The EC Essential Facilities Doctrine, the Microsoft Case and the Treatment of Trade Secrets

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<tr>
<td>AG</td>
<td>Advocate General</td>
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<td>Court of First Instance</td>
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<td>CMLR</td>
<td>Common Market Law Reports</td>
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<td>DG</td>
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<td>EC</td>
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<td>EU</td>
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<td>IP</td>
<td>Intellectual Property</td>
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<td>OJ</td>
<td>Official Journal</td>
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<td>US</td>
<td>United States of America</td>
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<td>TRIPS</td>
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1 INTRODUCTION

1.1 Background

One of the main objectives of the European Community (EC) is to avoid the distortion of competition in the internal market.\(^1\) This aim is to be achieved through the application of the more detailed competition provisions in the EC Treaty\(^2\), namely the Articles 81 and 82. Article 82 states that any abusive conduct of a dominant undertaking which may affect trade between Member States is prohibited. The European Court of Justice (ECJ) has, through a wide stream of judgements, set the frame for which conducts may be considered as abusive. These judgements have also led to the development of the so called “essential facilities doctrine” in EC law, which concerns the grant of access to a facility or resource controlled by a dominant firm.\(^3\) The central concept of the essential facilities doctrine is that a dominant firm's refusal to provide access to something it owns or controls, to which the access for other firms is essential in order for them to provide products or services to customers, may be held as abusive and therefore also prohibited.\(^4\) This means that a dominant undertaking may have a duty to share its facilities – which it many times has developed during many years – with competitors. A broad application of the essential facilities doctrine could therefore risk removing incentives for research and innovation, as it would become less fruitful for undertakings to invest in such facilities. On the other hand, if the essential facility is a monopoly asset of a dominant undertaking, a non-application of the essential facilities doctrine could allow the undertaking to set abusively high access prices or to permanently exclude competition on the related market by refusing to share the facility.

The essential facilities doctrine was first developed in cases where a dominant firm refused to supply a physical facility to other firms.\(^5\) In more recent cases, however, the European courts have also held a dominant firm's refusal to license intellectual property

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1 See Article 3(1)(g) of the EC Treaty.
2 The Treaty establishing the European Economic Community (EEC Treaty) [1957]. Latest amendments were made in 2001. The Articles in the Treaty were renumbered in 1999. Only the new Article numbers will be used throughout this thesis, even when quoting texts which refer to the old Article numbers.
4 Ibid.,
(IP) rights as infringing Article 82. The reason for such an approach has mainly been that exclusive rights, such as IP rights, give the right-holder a temporary monopolistic position and that a refusal to license therefore may lead to the elimination of all competition on the market as it will be impossible for competitors to enter that market without a license. Thus, in exceptional cases, the exercise of exclusive rights, in means of a refusal to license, has been prohibited by Article 82.

One particular area of refusal to license concerns “interface information” within the information technology sector. Interface information is such information that providers of software need in order to create products which can operate with other programs and systems. This information is many times either protected by IP rights, such as patent or copyright, or kept as a non-patented know-how and thus only protected by its secret nature. In a recent judgement of the European Court of First Instance (CFI) Microsoft was held to infringe Article 82 by refusing to license secret interface information. This case is highly interesting not only because it may clarify the relation between EC competition law and IP rights in essential facilities cases, but also because of the way the CFI equalled secret information – know-how – with other IP rights in its judgement by stating that

“... there is no reason why secret technology should enjoy a higher level of protection than, for example, technology which has necessarily been disclosed to the public by its inventor in a patent-application procedure.”

As mentioned above, one of the main reasons for competition rules to interfere with exclusive rights is that such rights may give the owner a legally protected monopolistic position for a longer period and that it is feared that the exercise of exclusive rights may eliminate all competition in that area from the market. This is however not the case with trade secrets which, once they are revealed, cannot be protected from other's exploitation. One may therefore question if trade secrets in reality endanger competition to the same extent than IP rights.

9 Ibid., para 693.
1.2 Statement of the problem

Is the EC essential facilities doctrine applicable on trade secrets? If so, should trade secrets be treated differently from IP rights when applying the doctrine?

1.3 Purpose

The aim of this thesis is to examine whether or not the essential facilities doctrine is applicable on trade secrets, and if there are any reasons for trade secrets to be treated differently from IP rights in such a situation. It will thus be examined whether the current treatment of trade secrets by EC competition authorities serves its purpose – to enhance competition and consumer welfare – or if it only is a short-term solution which will counteract its purpose in the longer term.

1.4 Method, materials and outline

In order to achieve the goal of this thesis, I have used a comparative method. The choice of method has come naturally due to the fact that I intend to examine the relationship – and possible clashes – between EC competition law, IP laws and trade secret laws. When examining each legal area, I will apply a traditional legal method. I have thus mainly examined judgements of the European courts, decisions of the European Commission (Commission) and, when appropriate, opinions of Advocates General (AG). Furthermore, I have used primary and secondary EC legislation, Commission guidelines, legal and economic doctrine and commentaries.

The central question I intend to answer is derived from the fairly recent judgement of the CFI in the Microsoft\(^\text{10}\) case, and concerns the relationship between the EC essential facilities doctrine and trade secrets. One may therefore consider the Microsoft judgement being the point of departure of my analysis. However, I have chosen to approach this issue reversely by dividing my analysis into three substantial parts, in which I have placed the core issue in the last part. There are several reasons for this. Firstly, it is consistent with the chronological development of the essential facilities doctrine in EC case-law. Secondly, the case-law regarding the application of the doctrine on IP rights has become intertwined with its application on trade secrets. As was briefly mentioned in the introduction, the CFI chose to equalise trade secrets with

\(^{10}\) Case T-201/04, Microsoft Corp. v Commission, [2007] ECR II-3601.
IP rights in the Microsoft judgement, following the precedent case-law. Therefore, a chronological review of this issue is necessary in order to understand the reasoning of the CFI in this case.

In the first part, I have focused on the concept of the EC essential facilities doctrine and its development in European case-law. Here, I seek mainly to establish the underlying purposes of the doctrine and what the European courts intend to achieve by its application. As this part will lay the ground for the forthcoming comparative studies, it is crucial to truly grasp the meaning of the doctrine in EC law.

In the second part, I have analysed the application of the essential facilities doctrine on IP rights. The chapter begins with a study of the concept of IP rights. This follows by a chronological examination of EC case-law in which the essential facilities doctrine has been applied on such rights. Thereafter, I have sought to highlight the main issues arising from the EC approach, by referring to the ongoing debate in legal and economic commentaries.

In the final third part, I have analysed the application of the essential facilities doctrine on trade secrets. Following the same outline as in the previous comparative chapter, I have chosen to initiate this section by studying the concept of trade secrets. Thereafter, I have examined EC case-law. As will be noticed when reaching this chapter, there is not much case-law referring to this issue; besides the Microsoft judgement, there is only one other case from the year 1984. Therefore, focus will be laid on Microsoft. Next I have examined legal and economic commentaries regarding the application of the doctrine in the Microsoft judgement. Here I seek to see whether the debate, regarding the application of the essential facilities doctrine, has taken a different turn when the question has been of trade secrets instead of IP rights.

Each chapter ends with a conclusive analysis. The purpose of these analytical parts is to highlight and discuss the main issues necessary to bear in mind for the following chapter. These sections will also pave the way for the final analytical chapter, in which I have gathered my previous conclusions into one profound discussion about whether or not the European courts' current treatment of trade secrets, when applying the essential facilities doctrine, is well founded and serves its purposes.
1.5 Limitations

Only the relation between IP rights and competition law concerning unilateral abusive conducts will be elaborated. Article 81 of the EC Treaty will therefore be excluded from the discourse of this dissertation.

This thesis will only focus on the abusive conduct of refusal to deal. Other exclusionary or exploitative conducts will not be examined.

There are different types of possibly prohibited refusals to deal, such as the refusal to supply existing customers who deal with competitors or who do not agree on tying arrangements. This thesis will focus only on problems arising when the dominant undertaking competes on a downstream market with the company to whom it refuses to give access to its facilities, and the refused facility is essential for the competitor to access the market.

Only IP rights which are referred to in the cases discussed in this thesis will be further elaborated. Thus, a reference to IP rights only includes patents and copyrights.

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2 THE ESSENTIAL FACILITIES DOCTRINE IN EC COMPETITION LAW

2.1 Introduction

In general, it is considered as pro-competitive to let companies have control over their own assets, and to require them to independently develop the assets they need in order to compete on the market. The essential facilities doctrine, which is the subject matter of this chapter, is considered as an important exception to that general rule. According to this doctrine, it might instead be considered as pro-competitive to interfere with a company's property rights. Such a situation can for example occur when the company in question has a dominant position, and it refuses to give other competitors access to an asset. If the company's refusal risks having severe negative impacts on competition, the competition authorities can, for the purpose of safeguarding the competitive structure, apply the doctrine and oblige the company to share the asset with others.

To fully comprehend the concept of the essential facilities doctrine, and what it is meant to achieve, one must first look into the underlying objectives of EC competition law, as they have strongly influenced the application of the EC competition provisions in the European case-law. Furthermore, the essential facilities doctrine is a concept developed from early cases concerning abusive refusals to deal with existing customers. Therefore, the objectives of EC competition law, and the EC case-law previous to the doctrine, will be examined first before continuing to examining the doctrine.

2.1.1 Objectives of EC competition law

The general objectives of EC competition law are set out in the EC Treaty. Article 2 of the Treaty states that the Community shall have as its task to promote a high degree of competitiveness and convergence of economic performance. It is furthermore stated that the goals set out in Article 2 shall be reached through the creation of a common market. For this purpose, a system which ensures that competition in the internal market is not distorted shall be established. This means that the EC competition rules, mainly the Articles 81 and 82 of the EC Treaty, must be read in the light of the general Community

12 Temple Lang, J., The principle of essential facilities in European Community competition law – the position since Bronner, Notes for a lecture, Copenhagen, September 2000, p. 2.
13 See Article 3(1)(g) of the EC Treaty.
goal of *market integration*. The EC competition rules have thus two main objectives; to promote competition and market integration.

The EC competition provisions where highly influenced by ordoliberalism at the time of their drafting, and ordoliberalism has also influenced the development of the EC case-law. An ordoliberal view on competition policy implies that the competition rules serve to protect the competitors, rather than protecting competition, meaning that all those who want to enter and compete on the market should be able to do so. The protection of small and medium sized undertakings is thus more valued than the efficiency of competition as a whole.

Since the “Modernization” reform of EC competition law in 2004, the objectives of the competition rules have evolved towards a more economic approach. This has resulted in placing consumer welfare in focus when interpreting the competition provisions. According to the economics of competition, the effects on consumer welfare depend broadly on how the market power in a certain market is divided among the competitive companies, and how this division impacts the companies' influence on the prices. Market power may become concentrated to one or few companies when there is some sort of entry barrier which makes it difficult for other competitors to enter the market. A company with a high level of market power can in such a situation raise its prices above marginal cost without losing too many of its customers. This results in a monopoly profit for the company which negatively affects consumer welfare. It is for this reason that competition authorities, when putting the consumer welfare in focus, consider monopoly profits as something that should be avoided. However, consumer welfare is not only maximized by the avoidance of monopoly profits. Enhancement of innovation, research and development of new technology will also generate welfare, as it leads to the introduction of new and better products on the market for which the

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16 Ibid., p. 35.
20 Ibid., para. 1.43.
21 Ibid., para. 1.62.
22 Ibid.
consumers have a demand.\textsuperscript{23} Competition authorities must hence, when applying the competition provisions, balance these different aspects against each other in order to make a correct measurement of the actual effect of a dominant firm's conducts on consumer welfare.

