



Faculty of Law and Public administration

Master Program in Law

Refusal to License Intellectual Property Rights under Article 102 TFEU

رفض ترخيص حقوق الملكية الفكرية في ظل المادة 102 من معاهدة TFEU

Submitted by:

Safa Ahmad Alawi Tahhan

(1155556)

Supervised by:

Dr. Mohammad Alqaisi

Dr. Diab Alshikh

2021-2022



Faculty of Law and Public administration

Master Program in Law

Refusal to License Intellectual Property Rights under Article 102 TFEU

رفض ترخيص حقوق الملكية الفكرية في ظل المادة 102 من معاهدة TFEU

Submitted by:

Safa Ahmad Alawi Tahhan

(1155556)

Supervised by:

Dr. Mohammad Alqaisi

Dr. Diab Alshikh

"This Thesis was submitted in partial fulfillment of the requirements for the Master's Degree in Law from the Faculty of Graduate Studies at Birzeit University, Palestine"

2021–2022

Refusal to License Intellectual Property Rights under Article 102 TFEU

رفض ترخيص حقوق الملكية الفكرية في ظل المادة 102 من معاهدة TFEU

Discussion Date: 30 June 2022

Submitted by:

Safa Ahmad Alawi Tahhan

(1155556)

This Thesis has been discussed and permitted on:

By the following discussion committee:

Dr. Mohammad Alqaisi (First Supervisor, Chairman) -----

Dr. Diab Alshikh (Second Supervisor) -----

Dr. Mahmoud Dodeen (Member) -----

Dr. Amir Khalil (Member) -----

Summary

Refusal to grant a license for intellectual property right by a dominant undertaking to a third party illustrates one of several interactions between EU competition law and European laws regulating intellectual property rights. Article 102 of the Treaty on the functioning of the European Union restricts certain conducts made by an undertaking that holds a dominant position in a given market, such as refusal to supply and refusal to license to a third party. Whereas, European laws regulating intellectual property rights give the owner of intellectual property right an exclusive legal right to choose whether he wants to grant a license for his intellectual property right to a third party or not. Therefore, the significant legal question that this thesis answers is whether the act on part of a dominant undertaking to refuse to grant a license for his intellectual property right to a third party constitutes an abusive practice contrary to Article 102 TFEU.

In a series of cases that stretches from *Volvo v. Veng* case to *Microsoft* case, the European courts have found that an undertaking occupying a dominant position that refuses to share its intellectual property right with other parties may become liable for infringing Article 102 TFEU. It is critically important for the determination legal framework to differentiate between refusal to grant a license for intellectual property rights committed in a primary market and refusal to grant a license for intellectual property rights committed in a secondary market; as exclusive exploitation by intellectual property right's owner could be legitimate competition in the primary market but could become abusive in a secondary market in the presence of "exceptional circumstances".

This thesis analyses the evolution of the “exceptional circumstances” doctrine as a flexible legal tool to determine the compatibility of a refusal to license intellectual property rights with Article 102 TFEU. The doctrine enables the European courts to assess each case on its own merits and take into regard the specific circumstances surrounding the refusal to grant a license for intellectual property rights.

المُلخَص

يعد رفض ترخيص الملكية الفكرية أحد أوجه التداخل بين قانون المنافسة الأوروبي والقوانين الأوروبية التي تنظم حقوق الملكية الفكرية. حيث ان القوانين الأوروبية التي تنظم حقوق الملكية الفكرية تعطي مالك الملكية الفكرية حق حصري قانوني بحرية الاختيار فيما إذا كان يريد ان يمنح الترخيص لشخص اخر ام لا، بينما يحظر قانون المنافسة الأوروبية من خلال المادة (102) من معاهدة عمل الاتحاد الأوروبي (TFEU) بعض سلوكيات الشركات التي تتمتع بمركز مسيطر في السوق مثل رفض الترخيص. لهذا فان السؤال القانوني المهم التي تجيب عليه هذه الرسالة هو فيما إذا كان رفض منح الترخيص لملكية فكرية من قبل شركة تتمتع بمركز مسيطر يعد من السلوكيات المحظورة وفقا للمادة (102) من معاهدة عمل الاتحاد الأوروبي (TFEU).

لقد وجدت المحاكم الأوروبية من خلال سلسلة من القضايا التي امتدت من قضية فولفو الى قضية مايكروسوفت ان الشركة التي تتمتع بمركز مسيطر في السوق وترفض ان تمنح الترخيص لحق ملكية فكرية لطرف اخر قد تكون عرضة لانتهاك المادة (102) من معاهدة عمل الاتحاد الأوروبي (TFEU). ولكن من اجل تحديد الإطار القانوني بشكل واضح يجب ان يتم التمييز بين رفض منح الترخيص لملكية فكرية المرتكب في السوق الاولى ورفض منح الترخيص لملكية فكرية المرتكب في السوق الثانوي؛ حيث ان رفض منح الترخيص لملكية فكرية قد يعتبر من ضمن المنافسة المشروعة في السوق الاولى ولكن من الممكن ان يصبح أحد "الافعال المسيئة" اذا ما ارتكبت في السوق الثانوي في ظل وجود "ظروف استثنائية".

تدرس هذه الرسالة تطور نظرية "الظروف الاستثنائية" كأداة قانونية مرنة تحدد مدى توافق رفض ترخيص حقوق الملكية الفكرية مع المادة (102) من معاهدة عمل الاتحاد الأوروبي (TFEU). حيث ساعدت نظرية "الظروف الاستثنائية" المحاكم الأوروبية في دراسة كل قضية على حدى وبشكل موضوعي اخذة بعين الاعتبار الظروف الخاصة والمحيطة بكل قضية من اجل تحديد مدى قانونية رفض منح الترخيص لحقوق الملكية الفكرية من قبل شركة تتمتع بمركز مسيطر في السوق.

Table of Contents

Summary	d
الملخص	f
Table of Contents	g
List of abbreviations	h
Introduction	i
Background	i
Research objectives.....	j
Research Importance.....	k
Research questions.....	k
Research Scope	l
Research Methodology	m
Research Structure	n
Chapter 1	1
Dominance and Intellectual Property Rights.....	1
1.1 The concept of dominance.....	1
1.2 Types of dominance.....	3
1.2 The methods of assessing dominance.....	5
1.3 Dominance and intellectual property right	11
Chapter 2.....	20
Refusal to license intellectual property right.....	20
2.1 The concept of refusal to license intellectual property right.....	20
2.2 The development of doctrines toward refusal to license.....	26
2.2.1 Refusal to supply intellectual property right in primary market.....	26
2.2.2 Refusal to supply intellectual property right in secondary market.....	29
2.2.3 “Essential facility” doctrine.....	36
2.3 The assessment of refusal to license intellectual property right.....	38
2.3.1 From refusal to supply IPR to refusal to license IPR.....	39
2.3.2 “Exceptional circumstances” doctrine	44
Chapter 3.....	68
Conclusions and recommendation.....	68
Bibliography	72

List of abbreviations

AC	Advocate General
ECJ	European Court of Justice
European courts	The Court of Justice of the European Union
CJEU	The Court of Justice of the European Union (the European Court of Justice, the General Court and the European Civil Service Tribunal)
Frاند	Fair, reasonable and Non-discriminatory
GC	General Court
IPR (s)	Intellectual Property Right (s)
IP	Intellectual Property
SEP	Standard-Essential patent
TFEU	Treaty on the functioning of the European Union

Introduction

Background

Over the years, the relationship between Competition Law and Intellectual Property Rights (IPR) has been a controversial subject; it has been argued a lot about whether the relationship is complementary or conflicting.¹ In the early 20th century, most scholars described the relationship between Competition law and IPRs as "contradictory".² They saw a great tension between the objectives of Competition law and IPRs among other reasons that made them see Competition law as incompatible with IPRs.

While IPRs grant a legal monopoly to the inventor and exclusive right to restrict others from using his innovation, Competition law prohibits abusive monopolistic conduct and arbitrary exclusion of competitors.³

Recently, many scholars started to change their negative perspective about the relationship between the two systems of law to a more positive and complimentary one. As Bohannon and Hovenkamp once referred to IPRs and Competition law as "two blades of the same scissors".⁴ They started to see that Competition law and IPRs in their own way have the same objective to promote competition.⁵

However, the interaction between Competition law and IPRs has always been significant, causing difficulties for policy-makers to find a functioning balance to

¹ Alice Pham, "competition law and intellectual property rights: controlling abuse or abusing control?" (2008) CUTS international center, page 4

(<https://bit.ly/33SLIfv>)

² Rotich Jebon, "The interface between competition law and intellectual property law in Kenya" (master thesis, university of Nairobi, Kenya, 2016) page 46

(<https://bit.ly/3H2RdX9>)

³ Rotich Jebon, *ibid*, page 43

⁴ Christina Bohannon and Herbert Hovenkamp, *Creation without Restraint: Promoting Liberty and Rivalry in Innovation*, (1st edition, Oxford University Press, United Kingdom, 2012), page 39

⁵ William Neilson and others, "Intellectual property rights and competition law and policy: attempts in Canada and Japan to achieve reconciliation" (2002) Washington university global studies law review, volume 1, issue 1, page 333.

(<https://bit.ly/3yMXKSH>)

reconcile these separate bodies of law. One of several interfaces between Competition Law and IPRs is whether a refusal to grant a license for IP constitutes an abusive practice contrary to Competition Law. In principle, the owner of IP has the right to choose whether he wants to deal with a third party and with whom he wants to deal. However, competition law establishes an exception from the principle of contractual freedom. Article 102 of the Treaty on the Functioning of the European Union (TFEU) came to prohibit undertaking which holds a dominant position in the market from abusing their position. In principle, there is nothing unlawful about market dominance, but with power comes responsibility. Therefore, the act of an undertaking that holds a dominant position and refuses to deal with a third party may be considered abusive conduct if it has serious impact on competition.

That being said is the act of a dominant undertaking to refuse to license its IPR to a third party considered an abusive conduct and therefore is prohibited by law?

In an attempt to create a legal framework for the refusal to grant a license for IPR by a dominant undertaking, the European courts has established “exceptional circumstances” doctrine. The European courts adopted the notion of "exceptional circumstances" as a legal tool to determine the compatibility of a refusal to license IPR with competition law.

Research objectives

The research aims to examine when a refusal to license an IPR may be unlawful according to Article 102 TFEU. On one hand, IPRs offer the owner an exclusive legal right to exploit his IP; whether to exploit it himself or through licensing it to a third party. On the other hand, comes competition law that aims to protect competition in

markets and considers refusal to supply and license an abusive conduct when it affects competition.

This research recalls the concept of refusal to license IPR as an abusive conduct under Article 102 TFEU. It defines the concept of abuse and the methods for assessing refusal to grant a license for IPR by a dominant undertaking through European case law.

Furthermore, this study sheds light on the cases where refusal to grant a license for IPR by a dominant undertaking can be justified. It examines “exceptional circumstances” doctrine as a legal tool established and developed by the European courts.

Research Importance

The research aims to study all aspects of refusal to license IPR under Article 102 TFEU.

This research serves as a useful reference for researchers who want to study the refusal to license IPR as one of the types of abuses committed by dominant undertaking.

In addition, the research is rich with European court’s decisions regarding refusal to license IPR by a dominant undertaking; which sets a balance between Competition Law and IPRs when it comes to refusal to license IPR by a dominant undertaking.

Furthermore, the research aims to determine the legal framework and the assessment methods regarding refusal to license IPR as well as finding appropriate answers to the questions of the research.

Research questions

The research aims to answer the following questions:

1. What is the concept of dominance? In addition, what are the methods of assessing dominance?

2. Does the possession of IPR indicate automatically the existence of a dominant position?
3. What is the concept of refusal to license IPR as one of the types of abuse under Article 102?
4. Does a refusal to license IPR is an abusive conduct under Article 102?
5. What are the doctrines that used by European courts to consider refusal to license IPR to a third party as an abuse of a dominant position?
6. Are there any considerations that may objectively justify refusal to license IPR by a dominant undertaking to a third party?

Research Scope

In order to maintain a defined analysis of the research subject, several limitations have been made to structure this paper. Initially, the substantive scope of the thesis studies an undertaking's exploitation of its IPR in relation to refusal to supply or license situations, so it does not cover any other abusive practices involving IPR, such as tying, bundling, and excessive or predatory pricing.

Regarding refusal to license intellectual property rights, this thesis does not talk about licensing agreements in which the owner of intellectual property right (Licensor) grants permission to another (Licensee) to use their intellectual property right on mutually agreed terms and conditions. Nevertheless, this thesis examines compulsory licensing which is authorized by the European courts that allows the company or an individual seeking other's intellectual property to use it without having to seek the consent of the owner/ the right holder by paying a predetermined fee for the license.

Regarding the territorial scope, this thesis is centered around EU competition law specifically Article 102 of the TFEU which prohibits undertaking who holds a dominant

position from abusing their position. Therefore, any debate regarding refusal to license IPR prohibited in other legislations are left out.

