, paras. 693 – 701.

²⁶⁵ *Ibid.*, paras. 783.

The Commission extended in *Microsoft* the new product condition set out in *Magill*. It found that the refusal prevented the technical development. It based its decision to the argument that the exceptional circumstances set out in *Magill* and *Bronner* were not exhaustive and it was possible take into account other circumstances as well. It stated that the refusal to supply is made case-by-case basis.²⁶⁶

The CFI confirmed the earlier interpretation of two different markets. In in refusal to supply cases there have to be two different markets in question even if the upstream market would be almost “hypothetical”.²⁶⁷ The CFI upheld the Commission’s decision of indispensability condition and considered in here indispensability did not mean the exclusion from the market.²⁶⁸ The CFI interpreted that with the elimination of competition criterion was meant elimination of effective competition on the downstream market.²⁶⁹ Secondly, it found that it is not necessary to wait that the competition actually eliminates competition but it was enough that there is a risk of elimination of effective competition.²⁷⁰ This decision differed from *Magill* where it was found that the potential entrant was entirely excluded from the market.²⁷¹

The CFI confirmed the Commission’s finding of new product that it was enough that the refusal to license limited technical development to the prejudice of consumers (the Article 102 (b)). It found that appearance of a new product was not the only relevant parameter and that the Article applied to the limitation of technical development and production and markets.²⁷² The CFI rejected Microsoft’s argument that the disclosure of the interoperability information would allow cloning the Microsoft’s products. The competitors had all reasons to develop new differentiated products.²⁷³ The disclosure of the interoperability information did not enable competitors to avoid the need for innovation. Neither the CFI found objective justification for refusal to disclose. The intellectual property right was not a sufficient justification in here.

²⁶⁶ Microsoft 2004, para. 555.

²⁶⁷ IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG 2004, paras. 43 – 44.

²⁶⁸ Microsoft Corp. v Commission of the European Communities 2007, paras. 369 – 436.

²⁶⁹ *Ibid.*, para. 563.

²⁷⁰ *Ibid.*, paras. 560 – 561.

²⁷¹ Jones and Sufrin 2011, 519.

²⁷² Microsoft Corp. v Commission of the European Communities 2007, paras. 646 – 647.

²⁷³ *Ibid.*, para. 658.

4.4 Key considerations for duty to license analysis in relation to intellectual property rights

In case law have been developed the four cumulative criteria which have to be fulfilled before the duty to license can come into question. These conditions are 1) the indispensability, 2) the elimination of competition, 4) the new product entry, and 4) the objective justification. Considering of the indispensability and the elimination of competition conditions under the case law, especially under *Microsoft*, can be ended up to the conclusion that the intellectual property rights are essential for a long-run innovation competition, not only for the short run price competition.²⁷⁴

The duty to license analysis under Article 102 is based on a consideration of dynamic competition, not on static competition. The exclusion of price competition is inherent for intellectual property rights; therefore the mere static price concerns are not sufficient to justify duty to license. Rather the short term exclusion of the price competition incentives for long run competition through new innovations.²⁷⁵ Further, the duty to license should be limited only to the serious market failure cases.²⁷⁶

The intellectual property embodies the key competitive features of products; therefore the following questions requires a careful analysis when duty to license is treated: 1) the nature of intellectual property and its value for the company which holds the dominant position; 2) the manner in which the dominant company exploits its intellectual property; and 3) the purpose for which the requesting company wishes to use the intellectual property.²⁷⁷

The duty to license intellectual property should stimulate innovation, but the risk in the duty to license is that it simply allows competitors to avoid innovation. It should be always analyzed that the duty to license really brings some new technology to the market, *that is*, the purpose of the duty to license is not to produce only minor

²⁷⁴ Graf 6.10.2009, 14.

²⁷⁵ *Ibid.*, 13.

²⁷⁶ *Ibid.*

²⁷⁷ *Ibid.*

improvements or features of some product or software. New variant is not justification for duty to license.²⁷⁸

On the other hand it could be asked whether the intellectual property is an essential competitive element of the company or just an additional feature. The impact to the dominant company's operation perhaps is not so significant if it is question of the additional feature compared if it is question of the core business of the dominant company.²⁷⁹

The *Microsoft* is an important precedent of applying the duty to license test. It set forth important limitations on intellectual property rights when those are in conflict with the European competition law.²⁸⁰ However, it cannot be applied as a precedent for every company in every industry, the fact is that Microsoft is a super dominant and can create de facto standards. Each case has to be considered against the specific circumstances of each case. At the end the competition must always be assessed based on how successful it is among the consumers. In particularly in the IT-sector the consumers' choice and innovation are the key factors of success.²⁸¹