2.1.2 Article 82 and abusive refusals to deal

Article 82 of the EC Treaty establishes that a dominant firm's unilateral behaviour may in some circumstances be counted as an abuse and thus be prohibited. The wording of Article 82 clearly states that only an abuse of a dominant position is prohibited, not the dominance itself. A dominant undertaking's reasonable conduct in relation to innovation, output, efficiency etc. is therefore not an abuse \textit{per se}. Behaviours caught by Article 82 are broadly those of an exclusionary or exploitative character, which lead to the serious distortion or weakening of competition, to the detriment of consumers.\textsuperscript{24} An abuse of an exploitative character refers to the situation when an undertaking uses its dominant position in order to obtain monopoly profits, for example by excessive pricing or reduction of product efficiency.\textsuperscript{25} An exclusionary abuse refers instead to conducts which shall reinforce the dominant undertaking's position and exclude actual or potential competitors from the market, a situation that may indirectly harm consumers through the conduct's impact on the effective competition structure.\textsuperscript{26}

The specific type of abusive conduct which is the subject matter of this chapter, namely a dominant firm's refusal to deal, is counted as an exclusionary abuse.\textsuperscript{27} It is however important to notice that a refusal to deal is not always considered an abuse. If this would be the case, it would mean that an undertaking with a dominant position has an absolute duty to deal with everybody who requests it to do so, including with other competitors. The idea of such an absolute duty is highly controversial as it is contrary to the notion of freedom of contract and basic property rights. It is therefore generally accepted that

\textsuperscript{23} Ibid., para. 1.119-1.121.
\textsuperscript{24} See Faull, J., Nikpay, L., \textit{The EC Law of Competition}, 1\textsuperscript{st} edn., Oxford University Press, 1999, para. 3.05.
\textsuperscript{25} Monti, G., \textit{EC Competition Law}, Cambridge University Press, 2008, p. 217. See also supra 2.2.1.
undertakings have a freedom to choose their contractual partners.  

Nevertheless, the European case-law has made it clear that a refusal to deal can in some situations be held as an abuse. A dominant firm's refusal to deal is generally considered by the European courts to harm competition when the refused product or facility cannot be reproduced by the competitor for physical, legal or economic reasons and the refusal to give access to it therefore risks eliminating competition on the market. In most part of these cases there has also been a leverage effect, meaning that an undertaking with a dominant position on an upstream market has used its dominance to gain a competitive advantage on a downstream market.

2.1.2.1 Commercial Solvents

The first time it was established by the ECJ that a refusal to deal can be counted as an abuse, was in the case Commercial Solvents. This case concerned Zoja, an Italian producer of ethambutol based anti-tuberculosis drugs, and Commercial Solvents, a dominant supplier of a raw material which was necessary for Zoja's production. When Commercial Solvents, who had started to produce its own anti-tuberculosis drug and thus had entered into competition on the same market as Zoja, decided to no longer supply Zoja with the necessary raw material, the ECJ held it to be an abuse, stating that:

"... an undertaking being in a dominant position as regards the production of raw material and therefore able to control the supply to manufacturers of derivatives, cannot, just because it decides to start manufacturing these derivatives (in competition with its former customers) act in such a way as to eliminate their competition which in the case in question, would amount to eliminating one of the principal manufacturers of ethambutol in the Common Market."

The factors leading to the refusal to be held as abusive were thus that Commercial Solvents used its dominant position in order to gain a competitive advantage when vertically integrating into a downstream market, causing the elimination of an important competitor on that market by doing so.

28 Ibid., para. 207.
32 Ibid., para 25.
The idea to encourage the emergence and maintenance of downstream markets has greatly influenced the EC case-law concerning refusals to deal and, later also, the essential facilities doctrine. To further illustrate this fact, it is worth mentioning another early case dealing with a refusal-to-deal problematic, namely *Hugin*.33

### 2.1.2.2 *Hugin*

The *Hugin* case concerned Hugin, a non-dominant producer of cash registers, and Liptons, a customer of Hugin which also made business of providing reparation services of Hugin cash registers within the UK. Hugin ceased to supply Liptons with spare parts when it decided to start competing with it on the downstream market. This was held by the Commission to be an abuse.

The Commission reasoned that independent companies on the spare parts market had no possibility to enter the market without having access to the spare parts.34 Thus, the downstream market for spare parts could not emerge without such access. Since Hugin had a monopoly on its spare parts, the Commission considered it having a dominant position on the spare parts market, despite the fact that it had only a minor share of the upstream market for cash registers.35 A refusal to supply such spare parts without a valid justification was therefore an abusive conduct, as it risked eliminating all competition on the downstream market for spare parts.36

*Hugin* and *Commercial Solvents* are two of the most important cases which have laid the ground for the essential facilities doctrine in EC law. In the following section the notion of the essential facilities doctrine will be further elaborated.

### 2.2 The concept of the essential facilities doctrine

The concept of the essential facilities doctrine originates in US antitrust law.37 The basic idea of the doctrine is, similarly to the reasoning in *Hugin* and *Commercial Solvents*,

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34 *Hugin/Liptons*, OJ 22/23 [1978], para. 4 under section F, II(a).
35 Ibid.
36 Ibid., para. 8, 10 and 14 under section F, II(a).
37 The doctrine on essential facilities originates from the US Supreme Court Decision *United States v Terminal Railroad, Ass'n*, 224 US 383 [1912], although the Court never referred to the words “essential facility”. The doctrine has only been explicitly referred to by lower courts. In a recent decision, the Supreme Court expressed serious doubt regarding the use of the doctrine. See *Verizon Communications Inc v Law Offices of Curtis V. Trinko LLP*, 540 US No. 02-682 [2004]. See also infra section 2.3.
that in a situation where a dominant company has control over an asset, to which access is essential for competitors to compete on a downstream market, the company may be obligated to give access to the facility, if there is a risk of the competitors being eliminated from the downstream market without such access.\textsuperscript{38} The purpose of such an obligation is to make sure that competition on a downstream market becomes possible.\textsuperscript{39} It is therefore not sufficient, for the doctrine to apply, if competitors can survive on the downstream market without access to the facility.\textsuperscript{40}

Although there is a great resemblance between the earlier refusal-to-deal cases and the essential facilities doctrine, there are some differences between the two notions. To begin with, the phrase “essential facility” was first used in EC law in a time when the Commission was liberalising the formerly monopolised transport market within the EU.\textsuperscript{41} For this reason, the Commission sought to give companies other than the previously monopolised companies, a fair chance to compete on the newly liberalised market. Therefore, unlike previous case-law, most essential facilities cases have dealt with a dominant company's refusal to co-operate with a new entrant, not an already existing customer. This principle has later evolved to cover not only transport facilities, but also other types of products and services, and later also IP rights.\textsuperscript{42} A common factor when applying the doctrine, notwithstanding the type of product, is that the facility must be “essential” for new competitors to be able to enter a downstream market, and that the dominant company cannot justify its refusal to give access to the facility. These two conditions will be further elaborated on below.

\subsection{2.2.1 When is a facility considered as “essential”?}

When deciding whether or not a facility is essential, the ECJ applies a so called indispensability test. The concept of this test is that there must be no actual or potential substitute for the facility, on which the competitors can rely on, and that the facility must be objectively necessary – indispensable – for competitors to be able to compete

\textsuperscript{38} See e.g. the Commission decision \textit{Sealink/B&I Holyhead:Interim Measures} [1992] 5 CMLR 255, para. 41. This decision was the first in which the Commission used the expression “essential facility”.

\textsuperscript{39} See e.g. the Opinion of Advocate General Jacobs in Case 7/97, \textit{Oscar Bronner GmbH & Co. KG v Mediaprint} [1998] ECR I-7791, para. 58.

\textsuperscript{40} See J. Temple Lang, \textit{The principle of essential facilities in European Community competition law – the position since Bronner}, Notes for a lecture, Copenhagen, September 2000, p. 2.


\textsuperscript{42} Temple Lang, J., p. 6. See infra Chapter 3 for the application of the doctrine on IP rights.
on a downstream market. As long as there are substitutes for the facility on the market, or is possible for the competitors to duplicate it by own means, one cannot oblige a dominant firm to share its facilities. For example, in the Magill case, which concerned a refusal to give access to certain information, the ECJ stated that it was impossible for the person requiring access to provide its own services without such access. The requirement of impossibility for competitors to replace or duplicate the facility does not necessarily have to be a physical one, but also economic or legal obstacles can make duplication impossible. However, when considering a competitor's economical possibilities, one must look at the situation with an objective view, taking into consideration the indispensability for all competitors on the market. The lack of access to the facility must create a barrier to entry for all competitors which is insurmountable, or which permanently damages their activities and makes them uneconomical. Thus, the dominant firm's refusal must lead to a substantial negative effect on competition in the downstream market, in means of risking the elimination of effective competition.

2.2.2 What amounts to a valid justification for refusing access?

In general, a refusal to give access to an essential facility can be justified if it is considered as “reasonable”. This means that also someone without any interest in vertically integrating into the downstream market would refuse access. Reasonable reasons to refuse, although within the principle of proportionality, might for example be when giving access would hinder the development of the facility, or reduce its value or efficiency. The facility might also have limited physical capacity, making it

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44 Joined Cases C-241/91 P and C-242/91, RTE and ITP v Commission [1995] ECR 743. This case is examined in section 3.2.2. below.
45 Ibid., para. 53.
46 Case 7/97, Oscar Bronner GmbH & Co. KG v Mediaprint [1998] ECR I-7791, para. 44.
48 Temple Lang, J., The principle of essential facilities in European Community competition law – the position since Bronner, Notes for a lecture, Copenhagen, September 2000, p. 10.
51 Ibid., p. 15.
impossible to share it with others. Moreover, the owner of the facility can claim that the positive impacts on competition and innovation outweigh the negative ones, when refusing access to the facility. It is then up to the owner to establish that this is really the case.

2.3 Criticism regarding the doctrine – the US approach

It was mentioned above that the concept of the essential facilities doctrine first arose in the US antitrust law. There is however a difference in the US approach to the doctrine compared to the one within the EU, in means of the former being far more restrictive and critical. In US law, the doctrine has only been explicitly referred to in judgements of lower courts. In a relatively recent judgement of the US Supreme Court, the so called Trinko case, the Court expressed great reluctance towards the application of the essential facilities doctrine. Firstly, it held that it goes against the underlying purposes of antitrust law to oblige a firm to share its “source of advantage” with others. This is due to the fact that the possession of monopoly power, and the possibility to charge monopoly prices for a short time, encourages companies to take risks and make investments and, thus, brings incentives to innovate. Since companies may gain monopoly power by establishing an infrastructure, they should not be obliged to share it with others when their investments have started to pay off. Such an obligation could diminish the incentive for both the monopolist and the rival to invest in beneficial facilities. Secondly, it held that a duty to share would require the antitrust authorities to act as central planners, identifying and continuously supervising the terms of dealing – a role the Supreme Court meant they were ill-suited for. Lastly, the Court emphasized the existing risk of antitrust authorities making false condemnations when obliging a company to share its facilities, so called “false positives”, this leading to the opposite results of what antitrust law is striving for to reach. However, while referring to an

52 Ibid., p. 16.
53 Ibid., p. 15-16.
54 Supra section 2.2. See in particular footnote 37.
56 Verizon Communications Inc v Law Offices of Curtis V. Trinko LLP, 540 US No. 02-682 [2004].
57 Ibid., para. 8 of section III.
58 Ibid., para. 2 of section III.
59 Ibid., para. 1 of section III.
60 Ibid., para. 2 of section III and para. 7 of section IV.
61 Ibid., para. 6 of section IV.
earlier “essential facilities” case\(^6\), the Court recognized that a refusal to deal could in certain circumstances be held as anticompetitive and thus prohibited.\(^6\) The reasons why this was not the case in the current case were, (i) that it was not clear whether the refusal was motivated by anticompetitive intent, and, (ii) that the refused services did not already exist on the market.\(^6\)

### 2.4 Conclusive analysis

We have seen in this chapter that a company's exercise of its property rights and freedom of contract may in some situations be considered as anti-competitive and, thus, prohibited. The factors leading to such a prohibition are formulated through a stream of EC cases, commonly labelled as the essential facilities doctrine. When the EC first started to apply the doctrine, it was to facilitate the liberalisation of the monopolised transport market. Thus, in order to give new entrants a fair chance to compete on the market, mainly companies which were previously legal monopolies were obliged to share their infrastructure facilities.