Research Methodology

The method used in this research is basically an analytical one, analyzing refusal to license IPR by a dominant undertaking as one of the types of abuse under Article 102 TFEU. Refusal to license IPR can be subject to Competition law only if the owner of the IP holds a dominant position in the common market. Therefore, the first step includes understanding the concept of dominance and the situations in which possessing IPR leads to owning a dominant position in a common market. The second step is studying the concept of refusal to license IPR as one of the types of abuse mentioned under Article 102 TFEU.

The research is centralized on the legal framework of competition in the European Union; the EU competition legislator and judiciary have set a remarkable development in this field throughout the work of its Commission and the jurisprudence of its courts. Finally, one cannot examine the law in isolation from judicial decisions; therefore, the case-law of the European Union courts is a central source in this paper. The European court relies substantially on its earlier case law and establishes rules and principles according to them. Consequently, the main judicial decisions that addressed the topic of this paper were the decisions that had been made by the European Court of Justice “the CJEU”⁶, which is the highest court in the EU that became applicable through the Lisbon Treaty in 2009.

⁶ The CJEU is comprised of three courts: The European Court of Justice (ECJ), the General Court and the European Civil Service Tribunal. They all serve different purposes. The CJEU's mission is to ensure that the European law is protected in the application of the Treaties of the European Union.

Research Structure

The research presents the legal framework related to refusal to license IPR by a dominant undertaking. Refusal to license IPR must be coming from undertaking that holds a dominant position in the common market in order to be subject to Article 102 TFEU.

Thus, the study includes two main parts. The first chapter discusses the concept of dominance and the methods of assessing dominance that helps in determining when owning IPR means holding a dominant position in the common market.

Chapter two explains how refusal to grant a license of an IPR by a dominant undertaking can be an abusive conduct under Article 102 TFEU. Firstly, it defines the concept of refusal to license IPR as an abusive conduct. Secondly, it shows the development of doctrines used by the European courts that dealt firstly with refusal to supply, and then those doctrines were applied on cases that dealt with refusal to license IPR by a dominant undertaking. Finally, it examined “exceptional circumstances” doctrine through the analysis of European case law that identified the considerations that may objectively justify refusal to license IPR by a dominant undertaking to a third party.

Chapter 1

Dominance and Intellectual Property Rights

Article 102 of The Treaty on the Functioning of the European Union (TFEU) came to regulate the actions of undertakings, which occupy a dominant position on a particular market. It concentrates on dominant undertakings that take advantage of their position to affect competition on markets. Whereas, undertakings, which do not enjoy a dominant position, are left out from the scope of Article 102 TFEU, that is their actions do not fall in scope European Competition Law application. Thus, in order to say that refusal to license an intellectual property right (IPR) by its owner to a third party is unlawful according to competition law, it must be decided first that this undertaking possesses a dominant position.

Therefore, this chapter discusses the concept of dominance, the methods of assessing dominance and whether holding an IPR means automatically holding a dominant position.

1.1 The concept of dominance

Article (102\1) of the TFEU states:

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

The concept of a "dominant position" forms the basis of Article 102 TFEU. Therefore, as long as an undertaking⁷ does not hold a dominant position it is not touched by Article 102 TFEU. To determine whether the accused undertaking holds a dominant position in the market, we must know how dominance is being measured. According to economic criteria, dominance equals the power to limit output in order to raise prices and to extract profits above the competitive level from that market.⁸

However, the term "dominant position" in Article 102 has been defined by a legal assessment by the Court of Justice of the European Union (CJEU), as it is stated in *United Brands Case* that a "dominant position" is:

"a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by affording it the power to behave to an appreciable extent independently of its competitors, its customers and ultimately of its consumers."⁹

As well as, in *Hoffmann La Roche Case*, the CJEU also defined a "dominant position" by stating that:

"Such position does not preclude some competition ... but enables the undertaking which profits by it, if not to determine, at least to have an appreciable influence on the conditions under which that competition will develop, and in any case to act largely in disregard of it so long as such conduct does not operate to its detriment."¹⁰

⁷ Undertakings can be natural or legal persons, private companies or state companies, producers, distributors, service providers or professionals. It is not important what sort of activity the undertaking is doing, neither, at which stage of the production process the undertaking operates.

⁸ Steve Anderman and Hedvig Schmidt, *EU competition law and intellectual property rights* (2nd edition, oxford university press, united states, 2011) Page 5.

⁹ United Brands Company and United Brands Continental BV V Commission of the European Communities, case 27\76, 14\02\1978, para 38 (<https://bit.ly/3KfOp2s>)

¹⁰ Eric Van Damme and others, "Abuse of a dominant position: cases and experiments" (2006) ssrn electronic journal, page 4, 10.02.2018 (<https://bit.ly/3hIGHcT>)

Therefore, dominant position refers to a position of economic strength that an undertaking holds, making it capable of controlling the relevant market independently from any competitors, customers, suppliers, or consumers.¹¹

1.2 Types of dominance

According to Article 102 TFEU, it is prohibited for “one or more undertaking” to abuse a dominant position. Thus, Article 102 applies not only to single undertaking dominance but also to where two or more undertakings are involved, this is known as a “joint” or “collective” dominance. Collective dominance was first addressed in the *Flat Glass Case*,¹² where the EU Commission found that three Italian companies occupied a collective dominant position and represented themselves as one entity and not as individuals. The Court of First Instance confirmed that: “There is nothing in principle to prevent independent economic entities from being, on a specific market, united by such economic links that by virtue of that fact together they hold a dominant position vis-à-vis the other operators on the same market.”¹³

Furthermore, in *Cewal Case*, the Court of First Instance emphasized that “A dominant position may be held by two or more economic entities legally independent of each other, provided that from an economic point of view they present themselves or act together on a particular market as a collective entity.”¹⁴

¹¹ Ibid, page 4

¹² A fundamental case where the Court of First Instance defined what a position of joint dominance is. It concerned three Italian companies that together held 90% of market share in Italian market of flat glass. Companies complained to the commission about the three Italian companies for infringing Article 85(1) of the EEC Treaty, and Article 86 of the Treaty. for further reading: (<https://bit.ly/3zzGcf9>)

¹³ Società Italiana Vetro SpA, Fabbrica Pisana SpA and PPG Vernante Pennitalia SpA V Commission of the European Communities, Joined cases T-68/89, T-77/89 and T-78/89, 10\03\1992 (<https://bit.ly/39udqlx>)

¹⁴ Cewal V the Commission, case 93/82/EEC, 23\12\1993 (<https://bit.ly/3mJ5sYW>)

It should be clarified that there is no collective dominance when the two entities concerned are a parent company and its subsidiary. In order to determine that the undertakings concerned together hold a dominant position in a market, there is criteria that can be summarized as follows:

(a) Economic links and connecting factors¹⁵

There are several forms for connecting factors between undertakings that may lead to a finding of collective dominance, such as agreement, strategic alliances, joint purchasing, and joint marketing.

However, to establish collective dominance, the existence of structural links among the undertakings concerned is not important.¹⁶ The existence of collective dominance does not require an agreement or other links in law; it may be based on other connecting factors. The Court of First Instance in the *Gencor Case* assessed the types of connection required to find a collective dominance

“There is no reason whatsoever in legal or economic terms to exclude from the notion of economic links the relationship of interdependence existing between the parties to a tight oligopoly within which, in a market with the appropriate characteristics, in particular in terms of market concentration, transparency, and product homogeneity, those parties are in a position to anticipate one another’s behavior and are therefore strongly encouraged to align their conduct in the market, in particular in such a way as to maximize their joint profits by restricting production with a view to increasing prices.”¹⁷

¹⁵ Van Bael and Bellis, *supra*, page 105-108

¹⁶ Renato Nazzini, *The foundations of european union competition law: the objective and principles of article 102* (1st edition, oxford scholarship, United Kingdom, 2012) page 89

¹⁷ Renato Nazzini, *ibid*, page 90

Therefore, a collective dominance may depend on “economic assessment” such as the structure of the market concerned and the way in which the undertakings interact on that market.

(b) Coordinated conduct

The Court of First Instance in *Airtours Case*¹⁸ set out three conditions to establish a collective dominance; first, each member of a collective dominant position must have the ability to know how the other members are behaving. Second, there must be sufficient deterrents to ensure that there is a long-term incentive not to deviate from this policy of maintaining common market behavior, such as a sufficient punishment mechanism to discourage undertaking that deviates from the common market behavior. Third, the foreseeable reaction of current and potential future competitors will not influence the results expected from the common policy.¹⁹

The CJEU²⁰ stated that: “it is necessary to avoid a mechanical approach involving the separate verification of each of those criteria taken in isolation while taking no account of the overall economic mechanism of a hypothetical tacit coordination”.²¹

1.2 The methods of assessing dominance

It is a long complex process for the European Commission to conclude and announce that an undertaking holds a dominant position in a market. Over the years and through

¹⁸ *Airtours Case V Commission of the European Communities*, Case T-342/99, 6/6/2002 (<https://bit.ly/3mLNuF6>)

¹⁹ Renato Nazzini, *supra*, page 85

²⁰ The European Court of Justice is the court that is responsible for interpreting and ensuring the implementation of EU law across the 27 countries that now make up the European Union.

²¹ Piet Jan slot and Martin Farley, *supra*, page 108

case laws the Commission came to narrow the factors that may indicate the existence of dominance. These following factors help on determining whether an undertaking holds a dominant position in a market or not:

(a) Market share²²

There are different degrees of dominance. As for "monopoly", for example, there will be of course a dominant position; when an undertaking holds 100 percent of the market share, this means automatically that there is no competition in that market. Therefore, monopoly and high market share lead to a "super-dominant" position,²³ where there is a greater responsibility for the undertaking concerned not to allow its conduct to impair genuine undistorted competition in the common market.²⁴

Most dominant position cases rely on Market share as a factor of assessing dominance. For example, in *Continental Can Case* their market share was 70-90 percent, in *Sugar Case* their market share was 85-95 percent, and Intel was an example of undertaking with IPR that held 80 percent market shares in the x86 CPU market.

High market share is a great indicator that a firm occupies a dominant position in the market. The CJEU confirmed that in *Hoffmann La Roche* case:

"Although the importance of the market shares may vary from one market to another the view may legitimately be taken that very large shares are in themselves and save in exceptional circumstances, evidence of a dominant position. An undertaking which has

²² Market share is the percent of total sales in an industry generated by a particular company. Market share is calculated by taking the company's sales over the period and dividing it by the total sales of the industry over the same period. This metric is used to give a general idea of the size of a company in relation to its market and its competitors.

²³ Van Bael and Bellis, *Competition law of the European community* (fifth edition, Kluwer law international, the Netherlands, 2010) page 103.

²⁴ NV Nederlandsche Banden Industrie Michelin V Commission of the European Communities, case 322/81, 09/11/1983, para 70 (<https://bit.ly/3CwRnoJ>)

a very large market share and holds it for some time by means of the volume of production and scale of the supply which it stands for... is by virtue of that share in a position of strength which makes it an unavoidable trading partner..."²⁵

Furthermore, the Commission clearly stated in *Hilti Case*²⁶ that an undertaking with high market share that exceeds 75% occupy a dominant position and there is almost no competition left in the market.²⁷ The guidance on abusive exclusionary conduct confirmed that by stating:

“The higher the market share and the longer the period of time over which it is held, the more likely it is that it constitutes an important preliminary indication of the existence of a dominant position”.²⁸

An undertaking's market share is an important factor in assessing dominance, however, it does not always determine on its own whether an undertaking is dominant or not. Thus, market share that is less than 40% of the market requires economic analysis. Even though, 40% of the market is a high market share, but it cannot establish dominance by itself. The essential factor that must be examined is the existence of actual competition. Therefore it is very important to discover what the market shares of other undertakings on the market are; because if the next largest competitor has a market share of 40 percent or more, the position of the largest undertaking with a 50 percent share is for sure far less strong than the number two undertakings which hold only a 4 percent market share.²⁹ The CJEU confirmed this in many cases, for example in *Michelin case*;

²⁵ Hoffmann-La Roche & Co. AG V Commission of the European Communities, case 85\76, 13\02\1979, para. 41

(<https://bit.ly/3hGEP4a>)

²⁶ Hilti V Commission, Case T-30/89, 12\12\1991, para 92

(<https://bit.ly/3mJ6wMm>)

²⁷ Piet Jan slot and Martin Farley, *supra*, page 104.

²⁸ Van Bael and Bellis, *supra*, p.104. See: the guidance on abusive exclusionary conduct, Para.15.

²⁹ Steven Anderman and Hedvig Schmidt, *EU Competition Law and Intellectual Property Rights* (2nd edition, Oxford University Press, United Kingdom) Page 60.

the Commission relied on the fact that Michelin's share of the market for new replacement tires for heavy vehicles was 57-65 percent to establish dominance when the market shares of its main competitors were only 4-8 percent.³⁰

Market shares > 70-80% is a clear indication of dominance

Market shares > 40% requires economic analysis

Market shares < 40 % is Generally considered to be indicative of an undertaking not holding a dominant position

(b) Commercial advantages

Another factor used as an indicator for a dominant position is commercial advantages. Offering a large product range can be one of the commercial advantages that indicates occupying a dominant position in the market.³¹ When an undertaking offers a large product range this gives it a competitive advantage in the market, and that was confirmed by the Commission in *Aerospatale-Alenia Espace de Havilland Case*.³² Boeing-McDonnell Douglas which was a major American aerospace manufacturing had an advantage over Airbus Industry because it offered jumbo jets and smaller aircrafts. For an air transport company, it was more practical to work with one manufacturer; that can offer advantages in training pilots and in stocking and ordering spare parts.