5 CONCLUSION

This thesis sets out the question *whether a company in the dominant market position has an obligation to license software, and if so, on which grounds that obligation is justified*. According to the case law the answer is yes and especially when a certain criteria have been met. If a company holds a dominant position and its software is indispensable for the competitors to be able to operate on the neighboring market, there is no substitute for the software and it is practically impossible for the competitor to create a substitute alone or together with the other competitors; the refusal to license eliminates the competition or there is a risk of elimination of competition on the neighboring market; the refusal to license prevents entry of a new product or limits

²⁷⁸ Graf 6.10.2009, 15.

²⁷⁹ *Ibid.*, 15.

²⁸⁰ Canetti 2004, 179.

²⁸¹ Kramler 6.10.2009, 30.

technology developments for which there is a potential consumer demand; and there is no objective justification for the refusal, the essential facility doctrine applies and the company may have the duty to license its software.

Applying the essential facility doctrine is not simple as it has to be applied case by case taking into account the special circumstances of each case. Additionally there exist risks when applying the duty to license. Firstly, the relevant markets can be defined too narrow when it is more obvious that the company is considered to be in a dominant position. Secondly, the consideration of the new product criteria should be applied with sufficient carefulness and not to be extended too much. The criteria were already extended to cover also the limitation of technical developments in *Microsoft* which has broadened the field of application to extreme limits.

In every business the goals are to develop a product or a service that would become a breakthrough, succeed and gain revenue. The companies compare themselves to each other and compete in having the biggest market share. This is also the driver behind the software business. This kind of business, however, requires risk management. Then the question is how much the companies should pay attention to the risk of duty to license when they are developing their products. In other words, how much risk management should be used beforehand in situations where the company should rely on the protection of the general law?

The subject arises a question whether it could be possible to oblige also a non-dominant company to license its software. Could a non-dominant company's software be so essential? If the answer is yes to both of these questions, how it would be justified compared to a dominant company's conditions to license? Even though the essential facility doctrine has strict conditions and it should be carefully applied, there is still a risk that the four aforementioned criteria are extended from the present legal practice. If the duty to license is extended too much it would be a serious threat to the development.

In practice the software is mostly licensed by agreements when the companies can manage their risks and negotiate the terms of agreements. Supervising a dominant position is based on afterward evaluation which, though, may have major consequences

for the companies, as was seen in the Microsoft case.²⁸² This may mean that the companies need to put more resources to the risk management. If duty to license really becomes a risk, the companies should add to their risk management the possibility of duty to license. Is the purpose of the regulation to increase legal resource costs needed in the risk management and does it slow down the companies' development at the expense of the consumers? From a practical point of view, these are the relevant questions that perhaps are not taken into account when applying the Article 102 and the essential facility doctrine.

There have been discussions whether the copyright is the best protection form for software rather than being protected by trade secrets, or whether the software should be protected at all. Despite the unprotecting in this area, the competition could lead to innovations in the software industry. The critics see the open-source software movement created voluntarily by the relinquished software industry's intellectual monopoly as the best evidence of that.²⁸³ By this way, the competition law problems between the intellectual property rights and competition law might not be as complicated. By this way it might be possible to even avoid intellectual monopolies. The other question is, though, would this really incentive innovations and benefit consumers. It is very interesting issue and raises many interesting questions relating antithesis of copyright and unprotection. However, the issue has not been discussed in this thesis and actually it could be a subject for another thesis.

It is impossible to cover all the questions arising around this thesis when the essential facility doctrine as a subject is very broad. Thus some of the questions have been covered just within certain limits. One of the most important questions limited outside this thesis is; on what terms the access to the facility must be given? The future shows whether the essential facility doctrine criteria extend to cover new possible facilities and whether the criteria will be developed further due to new facilities with own features. In the software business the cloud computing and SaaS (Software as a Service) have

²⁸² Ojala, EU-kilpailuoikeus 2011, 257 - 258. For example in *Microsoft* case which considered over pricing and limiting competition in pc-markets *Microsoft* has gained already together 1,68 billion euro sanctions. The other question is that if duty to license is seen as a remedy of abuse should there be still monetary sanction addition to that? The fact though is that the company has been unwilling to license its software and duty to license should be seen quite strict remedy. Different question is if company does not remedy the situation, the monetary sanctions could come to question.

²⁸³ Boldrin ja K. 2008, 17 – 18.

become more popular along with the traditional software. It would be interesting to know how the essential facility doctrine would fit to these services.