When looking into the earlier case-law in which the doctrine was first developed, one will find that the EC competition authorities put great value in safeguarding existing and emerging downstream markets. This priority has continued to play an important role in the essential facilities doctrine, despite the fact that the original goal of the doctrine was to support market liberalisation. Consequently, the doctrine has developed to cover a wide range of different assets – and not only transport facilities – and also to affect dominant companies others than the previous monopolies. The result of this is that also private companies, which unlike the previous state-owned ones have reached competitive advantages through private investments and efforts, might have to help other competitors to compete with them. Furthermore, notwithstanding the type of product which is in question, the factors leading to the application of the doctrine are centred around the effect a refusal will have on the downstream competition. Therefore, when determining whether or not the dominant company is obliged to give access to its asset, one must consider if it is possible for competition on the downstream market to survive without such access. In other words, one must examine whether the refusal

\(^6\) *Verizon Communications Inc v Law Offices of Curtis V. Trinko LLP*, 540 US No. 02-682 [2004], para. 3 of section III.
\(^6\) Ibid., para. 6-7 of section III.
constitutes an insurmountable entry barrier for competitors. This is considered to be the case when there exist no substitutes for the asset which the competitors can rely on, and it is objectively impossible for the competitors to create a substitute by own means. When examining competitors’ possibilities to develop a substitute, one must look at their physical, economical as well as legal possibilities. A refusal to share an asset can only be held as an abuse if it risks eliminating all effective competition on the downstream market. However, if the dominant company can provide a valid justification for its refusal, it may not be obliged to share the asset. A valid justification is generally when the refusal is considered as “reasonable”. However in practice, as will be seen in the coming chapters, it has shown to be difficult to justify a refusal when it results in a competitive advantage for the dominant firm while vertically integrating into the downstream market.

A look into the US approach towards the essential facilities doctrine, has shown that the US antitrust law has a far more critical and restrictive view on the doctrine than the European courts. The major critics put forward by the US Supreme Court regarding the idea of a duty to deal and the essential facilities doctrine are, that (i) successful companies should not be obliged to share their “sources of advantage” with competitors as this could remove both parties incentives to make further investments, (ii) antitrust authorities would have to assume a regulatory role which they are not suited for, (iii) companies in competition could easier get involved in illegal contractual relations with each other, (iv) the existing risks of making false judgements when obliging a company to share facilities with others, counteracting the basic purposes of antitrust laws when doing so. Furthermore, according to the US Supreme Court, the essential facilities doctrine might only be useful if the refusal is a disruption of previous supplies and the dominant company has an anticompetitive intent. In other words, the refusal must be an obvious predation for the competition rules to apply.
3 THE ESSENTIAL FACILITIES DOCTRINE AND INTELLECTUAL PROPERTY RIGHTS

3.1 Introduction

Having the ownership of IP rights generally means that the right-holder has an exclusive right to use the protected property. The right-holder has thus a legally protected right to exclude others from using the property. In a situation when the right-holder is a dominant firm, and access to the protected property is a precondition for downstream markets to emerge, might the exercise of an IP right be in conflict with competition law. We have seen in the foregoing chapter that the EC competition authorities are especially concerned about the elimination of competition on a downstream market, caused by a dominant firm's refusal to share an essential asset. As a result, although only in exceptional circumstances, the ECJ has obliged dominant firms to share – license – their exclusive rights with competitors, in order to preserve competition on downstream markets. This has caused a big debate regarding the relation between competition law and IP rights, to what extent the first should be allowed to interfere with the latter, and how such intervention affects the incentives to innovate and consumer welfare.

3.1.1 Concept and objectives of IP rights

IP rights are, in a broad sense, the legal rights which result from human intellectual activity. Unlike intellectual creations, physical properties are protected from other people's exploitation once they are in the possession of the owner. For this reason, the creator of an intellectual creation is granted an exclusive, although sometimes time-limited, right by law to exploit its own creation and to hinder others from doing so without her/his permission.

It is generally recognized that, by legally protecting intellectual creations and enabling creators to gain financial rewards of their efforts, one will promote further creativity and incentives to innovate. To develop an intellectual property is many times both

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65 Infra section 3.1.1.
expensive and time consuming, as it requires a certain degree of ingenuity. At the same time, once the new property is created, it may be easy and cheap for others to reproduce it. Thus, without a legal protection, there is a risk of “free riding” effects, in means of other parties taking advantage of the creator's investments. This would make it unprofitable for individuals and companies to bring new intellectual capital to the market, resulting in the gradual impoverishment of the society.\footnote{Davis, J., Intellectual Property Law, 3rd edn. OUP, 2008, para. 1.6.}

In the EC case-law concerning refusals to license IP rights focus has been on two specific rights, namely copyrights and patents. In the following section, the meaning of these rights will be briefly examined. Other IP rights will be left out as they do not serve the purpose of this dissertation.

### 3.1.2 Patents v. copyrights

Both patents and copyrights protect intellectual creations. There is however a difference in the type of creations they protect. Broadly, copyrights protect the specific form of expressing an idea, while patents protect the idea itself.\footnote{WIPO intellectual property handbook [1997], para. 2.1 and 2.164.} Furthermore, both these rights are granted for only a limited time, although the time-limit of copyrights is far more extensive than the time-limit of patents. Within the EU, the time-limits are harmonised to twenty\footnote{This is due to the European Patent Convention (EPC, 1973, a revised version entered into force on 13 December 2007), see Article 63 of the Convention. The EPC is not an EU instrument. It is administered by the European Patent Office (the executive organ of the intergovernmental organisation European Patent Organization, in which all EU Member States are members) which has as its main mission to grant European Patents. A European Patent is not an actual patent, but rather a bundle of national patents gathered under one label.} years for patents and fifty to seventy\footnote{See Article 1 in Council Directive 93/98/EEC [1993] OJ L 290/9, harmonizing the term of protection of copyright and certain related rights.} years past the death of the creator for copyrights. Another difference between the rights lies in the procedure to gain protection. Copyright protection arises more or less automatically when the work is expressed in some form, has a certain degree of originality and is published.\footnote{See Article 27(1) of the Agreement on Trade-Related Aspects of Intellectual Property Rights (generally known as the TRIPS Agreement). The TRIPS Agreement is an international instrument which sets out the minimum standards of IP rights protection that must exist in the member states.} Patents on the other hand require a far stricter procedure. For an invention to gain patent protection, it must first of all fulfil several criteria such as inventiveness, usefulness and novelty.\footnote{WIPO intellectual property handbook [1997], para. 2.174.} Furthermore, it must contribute to a technical solution. It must thus pass a strict test before being considered as patentable, something that results in many
inventions falling outside the scope of such protection. Lastly, it must be made available to the public in a sufficiently clear manner, meaning that it should be possible for a skilled person to put the invention into practice with only the disclosed information as guidance.\textsuperscript{75}

The last obligation, regarding the disclosure of detailed information about the patented invention, is considered as a justification for giving the inventor a temporary right to exclude others from exploiting the IP. This way, also others can benefit from an invention which might have been kept as a secret without such obligation. Similar justifications can be applied on the exclusive rights given to copyright-holders, as the right-holder can only profit from its copyright by bringing its work to the public.\textsuperscript{76}

The exclusivity of copyrights is less restrictive than patents, as it does not protect against a third person who independently comes up with the same arrangement. In such a situation, it is possible for both persons to gain copyright protection for the same product.\textsuperscript{77} This is partly due to the fact that copyrights, unlike patents, arise automatically when the work is expressed in some form, and not by formal procedures such as registration.\textsuperscript{78}

3.1.3 IP rights v. competition

An IP right is many times considered as a monopoly right, as it provides the right-holder an exclusive right to use the IP.\textsuperscript{79} It is however important to distinguish a legal monopoly from an economic monopoly. A right-holder who has a legal monopoly over the use of its IP does not necessarily have a monopolistic market power in economic terms.\textsuperscript{80} This is due to the fact that the relevant market, in terms of competition, is often much wider than the market of the single IP, as there often exist products which can function as a substitute for the protected property. Therefore, as will be seen further below, a right-holder's exercise of its right to exclude is not automatically prohibited by

\begin{footnotesize}
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\item \textsuperscript{75} WIPO intellectual property handbook [1997], para. 2.33.
\item \textsuperscript{76} Davis, J., Intellectual Property Law, 3\textsuperscript{rd} edn. OUP, 2008, para. 2.3.
\item \textsuperscript{78} Ibid.
\item \textsuperscript{79} See e.g. Turney, J., Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal innovation, Northwest Journal of Technology and Intellectual Property Rights, Vol. 3, No. 2 (2005), para. 9. See also J. Davis [2008], para. 6.2.
\end{itemize}
\end{footnotesize}
Article 82 of the Treaty.

### 3.2 EC case-law concerning refusals to license IP rights

In cases dealing with IP rights, the ECJ has constantly held that in the absence of harmonization of national laws, it is a matter of national rules to decide under which conditions IP rights are granted.\(^{81}\) This is due to the Article 295 of the EC Treaty, which states that the Treaty will not prejudice the Member States’ national systems of property rights. As a result, the ECJ does not have the competence to apply the competition provisions in the Treaty in order to regulate the conditions and the validity of IP right protection granted by national laws.\(^{82}\) The ECJ is however allowed to judge upon the “exercise” of the IP rights within the EC – a distinction which is developed in case-law.\(^{83}\) This means that if the right-holder is a dominant company, and it uses its IP rights in abusive ways, the competition provisions are applicable. As a result, the ECJ has in a few occasions considered a dominant company's exercise of its IP rights, when choosing not to permit licenses to competitors, as abusive.

#### 3.2.1 Renault and Volvo

*Renault*\(^{84}\) and *Volvo*\(^{85}\) were the first ECJ cases in which the issue of a dominant firm's refusal to license its IP rights was treated. Both cases dealt with the same issue, namely whether a dominant firm's refusal to license the design rights on car parts to customers, who wished to produce and sell such parts themselves, could amount to an abuse. The ECJ held that a refusal to license IP rights could not in itself constitute an abuse, as the right to refuse was the very subject matter of such exclusive rights.\(^{86}\) The Court continued however by stating that a refusal to license could be prohibited by Article 82 if it involved certain abusive conducts, for example an arbitrary refusal to supply.\(^{87}\) As no additional abusive conducts were referred to by the parties in these cases, the ECJ did not find the refusals to license to be abusive.\(^{88}\)

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\(^{82}\) Ibid.

\(^{83}\) Ibid. para. 9.


\(^{86}\) Ibid., para. 8, and Case 53/87, *CICCRA and Maxicar v Renault* [1988] ECR 6039, para. 15.


\(^{88}\) Case 238/87, *AB Volvo v Erik Veng* [1988] ECR 6211, para 10-11, and Case 53/87, *CICCRA and*
3.2.2 Magill

Magill\textsuperscript{89} is one of the two existing cases in which a dominant company has been obliged to license its IP rights. This case concerned copyright-protected television programme listings which belonged to three television broadcasters in Ireland and Northern Ireland. Magill, an Irish publisher, wanted to compile these listings into one weekly comprehensive television guide, a product that was not available on the market at that time. The broadcasters, who each published their own television listings separately, refused to license their listings to Magill. Their refusal was held to infringe Article 82 by the Commission\textsuperscript{90}, the CFI\textsuperscript{91} and finally by the ECJ.