In addition, an undertaking, which is vertically integrated, can be an indicator of occupying a dominant position in the market.³³ Vertically integrated means a company controls a large proportion of the resources necessary for production and delivering the

³⁰ Piet Jan slot and martin Farley, *An introduction to competition law* (2ND edition, hart publishing, London, 2017), page 101

³¹ Piet Jan slot and martin Farley, *supra*, page 101-106

³² *Aerospatale- Alenia/de Havilland*, case no. IV/M.053, 12\05\1991, A case about merger, For further reading: (<https://bit.ly/3CjwLQn>)

³³ Steven Anderman and Hedvig Schmidt, *supra*, page 61

final product to the relevant market and does not rely upon independent distributors to get their products to the customer. For example, Shell and BP prospect for oil and gas, they produce it, transport it, refine it and sell it through their own petrol pumps on garage forecourts.³⁴ Another conspicuous commercial advantage that can be used as an indicator for a dominant position is a well-known brand, As for Coca-Cola.

(c) Technical advantages

Technical advantages can be an indicator among other factors of a dominant position. Technical advantages appear usually in patents and copyrights. It must be distinguished between situations where the whole product falls under a patent or a copy right, and situations where only a part of the production process falls under such rights. If the product concerned cannot be replaced by any competing substitute product this exclusivity creates a dominant position in the market, such as Zantac, which is a drug for treating stomach ulcers, which has been an incredible money-earner for its owner over the years. Whereas, if there is an alternative product or if the exclusive right covers only a part of the production the owner's position in the market is only strengthened by this factor.³⁵

(c) Statutory monopoly

"Special rights" is an indicator of a dominant position among other factors. "Special rights" do not indicate a dominant position in the market by itself. It may give an advantage for the undertaking concerned but that advantage is shared with its competitors.³⁶

³⁴ Ibid, page 61

³⁵ Piet Jan slot and Martin Farley, supra, page 105

³⁶ Piet Jan slot and Martin Farle, supra, page 106

“Special rights” means that there are a few undertakings which are granted the right to operate on a particular market but the access to that market is restricted.³⁷

(e) Barriers to entry

“Barriers to entry” means that if it is difficult to begin to produce particular product, then the undertaking which produces this product already holds an advantage in the market.

There are several factors influence the available supply of products on the market. One of the supply-side factors that form a barrier to enter the market is the requirement of big production capacity in certain industries.³⁸ For example, in automobile industry, it costs billions to develop a completely new model, and to regain these billions and make good profit; the undertaking must sell a sufficient quantity of cars. If too few are made, then the price of each car will be too high. For most car producers it is very important to have significant production capacity.³⁹

In addition, high investment costs can be a barrier to enter a market.⁴⁰ In aircraft industry, for example, only a few undertakings can afford the cost of launching a new aircraft. Therefore, there is a natural barrier that excludes small industries from entering particular markets.

Furthermore, patents can be a barrier to enter a market; the first patent holder can have an advantage over other undertakings because it has built a strong reputation in the market that sometimes makes it almost impossible for new undertakings to enter that

³⁷ Steven Anderman and Hedvig Schmidt, *supra*, page 61

³⁸ OECD, “barriers to entry” (2005) page 33

For further reading: (<https://bit.ly/3tDgnGN>)

³⁹ *Ibid*, page 61

⁴⁰ Steven Anderman and hedvig Schmidt, *supra*, page62

market.⁴¹ A clear case about this can be *Napp Pharmaceuticals Case*.⁴² The office of fair-trading relied on this factor to build its theory about Napp's dominant position in the market. Napp is a research-based company based in the UK that was the first company to launch sustained-release morphine product (MST) in the UK in 1980.⁴³ MST was a new formulation of a pain relief product for severe pain like cancer. Napp's patent expired in 1992. Nevertheless, by being the first production company for those painkillers during those years, Napp developed a strong reputation that made it difficult for new products to enter that market.⁴⁴ Therefore, a previously held advantage due to patent protection may continue even after the expiry of that protection; due to the reputation that has been built.

1.3 Dominance and intellectual property right

To determine whether or not there is a dominant position in any given case, one must notice which factors in the relevant market restrict competition. Because obviously market share by itself cannot determine whether there is a dominant position or not, and the possession of IPR does not automatically consider holding a dominant position in the market. Therefore, these factors are necessary to show that even though the undertaking concerned does not have a very high market share, it nevertheless occupies a dominant position and vice versa.

In order to regulate conduct of an IPR owner by article (102), its owner must hold a dominant position in a particular market. The CJEU stated that possession of an IPR does not always amount to a position of dominance:

⁴¹ OECD, *supra*, page 136.

⁴² Napp pharmaceutical holdings limited and subsidiaries (Napp), case 98/2/2001, 30\03\2001 (<https://bit.ly/3tyyb5R>)

⁴³ *Ibid.*

⁴⁴ *Ibid.*

“The manufacturer of sound recordings who holds a right related to copyright does not occupy a dominant position within the meaning of article 102 merely by exercising his exclusive rights to distribute the protected article. Article 102 further requires that the manufacturer should have the power to impede the maintenance of effective competition over a considerable part of the relevant market-in particular to the existence of any producers making similar products and to their position on the market.”⁴⁵

As an exclusive right to exploit an IPR does not automatically mean finding a dominant position. The main question here is when can we say that an IPR owner owns a dominant position?

The first step to say that the right-holder occupies a dominant position is to determine the relevant product then to define the relevant product market upon which dominance is being measured, and its geographic dimension.⁴⁶

If a firm accused of abuse of a dominant position, then the competition authority must first determine “the relevant product”. For example, if the product is bananas then the initial product defines itself, and therefore the Commission can easily move to define the relevant product market. but if the product is more technically complex, the competition authority must decide whether and to what extent to view the various sub-products or raw materials as components of an integrated product and to what extent to view each sub-product or raw material as a product in its own right.⁴⁷ Therefore, in the case of products such as consumables and spare parts, the Commission decides whether they are parts of the product or separate products creating separate markets. Furthermore, when a firm has different economic activities within the same company,

⁴⁵ Deutsche Grammophon Gesellschaft mbH V Metro-SB-Großmärkte GmbH & Co. KG, case 78/70, 08/06/ 1971, para 16

(<https://bit.ly/3tBYcRA>)

⁴⁶ Steven Anderman and Hedvig Schmidt, *supra*, page 37-53

⁴⁷ Giorgio Monti, *EC competition law*, (1st edition, Cambridge university press, USA, 2007), page 218

the commission can determine whether these operations offer one product or are separate activities offering separate products on separate markets despite the corporate form of the operations.⁴⁸

In the case of *Hugin*⁴⁹, which was a major manufacturer of cash register, and Liptons, which served, repaired, sold and rented out the cash register. Since 1950 Liptons had bought spare parts for the cash registers produced by Hugin company. In 1969, Liptons was the main agent to sell Hugin cash registers in the United Kingdom. In 1972 Hugin ended its relationship with Liptons and refused to supply them with spare parts. Liptons complained to the commission, and after analyzing the situation, the CJEU decided that there was a separate market for spare Hugin parts required by independent undertakings specializing in maintenance and repair of Hugin cash registers from the market for cash registers generally. Then this led to deciding that Hugin was dominant in the “market” for new spare parts for Hugin cash registers despite the huge competition between manufacturers in the cash register market.

The CJEU reasoned deciding that Hugin spare parts are separate products from cash registers; because there was a separate demand for the product.⁵⁰ So due to the existence of demand from independent undertakings specializing in the maintenance and repair of cash registers, the CJEU determined that the Hugin spare parts are separate products from cash registers.

As well, in the *Volvo and Maxicar case*⁵¹, the issue also arose whether it was possible to see cars spare parts as a separate product from new cars. The car firm’s argument was that the replacement parts as a separate market from new cars because they were

⁴⁸ Ibid, page 2019

⁴⁹ *Hugin V Liptons*, case 22\78, 24\02\1978
(<https://bit.ly/3q3AkFN>)

⁵⁰ *Hugin V Liptons*, supra, para 7-8

⁵¹ *Volvo V Maxicar*, case 238\87, 17\07\1987
(<https://bit.ly/3IPsmY7>)

part of a package deal offered to the consumer. The relevant product market was the market for new cars and/or maintenance and repair work. So from the point of view of the supply side of the market, the two separate stages of economic activity were viewed as a comprehensive package.

However, in order to determine the initial product, we must analyze the viewpoint of consumers and users. Here the Commission distinguished between the individual purchasers of cars who might be affected by the relationship between the price of spare parts and the new car and those who are only interested in repairs. So the commission stated:

The fact remains that the owner of a vehicle who, at a given moment decides to repair the bodywork of his vehicle rather than change model is obliged to purchase (either directly, if he repairs the car himself, or indirectly through a garage in the manufacturer's network or through an independent repairer) a body panel which is identical in shape to the original part. Consequently, for the owners of a vehicle of a particular make the relevant market is the market made up of the body panels sold by the manufacturer of the vehicle and of the components which, being copies, are capable of being substituted for them.”⁵²

Therefore, the Commission's first concern was whether there was specific consumer demand for the relevant spare parts and whether any other substitute products could meet that demand. Therefore, the Commission decided that the relevant product couldn't be defined through a supply viewpoint, and narrowed the initial product to spare parts (body panel) which led to converting narrowly defined product as the base for a market into a single product market.

⁵² Maxicar V Régie nationale des usines Renault, case 53\87, 05\10\1988, para 47 (<https://bit.ly/3Chg2gJ>)

An IPR does not automatically have the effect of converting a narrowly defined product into a single product market. The effect of an IPR in excluding substitutes is based on whether there are substitute products capable of performing the same function as the relevant product.⁵³ If the relevant product which is the base for the relevant market is dependent in a way that the IPR precludes substitutes then the IPR produces dominance.⁵⁴ So in the *Volvo Case*,⁵⁵ the product was a body panel protected by a design right, if the components had been any other part that could have been made using another design then the IPR wouldn't have the effect of narrowing the product market. As long as components performing the same function were available and interoperable with Volvo cars, the existence of the design right would not have the effect of excluding substitutes from the product market. However, in the *Volvo Case*, the IPR of body panels gives an exclusive right that narrows down the product market to a single product market, which means turning the right holder from a dominant position to a monopoly. Consequently, it is very important for an IPR's owner to widen the initial choice of product by the Commission; so it cannot face a form of double jeopardy.⁵⁶ The narrow definition of product can reduce the possibilities of substitutes, resulting in a narrow single product market. Finding a narrow product market can result in the IPR that the IP's owner is found to be dominant to the point of constituting a de facto monopoly. Moreover, setting a clear definition to a relevant market can facilitate determining when an IPR's owner has a dominant position in that market. Therefore, the best method of assessing dominance by an IP's owner is to see if there are few substitutes for the protected product or technology that the right-holder has the power in a relevant product

⁵³ Haris Catovis, *supra*, page 28

⁵⁴ *Ibid*, page 28

⁵⁵ AB Volvo V Erik Veng (UK) Ltd, case 238\87, 05\10\1988
(<https://bit.ly/3pD9Quk>)

⁵⁶ Steven Anderman and Hedvig Schmidt, *supra*, page 53, look into: Commission's enforcement guidelines on article 82 para 51

market to enable it to prevent effective competition from being maintained on that market.

There are substitutes to every good or service, and fair analysis of competitive relationships between firms regarding a product would require an assessment of the possible substitutes for that product taking into consideration its function, its suitability for satisfying user needs, and its price. The Commission and the CJEU have tended to give a great deal to the demand side more than the supply side when it came to the exploration of competitive relationships in terms of the possible substitutes for the product. As the CJEU has said in *Hoffman la Roche Case*:

“The concept of the relevant market, in fact, implies that there can be effective competition between the products which form part of it and this presupposes that there is a sufficient degree of the interchangeability between all the products forming part of the same market insofar as a specific use of such products is concerned.”⁵⁷

In the commission notice on the definition of the relevant market, the commission combined all products and/or services, which are regarded as interchangeable or substitutable by the consumer, taking into consideration the product’s characteristics, their prices, and their intended use.⁵⁸ So if the consumer considers other goods or services to be a substitute to a product then it can be considered to be within the same product market. In the Hugin case, when the CJEU decided that the Hugin spare parts are separate products from new cash registers. This led to a conclusion that Hugin spare parts shape a single product market; because they were not interchangeable with the

⁵⁷ Hoffmann-La Roche & Co. AG V Commission of the European Communities, case 85/76, 13\02\1979, para 28

(<https://bit.ly/3MuCw2A>)

⁵⁸ Commission notice on the definition of relevant market, para 7

(<https://bit.ly/3KmSWIs>)

spare parts for another cash register, and were not interchangeable with old Hugin spare parts for the purpose required by independent undertakings in the maintenance market.

To test the interchangeability of a product, we must know to what extent do consumers of the product switch to other products. According to the CJEU's guidelines, if there was a lower than 5 percent shift of demand to another product, that product can't be included in the market.⁵⁹ If there was a higher switch in demand than 5 percent to another product then it can be included in that market.⁶⁰

Thus, measuring interchangeability that way will require a lot of extensive statistical analysis, which is not practical. Instead, the Commission has tended to rely on other evidence to determine the interchangeability of a product. The first thing the commission does is analyze the product's characteristics and limit the field of investigation of possible substitutes.⁶¹ Then the Commission tends to rely on other evidence that can be deduced throughout the case law to determine interchangeability of a product such as substitution in the recent past, views of customers and competitors, consumer preferences, barriers to switching demand, different categories of customers.⁶²

When the relevant market is determined, then the commission has one last job here, which is to locate the relevant geographic market. Throughout law cases, the CJEU pointed out that the geographic market is determined by reference to the area in which the product is marketed where the conditions of competition are sufficiently

⁵⁹ Richard Davis, *Triton on intellectual property in Europe* (fifth edition, Thomson Reuters trading as Sweet and Maxwell, London, 2018), page 1134.

⁶⁰ *Ibid*, page 1135

⁶¹ Office of Fair Trading, abuse of a dominant position, page 15, 01.05.2014 (<https://bit.ly/3vGB3Af>)

⁶² *Ibid*, page 15

homogeneous to allow an evaluation of the economic power of the undertaking concerned.⁶³ As the CJEU court stated in the united brands case that:

“The conditions for the application of (article 102) to an undertaking in a dominant position presuppose the clear delineation of the substantial part of the common market in which it may be able to engage in abuses which hinder effective competition and this is an area where the objective conditions of competition applying to the product in question must be the same for all traders.”⁶⁴

Throughout law cases that concerned article 102, the geographic market has been chosen as the area in which a state monopoly is conferred, as in telecommunications, or an area where a firm enjoys IP protection, without the follow up of an empirical analysis of interpenetration of trade.⁶⁵ Thus, in some cases, the geographic area has been narrowed to the area in which the abuse has occurred. Such as in the *Michelin case*, in which the Netherlands was taken as the relevant market.

For IP's owners, it is very important to define the relevant market under narrow terms; it can limit the field of legitimate exploitation of an IPR. A narrowly defined market can produce the result that possession of an IPR can contribute to a position of dominance on a market by reducing the possibilities of substitution. Moreover, the narrow definition of markets can affect the treatment of IPR in the test of dominance as well as abuse. In other words, setting a narrow definition to the relevant market can have the affection of seeing the exercise of exclusive IPR in one “market”, which may have been perfectly acceptable as lawful exploitation of a property right, unlawful in

⁶³ Steven Anderman and Hedvig Schmidt, *supra*, page 53, look into: commission's enforcement guidelines on article 82, para, 51

⁶⁴ United Brands Company and United Brands Continental BV V Commission of the European Communities, *supra*, para 44

⁶⁵ Steven Anderman and Hedvig Schmidt, *supra*, page 54

the “second” market under article 102 because it threatens the existence of competition on that “market”.

After reaching the conclusion that an undertaking who owns an intellectual property holds a dominant position in the market, comes a great responsibility to avoid misuse it. The misuse of IPR is the reason why it can be subject to competition law; therefore, the next chapter will discuss how the owner of IP may abuse their position and violate Article 102 TFEU.

Chapter 2

Refusal to license intellectual property right

Refusal to license refers to a situation in which the owner of IP refuses to give a license to a third party. In accordance to contractual freedom and the exclusivity given by IPRs, the owner of IP, in principle, has the right to choose with whom they want to deal and whether they want to give license to a third party or not. Nevertheless, competition law came with restrictions to contractual freedom whenever the owner of IP holds a dominant position in the market. The main question here, is every refusal to license an IPR considered an abusive conduct under competition law?

This chapter defines when a refusal to license IP can be seen as an abusive practice under article 102 TFEU. It also discusses how the European courts dealt with refusal to supply IPR's cases; in order to build a legal framework for refusal to license IPR's by a dominant undertaking. In addition, it studies the "exceptional circumstances" test as a criterion found by the European courts.

2.1 The concept of refusal to license intellectual property right

In order to define refusal to license IP by a dominant undertaking as an abusive conduct under article 102, we must know first what is the concept of "abuse"? In TFEU, the term "abuse" is not defined, whereas the TFEU sets out only four examples of abuse in its second subparagraph:

"(A) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions,

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

(c) Applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them in a disadvantaged position,

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

As seen above, the term “refusal to license intellectual property right” is not even mentioned in Article 102 TFEU. Article 102 TFEU sets some examples of abuses that can be classified as "exploitative" abuses. These types of abuses required from an undertaking who holds dominant position in a market to take advantage of its market power at the expense of customers or consumers.⁶⁶ Even though, Article (102) of the TFEU only referred to practices that can be classified as "exploitative", the Commission and the CJEU are free to apply the article to numerous practices not cited in it, which has been confirmed by the court in *Hoffmann La Roche Case* as it has been said that: "The concept of abuse is an objective concept relating to the behavior of an undertaking in a dominant position which is such as to influence the structure of a market, whereas a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition normal competition in products or services based on the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition."⁶⁷

⁶⁶ Piet Jan slot and Martin Farley, *supra*, page 109

⁶⁷ *Hoffmann-La Roche & Co. AG v Commission of the European Communities*, *supra*, para8

Therefore, Article (102) constitutes a list of conducts whereby the dominant undertaking takes advantage of its market power to exploit its trading partners. Throughout the years, the jurisprudence expanded the concept of abuse from exploitative conduct to exclusionary conduct. Article 102 has been applied more widely than prohibiting exploitative abuses, to conduct causing damage to the competitive structure of markets already weakened by the presence of a dominant firm.⁶⁸ These abuses are classified as "exclusionary abuses" which include refusals to supply and license IPR.⁶⁹

In order to say that refusals to license IPR to a third party is an abusive practice there must be three notable constituent elements:

(a) Conduct weakening competition in the market

As mentioned above, Article 102 has been applied to exclusionary conducts as well as exploitative conducts. Exclusionary conducts include refusal to license IPR to a third party. Refusal to license refers to a situation in which the owner of IP refuses to give a license to a third party leaving them with no other choice but to seek a compulsory license. A compulsory license is an exception to the general rule under IPRs that the IP's owner enjoys exclusive rights to determine whether to license or to decline to license their IPs' to a third party. The compulsory license forces the owner of an IP to license the use of their rights against their will versus payment either set by law or determined through adjudication or arbitration.⁷⁰

⁶⁸ Haris Catovic, *supra*, page 26

⁶⁹ Steven Anderman and Hedvig Schmidt, *supra*, page 74

⁷⁰ Reto M. Hilty, *Compulsory licensing: practical experiences and ways forward* (1st edition, Springer Heidelberg, New York, 2015) page 95

Refusal to license is not limited to cases of direct refusals but may also involve situations in which there is a disproportionate delay in negotiations or where the contractual terms of the license are so excessive that the refusal amounts to a constructive refusal to deal.⁷¹

However, it is important to mention that not every refusal to license IPR requires seeking a compulsory license; there are assessment tools for such a refusal that must be checked first in order to rule for a compulsory license. The third section of this chapter These assessment tools will be discussed.

(b) Methods of normal competition

Dominant undertaking has a responsibility to use methods of “normal competition”. In *Hoffman La Roche Case*, the CJEU required from dominant firms to act in "normal competition methods". The exact meaning of this has generally been unclear. However, the concept of “normal competition” embraces both the concept of competition on the merits and objective justification.⁷²

There is a huge agreement among competition agencies from OECD countries that the purpose of competition policy is to protect competition and not competitors.⁷³ And although it may be easy to decide that certain types of conduct are outside or inside the acceptable area, but there are types of conduct that are difficult to decide if they are accepted or not such as refusal to license IPR.

⁷¹ Faul and Nikpay, *The EU law of competition*, (3rd edition, oxford university press, United Kingdom, 2015) page 465

⁷² Steven Anderman and Hedvig schmidt, *supra*, page 77

⁷³ Ana Novosad, “Some thoughts concerning the main goals of competition law” (2013) jurisprudence, volume 20, issue 2, page 631

(<https://bit.ly/3MszMCM>)

The expression “competition on the merits” is unclear as many other expressions like “unfair”. Many agencies and courts have used “competition on the merits” to distinguish conduct that harms competition from conduct that advances it.⁷⁴ It was used to facilitate the task of sorting out harmful and exclusionary conduct from healthy and competitive conduct.

The expression “competition on the merits” is a vague term as was said before, but that did not stop lawyers and judges from using it to justify their arguments. So basically “competition on the merits” implies when a dominant undertaking can lawfully engage in a conduct to protect its own commercial interests if they are attacked even if that conduct forced competitors to exit the market or discouraged the entry of competitors.⁷⁵

When an undertaking is attacked and therefore engages in a conduct to protect its own commercial interest that is called “self-defense”.⁷⁶ Self-defense may be used as an objective justification, but the purpose of self-defense shouldn’t be to strengthen the undertaking dominant position and abuse it. As the CJEU confirmed in *United Brands Case*:

“.. the fact that an undertaking is in a dominant position cannot disentitle it from protecting its own commercial interests if they are attacked and that such an undertaking must be conceded the right to take such reasonable steps as it deems appropriate to protect its said interests”.⁷⁷

⁷⁴OECD, “competition on the merits “(2015), page 18
For further reading: (<https://bit.ly/3HRHCIH>)

⁷⁵ Ibid, page 19

⁷⁶ Steven Anderman and Hedvig Schmidt, *supra*, page 79

⁷⁷ *United Brands Company and United Brands Continental BV v Commission of the European Communities*, *supra*.

Self-defense can apply to discriminatory pricing and predatory pricing. For example, in the *Akzo Case*,⁷⁸ the EC stated that Akzo⁷⁹ as a dominant undertaking could supply below a determined minimum price only for a particular customer and only if it is necessary to do so in good faith to meet a lower price shown to be offered by a supplier ready to supply to that customer. Therefore, self -defense main purpose is limited to “meeting competition” and not “beating the competition”, and the dominant undertaking has an obligation to verify the information about the pricing practices of its opposition.⁸⁰

(c) Proof of harm

The concept of abuse is structured on preventing harm and offering protection for the continued participation of competitors still existing in a market weakened by the existence of a dominant firm. Regarding exclusionary abuse, it has immediate harm to competitors and ultimate harm to consumers. In exclusionary abuse, there is no need to prove actual effect and harm to competitors; Article 102 applies preventively before the damage is done. Consequently, the jurisprudence of Article 102⁸¹ declared that in some cases there may be no need to prove actual harm to the competitors, and the main test of effects is that the conduct was "likely to eliminate" all competition, and the Commission is not required to prove that competition had been eliminated.

The GC confirmed that the test of article 102 is not concerned with proof of effects but rather with proof of conduct that could possibly produce effects.

⁷⁸ Akzo Nobel NV, Akzo Nobel Chemicals GmbH, Akzo Nobel Chemicals BV, Akcros Chemicals Ltd V European Commission, Case C-516/15, 24\09\2015
(<https://bit.ly/3xsVksf>)

⁷⁹ Akzo is a dominant undertaking in the United Kingdom that produces organic peroxides which are specialty chemicals used in the plastics industry.

⁸⁰ Springer U, “meeting competition: justification of price discrimination under EC and US antitrust law” (1997) ECLR 251, page 154

⁸¹ Microsoft Corp. V. Commission, case T-201\04, 17\09\2007
(<https://bit.ly/3HZC8FX>)

Consequently, Article 102 came to regulate a dominant undertaking's conduct; where the non-dominant undertakings have the right to choose with whom they want to deal, Article 102 came to put borders to the dominant undertaking's freedom to accept or refuse with whom they want to deal if that refusal to deal has a real impact on competition. Article 102 has been interpreted to apply not only to exploitative abuses, but it was also aimed to protect competition from exclusionary abuses such as refusal to supply and refusal to license.

2.2 The development of doctrines toward refusal to license

Refusal to license IPR can be seen as a sub-category to refusal to supply.⁸² The European courts dealt first with cases concerning refusal to supply IPR and established doctrines that helped these courts with dealing with refusal to license IPR cases. Therefore, this section of this chapter shows how the European court dealt with refusal to supply intellectual property by dominant undertakings, and the doctrines that were established by them.

2.2.1 Refusal to supply intellectual property right in primary market

In principle, no one is obliged to help his competitors enter the market or succeed in the market. So, in order to compete, competitors must engage in innovation. But, with the concept of abuse under Article 102, to what extent does the concept of normal exploitation of IPR constitute an objective justification? And when can we say that the exploitation of IPR constitutes an abuse of a dominant position?

⁸² Massimo Motta, *supra*, page 492

The EU courts have shaped the answer to these questions by determining whether an abuse is committed on a primary or a secondary market.⁸³ In principle, exclusive exploitation of an IPR could be acceptable in the market for a specific product which incorporates it. But trying to extend the method of exclusive exploitation into neighboring markets or related products could be seen as an abuse of a dominant position. The Commission and the EU court draw the borders between IPRs and competition law through defining the abuse with the reference to its definition of relevant product market.

Before further explaining the way EU court and Commission decide whether abuse is being committed in a secondary market, there could be cases where abuse can happen in a primary market.