In its judgement, the ECJ stated that a refusal to license IP rights could not in itself constitute an abuse.\textsuperscript{92} It continued however with saying that a refusal to license could be considered as abusive in exceptional circumstances, referring to the Volvo case.\textsuperscript{93} The exceptional circumstances in this case were (i) the lack of actual or potential substitute for the new product which was prevented market access and for which there were potential consumer demand,\textsuperscript{94} (ii) the lack of justification for a refusal to license,\textsuperscript{95} and, (iii) the fact that the broadcasters reserved the second market to themselves by excluding competition.\textsuperscript{96}

It is worth mentioning that the copyright-protected information, namely the television programme listings, was considered by the ECJ as weak, and perhaps even questionable, IP rights. For example, the ECJ referred to the information as “basic information”, and criticised the broadcasters’ reliance on “national copyright provisions”.\textsuperscript{97} Moreover, as was noticed by AG Jacobs in his opinion to the Bronner\textsuperscript{98} case, a justification of the broadcasters' refusal to license, by reference to a decrease of their incentives to innovate, would have been difficult, as the television

\textsuperscript{92} Ibid., para. 49.
\textsuperscript{93} Ibid., para. 50.
\textsuperscript{94} Ibid., para. 52 and 54.
\textsuperscript{95} Ibid., para. 55.
\textsuperscript{96} Ibid., para. 56.
\textsuperscript{97} Ibid., para. 54. See also the opinion of Advocate General Jacobs in Case 7/97, Oscar Bronner GmbH & Co. KG v Mediaprint [1998] ECR I-7791, para. 63 (“... the provision of copyright protection for programme listings was difficult to justify in terms of rewarding or providing an incentive for creative effort.”).
\textsuperscript{98} Case 7/97, Oscar Bronner GmbH & Co. KG v Mediaprint [1998] ECR I-7791.
listings were not a result of creative efforts and great investments.99

3.2.3 IMS Health

The *IMS*100 case concerned the refusal to license a set of pharmaceutical sales data, the so called “1860 brick structure”, for which IMS Health had the copyright. A complaint from a competitor, NDC, led to an interim decision in which the Commission found that IMS Health was obliged to license the brick structure, saying that it had become *de facto* industry standard.101 The decision was however later withdrawn, because of change of circumstances.102 Prior to that, the national court had asked the ECJ to give a preliminary ruling on the issue. In its ruling, although not determining whether or not the refusal was an abuse in this specific case, the ECJ set the conditions which needed to be fulfilled for a refusal to license to be held as an abuse, following its reasoning in the *Magill* judgement when doing so.

The ECJ began by stating that a refusal to give access to IP rights did not in itself constitute an abusive conduct, as this was a part of the right-owner's exclusive right.103 For such a refusal to constitute an abuse, it must involve an abusive conduct prohibited by Article 82 EC.104 The ECJ continued by stating that three cumulative conditions must be fulfilled for a refusal to license IP rights to infringe Article 82, namely that (i) the refusal is preventing the appearance of a new product on the market for which there is a potential consumer demand, (ii) it is unjustified, and, (iii) it excludes all competition on an actual, potential or hypothetical downstream market.105 Furthermore, it emphasized the importance of consumer welfare when balancing the different interests of protecting IP rights and the economic freedom of its owner, against protecting free competition, holding that the latter can only prevail when a refusal to license have negative impacts on consumers.106

Similarly to the *Magill* case, the copyright-protected brick structure in question was not

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104 Ibid., para. 35.
105 Ibid., para. 44 and 52.
106 Ibid., para. 48.
a creation with a high degree of innovativeness. Firstly, the brick structure was mostly a compilation of basic information about pharmacies and doctors.\textsuperscript{107} Secondly, it was not a creation by IMS alone, but a result of network effects and a high degree of economic participation by the users of the brick structure.\textsuperscript{108} These circumstances were according to the ECJ relevant to take into account when deciding upon the indispensability of the IP right to competition.\textsuperscript{109}

### 3.3 Scholarly commentary regarding the EC application of the doctrine on IP rights

The case study in the previous section has shown that the ECJ considers compulsory licensing as a possible, although rare, remedy for a dysfunctional competitive structure in downstream markets. Even though the ECJ never made an explicit reference to the essential facilities doctrine when obliging a company to license, many consider it being a continuation of the doctrine.\textsuperscript{110} This has sparked a debate as to whether the application of the essential facilities doctrine on IP rights is an appropriate way of regulating competition, since such an approach interferes with the exclusive rights given by IP laws. In the following, the main argumentations criticising the application of the doctrine on IP rights, along with the argumentations supporting such an approach, will be considered.

#### 3.3.1 Arguments contesting the EC approach

The most prominent arguments put forward by those who are critical towards the application of the doctrine on IP rights, are that it will have dire effects on companies' incentives to innovate, and that the right to exclude other competitors is the very subject-matter of IP protection. Lipsky and Sidak, for example, consider the doctrine as antithetical to IP policies, stating that it is “...inconsistent with the exclusivity that is necessary to preserve incentives to create, the core operative device of IP law in a market economy”.\textsuperscript{111} Similarly, Lêveque states that an interference by competition

\begin{itemize}
  \item\textsuperscript{107} Ibid., para. 4.
  \item\textsuperscript{108} Ibid., para. 29-30.
  \item\textsuperscript{109} Ibid.
  \item\textsuperscript{110} See e.g. Lêveque, F., Innovation, leveraging and essential facilities: Interoperability licensing in the EU Microsoft case, World Competition 28 pp. 71-91 (2005), p. 74 (“...there is no doubt in the EU that refusal to license may raise antitrust liability and that the doctrine of essential facility may be applied on intellectual property rights.”).
\end{itemize}
authorities in the scope of IP laws will lead to a legal insecurity, as inventors will not be sure of the meaning of their rights in advance. This insecurity will then lessen the inventor’s incentives to make investments. Other commentators believe that IP laws are the preferable tools for balancing the different interests of competitiveness and innovation, as it is within those laws that the scope of the rights are established in the first place.

3.3.2 Arguments supporting the EC approach

Among those who support the application of the doctrine on IP rights, it has been argued that the alleged threat to incentives to innovate, when obliging a company to license, is unfounded and exaggerated. This is due to the fact that a successful IP might result in the IP holder recouping far more than what would have been needed to encourage the innovation. Therefore, when obliging an IP holder to license, one might correct a situation of over-protection caused by IP laws. Also, the essential facilities doctrine and IP rights are considered as different, complementary, policy instruments which strive towards a common goal of consumer welfare. Consequently, the application of the first should not exclude the application of the latter. The question how to reach this common goal must be answered based on the specific circumstances; sometimes one of the two is the appropriate instrument, another time a mixture of both. Furthermore, when the balance between competitiveness and innovation is

See also Turney, J., *Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal innovation*, Northwest Journal of Technology and Intellectual Property Rights, Vol. 3, NO. 2 (2005), para. 70 (“The threat of a compulsory license will have just as damaging effect on innovation in the market as the obligation itself...”).


See e.g. Hovenkamp, H., *IP ties and Microsoft's rule of reason*, Antitrust Bulletin 47 (2002), p. 272-273; Cotter, T. F., *Intellectual property and the essential facilities doctrine*, Antitrust Bulletin 44 (1999), p. 214 (“... it might be preferable to modify intellectual property doctrine than to rely upon the hazy and uncertain contours of the essential facilities doctrine.”); Govaere, I., *In Pursuit of an Innovation Policy Rationale: Stakes and Limits under Article 82 TEC*, World Competition 31, no 4 (2008): 541-556, p. 548 (“...it is first and foremost the IP system itself that seeks to establish the proper balance between allowing for temporary short term restrictions on competition in order to provide incentives to invest in R&D, on the one hand, and furtherance of long-term competition and innovation, on the other hand.”)


Ibid., p. 295.

Ibid., p. 296.


Schmidt, C. and Kerber, W., *Microsoft, Refusal to License Intellectual Property Rights, and the*
distorted, some prefer the *ex-post* application of the competition rules, instead of *ex-ante* regulation in IP laws, to redress the balance.\footnote{Incentives Balance Test of the EU Commission, Working paper (2008), p. 16. Available at \url{http://ssrn.com/abstract=1297939}.} This is because an ex-post approach is more adjusted to the case-by-case situation. Lastly, some consider the *Magill* and *IMS* judgements as a way for the ECJ to correct flaws in national copyright laws, holding that compulsory licensing would not have occurred if it had been question of costly IP rights with a high degree of innovativeness.\footnote{119 Ritter, C., p. 296.} \footnote{120 See e.g. Turney, J., *Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: The Primacy of Securing Optimal Innovation*, Northwestern Journal of Technology and Intellectual Property, vol. 3 No. 2 (2005), para. 60 f., and Ritter, C., supra footnote 112, p. 286-7.}

### 3.4 Conclusive analysis

We have seen in this chapter that a dominant company's refusal to license its IP rights might fall under the scope of the essential facilities doctrine and thus be prohibited. The remedy for such refusals has been to oblige the company to license its IP rights. However, the idea of compulsory licensing is in conflict with the subject-matter of IP laws, in which the right-holder is granted a legally protected right to exclude others from using its property. From an economic perspective, this exclusivity can be explained by wanting to encourage the inventor to continue inventing. Creating an IP can many times be both costly and time consuming. Thus, without protection, it might become unprofitable to make such investments due to the risk of “free-riding” effects. As a result, companies and individuals would have no incentives to innovate, which would lead to the gradual impoverishment of intellectual capital in the market.

The ECJ has taken notice of the importance of preserving the exclusivity of IP rights, by using a stricter test when deciding whether or not a company's refusal to license is abusive. Firstly, in the *Renault* and *Volvo* cases, and later also confirmed in *Magill* and *IMS*, the ECJ established that a refusal to license IP rights could not in itself constitute an abuse, but that it required an additional abusive conduct. Secondly, in the *Magill* case, it held that a refusal to license could only amount to an abuse in exceptional circumstances, such as when (i) the refusal prevents access of a new product on the market for which there is potential consumer demand, (ii) there is no justification for the refusal, and (iii) the refusal leads to the exclusion of competition. In *IMS*, the ECJ stated that the exceptional circumstances set out in *Magill* were cumulative. It also redefined
the last condition to mean that the refusal to license must lead to the exclusion of all competition on an actual, potential or even a hypothetical downstream market.

One may think that the ECJ is being very cautious when imposing the competition provisions on IP rights. However the above mentioned case-law has raised many voices among academics, as to whether or not the ECJ has gone too far in its approach. The main arguments of those who are sceptical towards the application of the essential facilities doctrine on IP rights, are that it will affect companies' incentives to innovate negatively, and that the right to exclude others from using the IP is the very subject-matter of IP protection. However, it is important to recall that the goal to enhance the incentives to innovation in the society is also a goal toward which EC competition law strives. While the competition rules seek to reach this goal through an enhancement of competition on the market, IP laws want to do so by restricting competition for a period of time. This aspect has been highlighted by both economists and legals, which insist on the problem lying on the different approaches competition law and IP law adopt in order to reach the common goal of society welfare. Indeed, among those academics who are more supportive of the essential facilities doctrine being applied also on IP rights, it is argued that both competition provisions and IP laws provide instruments which help enhancing incentives and welfare, and that these instruments should function parallelly to one another. In a situation when IP laws over-protect a right-holder, it is appropriate for competition laws to interfere ex post, in order to resettle the balance between competitiveness and innovation.

There have been very few European cases in which a dominant company has been obliged to share its IP rights with competitors. A common factor in these cases has been that the refusal concerned licensing of copyrights. Furthermore, the copyrights in question were not a result of great investments, nor did they have a high degree of innovativeness. Taking Magill as an example, the right-owners seem to have used the broad definition of copyrights in their national legislation in order to preserve the downstream market for themselves. Printing television programme-listings is not a new phenomenon created by these particular broadcasters, but a very common happening in many countries. It is also not exceptional that a third party reproduces these listings into one comprehensive guide. As neither the underlying idea of the information in question nor the way in which it is expressed, is original, one will not decrease the broadcasters' incentives to innovate by obliging them to license the information. Such an obligation
would only help opening up the competition on a downstream market and introducing a new product for which there is consumer demand. Similar approaches can be made to the copyright-protected database in *IMS*. Here, the copyright protected what seemed to be a compilation of basic information. Furthermore, the way in which the information was compiled was not created or financed by IMS alone. Also, the only reason why this database-system had a certain value was because it had become a *de facto* industry standard, due to network effects. Consequently, in order for others to be able to compete with IMS, they needed allowance to use the standardised database-structure, as their services would have no value for the customers otherwise. Imposing an obligation on IMS to license its brick-structure could therefore be considered as a precondition for a viable competition on the market. Considering the fact that IMS put no innovative or financial efforts in creating the brick-structure, it seems correct to assume that an obligation to license did not affect its incentives to innovate negatively.

What conclusions can be drawn from the foregoing examination of the EC case-law? It seems clear that the key issue, when considering a possible application of the essential facilities doctrine on IP rights, is what *effects* such application will have on the ultimate goal of society welfare. It seems also clear that all parties – whether it is the ECJ, legal practitioners or academics – consider the maintenance of companies' incentives to innovate as an important instrument to an enhanced welfare. Furthermore, none of the parties disagree on the important role IP rights play in this context. Indeed, when looking at the circumstances surrounding compulsory licensing in the European case-law, one will find that the ECJ has never obliged a company to share an IP right which has resulted from great investments. It is important to bear in mind that, due to Article 295 of the EC Treaty, the ECJ can only judge upon companies' *exercise* of their property rights, not upon the *existence* of such rights. It is thus not up to the ECJ to decide whether or not an IP deserves the exclusivity given to it by national laws of the Member States. However, the ECJ seems to be using its right to interfere with the exercise of companies' IP rights, in order to indirectly correct flaws in the Member States' national IP laws. The foregoing examination of *Magill* and *IMS* supports this theory.

To conclude, it seems rather unlikely that the ECJ will apply the essential facilities doctrine on IP rights which protect expensive and highly advanced innovations, as such interference is likely to harm society in both the short-term and the long-term time frame. Only when it is question of IP rights which (i) do not reward the efforts of the
right-holder and (ii) allow the right-holder to use it for predatory causes, such as leveraging its dominance to a downstream market, might the essential facilities doctrine be a practical *ex-post* instrument to compensate for the *ex-ante* flaws in national IP laws. In the next chapter it will be examined whether or not trade secrets undergo a similar treatment to IP rights, when applying the essential facilities doctrine.
4 THE ESSENTIAL FACILITIES DOCTRINE AND TRADE SECRETS

4.1 Introduction

On the 24th of March 2004, Microsoft was held by the Commission to have abused its dominant position by refusing to supply presumably IP right protected information to its competitors, allegedly wanting to leverage its market power to a downstream market.\textsuperscript{121} This decision was also later upheld by the CFI on the 17th of September 2007.\textsuperscript{122} Although this case has some similarities with the earlier European cases concerning refusals to license, which were examined in the foregoing chapter, there are some significant parts in which it differentiates from the precedent case-law. Unlike the earlier cases, Microsoft dealt with a problem which is typical for dynamic high technology markets, namely high entry barriers created by strong network effects and consumer lock-in.\textsuperscript{123} Microsoft has since many years held an overwhelmingly large share of the PC operating system market.\textsuperscript{124} Consequently, independent computer software producers need to create applications which will function – interoperate – with Microsoft's Windows PC operating system in order to survive on the market, as there is no extensive demand for computer programs which do not function with Windows.\textsuperscript{125} For this purpose, they need access to so called “interface information”\textsuperscript{126} about the different computer systems or programs with which they require interoperability. This information might either be protected by IP rights, such as copyright or patent, or be kept as a trade secret and thus protected by its secret nature.\textsuperscript{127} As will be elaborated further below, there were certain ambiguities whether or not the information Microsoft refused to supply to its competitors were covered by IP rights. In its defence, Microsoft held that the information was \textit{either} an IP or a trade secret.\textsuperscript{128} However, the CFI chose

\textsuperscript{121} Case COMP/C-3/37.792, Microsoft, [2004].
\textsuperscript{122} Case T-201/04, Microsoft Corp. v Commission, [2007] ECR II-3601.
\textsuperscript{123} “Network effects” refers to the situation when the utility of a product is dependent of the number of consumers using it, or of the number of complementary products on the market. See Case COMP/C-3/37.792, Microsoft, [2004], para 420-422 and 448.
\textsuperscript{124} Microsoft's market share exceeds 90 %. See Case COMP/C-3/37.792, Microsoft, [2004], para 431-435.
\textsuperscript{125} Ibid., para 449 and 452.
\textsuperscript{126} See Council Directive 91/250 [1991] OJ L 122/42, recital 11 (“[...] the parts of the program which provide for such interconnection and interaction between elements of software and hardware are generally known as 'interfaces'”).
\textsuperscript{127} See infra 4.1.2.
to treat the information as an IP while establishing that there should be no difference in treatment between IP rights and trade secrets.\textsuperscript{129}

This brings us to the initial question of this dissertation, namely, should the refusal to disclose trade secrets be counted as a variation of abuses under the essential facilities doctrine, and, if yes, is it correct to categorically equalize trade secrets with IP rights in such a situation? These questions cannot be answered without first examining the concept and nature of trade secrets. As will be seen later in this chapter, the only time this issue has been raised in EC case-law is when it has been a question of interoperability of computer products. For this reason, also the concept of trade secrets within the computer industry will be looked into, before continuing to the specific subject-matter of this thesis.

4.1.1 \textbf{What constitutes a trade secret?}

We have seen that creativity may be protected by IP rights in order to promote the incentives to innovate. However not all innovations are, or can be, protected by such rights. A technical innovation or information, as economically valuable as it may be for the owner, may still not reach the level of creativity that is necessary for it to be protected by IP rights. The owner may therefore choose to keep the innovation as a secret in order to protect it from being exploited by others. Keeping knowledge and innovations as a secret away from other competitors, instead of protecting it with IP rights, may also be a part of the owner's business strategy. In both situations, the knowledge or innovation will be considered as a \textit{trade secret}, that is to say confidential business information with a certain degree of technical or commercial value.\textsuperscript{130} The concept of trade secrets is not as well-defined as the different IP rights and may therefore include a wider range of different information, such as distribution methods or customer lists.\textsuperscript{131} It is protected by national laws of confidence and contractual provisions, and there is in general no need for novelty or creativity, in means of it being patentable, for it to gain legal protection.\textsuperscript{132} There are however certain factors to take into account when considering whether or not the information constitutes a protectable

\textsuperscript{129} Ibid., para 693.
\textsuperscript{130} Definition by WIPO. See \url{http://www.wipo.int/sme/en/ip_business/trade_secrets/trade_secrets.htm}
\textsuperscript{132} Ibid.
trade secret. The Commission has defined trade secrets as following;

“... a package of non-patented practical information, resulting from experience and testing, which is (i) secret, that is to say, not generally known or easily accessible, (ii) substantial, that is to say, significant and useful for the production of the contract products, and (iii) identified, that is to say, described in a sufficiently comprehensive manner so as to make it possible to verify that it fulfils the criteria of secrecy and substantiality.”

Thus, according to the Commission, in order for a trade secret to gain protection, it must not be covered by IP rights and it must have a certain commercial value. The latter condition implies that the secret must bring a competitive advantage to the owner; if the owner does not suffer any harm by the secret being revealed, there is no reason to give her/him protection. These requirements correspond well with the general international understanding of the concept of trade secrets.

4.1.1.1 The scope of the protection

It is provided in the TRIPS Agreement that trade secrets are protected against (i) unlawful disclosure, (ii) acquisition, and (iii) usage in a manner contrary to honest commercial practices. The latter is explained as practices such as breach of contract, breach of confidence or espionage. Also the usage of a trade secret by third parties in bad faith is covered by the protection. However, if the third party obtained the trade secret without being aware of the use of it being unlawful, it falls outside the scope of the protection.

The meaning of trade secrets being protected only against such acquisition which is unlawful, or contrary to honest commercial practices, is that the secret-owner cannot prevent someone from acquiring the knowledge by proper means, such as through independent research or reverse engineering. The possibility for others to acquire

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133 Trade secrets are often referred to as “secret know-how” within the EU. The Commission's definition concerns thus protetable secret know-how.
136 See footnote 74.
137 See Article 39 of the TRIPS Agreement.
138 Ibid., footnote 10.
139 Ibid.
secret knowledge by own means through reverse engineering is an important limitation of the exclusive rights of a trade secret owner, as such rights otherwise last as long as the information remains secret. Therefore, it is considered as a pro-competitive way to enable second comers to comprehend and get access to the secret know-how.\footnote{Samuelson, P., and Scotchmer, S., \textit{The Law and Economics of Reverse Engineering}, The Yale Law Journal, Vol. 111: 1575 (2002), p. 1650.} Furthermore, the “threat” of reverse engineering enhances competition as it encourages the development of new products and restrains market power.\footnote{Ibid.}

\subsection*{4.1.1.2 Trade secrets v. IP rights}

Although the underlying idea of protecting trade secrets is the same as the one of IP rights protection, namely to create incentives for research and innovation, there are some important aspects which distinguish trade secrets from IP rights. The first, and most obvious, difference is that trade secrets are not disclosed to the public. Thus, while IP right holders are encouraged to share the results of their creations, trade secret owners must keep their innovations as a secret in order to gain protection. Furthermore, as a result of the secrecy, there is no demand for registering trade secrets; the know-how exists even if the public is unaware of its existence. This is why trade secret protection, unlike patent protection, covers a wider range of ideas and information. Thirdly, trade secrets are more vulnerable assets than IP rights, as their protection is depending entirely on the secrecy; once they are discovered, they are considered as public and may therefore be exploited by everyone.

\subsection*{4.1.2 Protection of computer technology}

The procedure of creating computer programs\footnote{WIPO has defined a “computer program” as a set of instructions expressed in words, codes, schemes or in any other form, which is capable, when incorporated in a machine-readable medium, of causing a computer – an electronic or similar device having information-processing capabilities – to perform or achieve a particular task or result. See WIPO intellectual property handbook, \textit{Introduction to Intellectual Property: theory and practice}, Publication No. 489 (E), Kluwer Law International [1997] para. 7.17.} is many times a very complicated one, and it often requires great investments. For this reason, it is crucial for the creators of computer programs to gain protection against unauthorised exploitation of their work, as it would not be fruitful for them to make such investments otherwise. The general preference of way of protecting computer programs is through copyright protection, in
means of assimilating computer programs to literary work.\textsuperscript{144} Copyright protection as a way of protecting computer programs is also the choice of the EU. Since the implementation of the Software Directive\textsuperscript{145}, all Member States must thus protect computer programs as literary work. Similarly to literary work, the copyright protection of computer programs within the EU lasts seventy years after the lifetime of the creator.\textsuperscript{146}

The consequence of choosing copyright as way of protecting computer technology, is that only the literal expression of a computer program is protected, not the ideas which underlie it. This creates a significant limitation in the protection, as the ideas behind computer programs many times provide solutions for solving different problems. According to the TRIPS Agreement, inventions within all fields of technology may gain patent protection on the condition that they fulfil the patentability criteria.\textsuperscript{147} This means that also computer-based inventions may fall within the scope of patent protection if they provide a new technical solution to a problem. However, not all underlying ideas of computer programs have the required technical effects. There are also many abstract ideas and methods for solving problems, so called algorithms, which may not fulfil all the criteria for patentability.\textsuperscript{148} As they are only ideas, they will not be protected under copyright either. This problematic brings the questions where to draw the line between patentable and non-patentable information, and, how to treat the inventions falling outside the scope of both patent and copyright protection?

4.2 The EC case-law concerning refusals to share trade secrets

As was mentioned initially in this chapter, the only time the question of compulsory sharing of trade secrets has been evoked in EC law when applying Article 82, has concerned interface information needed for interoperability of computer programs. The first time this issue was raised, was in the IBM\textsuperscript{149} case in 1984. Although this case never reached a final judgement, due to a settlement agreement between the Commission and IBM, it is significant to mention, as it is the only case, prior to Microsoft, in which a

\textsuperscript{144} See e.g. Article 10(1) of the TRIPS Agreement and Article 4 of the WIPO Copyright Treaty.
\textsuperscript{147} See Article 27(1) of the TRIPS Agreement.
\textsuperscript{149} Bulletin of the European Communities, IBM Settlement, 7/8-1984 96-103, [1984].

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company's refusal to share secret information has been alleged to be abusive.