In general, in the primary market in which an undertaking holds a dominant position, the main effect of article 102 is to regulate exploitative abuses such as excessive pricing, predatory pricing, tie-ins, and discriminatory pricing.⁸⁴ However, could the acquisition of an IPR by a dominant undertaking be considered abusive? The internal development of innovation clearly gave the right holder the power to exclude potential competitors from the market. Therefore, could an acquisition of relevant technology be viewed differently from the general principle?

The CJEU and the Commission gave their answer In the *Tetra Pak Case*.⁸⁵ Tetra Pak had 91.8% share of the market for the supply of machines for sterilizing and filling aseptic cartons and the cartons themselves.⁸⁶ Elopak, a licensee of Liquipak, was trying

⁸³ Steven Anderman and Ariel Ezrachi, *Intellectual property and competition law: new frontiers* (1st edition, oxford university press, United Kingdom, 2011) page 277

⁸⁴ Gunnar Niels, Helen Jenkis and James Kavanagh, *economics for competition lawyers* (2nd edition, Oxford university press, United Kingdom, 2016) page 153

⁸⁵ Tetra Pak International SA v Commission of the European Communities, Case T-83\91, 06\10\1994 (<https://bit.ly/3hJg6wd>)

⁸⁶ James Boyle, *Intellectual property: law & the information society*, (1st edition, createspace independent publishing platform, USA,2014), page 45

to compete in the aseptic market by developing a product using Liquipak's exclusive patent license from BTG. But in 1986 Tetra Pak acquired three companies of the Liquipak group, which specialized in the development and manufacture of filling equipment for a liquid food product. In addition, Tetra Pak controlled 90 to 95 percent of the aseptic sector in the market, putting an end to the entry of Elopak's product. Elopak complained to the commission, and after beginning to investigate, Tetra Pak abandoned the exclusive license, agreeing to keep it on a non-exclusive basis. The Commission found Tetra Pak guilty and behaved abusively in acquiring the exclusive license by buying the Liquipak group; because it strengthened its monopoly and prevented the potential competitors from entering the field.

The GC assured that acquiring an exclusive license by an undertaking that holds a dominant position does not automatically mean that there is an abuse within Article 102.⁸⁷ Nevertheless, for applying Article 102, we must take into consideration the circumstances surrounding the acquisition and in particular its effects on the structure of competition in the relevant market. Therefore, in the Tetra Pak Case, the acquisition itself was not abusive, but the acquisition given the position of Tetra Pak on the market was.

Therefore, the legal position of the acquirer of a patent license is different from that of the original proprietor of the protective right, and that was confirmed by the advocate general who recommended that: "The special position which the proprietor of an industrial property right enjoys in the context of article 102 should not be extended to the licensee:

The fact that an inventor occupying a dominant position on the market may exclude third parties from exploiting his own invention without his conduct constituting an

⁸⁷ Steven Anderman and Ariel Ezrachi, *supra*, page 13

abuse does not signify that undertakings occupying a dominant position may, by acquiring an exclusive license, invariably exclude their potential competitors from using the research findings made by third parties.”⁸⁸

The AC made a point that the acquisition of the exclusive right is not protected by the existence of IPRs, and an abusive conduct may be seen as infringement under Article 102; because a non-exclusive license would have allowed other competitors to get access to the market and would have allowed Tetra Pak to use the protected product for its own improvements without excluding other competitors from the market. Tetra Pak acquisition did not just eliminate Elopak from developing a new product and entering the market but also removed the possibility that any other potential competitors could use the alternative sterilization process to get access to the market.⁸⁹

2.2.2 Refusal to supply intellectual property right in secondary market

In general, as we have seen, as long as the exclusive exploitation remains in the primary market, Article 102 is not restrictive to IPR’s exploitation. However, when the exclusive exploitation of IPR extends into a second market, particularly a dependent market or to a second product unprotected by the right, that’s when the balance between lawful exploitation of an IPR and the exclusion of competitors is being shuddered by Article 102.

In order to say that an abuse was committed under Article 102, there must be a conduct in a second market other than the dominated market, and there must be a link between those two markets.⁹⁰ The general rule is that conduct must threaten the level of competition in a market where, as a result of the presence of that dominant undertaking,

⁸⁸ Steven Anderman and Ariel Ezrachi, *supra*, page 87

⁸⁹ Aurora Garcia and Nikolaos Georgantzis, “Dominance in the Tetra Pak case: an empirical approach” (1999) *European journal of law and economics*, volume 23, issue 6, page 144

⁹⁰ Gunnar Niels, Helen Jenkis and James Kavanagh, *pervious source*, Page 155.

competition is already weakened.⁹¹ So, there must be a link between the dominant position and the level of competition in the second market.⁹²

In the case of *Commercial solvents* who once enjoyed a monopoly position in the market of production of raw materials. The raw material was an essential input for the production of some drugs. Commercial solvents stopped supplying raw material for some drug producers. Obviously Commercial solvents enjoyed a dominant position in the raw material market but did not enjoy a dominant position in drug-producing market. However, there was a link between the two markets; as drug producers could not enter the market or produce anything without the raw material. And that indicated that somehow Commercial solvents had the power to eliminate competitors and remove actual competition in the drug-producing market. The relationship between the two markets was vertical; with the dominant undertaking in the primary market controlling supply to the secondary market.⁹³ The EU courts and the Commission confirmed that the undertaking which was dominant in the primary market could not without an objective justification use its market power in that market to reserve to itself an operation in the secondary market.⁹⁴ In these kind of cases, dominance in the primary market was the source of power to control the secondary market, which made an obvious connection between dominance and the secondary market.

In other cases, the link between the two markets was vertical where the dominant undertaking acted in the secondary market in a way to strengthen its dominant position in the primary market.⁹⁵ For example, *BPB Industries and British Gypsum Case*⁹⁶, an

⁹¹ Ibid, page 155.

⁹² Ibid, page 156.

⁹³ John Temple Lang, "Defining legitimate competition: companies' duties to supply competitors and access to essential services" (1994) Fordham international law journal, volume 18, issue 2, page 444

⁹⁴ Ibid, page 445

⁹⁵ Ibid, page 446

⁹⁶ *BPB Industries Plc and British Gypsum Ltd V Commission of the European Communities*, Case T-65/89, 01\04\1993

(<https://bit.ly/3pKqhoH>)

undertaking which controlled about half the production capacity for plasterboard in the united kingdom. Plasterboard was distributed to builders through builder's merchants. In 1985 BPB Industries and British Gypsum implemented a policy of favoring distributors who were not trading in imported plasterboard, so it used a system of loyalty rebates in the secondary market to discriminate against distributors using plasterboards from a foreign manufacturer. This had put BPB and British Gypsum in a position to use their market power in the dominated market to cross-subsidize pricing in the secondary market. The EU court stated that despite the fact that the conduct was made in the secondary market, it still could be viewed as an abusive conduct; because discriminatory treatment was made to strengthen the dominant position in the primary market.

In *Tetra Pak II Case*⁹⁷, the CJEU also wanted to apply Article 102 to abuse committed by a dominant undertaking on a market upon which the undertaking was not dominant and where the conduct and the effects of that abuse were concentrated on that secondary market. The CJEU acknowledged that, “the application of Article 102 presupposes a link between the dominant position and the alleged abusive conduct, which is normally not present where conduct on a market distinct from the dominant market produces effects on that distinct market.”⁹⁸

It added that: “in the case of distinct, but associated, markets, as in the present case, application of article 102 to conduct found on that associated, non-dominated market and having effects on that associated market can be justified by special circumstances” in this case the fact “that the quasi-monopoly enjoyed by Tetra Pak on one market and

⁹⁷ Tetra Pak International SA v Commission of the European Communities, case C-333\94P, 1996 (<https://bit.ly/3hIKXsT>)

⁹⁸ Ibid, para 27

its leading position on the other market placed it in a position comparable to that of holding a dominant position on the markets in question as a whole.”⁹⁹

The CJEU also confirmed about finding a link between the two markets in order to say that an abusive conduct had been committed:

“The fact that the various materials involved are used for packaging the same basic liquid products shows that Tetra Pak’s customers in one sector are also potential customers in the other ... it is also relevant to note that Tetra Pak and its most important competitor, PKL, were present on all four markets. Given its almost complete domination of the aseptic markets, Tetra Pak could also count on a favored status on the non-aseptic markets. Thanks to its position on the former markets, it could concentrate its efforts on the latter by acting independently of the other economic operators on those markets.”¹⁰⁰

Consequently, the EU courts and the Commission varied a lot on defining the nature of associative links between two markets under Article 102; depending on the nature of the abuse. Therefore, in order to put legitimate exercise of IPR under Article 102, it is necessary to take into consideration the market context as well as the type of abuse.¹⁰¹

The CJEU gave strong support to the Commission’s policy of treating a refusal by a dominant undertaking to supply existing customers as an abuse of a dominant position. In the *Commercial Solvent Case*, the dominant undertaking decided to stop supplying raw material for ethambutol to its long-standing customer, Zoya, who was dependent on producing ethambutol; trying to get access in the ethambutol market. The CJEU declared that Commercial Solvents’ plan to start producing ethambutol was not a good justification for refusing to supply the raw material to its long-standing customer;

⁹⁹ Ibid, para 31

¹⁰⁰ Ibid, para 29

¹⁰¹ Steven Anderman and Hedvig Schmidt, *supra*, page 91

driving it to leave the market and eliminating competition in that market.¹⁰² The CJEU also declared that Commercial solvents could have entered the ethambutol's producing market without kicking out Zoya. In effect, Article 102 could obstruct a dominant undertaking's freedom of contract and place limits on its business strategy.

The reasoning of the CJEU in *Commercial Solvents Case* was also applied in the case of *Telemarketing Case*¹⁰³. TV broadcasting worked with Telemarketing for several years. Telemarketing was a company that provided phone lines and telephone operators. One-day TV broadcast decided to enter the field itself and stopped supplying services to Telemarketing. The CJEU found that such refusal is considered abusive, without any objective justification; whereas a firm that holds a dominant position, it holds special responsibility.

It is clear that wherever a dominant undertaking's refusal to supply drives an existing customer (competitor) out of business in a particular market, it would be considered as an abusive conduct under Article 102. However, what were less clear were the responsibilities of a dominant undertaking to a new entrant to such market. The Commission's point of view on this subject was declared through two airline cases. In *London European\Sabena Case*¹⁰⁴, Sabena is an airline company who was owned by the Belgian state. Its main activity is the provision of air transport services, but it provided other services such as the Saphir computerized reservation service (CRS). The Saphir system is a computerized system, which allows travel agents to consult the flight schedules, fares and seat availability of airlines included in the system, and to make

¹⁰² Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation v Commission of the European Communities, supra, para 25

¹⁰³ Centre belge d'études de marché - Télémarketing (CBEM) v SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB), case 311\84, 03\10\1985
(<https://bit.ly/3sO8vmB>)

¹⁰⁴ London European v Sabena, case IV\32.318, 04\11\1988.
(<https://bit.ly/3vNaRDZ>)

reservations. This system eliminates the need for travel agents to telephone the company concerned for each booking. Reservations are made directly by the agency based on the data provided by the system. Sabena is the sole manager of the system and has the power to grant or refuse access to the system. Sabena refused access to its CRS to London European because it was entering the London-Brussels route and undercutting Sabena's fare rates. Sabena's refusal access to London European prevented London European from operating that route. London European complained to the Commission, and after investigations, the Commission considered Sabena's conduct abusive and stated that Sabena held a dominant position on the market for the supply of computerized reservation services in Belgium, it abused that dominant position on that market by refusing to grant London European access to the Saphir system on the grounds that the latter's fares were too low and that London European had entrusted the handling of its aircraft to a company other than Sabena. Trade between member states has been affected by Sabena's abuse of its dominant position. The Commission stated: "The infringement committed is of a particular serious nature. It consisted in the present case in the refusal to grant a small competitor access to a computerized reservation system in order to deter it from operating on a given route, to impede its actual operation and marketing of the service and to dissuade it from thus introducing an element of competition. By taking this action, Sabena was flouting one of the fundamental objectives of the treaty, namely the creation of a common market between member states. The seriousness of the infringement is heightened by the fact that Sabena's behavior formed part of a well-established company strategy in this area. The fact that it does not appear to have applied it to other airlines is merely because the

opportunity did not arise. It does not detract from the fact that Sabena applied it to London European.”¹⁰⁵

In *British Midland vs. Aer Lingus Case*¹⁰⁶, Aer Lingus is the national airline of Ireland and British midland is the main operating company of the airlines of Britain. Both airline companies were parties of the multilateral interline traffic agreement (MITA) to which airlines are authorized to sell each other’s services. As a result, a single ticket can be issued, which comprises segments to be performed by different airlines and airlines are authorized to sell each other’s services. The airlines which are parties of the MITA meet every year to discuss cargo and passenger tariffs. In 1991, Aer Lingus representative declared at the opening of the conference that the company would not participate in consultations concerning the routes from Dublin to Amsterdam, London, and Paris. Aer Lingus decided back then to end its interlining agreement with British midland once British midland began to compete on the Dublin-London route.