4.2.1 IBM

In 1980, the Commission accused IBM of failing to supply independent manufacturers in good time with interface information on its new products, creating a competitive advantage for itself by doing so. According to the Commission, IBM held a dominant position on the operating system market, which resulted in IBM also controlling the downstream market for compatible products to its operative system. Therefore, by failing to supply the information in sufficient time, IBM was alleged of abusing its dominance to gain advantages on the downstream market. In 1984, IBM agreed on a settlement agreement in which it undertook to disclose timely and sufficient interface information to competitors.

The Commission's main concern, when wanting IBM to supply the information without delay, was that de facto industry standards, such as IBM's operative system System/370, would be used to prevent the competitive development of interoperable computer products. Thus, it considered IBM's commitment to result in a substantial improvement of competitors' position on the downstream market, leading to a strengthened and more effective competition. Knowing that the essential information would be available, competitors would have higher incentives to innovate new products. This would in return strengthen the position of users, as they could choose from a larger selection of products available on the market.

4.2.2 Microsoft

The Microsoft case arose due to a complaint from Sun Microsystems – one of Microsoft's main competitors in the work group server market – who alleged Microsoft of abusing its monopoly on the PC operating system market, by refusing to provide relevant interface information about its PC operating systems to Sun. According to

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152 Ibid.
154 Ibid., p. 92.
156 Ibid.
157 Microsoft was also accused of abusively tying Windows Media Player to its operating systems. This second accusation will not be elaborated further here, as it does not serve the purposes of this
Sun, this information was necessary for the full interoperability of Sun's products with those of Microsoft's, without which Sun could not viably compete with Microsoft on the market for work group servers.\textsuperscript{158} Microsoft argued that it had indeed provided sufficient interface information to its competitors, and that Sun's request was too broad as it was not limited to the information that was essential to provide commercially viable work group server operating systems.\textsuperscript{159} Microsoft argued furthermore that its refusal was objectively justified because of the requested information being protected by IP rights, resulting from large investment and research expenses. An obligation to disclose the information to the competitors would therefore eliminate Microsoft's incentives to innovate.\textsuperscript{160} Lastly, Microsoft expressed concern that the disclosure of the information would make it easy for competitors to clone features in the Windows operating systems.\textsuperscript{161} None of Microsoft's arguments gained support from the Commission and the CFI, and Microsoft was held to have abused its dominant position by refusing to disclose interface information to its competitors. In their decisions, both the Commission and the CFI applied – however in a slightly modified version – the stricter test set out in the case-law concerning refusals to license IP rights.

\textbf{4.2.2.1 The decision of the Commission}

The Commission initiated its analysis by stating that the different factors referred to in previous case-law, which indicated that a refusal to deal or license was abusive, did not constitute an exhaustive check-list of exceptional circumstances.\textsuperscript{162} Therefore, when analysing Microsoft's conduct, the Commission took all the circumstances surrounding the refusal into consideration. It concluded that Microsoft's refusal was abusive as it (i) constituted a disruption of previous levels of supply,\textsuperscript{163} (ii) risked the elimination of competition due to the indispensability of the refused information to competitors,\textsuperscript{164} (iii) limited technical development to the detriment of consumers,\textsuperscript{165} and, (iv) lacked an objective justification.\textsuperscript{166} The Commission explained that the risk of the competition

\textsuperscript{158} See Case COMP/C-3/37.792, Microsoft, [2004], para. 3.
\textsuperscript{159} Ibid., para. 563 and 565.
\textsuperscript{160} Ibid., para. 709.
\textsuperscript{161} Ibid., para. 713.
\textsuperscript{162} Ibid., para. 555.
\textsuperscript{163} Ibid., para. 692.
\textsuperscript{164} Ibid., para. 701.
\textsuperscript{165} Ibid., para. 783.
\textsuperscript{166} Ibid., para. 783.
being eliminated is based on the fact that there are substantial network effects on both the upstream and the downstream markets in which Microsoft operates, and also between the two markets. Thus, by holding a quasi-monopolistic position on the upstream market, and by refusing to disclose the necessary information to competitors on the downstream market, Microsoft was exploiting these network effects in order to leverage its dominance to that market.\textsuperscript{167}

4.2.2.1.1 Refusal to share trade secrets – any difference from IP rights?

The Commission rejected\textsuperscript{168} Microsoft's claim that the information in question was protected by IP rights and trade secret laws, putting forward several arguments to support this decision. Firstly, it held that the information in question was not innovative, as the underlying ideas of such communication protocols were not new.\textsuperscript{169} Secondly, it claimed that Microsoft had failed to demonstrate that the information was protected by any types of IP rights, and that the contested decision involved compulsory licensing.\textsuperscript{170} This was due to the fact that (i) Microsoft had only managed to identify one patent in a very late stage of the case,\textsuperscript{171} (ii) the copyright was purely incidental, since an obligation to disclose information necessarily would involve the drafting of a document,\textsuperscript{172} and, (iii) that Microsoft was not correct to equalise the secrecy of the information, in means of it being “trade secrets”, with IP rights created by law.\textsuperscript{173} Regarding this last observation, the Commission continued by holding that the case-law on compulsory licensing is not \textit{per se} applicable on trade secrets, and that trade secrets normally enjoy a more limited protection under national laws than copyrights and patents.\textsuperscript{174} Furthermore, the general presumption in EC competition law, that it is legitimated for right-holders to refuse to license IP rights created by law, does not apply automatically to refusals to disclose secrets.\textsuperscript{175} Instead, such a refusal must be considered on a case-by-case basis. In this particular case, the value of the secret lied in

\begin{footnotesize}
\begin{enumerate}
\item COMP/C-3/37.792, \textit{Microsoft}, [2004], para. 533 and 779-781.
\item Due to the uncertainties surrounding the alleged IP right protection, the Commission however recognized that “it cannot be excluded that ordering Microsoft to disclose such specifications and allow such use of them by third parties restricts the exercise of Microsoft’s intellectual property rights”. This circumstance was however nothing that would change the outcome of the case. See ibid., para. 546 and footnote 249.
\item Ibid., para. 277.
\item Ibid., para. 278. See also COMP/C-3/37.792, \textit{Microsoft}, [2004], footnote 249.
\item Ibid., para. 279.
\item Ibid., para. 280.
\item Ibid.
\item Ibid.
\end{enumerate}
\end{footnotesize}
the fact that it was owned by a dominant company, not in its innovativeness.\textsuperscript{176}

\subsection*{4.2.2.1.2 Compulsory disclosure v. incentives to innovation}

It was noted earlier\textsuperscript{177} that Microsoft justified its refusal by claiming that the information resulted from substantial investments in technology development, and that an obligation to share it with others would reduce its incentives to innovation.\textsuperscript{178} The Commission initiated its response by emphasising that the requested information did not include Microsoft's source codes, but only some protocol specifications.\textsuperscript{179} It continued by measuring the positive effects on incentives to innovation, which would derive from obliging Microsoft to disclose the information, against the negative effects on such. The Commission concluded that

\begin{quote}
“[…] on balance, the possible negative impact of an order to supply on Microsoft's incentives to innovate is outweighed by its positive impact on the level of innovation of the whole industry (including Microsoft).”\textsuperscript{180}
\end{quote}

Thus, the Commission acknowledged that, by obliging Microsoft to share its trade secrets, one might possibly reduce Microsoft's incentives to innovate. However, if Microsoft's anti-competitive behaviour would be allowed to continue, the risk of all effective competition on the downstream market being eliminated would remain. This would harm Microsoft's – not to mention the whole industry's – incentives to innovate even more, as there would be no competitive pressure on the market.\textsuperscript{181}

\subsection*{4.2.2.2 The judgement of the CFI}

Presuming that the interoperability information was covered by IP rights, the CFI applied the stricter test set out in \textit{Magill} and \textit{IMS}, when judging upon Microsoft's conduct.\textsuperscript{182} According to the CFI, all factors were fulfilled for Microsoft's refusal to be held as an abuse, namely that (i) access to the information was indispensable in order for competitors to remain viable on the market,\textsuperscript{183} (ii) the refusal created a risk of

\begin{itemize}
\item \textsuperscript{176} Ibid.
\item \textsuperscript{177} Supra 4.2.2.
\item \textsuperscript{178} COMP/C-3/37.792, \textit{Microsoft}, [2004], para. 709 and 713.
\item \textsuperscript{179} Ibid., para. 714 f.
\item \textsuperscript{180} Ibid., para. 783. Emphasized sections are the author's own.
\item \textsuperscript{181} Ibid., para. 724-725.
\item \textsuperscript{182} Case T-201/04, \textit{Microsoft Corp. v Commission}, [2007] ECR II-3601, para. 289 and 336.
\item \textsuperscript{183} Ibid., para. 436.
\end{itemize}
competition being eliminated,\textsuperscript{184} (iii) the refusal limited technical development to the
detriment of consumers,\textsuperscript{185} and, (iv) there existed no objective justifications to
Microsoft's refusal.\textsuperscript{186} The third criterion is a modification of the previous “new
product” criteria from \textit{Magill} and \textit{IMS}. However, by reference to the Commission's
reasoning in its decision, the CFI held that this criterion should be widened as to include
all refusals which resulted in the limitation of technical development to the prejudice of
consumers.\textsuperscript{187}

4.2.2.2.1 \textit{Refusal to share trade secrets \textendash any difference from IP rights?}

Unlike the Commission, the CFI did not consider it necessary to discuss whether or not
the refused information was covered by IP rights.\textsuperscript{188} Instead, the CFI interpreted the
Commission's assessment as to answer the question whether this case should be solved
by treating the information as a physical product, and thus apply the classical essential-
facilities-doctrine test, or to treat the information as an IP right, and thus apply the
 stricter – and therefore also more favourable for Microsoft – refusal-to-license test.\textsuperscript{189}
Without giving any closer explanation, the CFI made a presumption that the information
in question were covered by IP rights, or constituted a trade secret, and that trade secrets
“must be treated as equivalent to intellectual property rights”.\textsuperscript{190} This point of view is
also reiterated later in the judgement, where the CFI clearly states, again without giving
any further explanation to the statement, that

“[…] there is no reason why secret technology should enjoy a higher level of protection than,
for example, technology which has necessarily been disclosed to the public by its inventor in
a patent-application procedure.”.\textsuperscript{191}

According to the CFI, by choosing to treat the information as an IP, the outcome of the
judgement would be the most favourable one for Microsoft.\textsuperscript{192} This indicates that if
trade secrets had not been equalised with IP rights, they would have been treated as
physical property, meaning that the less restrictive refusal-to-deal test would have been

\textsuperscript{184} Ibid., para. 620.
\textsuperscript{185} Ibid., para. 665.
\textsuperscript{186} Ibid., para. 711.
\textsuperscript{187} Ibid., para. 647 – 649.
\textsuperscript{188} Ibid., para. 283.
\textsuperscript{189} Ibid., para. 284.
\textsuperscript{190} Ibid., para. 289.
\textsuperscript{191} Ibid., para. 693.
\textsuperscript{192} Ibid., para. 284 and 336.
applied.

4.2.2.2 Compulsory disclosure v. incentives to innovation

The CFI did not examine whether or not an obligation to disclose the secret information would have significant negative impacts on Microsoft's incentives to innovation. Instead, it simply reiterated the Commission's decision, in which it was held that Microsoft had not managed to establish that this was the case.193 In the same context, the CFI highlighted that it is a normal practice within the software industry to disclose interoperability information to competitors, and that Microsoft itself had followed this practice when entering the market.194 This practice had until now not shown any negative effects on the incentives of the other parties on the market.195

4.2.2.3 The scope of the remedy

As a remedy for its refusal, Microsoft was obliged to disclose complete and accurate interoperability information, although without having to disclose the source codes, to its competitors.196 This obligation applied not only to information about current products, but also to information about future generations of products, meaning that the information must be continually updated.197 Furthermore, as the purpose of this obligation was to make sure that competitors could viably compete with Microsoft, Microsoft was obliged to allow the competitors to implement the information in their own products.198 These obligations must be fulfilled on reasonable and non-discriminatory terms.199 By “reasonable terms” the Commission referred to the conditions, regarding the access and use of the information, in the licensing agreement.200 The requirement of non-discrimination referred instead to Article 82(c)201 of the EC Treaty, with which the Commission meant that Microsoft must disclose the information to every company with an interest to enter the downstream market for work

193 Ibid., para. 697.
194 Ibid., para. 702.
195 Ibid.
196 COMP/C-3/37.792, Microsoft, [2004], para. 999.
197 Ibid., para. 1002.
198 Ibid., para. 1003.
199 Ibid., para. 6.1.1.2.
200 Ibid., para. 1005.
201 Article 82(c) of the EC Treaty states that “applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage” is an abusive conduct.
group server operating system products. Lastly, Microsoft had to pay a fine amounting to 497.2 million Euros.

Microsoft initially refused to fully comply with its obligations according to the Commission's decision. Therefore, in 2006, the Commission imposed an additional fine of 280.5 million Euro on Microsoft. However, it was not until October 2007, after further objections from the Commission, that Microsoft finally agreed on disclosing the requested information to its competitors, and ensuring that also “open source” software producers had access to the non-innovative parts of the secret interoperability information. Furthermore, after claims from the Commission that the secret information lacked significant innovation, Microsoft agreed on reducing the royalties for the information. Since it had taken Microsoft three years to comply with its obligations, the Commission imposed another penalty fine of 899 million Euros on Microsoft in 2008.

4.3 Refusal to disclose interoperability information v. refusal to license – the Commission's standpoint

The Commission has communicated its position regarding the application of the essential facilities doctrine on IP rights and interface information twice during the last years; the first time in 2005 and the second time as late as in February 2009. Both
documents are published after the Microsoft decision, and also partly based on this decision. However, when comparing the two documents, one will notice that the Commission's position regarding the relation between refusals to license IP rights and refusals to disclose interface information has taken a slightly different direction in the latter document, compared to the first.

In the document from 2005, the Commission referred to refusals to disclose information as a “special case”, and thus placed it in a different category of conducts than refusals to license, while holding that there exists no general obligation for dominant firms to ensure interoperability. However, if the refusal is a way for the company to leverage its power to a downstream market, the refusal might be held as abusive. The Commission continued by stating that:

“Even if such information may be considered a trade secret it may not be appropriate to apply to such refusals to supply information the same high standards for intervention as those described in the previous subsections.”

With this statement, the Commission implied that IP rights were more worth protecting than trade secrets.

In the document from 2009 on the other hand, the Commission bundles refusals to license IP rights and refusals to disclose information into one category, implying that the latter is a sub-category of refusals to license. In fact, all refusal-to-deal scenarios – prior to the essential facilities doctrine as well as after the doctrine – are discussed as one type of abuse which may take different forms. As a result, the Commission has set out the same criteria for when a dominant company's refusal to deal is considered to be particularly serious, regardless the type of asset which is being refused, following the case-law of the essential facilities doctrine regarding physical property.

211 DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses [2005], para. 241.
212 Ibid.
213 Ibid., para. 242.
214 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, C(2009) 864 final [2009], para. 78 (“...refusal to license intellectual property rights, including when the license is necessary to provide interface information...”).
215 Ibid., para. 81.
216 Ibid. The criteria are; (i) if the refusal relates to an asset that is objectively necessary to be able to
discussing the different criteria, the Commission holds that a refusal is more likely to be considered as an abuse if it is a disruption of previous supply.217 Also, the higher market share the dominant company has, the greater is the risk of effective competition being eliminated.218 As for the effects of the refusal on consumer welfare, the Commission considers it harmful if the refusal prevents the entry of new and innovative products or prevents technical development.219 Lastly, it states that a refusal may be justified by referring to negative impacts on the company's incentives to innovate.220 However, it is then up to the company to demonstrate such negative impacts.221 If the refusal is a disruption of previous supply, this may affect the outcome of the Commission's assessment of the claimed justifications.222

4.4 Scholarly commentary regarding the EC application of the doctrine in the Microsoft case

Although there exist numerous commentaries regarding the Microsoft case, there are hardly any commentaries discussing the particular circumstance in this case which differs it from earlier case-law, namely that it concerns a refusal to share trade secrets and not IP rights. Instead, most commentators focus on the effects of compulsory licensing on society welfare, particularly within the software market, and hence discuss whether or not the CFI achieved the desirable effects with its judgement. Irrespective of their standpoint, whether being supportive or critical, the commentators have as a point of departure the specific characteristics of the software market, i.e. network effects and consumer lock-in, when evaluating the outcome of the case.

4.4.1 Arguments contesting the EC approach

Those who are critical towards the obligation imposed on Microsoft to disclose interoperability information, argue that the Commission and the CFI have failed to consider the positive consequences of network effects and consumer lock-in in high-

217 Ibid., para. 84.
218 Ibid., para. 85.
219 Ibid., para. 87.
220 Ibid., para. 89.
221 Ibid., para. 90.
222 Ibid.
technology markets. An example is Turney, who see the concentration of market power as a natural development on innovative markets, as it leads to higher efficiency and therefore also to higher consumer welfare. Similarly, Hovenkamp considers the profitable lifetime of a product on the computer market being much shorter than the legal duration of the property rights, stating that the dominant company will continue to innovate in order to always keep its products up to date. Thus, the innovative process will not be negatively affected by temporary lock-in effects. Moreover, it is held that the interference with a dominant company's property rights is much greater in Microsoft than it has been in previous case-law, as Microsoft's IP rights and trade secrets were valuable and strong, unlike those in Magill and IMS.

4.4.2 Arguments supporting the EC approach

Those who support compulsory disclosure of interoperability information emphasise instead the negative consequences of network effects. Montagnani, for example, holds that that the strong network effects in high-technology markets help strengthening the position of the rights-holder and allowing unjustified monopoly profits. Also, it leads to the product of the right-holder becoming a de facto industry standard, without access to which other competitors cannot provide their own products or create new ones. In such situations, the dominant company's exploitation of its property rights limits competition as well as the innovation process, leaving no way out except obliging the company to share the necessary asset. Other commentators consider that the interoperability information on Microsoft's operating system is an essential infrastructural facility, similar to mutually selected industry standards, to which all parties on the market should have open and non-discriminatory access. They do not

224 Ibid.
228 Montagnani, M. L., p. 631.
229 Ibid.
believe that the value of the withheld information results from substantial investments or innovative efforts.\textsuperscript{231} Therefore, disclosing the information will not decrease Microsoft's incentives to innovate, but only increase the incentives on the market.

4.5 Conclusive analysis

We have seen in this chapter that also a company's refusal to disclose trade secrets might fall within the scope of the essential facilities doctrine. However, a study of the European case-law has shown that the only time a company has been imposed an obligation to disclose trade secrets, has been within the software industry. The software industry is a typical example of a market which is affected by strong network effects and consumer lock-in. Such markets create particular concern for the competitive structure as it is the network effects, rather than the dominant company's innovative efforts, which lead to high barriers to entry and an enhanced market power. This was also one of the main arguments put forward by the Commission and the CFI, when obliging Microsoft to disclose its trade secrets. According to them, it was necessary for other competitors to have free access to the interoperability information as Microsoft's PC operating system had become a \textit{de facto} industry standard due to the network effects. Thus, the high value of the interoperability information came mostly from its necessity, not from of its innovativeness. Consequently, by refusing to share that information, Microsoft exploited its property rights on an asset to which everybody should have access, in order to leverage its dominance to the downstream market.

While discussing the relationship between refusals to share trade secrets and refusals to license IP rights in the \textit{Microsoft} case, the Commission made several interesting comments. Firstly, it stated that the case-law regarding refusals to license IP rights does not \textit{per se} apply on trade secrets. Secondly, it held that the legal right for IP right-holders to refuse to license does not \textit{per se} apply on trade secrets either, as trade secrets are normally less protected by national laws than IP rights.

The first statement implies that a dominant company, which refuses to share its trade secrets in a potentially abusive manner, cannot always rely on the Courts applying the stricter test for refusals to license IP rights when judging upon its refusal. Instead, the refusal might be judged under the test set out for physical property, with a higher

\textsuperscript{231} Ibid, p. 33 and 55.
probability of it being prohibited. Alternatively, the refusal might fall under a separate category and thus undergo a different – and possibly even stricter – test than those concerning IP rights and physical property. The Commission did indeed classify refusals to share trade secrets separately from other forms of refusals to deal in its discussion paper from 2005, in which it considered trade secrets being less worthy protection than IP rights. This categorisation was however not upheld in its latest communication from 2009, in which it chose to discuss refusals to deal more generally, without taking notice of the specific type of property in question. It seems like the Commission is seeking to clarify its own reasoning in the Microsoft case, after it was upheld by the CFI. Recalling the Commission's decision, in which it took all circumstances surrounding Microsoft's refusal into account, and not only the specific factors set out in Commercial Solvents or Magill, it seems logical that it has set out one single test for all refusals to deal in its latest communication. The Commission takes hence a highly effect-based approach when deciding upon refusals to deal; regardless of the type of property which is refused, the refusal will be considered as particularly serious if it fulfils several criteria, namely (i) if it is acted out by a near-monopolistic company, (ii) if it involves an abusive conduct, such as a disruption of previous supply, and, (iii) if it harms consumer welfare by preventing the entry of a new product or by preventing technical development.

The second statement of the Commission implies that it is generally more accepted to refuse to share IP rights, than it is to refuse to share trade secrets. This means that, from an EC perspective, trade secrets should be less protected than IP rights in antitrust issues, since they are also less protected than IP rights by the national laws of the Member States. Such a reasoning makes however little sense, when considering the specific subject-matter of trade secrets in comparison to IP rights. The limited protection of trade secrets is mainly due to the fact that trade secrets, opposite to IP rights, are protected only while being a secret. Thus, the difference in legislation is a result of the difference in the nature of the property in question. It is not solely based on an estimation of how protection-worthy the property is. Furthermore, it is not correct to assume that IP rights are more valuable than trade secrets, since certain information that is kept as a secret might also be patentable as well as protectable by copyrights. Irrespective of the information being an IP or a secret, it has a certain commercial value for the owner. Therefore, an obligation to share that information with other competitors will generally have a negative impact on the value of the information.
The Commission acknowledged the existing risk of decreasing Microsoft’s incentives to innovate by obliging it to share its trade secrets. However, after balancing the positive impacts of an obligation, against the negative impacts of such, it reached the conclusion that the first outweighed the latter. Most importantly, it did not consider that the secret information in question had a high level of innovativeness. Unlike the source codes of Microsoft’s products, the interoperability information was not in itself the product with which Microsoft competed on the market.

Although the Commission only explicitly refers to Microsoft’s incentives to innovate when considering its justifications, one should not assume that it is only at this stage that the impacts on the innovative process are taken into account. The fact that the Commission referred to its earlier considerations, when dismissing Microsoft’s justification, indicates that it had previously made an own evaluation. Naturally, it is only when a company’s refusal is considered as anti-competitive and harmful for consumer welfare, that an obligation imposed on the company to share its asset can be justified. The principal burden of proof, regarding the effects on innovation, lies thus on the competition authorities, and can be refuted by the dominant company by providing stronger evidence. This process is crucial for the long-term effects of compulsory disclosures on society welfare. If competition authorities would base their decisions purely on the unfavourable position of competitors, in means of seeking to maximise their possibilities to enter the market, one would see immediate positive effects on the competitive structure. However, the important long-term role of IP rights and trade secrets would be undermined.

Some have criticised the outcome of the Microsoft case by holding that a temporary concentration of market power within high-technology markets leads to higher efficiency and higher welfare. This might be true. However, when looking at the specific situation in Microsoft, it seems difficult to label Microsoft’s market power as “temporary”. The fact that Microsoft continued its abusive behaviour three years past the Commission’s judgement, seemingly unaffected by the excessive penalty fines, is a strong indication on the opposite.
5 FINAL ANALYSIS

The tensed relationship between EC competition law and IP rights has been subject to great controversy among both legal and economic academics during the past years. However, not much has been said when it comes to the relationship between competition law and trade secrets. In this thesis I have sought to clarify whether or not the essential facilities doctrine also applies on trade secrets. So, what conclusions are there to be drawn? Do trade secrets fall within the scope of the doctrine? Is the CFI correct in establishing that there is no reason for trade secrets to be treated differently from IP rights when applying the doctrine?