The Commission said that the potential loss of revenue that Aer Lingus might suffer from the new entrant’s competition is not a justification to refuse to interline with British midland. The Commission said:

“Refusing to interline is not normal competition on the merits... the argument that interlining would result in a loss of revenue would not of itself make the refusal legitimate... both a refusal to grant new interline facilities and the withdrawal of existing interline facilities may, depending on the circumstances, hinder the maintenance of competition.”¹⁰⁷

¹⁰⁵ London European v. Sabena, supra, para 37

¹⁰⁶ British Midland v. Aer Lingus, case IV.33.544, 26(02)1992
(<https://bit.ly/3ISRi0L>)

¹⁰⁷ British Midland v. Aer Lingus, supra, para 25.

In both cases, it was not clear whether every denial of access to a new entrant that threatened their survival would be considered infringement under Article 102. In *Aer Lingus*, the Commission summed up the issue in the following way:

“whether a duty to interline arises depends on the effects on competition of the refusal to interline; It would exist in particular when the refusal or withdraw of interline facilities by a dominant airline is objectively likely to have a significant impact on the other airline’s ability to start a new service or sustain an existing service on account of its effects on the other airline’s costs and revenue in respect of the service in question, and when the dominant airline cannot give any objective commercial reason for its refusal (such as concerns about creditworthiness) other than its wish to avoid helping this particular competitor.”¹⁰⁸

2.2.3 “Essential facility” doctrine

The Commission had begun to formulate a view that in order to preserve an effective competition, dominant undertakings which owned “essential facility” must offer access to competitors as well as customers on a non-discriminatory basis.¹⁰⁹ The “essential facility” doctrine was mentioned at first in *Sea Containers V Stena Sealink Case*.¹¹⁰ Sea Containers wanted to provide a high-speed catamaran ferry service from Holyhead to Ireland, so Sea Containers asked Stena Sealink, the owner of the port facilities, to provide access to its new ferry service. Stena Sealink refused Sea Container’s request; because this means creating competition to its ferry service on the same route. The Commission stated that:

¹⁰⁸ Ibid, para 26

¹⁰⁹ Bishop Simon and Walker Mike, *The economics of EC competition law: concepts, application and measurement* (3rd edition, sweet and Maxwell, London, 2010) page 116.

¹¹⁰ *Sea Containers v. Stena Sealink - Interim measures*, Case iv\34.689, 21\12\1993 (<https://bit.ly/3HQVpsS>)

“an undertaking which occupies a dominant position in the provision of an facility and itself uses that facility (i.e. a facility or infrastructure without access to which competitors cannot provide services to their customers) and which refuses other companies access to that facility without objective justification or grants access to competitors only on terms less favorable than those which it gives to its own services, infringes article 102 if the other conditions for applying that article are met.”¹¹¹

The Commission found that Stena Sealink had abused its dominant position as the harbor authority for Holyhead by denying access to its competitor on non-discriminatory terms. The Commission’s conclusion was that Stena Sealink’s conduct did not meet with the obligations of an undertaking which enjoys a dominant position especially when this undertaking owned an essential facility. Thus, abuse could be defined in terms of a dominant undertaking disserving the development of growth in competition in a market as well as the maintenance of the degree of existing competition in that market.¹¹² The Commission also found that based on the capacity of the harbor, an additional competitor could be accommodated without undue inconvenience.

One can notice that the Commission declared through the “essential facility” doctrine, first, that where a firm controls an essential facility comes a greater responsibility not to discriminate, stemming from its dual role both as administrator of an infra-structure and an operator on a market utilizing this infrastructure.¹¹³ Second, there may be additional procedural obligations on firms that control an essential facility. For example, in *Stena Sealink Case*, the Commission found it abusive for the fact that it failed to negotiate and consult with its customers as an independent operator.

¹¹¹ Sea Containers V Stena Sealink - Interim measures, previous source, para 66.

¹¹² Sara Fredriksson, previous source, page 25.

¹¹³ Ibid, page 27.

The Commission's mission under Article 102 was to make sure dominant firms owning essential facilities or infrastructure in a market expose such facilities on a non-discriminatory basis to enable competitors to compete in the same or related markets. The case law sets four elements necessary to establish liability under the essential facility doctrine:

1. Control of the essential facility by a dominant undertaking
2. A competitor's inability practically or reasonably to duplicate the essential facility
3. The denial of the use of the facility to a competitor
4. The absence of objective justification that justifies such a denial.

The "essential facility" doctrine applied to a wide range of commercial activities: airlines, harbor facilities, railways, telecommunications, and energy.¹¹⁴ It was not made for IPRs only. If an IPR was amounted to an essential facility, and unlicensed competitors could not gain entrance to the market, then the Commission would view that the best remedy is to give a compulsory licensing of IPR.

Consequently, it is fundamental for the Commission to see if the refusal to supply was committed in primary or secondary market. In principle, refusal to supply by the owner of an IPR could be acceptable in primary market out of respect to IPRs. Nevertheless, the same refusal could become abusive in secondary market in certain circumstances.

2.3 The assessment of refusal to license intellectual property right

The principle rule under Article 102 TFEU does not include forcing dominant undertakings to license their IP to a third party. However, IPRs were very clear about the exclusivity that given to the IP's owner. That is why it was very difficult for the

¹¹⁴ Sara Fredriksson, *supra*, page 282.

Commission to extend obligation not to supply into an obligation not to refuse to license an IPR by a dominant position.

This section studies the assessment of refusal to license IPR by a dominant undertaking and the European court decisions related to such a refusal. It shows when refusal to license IP can be seen abusive under Article 102 TFEU.

2.3.1 From refusal to supply IPR to refusal to license IPR

The Commission adapted the doctrines that were used by the European court in refusal to supply IPR by a dominant undertaking. The Commission decided that, in general, exclusive exploitation by IPR's owner could be legitimate competition in the primary market but could become abusive in a secondary market in certain circumstances because of the leveraging of market power from one market to the other.¹¹⁵

The guideline to this statement was introduced in the *Volvo UK v Veng AB Case*¹¹⁶, *Volvo v. Veng* was the first judgment of the ECJ concerning refusal to license IPR under Article 102 TFEU. Volvo is the proprietor in the UK of the registered design for the front wings of Volvo series 200 cars. Veng is a company that imported the same body panels, manufactured without permission from Volvo, and marketed them in the UK. Volvo started a case against Veng Company for infringement of its sole and exclusive rights. Veng claimed as a defense that according to Article 102 of the TFEU Volvo was required to supply or license him to make panels. He argued the Volvo's refusal to license him to make panels was an abuse of its dominant position. The CJEU stated:

“the Court of Justice held first that there were three separate markets: the market for cars, the market for Volvo spare parts and the market for repair and maintenance in the

¹¹⁵ John temple Lang, *supra*, page 278.

¹¹⁶ *AB Volvo V Erik Veng (UK) Ltd*, *supra*.

spare parts market for Volvo front wing panels. Moreover, by virtue of its design right and the nature of the product, this was an unusual degree of dominance, a monopoly with no substitutes of a product that was indispensable to the repair and maintenance market.”¹¹⁷

After declaring the type of market we’re dealing with in this case, the CJEU held that Volvo had no duty to supply or license competitors in that market. As we are talking about primary market for which Volvo had a monopoly owing of its design right, the exclusive right to make or sell was protected by the IPR and was respected by the TFEU and that what the CJEU stated:

“The right of the proprietor of a protected design to prevent third parties from manufacturing and selling or importing, without its consent, products incorporating the design constitutes the very subject matter of its exclusive rights. It follows that an obligation imposed upon the proprietor of a protected design to grant to third parties, even in return for a reasonable royalty, a license for the supply of a product incorporating the design would lean to the proprietor being deprived of the substance of its exclusive right.”¹¹⁸

It went on saying that “a refusal to grant such a license cannot itself constitute an abuse of a dominant position”.¹¹⁹

In this case, we are talking about normal exercise of IPR, Volvo as an owner of a design right (IPR), enjoys a complete monopoly in the primary market for manufacturing and selling new Volvo spare parts, and can price quite highly without infringing the competition rule against unfair pricing.

¹¹⁷ AB Volvo V Erik Veng (UK) Ltd, supra, cited supra note 188 para 28 opinion of Mr. Advocate General Misho

¹¹⁸ Ibid para 8

¹¹⁹ Ibid, para 8

However, while IPRs protect Volvo in the primary market; putting no obligation on a dominant undertaking to license competitors or sell IP protected product, Competition Law put a special responsibility on the dominant undertaking in the secondary market. The CJEU in *Volvo case* pointed out that there is a special responsibility that lies upon Volvo in the secondary market; because it cannot always refuse to supply competitors in the maintenance market, nor it can impose price as highly as to make supplies of the protected product inaccessible to the secondary market.¹²⁰ As the CJEU put it:

“it must however be noted that the exercise of an exclusive right by the proprietor of a registered design in respect of car body panels may be prohibited by article 102 if it involves, on the part of an undertaking holding a dominant position, certain abusive conduct...”

The CJEU gave three examples of such abuses:¹²¹

- (a) If the IPR’s holder refused to supply spare parts to independent repairers in a secondary market without an objective justification
- (b) If the IPR’s holder fixes prices for spare parts at an unfair or excessively high level
- (c) If the IPR’s holder decides no longer to produce spare parts for a particular model, though many cars of that model are still in use.

The abusive conduct of the IPR’s owner in the secondary market must be an exploitation of its dominant market power in the primary market to exclude existing competitors and to deny access to new entrants in the secondary market. In *Volvo Case*, the CJEU judged that in exceptional cases where a dominant undertaking refuses to supply its IPR in order to prevent competition on a secondary market, competition

¹²⁰ Ibid, para 11

¹²¹ AB Volvo V Erik Veng (UK) Ltd, supra, para 9.

authority might force the dominant undertaking to supply or license its IPR protected good. This case did not distinguish between existing competitors and new entrants; indicating that the dominant undertaking's duty to supply is not limited to those who had previously been supplied.

It is also important to point out that the CJEU did not give a total exemption for IPR's owners who hold a dominant position from the Competition law in a primary market. As it has been said before, in primary markets, the CJEU has found acquiring an IPR by another firm in order to control potentially competing innovative technology, to be an abusive conduct under article 102; because this kind of conducts can foreclose access to the competing technology to that market. Moreover, while there is a powerful statement by the competition rules that in primary markets the legal monopoly created by IPRs will be respected, there is an equally powerful statement that in secondary markets Competition law is superior to IPRs.

After the Volvo case, there was a real difficulty for the Commission to extend obligation not to supply into an obligation not to refuse to license an IPR by a dominant position. The IPRs protect exclusive right of exploitation upon proprietors and the Commission respected that; because without the exclusive right to exploit the innovation there would not be financial reward for the innovator and simply others could copy the innovation and sell it for less.

On one hand, the Commission had no choice but to respect IPRs in order to encourage innovation and guarantee creativity. On the other hand, the Commission's main concern was to regulate the conduct of a firm that hold a dominant position not to preclude the application of article 102, even if such position was created or reinforced by owning IPR.

However, it was clear that it considers a real infringement of Article 102 if dominant undertaking uses its market power to prevent potential competitors from entering markets or drive out existing firms from the market regardless of the logic of IPRs.

In *IGR stereo television Case*¹²², a case in 1981, IGR firm owned by all the manufacturers in Germany, which was also the proprietor of the patents for stereo receivers needed to equip German TV sets for stereo TV reception. IGR granted patent licenses to its members, but planned to delay granting licenses to non-members to a later date with a quantity limits. The patent rights were used to stop Salora, a Finnish company, from supplying stereo TV sets to Germany since a patent license for the stereo receivers was essential in order for a firm to enter the German stereo TV market. After the Commission started investigations in this case, IGR agreed to license immediately and without quantity limit. Although this case did not end with adjudication, but the Commission did not take into consideration that the patent rights, which was the base for the dominant position, could justify the refusal to supply. All that really mattered to the Commission was to regulate IGR's conduct that it cannot drive out competitors from the market or limit competitors for entering the market.

For IPR's owners, a key point in deciding whether Article 102 applies to them is the distinction made between primary and secondary markets. Undertakings are allowed to freely enjoy their exclusive IPR in the product market or technology market in which they are dominant "the primary market", however, in "secondary markets" where the IPR is an indispensable input, the European courts has limited the freedom of exclusive exploitation.¹²³ The European courts has developed "an exceptional circumstances test"

¹²² John Temple Lang, *supra*, page 464-465

¹²³ Valentine Korah, *An introductory guide to EEC competition law and practice* (4th edition, sweet and maxwell, London, 1990) page 44

as a criterion to decide when refusal to license IP may consider abusive according to Article 102 TFEU.

2.3.2 “Exceptional circumstances” doctrine

The series of case law of the European courts dealing with refusal to license IPR establish that a dominant undertaking’s refusal to share its IPR with third parties does not in itself considered to be abusive conduct under Article 102 TFEU. The European courts has confirmed that not every refusal to license IPR by a dominant undertaking can amount to be an abuse. In order for such refusal to be prohibited by Competition Law, the presence of “exceptional circumstances” test is required. The European courts has found through case laws the concept of “exceptional circumstances” doctrine as a legal tool to assess refusal to license IPR under Article 102.

Over the years, the EU courts have taken an active role in defining the nature of those “exceptional circumstances” in which an IPR owner can be compelled to license its IPR to existing competitors and new entrants in markets. These cases were a starting point that there is no obligation of an IP’s owner to share its technology but there can be exceptional circumstances in which the failure to do so may amount to an infringement of article 102 TFEU.

The European courts has adapted case-by-case doctrine when it came to refusal to license IP cases. The European courts have reserved flexibility when dealing with refusal to license IP cases by dominant undertakings. That means that, the European courts examine each case on its own merits and study the circumstances surrounding that specific instance of a refusal to license.

The “exceptional circumstances” establishes that it is sufficient if, at a minimum, that these four cumulative conditions are present:

1. The refusal denies access to a product or service that is ‘indispensable’ for the continuation of a particular business.
2. The refusal prevents the emergence of a ‘new product’ for which there is potential consumer demand
3. The refusal is ‘likely’ to eliminate any competition on a secondary market
4. The absence of objective justifications which justify the refusal

This section of the thesis will clarify and summarize each of the sufficient exceptional circumstances and how each circumstance the European courts has interpreted through the long journey of cases.

4.3.1.1 Indispensability:

Indispensability means that a product (which in our case is IP) is so important to a third party that it cannot carry on its business without. In order to decide that a certain product or service is indispensable, it must be determined whether there are other alternatives for the relevant product or service.

The indispensability factor elaborated through cases. In *IMS Health Case*,¹²⁴ the CJEU concentrated on this condition. IMS and NDC were two German companies participated in the German market for providing data related services to pharmaceutical companies. IMS had developed a database system presenting regional pharmaceutical sales data in German called “1860 brick structure”. This system used a method for dividing the German territory into small geographical segments (bricks) based on many factors such as postal codes, population density and location of pharmacies and doctors. IMS configured pharmaceutical sales information in accordance with the brick structure

¹²⁴ IMS Health GmbH & Co. OHG v NDC Health GmbH & Co. KG, the court of justice, case C-418/01, 29/04/2004, para 52-53
(<https://bit.ly/3HZFsAV>)

and then provided sales reports to the pharmaceutical companies. It took IMS a long time to develop this system and it had become the only standard to which clients in pharmaceutical market took their information and distribution systems. NDC asked IMS to license its copyright “1860 brick structure” but IMS refused. NDC complained to the Commission that IMS’s refusal to license its copyright was a violation of Article 102 TFEU and thus an abuse of a dominant position. The Commission distinguished between the brick structure database, which was protected by IPRs, and the related market of regional sales data services.¹²⁵ It found that the brick structure was an essential facility; because it had become a market standard demanded by wholesalers as well as pharmaceutical companies did.¹²⁶ The Commission stated that the IMS’s 1860 brick structure was indispensable for NDC and it cannot carry on its business without the IMS’s copyright, and due to legal and technical obstacles it wasn’t possible to develop a new system.¹²⁷ After investigating in this case, the Commission found that the test of exceptional circumstances was fulfilled,¹²⁸ the Commission asked IMS to grant NDC a license to its copyright on non-discriminatory terms.¹²⁹

IMS asked for the annulment of the decision from the CJEU and therefore the execution of the decision was suspended until the final ruling.

The CJEU began by confirming that the act of a dominant undertaking to refuse to license its IP does not in itself constitute abuse of a dominant position. The court held that only in “exceptional circumstances” the exercise of an exclusive right may involve abusive conduct. The CJEU made it clear that in order for a refusal to license new

¹²⁵ IMS Health GmbH & Co. OHG V NDC Health GmbH & Co. KG, the Commission decision, case T-48\01R, 2002

([EUR-Lex - 62001CJ0418 - EN - EUR-Lex \(europa.eu\)](#))

¹²⁶ Ibid

¹²⁷ Ibid, para 127-131

¹²⁸ IMS Health Case, the Commission decision, supra, para 167-174

¹²⁹ Ibid, para 2015

entrants to a market dependent upon an IP protected input to be abusive; the refusal must meet four cumulative conditions:¹³⁰

1. Access to the copyright protected by IPRs is indispensable in order to carry out a particular business
2. The refusal prevents the emergence of a new product for which there is potential consumer demand
3. There is no objective justification for the refusal to license
4. The refusal is likely to exclude any competition on a secondary market.

Concerning the indispensability criterion, the court stated that it was necessary to look if there are products or services that can amount to be alternative solutions, even if they are less advantageous, and whether the existence of technical, legal or economic obstacles is making it impossible or unreasonably difficult for any company to develop alternative products or services.¹³¹ As for the 1860 brick structure, there was an obvious dependency by the users (pharmaceutical companies and wholesalers) to that structure.¹³² Moreover, for another company to develop such a structure, it would have to make exceptional organizational and financial efforts in order to acquire reports of pharmaceutical sales data from a structure other than IMS's brick structure.

The 'indispensability' criterion was elaborated by the CJEU in *Bronner Case*¹³³. The *Bronner Case* did not actually involve IPR, it dealt with a refusal to provide access to physical property. However, it is important to mention *Bronner Case*; because the

¹³⁰ IMS Health Case, the Court of Justice, supra, para 38

¹³¹ Ibid, para 28

¹³² Lena Salomonsson, supra, page 4

¹³³ Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG, case C-7/97, 26/11/1998
(<https://bit.ly/3HMDaEQ>)

CJEU developed the “exceptional circumstances” test that was mentioned *IMS health Case*.

Bronner Case revolved around a newspaper distribution system. Mediaprint published and distributed two daily newspapers in Austria and held a dominant position in that market. Bronner that was a smaller newspaper published and distributed the daily newspaper *Der standard*. For the distribution of its newspaper, Mediaprint had established a nationwide early-morning home-delivery service. Bronner wanted Mediaprint to include *Der standard* in its delivery scheme but Mediaprint refused. Bronner complained to the Commission and sought an order from an Austrian court requiring Mediaprint to stop abusing its dominant position on the home-delivery market and ordering it to include *Der Standard* in its home- delivery scheme service. Bronner argument was that other methods of sale, such as postal delivery, were less advantages and given the small proportion of its newspaper in the market, it would be unprofitable for it to construct its own home-delivery system.

Although, *Bronner Case* did not deal with IPR, but the case took the ruling of *IMS Health Case* and *Magill Case* and introduced the “exceptional circumstances” test to the “essential facility” doctrine. Moreover, the CJEU built its ruling in *Bronner Case* upon refusal to license IPR’s cases, clarifying its view on “indispensability” and the requirements needed for such a claim.

In deciding whether Mediaprint’s refusal to include *Der Standard* in its home delivery scheme constituted an abuse, the CJEU mentioned three factors in determining whether Mediaprint’s behavior was unlawful under Article 102:¹³⁴

¹³⁴ Dolmans Maurits and others,” Are article 82 EC and intellectual property interoperable? The state of the law pending the judgement in *Microsoft v. commission*” (2007) competition policy international, volume 3, issue 1, page 177

1. The refusal to provide the home-delivery service must be likely to eliminate all competition on that market
2. The refusal is incapable of being objectively justified
3. The service itself is indispensable and there is no actual or potential substitute

There was no dispute between the parties that there were other methods of distribution such as sales in shops and post-delivery, even if they were less advantageous.¹³⁵

Furthermore, the CJEU noted that there were not any technical, legal or economic obstacles capable of making it impossible for Bronner to establish alone or in cooperation with others its own home-delivery service.¹³⁶ The CJEU clarified that in order to say that such access to home-delivery system is indispensable; it is not enough to argue that Bronner cannot establish its own home-delivery system because of economic reasons and the small nature of its newspaper in the market.¹³⁷

The judgment in *Bronner case* focused on the “indispensability” criteria. It clarified that an undertaking cannot win a case by arguing that access to the property is desirable and convenient, justifying his argument by his financial inability. Bronner argued that he could not make his own home-delivery system due to the small circulation of his newspaper distribution compared to Mediaprint’s newspaper distribution. Furthermore, the CJEU pointed out in its judgment additional factors in appraising the indispensability criteria such as technical, legal or economic constraints. In order to say that access is indispensable, there must be no actual or potential substitutes, however, in *Bronner Case* there were several alternatives for distributing its newspaper even if they were not equally advantageous as Mediaprint’s distribution system.

¹³⁵ Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG, *supra*, para 43

¹³⁶ Oscar Bronner GmbH & Co. KG v Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, *supra*, para 44

¹³⁷ *Ibid*, para 46

Since the CJEU mentioned several substitutable delivery methods for Bronner to utilize in his business, therefore, the access to Mediaprint's home-delivery system was not indispensable. In conclusion, the CJEU did not consider Mediaprint's refusal to access to its nationwide distribution system of daily newspaper as an abuse of a dominant position.

Furthermore, the concept of indispensability was widened in *Microsoft Case* to conclude 'economic indispensability'.¹³⁸ *Microsystem (Sun) v. Microsoft Case*¹³⁹ started when Sun complained to the Commission that Microsoft abused its dominant position contrary to Article 102 TFEU by refusing to share sufficient interface information in order to enable Sun to create work group operating systems (WGOS) that would operate with Microsoft's windows desktop and server operating systems. Sun argued that Microsoft's interoperability information was necessary for Sun's ability to compete as a work group server operating system supplier. After investigation, the Commission came to a conclusion that Microsoft occupied a dominant position on the client PC operating system market that had become the dominant market standard for interoperability in work group networks.¹⁴⁰ In the decision, the Commission repeated again the "exceptional circumstances" doctrine established in *Volvo v. Veng Case* and *Bronner case*. The Commission found that the interoperability information was indispensable due to the absence of substitutes for disclosure by Microsoft¹⁴¹. Microsoft argued that access to the interoperability information was not indispensable since other distributors such as Linux succeeded in

¹³⁸ Killick, "IMS and Microsoft Judged in the cold lights of IMS" (2004) the competition law review, volume 1, issue 2, page 41

¹³⁹ Microsoft Corp. V Commission of the European Communities, the court of justice, case T-201\04, 17\09\2007
(<https://bit.ly/3KmXv1S>)

¹⁴⁰ Microsoft Corp. V Commission of the European Communities, the commission decision, case - 3\37.792, 24\03\2004, para 779

¹⁴¹ Ibid, para 668

increasing in market shares on the work group server operating system market without having access to Microsoft's interoperability information. However, the GC concluded that the Commission was right in finding that the interoperability information was indispensable. According to the GC, there were several evidences showed that Microsoft's interoperability information was a key factor in the development of windows work group server operating systems.¹⁴² There was no disagreement that Microsoft held a dominant position in PC operating system market, and without its interoperability information shared with other competitors, they will not be able to compete viably in the market if they were incapable of achieving a high degree of interoperability with windows.¹⁴³ In addition, the GC assured that there were not any other alternatives of ensuring interoperability, it rejected Microsoft's argument that other alternative operating systems such as Linux was competing effectively on the market, on the contrary, the GC emphasized the fact that the growth of Linux products on the work group server operating systems market was only "modest".¹⁴⁴

Therefore, *Microsoft Case* showed that even if there were other alternatives, if they were considered disadvantageous, they would not in reality be considered alternatives.

¹⁴² Ibid, para 387-388

¹⁴³ Microsoft Corp. V Commission of the European Communities, the court of justice, supra, para 393

¹⁴⁴ Ibid, para 432

4.3.1.2 *New product*

One of the most important ‘exceptional circumstances’ that was addressed by the CJEU is ‘new product’ criterion. The significance of the ‘new product’ criterion has changed from case to case. It was first mentioned in *Magill Case*.¹⁴⁵ Magill was a compiler of a comprehensive weekly TV guide combining the contents of the three individual weekly TV guides. It consists of three individual weekly TV guides sold separately by three TV companies.¹⁴⁶ RTE enjoyed a monopoly position over television broadcasting in Ireland, and BBC\ITP enjoyed a monopoly position in the UK and Northern Ireland. The three individual companies ITP, RTE and BBC were the broadcasting companies that published their weekly TV guide containing only their own individual consumption weekly program schedules. Television audiences wishing to plan their TV consumption for the forthcoming week were forced to purchase each one of these TV guides separately. Such schedules were protected by copyright, publishing rights were reserved to separate publications owned by RTE, ITP and BBC themselves or granted under a license free of charge to newspapers and magazines with listings information to be published according strictly enforced licensing conditions.

The existence of the copyright gave the three broadcasting companies a dominant position in the market and the freedom to choose the individuals to whom they would license the television schedules. In order to meet the increased consumer demand, Magill started publishing a comprehensive weekly TV guide containing details of all of the television programs to be transmitted by the broadcasting companies. The three

¹⁴⁵ Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) v Commission of the European Communities, Joined cases C-241\91P and C-242\91P, 06\04\1995

(<https://bit.ly/3sMA3sm>)

Magill TV Guide/ITP, BBC and RTE, case IV\31.851, 21\12\1988

(<https://bit.ly/3pDKWeg>)

¹⁴⁶ The case of Magill concerns British and Irish television company’s refusal to license their copyright protected television program schedules. Under the UK and Irish legislation, intellectual property rights protected compilations of information such as listings of programs to be TV- broadcasted as well as literary and artistic work.

television companies initiated legal proceedings in court; claiming that Magill infringed their respective copyrights in the program listings. The broadcasting companies filed a lawsuit against Magill in order to prevent it from producing and publishing its listings magazine and eventually obtained injunctions against Magill for copyright infringement. Conversely, Magill complained to the Commission that the broadcasting companies were abusing their dominant position contrary to Article 102 by refusing to grant a license for the publication of their comprehensive weekly TV guide.