5.1 Is the EC essential facilities doctrine applicable on trade secrets?

In Chapter 3 we have seen that it is possible for copyrights to fall within the scope of the essential facilities doctrine. The examination in Chapter 4 has shown that also secret interoperability information might be covered by the doctrine. Should this lead to the conclusion that the essential facilities doctrine is applicable on all trade secrets? The elaboration of the EC case-law in the previous chapters provides that such an application is rather exceptional. One should therefore be cautious not to interpret the case-law in too general terms, in means of equalling copyrights with all IP rights, and secret interoperability information with all trade secrets.

As for dominant companies' refusals to disclose trade secrets, it has only been considered to harm the competitive structure within the software industry. The reasons for this were that, due to the strong network effects on the market, the products of a near-monopolistic company – namely Microsoft's/IBM's operating systems – on the upstream market had become a de facto industry standard. Consequently, the products on the downstream market were dependent on functioning with this standardised product, as there would be no consumer demand for the products on the downstream market otherwise. This scenario, which can be applied on both IBM and Microsoft, is also coherent with the abusive refusal in IMS. In all these cases, access to the IP right/trade secret in question was necessary due to its role as a link between the products provided on the market and their compatibility with the current industry standard. Thus in Microsoft and IBM, the interoperability information was important in order for
competitors to be able to provide products compatible to Microsoft's/IBM's standardised operating system. Similarly in IMS, the copyrighted information was necessary not because of the value of the originality of the information, but because of its direct link to the standardised brick-structure. This brings us back to the initial goal of the essential facilities doctrine, namely the liberalisation of the – highly infrastructural – transport markets. It is thus not surprising that the Commission and the European Courts considered the refusals in these specific cases as abusive, as this is coherent with the initial purposes of the doctrine. The copyright in IMS and the information in IBM/Microsoft were mostly valuable because they were indispensable tools for the competitors to provide services on the downstream market – they were not the final products themselves in which the dominant company had invested in and sought to distribute to its customers. Such tools should be open for everyone to use, as they only function as a bridge between companies' products and the market. Consequently, a free access will allow new products into the market and create incentives for the companies to continue developing products, as it will become possible to manufacture products which are coherent with the industry standard on the market. Without a free access, it will only be the dominant company which has the possibility to provide products, in accordance with the industry standard, on the downstream market. Provided that the company is vertically integrated in the downstream market, it seems clear that, when the dominant company refuses to share the information while holding that it is exercising its property rights, it is in reality preserving the downstream market for itself.

These considerations lead to the conclusion that a trade secret, which functions as an essential tool for competitors to provide products, compatible with an industry standard, on a downstream market, should be freely disclosed to every company wanting to operate on the market, if

i. the value of the trade secret lies only in its role as a tool, not in its originality and innovativeness,

ii. the owner of the standardised asset is also the holder of the trade secret,

iii. the owner of the standardised asset has a very high share of the upstream market, and

iv. the owner of the standardised asset is, or intends to become, vertically integrated.
on the downstream market.

The first condition is of great importance, as an obligation for companies to disclose assets in which they have put great financial and innovative efforts might decrease their incentives to innovate and consequently also decrease the society welfare. This will be discussed further in the forthcoming section while answering the second question, as the negative impacts of compulsory licensing on companies' incentives is one of the main justifications for treating IP rights stricter than tangible property when applying the essential facilities doctrine.

As for the first question, it is sufficient for now to conclude that the essential facilities doctrine is indeed applicable on trade secrets, if all of the circumstances mentioned above are fulfilled.

### 5.2 Should trade secrets be treated differently from IP rights when applying the essential facilities doctrine?

If interpreting this question widely, the answer must be yes; trade secrets should indeed be treated differently from IP rights. This is simply due to the differences in the characteristics of trade secrets, compared to those of IP rights. Although both types of property rights have a commercial value and are important incentives for companies to innovate, trade secrets are often less protected than IP rights due to their secrecy. By obliging companies to disclose their trade secrets, one will deprive companies from their protection, unless the information is also covered by other IP rights. A disclosure of IP rights on the other hand does not deprive the right-holder of its property rights, which last until the legal time-limits, if there are any, have come to an end. Surely, the disclosed trade secret is protected by the licensing agreement. But if the company is obliged to disclose this secret to every competitor, the practical consequence will be that the information becomes public. As the commercial value of the trade secret lies in its secrecy, an open access to the trade secret will automatically decrease its value. Furthermore, a trade secret is not protected against independent acquisitions through reverse engineering. This implies that an asset which has become an industry standard due to network-effects caused by a trade secret, is more challengeable than would have been the case if it had been caused by a patented information. An obligation to license IP rights ought therefore to be less harmful on a company’s incentives to innovate, than
an obligation to disclose trade secrets. Thus, when solely basing the answer on the subject-matter of each right, the CFI is not correct in stating that trade secrets and IP rights are categorically equal. Instead, it seems more correct to apply an even stricter test when applying the essential facilities doctrine on trade secrets, with focus on the long-term effects of compulsory disclosure on the innovation process and the society welfare.

But does the CFI really mean that trade secrets and IP rights are categorically equal and should be treated as such? I believe that this is not the case. To understand the statement of the CFI, one must bare in mind the specific circumstances in which this statement was made. The analysis in Chapter 3 and 4 has shown that it is only in highly exceptional situations that the essential facilities doctrine might interfere with a company's exclusive rights provided by IP- and trade secret laws. The doctrine is thus not generally applicable on every type of IP right, nor is it generally applicable on every type of trade secret. As a consequence, the statement of the CFI should not be interpreted as a general consideration, but it should be interpreted narrowly, in means of only applying on those IP rights and trade secrets which might fall within the scope of the doctrine. The question should therefore be reformulated as to whether or not those trade secrets, which might fall within the scope of the doctrine, should be treated differently from those IP rights, which might fall within the scope of the doctrine? As compulsory disclosure of trade secrets might cause greater damage on a company’s incentives to innovate, the answer to this question will depend on whether an equal application of the doctrine on trade secrets and IP rights takes this circumstance into account.

So far, there have been only two occasions in which a dominant company has been obliged by the European courts to license its IP rights, namely in *Magill* and *IMS*. Without reiterating the analysis in Chapter 3 and section 5.1 to any further extent, it can be established from the foregoing that the essential facilities doctrine might be applicable on IP rights in two exceptional cases, namely if

i. the IP right is an essential tool for providing products which are compatible with an industry standard (as in *IMS*), or

ii. the IP right is a result of dysfunctional national IP laws, in means of it
counteracting the underlying purposes of its exclusivity (as in *Magill* and possibly also *IMS*).

In both of these cases, it was concluded that the commercial value of the IP rights arose from other factors than their expensiveness and innovativeness. In *IMS*, aside from the fact that the copyright protected a standardised database-system (see reasoning in 5.1), the copyright protected something that had not been financed or created by IMS alone. In *Magill* on the other hand, the program-listings were indeed created by the owners, but they were not new, original nor costly (see reasoning in 3.4). All of these circumstances are in direct conflict with the subject-matter of IP right protection, in means of rewarding the creator for its efforts and enhancing the incentives to innovate. Thus, by only using compulsory licensing as a remedy for a dysfunctional competition structure when the IP rights (i) do not reward the efforts of the right-holder, and (ii) allow the right-holder to use it for predatory causes, such as a leverage of dominance to a downstream market, the ECJ is indeed considering the effects on the innovative process.

Should these considerations be applied on trade secrets as well, when applying the essential facilities doctrine? The answer ought to be yes, for two reasons. Firstly, by excluding such trade secrets, which have a commercial value in themselves due to innovative and financial investments of the owner, from the scope of the essential facilities doctrine, one will safeguard the trade secret holder’s incentives to innovate. It was held earlier that compulsory disclosure of a trade secret will undermine the trade secret’s commercial value as it will become public. Consequently, it will not be harmful to oblige the disclosure of such trade secrets which do not in themselves have a commercial value, but which only function as a means to operate on the market. On the contrary, it will only enhance the incentives to innovate, as it will become possible for all competitors to bring new products into the market, which would not have been possible without access to the necessary information.

Secondly, a reference to a property right – regardless the type of property – should not be a justification for predatory conducts. If a company would only risk being obliged to share an asset when the asset is a physical or an intellectual property, and not when it is a trade secret, it could easily place its IP rights under secrecy in order to be able to continue its predation. This would undermine the purposes of IP as important know-
how, which normally would have been disclosed to the public, now would be withheld from the society. For this reason, trade secrets should be treated equally to IP rights when the trade secret/IP right is abused for predatory causes. This seems to be the reasoning of the Commission and the CFI in *Microsoft*, as they upheld Microsoft’s leveraging on the downstream market and disruption of previous supplies, when obliging it to disclose its trade secrets. Both of these actions are indeed different forms of predation. Thus, not only was the interoperability information in *Microsoft* a necessary means for producing products compatible with the standardised operative system, but it was also a tool for carrying out predations.

To conclude, there is no reason to treat trade secrets differently from IP rights when applying the essential facilities doctrine. The doctrine’s interference in intangible property rights is highly exceptional and might only occur when all the above mentioned criteria are fulfilled. The EC case-law has shown that the important role IP rights and trade secrets play for society welfare, in means of creating incentives to bring new and innovative products to the market, is acknowledged also by the European competition authorities. The arguments put forward by those who are critical to the “extensive” application of the doctrine in EC law can therefore be questioned. Take for example the criticism put forward by the US Supreme Court in *Trinko*. Here, it was held that successful companies should not be obliged to share their “sources of advantage” with others as this would decrease their incentives to innovate. This is also the most prominent argument among critical commentators. However, the foregoing examination has shown that until now, the European courts have solved this issue by excluding innovative and costly property rights from the scope of the doctrine. Next, the Supreme Court held that there is a high risk of making false judgements when obliging a company to share an asset. This however is only a question of how narrowly one has defined the conditions set out for determining when an obligation to share might be imposed on a company. The criteria set out in the EC case-law are seemingly narrow, which implies that also this point has been noticed and agreed upon in EC competition law. Lastly, the Supreme Court considered the doctrine being useful only if the refusal involved a predation, such as a disruption of previous supplies. Although this is not the only time a refusal might be held as an abuse within the EC essential facilities doctrine, it is nonetheless a situation which justifies the application of the doctrine.
6 SUMMARY OF CONCLUSIONS

An examination of the EC essential facilities doctrine, and its applicability on trade secrets and IP rights, has provided that the doctrine is not generally applicable on all trade secrets, nor is it generally applicable on all IP rights. However, trade secrets might fall under the scope of the doctrine in highly exceptional circumstances.

The essential facilities doctrine is applicable on trade secrets which function as an essential tool for competitors to provide products, compatible with a standardised product, on a downstream market, if (i) the value of the trade secret lies only in its role as a tool, not in its originality and innovativeness, (ii) the owner of the standardised product is also the holder of the trade secret, (iii) the owner of the standardised product has a very high share of the upstream market, and (iv) the owner of the standardised product is, or intends to become, vertically integrated on the downstream market.

The narrow application of the essential facilities doctrine on IP rights should also be applied on trade secrets. The reason for this is that such an application will automatically exclude highly innovative and costly trade secrets from the applicability of the doctrine. As a result, the trade secret holders’ incentives to innovate will not be damaged. Furthermore, it will only enhance the incentives to innovate for the whole industry, as it will become possible for all competitors to bring new products into the market.

Trade secrets should not be used as a justification for predatory conducts. If a company would only risk being obliged to share an asset when the asset is a physical or an intellectual property, and not when it is a trade secret, it could easily place its IP rights under secrecy in order to be able to continue its predation. This would undermine the purposes of IP as important know-how, which normally would have been disclosed to the public, now would be withheld from the society. For this reason, trade secrets should be treated equally to IP rights when the trade secret/IP right is abused for predatory causes.
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