The Commission took Magill's side and ruled in Magill's favor. Therefore, Magill won an order for a compulsory license of the listings material from the TV companies to produce its comprehensive TV guide. The GC affirmed the Commission's order. There was further appeal in front of the CJEU, and the three broadcasting companies were supported in their arguments by the Intellectual Property Organizations (IPO) representing software makers internationally.¹⁴⁷ The AC's opinion was that the CJEU must exclude the judgments of the GC and annul the decision of the Commission based on the fact that IPR should be protected against competitors in secondary markets and primary markets.

AC argued that refusal to license a new product – the comprehensive TV guide- cannot be viewed as an abusive conduct; because the right to refuse to license a copyright must be seen as necessary to provide a reward to the copyright holder for its creative effort. His view was that the refusal to license could be abusive only if the new product did not compete with a product of the copyright holder.¹⁴⁸

However, the AC did not succeed in persuading the CJEU, and it did not take the AC's version of special circumstances into consideration. The CJEU upheld the decision of

¹⁴⁷ Steven anderman and Hedvig Schmidt, *supra*, page 103

¹⁴⁸ Magill Case, *supra*, para 40

the Commission and the GC on the finding of abuse and violation of Article 102 and affirmed the Commission's remedy of compulsory license.

The CJEU confirmed that the television companies' refusal to license their comprehensive TV guides prevented the emergence of a new product which themselves did not offer.¹⁴⁹ The TV companies left the viewers no choice but to buy weekly guides from the three TV companies and this was considered abusive under article 102 (b) which stated "limiting production, markets or technical development to the prejudice of the consumer".¹⁵⁰

In Magill case, the CJEU emphasized the Commission's "essential facility" doctrine under certain conditions as one test of exceptional circumstances.¹⁵¹ Firstly, the facility in the first market must have a de facto monopoly and not just merely dominant. Secondly, it must be an indispensable input to the secondary market. Thirdly, the direct purpose of refusing to make the essential facility available is to maintain a monopoly for the firm on the second market and excluding all competition on it.

The "new product" rule, a separate test of exceptional circumstances, suggests that if an IPR's owner owns an indispensable raw material for a new product with clear consumer demand and have these three conditions then the refusal to supply or license the raw material could be an abuse of a dominant position:¹⁵²

1. The raw material is a de facto monopoly, therefore there are no existing or potential substitutes
2. The IP's owner uses the raw material to prevent the emergence of that new product without any objective justification.
3. The IP's owner does not offer the new product by himself.

¹⁴⁹ Ibid, para 54

¹⁵⁰ Ibid, para 54

¹⁵¹ Steven Anderman and Hedvig Schmidt, *supra*, page 104-105

¹⁵² Steven Anderman and Hedvig Schmidt, *supra*, page 105

That being said, what if a firm who owns a unique biotechnology invention which can be used to cure clinical obesity rejected offering it as a general slimming drug, can another firm use the Magill's judgment as a springboard to get a compulsory access? It may be argued that the decision to limit the technical field of application is part of the company's commercial strategy of exploitation, but the better argument is that one of the three conditions above are not met, for example there are substitutes for the raw material or there are safety reasons for not releasing it for general consumption as a slimming pill.

Obviously, there will be difficulties in establishing how these guidelines apply to specific fields such as computer software, telecommunications, and other media industries. However, the more one understands the logic of competition law, the more one can decide if article 102 is being infringed or not.

However, what remains unclear here is how can one distinguish between the fact that a product is an essential input or facility for another product or market and the fact that this product is simply part of another product? To make it clearer, take, for example, a firm with a hardware product that has a major share of a market. It also provides an application in the form of diagnostic software for maintenance reasons as part of its product package and then uses it exclusively by its own maintenance contractors. The question that appear here: are the diagnostic software and hardware viewed as integral parts of the same "product"? On the other hand, is the diagnostic software viewed as a separate product constituting an essential input for the maintenance market for the hardware?

If the diagnostic software is viewed as a separate product constituting an essential input for the maintenance market for the hardware, would the undertaking be required to license it to competing third party maintenance companies? It would be caught as an

infringement under Article 102 if the undertaking had already allowed third party maintenance firms to enter the market and license its diagnostic software and suddenly decided to stop licensing it in order vertically integrate into the maintenance market.¹⁵³ However, if the undertaking from the beginning has viewed its investment in the diagnostic software as part of its program to exploit exclusively the value of its innovative hardware in secondary market, will that be viewed as normal exercise of IPR? In order for the third party maintenance firm to win in this case, they must succeed in two arguments. First, they must prove that there is not any substitute for the diagnostic software and that it is indispensable to their entry into the maintenance market for that product. They must prove that the diagnostic software is itself an “essential” input for the maintenance market requiring the firm to license it even to competitors. Secondly, it must show that the hardware company is trying to exclude all competition in the market through discriminating between its own company in the maintenance market and the new entrant.

After *Magill Case*, it was clear that it requires a deep understanding of Article 102 TFEU in order to determine that refusal to license intellectual property by its owner is unlawful. Two guidelines were provided through the decision in *Magill* decision. First, if an IP’s owner has a dominant position by virtue of the IPR, its exercise is limited by Article 102. Secondly, if the IP’s owner has a dominant position in the form of an essential facility, it will have a greater responsibility towards competitors that may be inconsistent with the full exclusive exploitation of the IPR in a downstream market. In general, these principles will not clash with the exercise of the exclusivity of IPR in primary markets and even secondary markets, but there will be exceptional cases where

¹⁵³ The reasoning of the court of justice in *Commercial Solvents* case can be applied here

a refusal to license would be caught under Article 102, and thereby put constraints on the exclusive exploitation of IPR in secondary markets.

In *Microsoft case*, the ‘new product’ criterion was widened and the GC introduced it in a different method utilized in earlier cases. After investigation in *Microsoft Case*, the GC concluded that the “new product” circumstance, as mentioned in *Magill Case*, could not be the only parameter, which decides whether a refusal to license IPR is being abusive within Article 102 TFEU.¹⁵⁴ The GC confirmed that refusal to license IPR might not only consist in limiting production but also technical development. The GC considered the Commission was correct to observe that there was limitation in choice for consumers and that an increasing number of consumers were locked into a standardized windows solution at the level of work group server operating systems.¹⁵⁵ In addition, Microsoft’s refusal discouraged other competitors from developing and marketing work group server operating systems with innovative features. Therefore, the ‘prevention of the emergence of a new product’ was evolved into ‘limitation of technical development’.

¹⁵⁴ Microsoft Corp. V Commission of the European Communities, case T-201\04, supra, para 643-647

¹⁵⁵ Ibid, para 651

4.3.1.3 Elimination of competition on a secondary market

This criterion was evolved through cases; it started as ‘liable’ to eliminate competition on a secondary market in *Magill Case* and turned to ‘likely’ eliminate competition in other cases. In *Magill Case*, the CJEU associated the ‘elimination of competition’ criterion with the refusal of providing the indispensable comprehensive TV guide to Magill. The three TV companies excluded all competition on the secondary market for weekly television guides and reserved it to themselves by denying any access to the basic information that was indispensable to the publication of such a guide. The TV companies used their dominant position on one market, consisting of an essential input or facility, to maintain a monopoly on a dependent secondary market. Moreover, by denying Magill the right to have access to the indispensable raw material, the broadcasting companies had in fact cut off Magill’s possibilities to enter the secondary market for the comprehensive weekly TV guides.

In *Bronner Case* and *IMS Health Case*, the court specified that the refusal to grant a license is ‘likely’ to exclude any competition on the secondary market. The CJEU distinguished between an upstream market (primary market), constituted by the indispensable product or service, and a secondary market, on which the product or service is used for the production of another product or the supply of another service. In making this distinction, two different stages of production may be identified and there must be interconnected in a way that the upstream product is indispensable for the supply of the downstream product. The court confirmed in these cases that it was important to identify two different stages of production and that they are interconnected, inasmuch as the upstream product is indispensable for the supply of the downstream product.

In *Microsoft Case*, the GC was pleased with the Commission establishing a “risk” of elimination of effective competition instead of relying on “accurate” elimination of competition. The GC was satisfied with the idea that it is sufficient to demonstrate merely a “risk” of effective competition being excluded and did not require waiting until competitors were actually excluded from the market before the commission intervenes. The GC found that competition must be saved before it is actually eliminated; thus, the GC stated: “before the elimination of competition on the work group server operating systems market had become a reality because the market was characterized by significant network effects and because the elimination of the competition would therefore be difficult to reverse”.¹⁵⁶

There is a distinction between the ‘risk’ and ‘likelihood’ of eliminating competition. The notion of ‘risk’ indicates a mere possibility or 5% to 10% chance.¹⁵⁷ In meanwhile, ‘likelihood’ indicates that it is at least more probable that competition will be eliminated than that it will not.¹⁵⁸

Consequently, the European courts have applied different standards in reviewing the ‘elimination of competition’ criterion. While the refusal to license in *Magill Case* and *IMS Health Case* has immediate foreclosing effect on the completion on the secondary market, the refusal to provide access to the interoperability information in *Microsoft* did not have any such immediate effect.

¹⁵⁶ Microsoft Corp. V Commission of the European Communities, case T-201\04, supra, para 270.

¹⁵⁷ Ong and Burton, "Building brick barricades and other barriers to entry: abusing a dominant position by refusing to license intellectual property rights" (2005) E.C.L.R, volume 26, issue 4, page 220.

¹⁵⁸ Ibid, page 220

4.3.1.4 Objective justification

The CJEU made it clear that without having objective justification, refusal to grant a license for an IPR may amount into abuse under Article 102 TFEU. Even though the CJEU mentioned this criterion in every case law involving refusal to license IPR, but it tended to be extremely void when it comes to explaining what kind of defense a dominant undertaking might have in order to objectively justify its abusive conduct. The ‘objective justification’ criterion was vague and the CJEU always used general terms to talk about it. In *Magill Case*, the CJEU stated that “there was no justification” for the broadcasting companies to refuse to grant Magill a license.

Another example was in *IMS Health Case* when the court said in lights of the facts before it the refusal for a license was not justified by objective considerations.

However, in *Microsoft Case*, Microsoft’s advocates made an effort to justify Microsoft’s refusal to license its sufficient interface information in order to enable Sun to create work group operating systems (WGOS). Microsoft’s plea for objective justification relied on two grounds. The first objective justification for Microsoft’s refusal to share its interoperability information involved the fact that this information was protected by IPRs and constituted trade secrets. Microsoft argued that this interoperability information was a significant investment for Microsoft that took a lot of hard work, and its reward was the commercial success.¹⁵⁹ The GC confirmed that the interoperability information was protected by IPRs and constituted trade secrets;¹⁶⁰ however, that does not prevent the fact that the refusal in question could be seen as abusive under Article 102 on the assumption that it constituted a refusal to license IPR.¹⁶¹ The GC assured that while the general rule is that undertakings are free to

¹⁵⁹ Ong and Burton, *supra*, para 666

¹⁶⁰ Microsoft Corp. V Commission of the European Communities, case T-201\04, *supra*, para 289

¹⁶¹ *Ibid*, para314

choose their business partners, but in some circumstances when the undertaking holds a dominant position, it has a special responsibility towards other firms and sometimes a refusal to supply may constitute an abuse of dominance within Article 102 TFEU.¹⁶² Therefore, the GC rejected Microsoft's defense that a refusal to license an IP could never constitute an infringement of Article 102 TFEU. The GC also dismissed the defense that the interoperability information constituted business secrets and stated "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".¹⁶³

The second ground for Microsoft's objective justification was that forcing to give a compulsory license would eliminate its future incentives to invest in the creation of more intellectual property. In GC's opinion, this defense was "vague, general and theoretical arguments".¹⁶⁴ The GC saw that Microsoft did not provide sufficient evidence that giving a compulsory license would reduce its incentives to innovate. The GC said that

"It is normal business practice for operators in the industry to disclose to third parties the information which will facilitate interoperability with their products... and such disclosure would allow the competing operators concerned to make their own products more attractive".¹⁶⁵

The GC found that Microsoft did not provide sufficient objective justification for its refusal to license its property right. It also found that the 'exceptional circumstances' identified by the commission were present in this case. Therefore, the GC rejected

¹⁶² Ibid, para 319

¹⁶³ Microsoft Corp. V Commission of the European Communities, case T-201\04, supra, para 693

¹⁶⁴ Ibid, para 698

¹⁶⁵ Ibid, para 701-702

Microsoft's appeal as wholly unfounded. Subsequently, the CJEU confirmed the Commission's decision;¹⁶⁶ that Microsoft had abused its dominant position in the windows operating system; by deliberately refusing to share interface protocols to other workgroup server makers. The Commission imposed several remedies for Microsoft's refusal to supply interface information included a fine of 497.2€ million for its infringement of Article 102 and an order for Microsoft to reveal all necessary interface information to Sun. The Commission also required Microsoft to update the disclosed information each time it brings to the market new versions of its relevant product. The Commission threatened that it might force Microsoft to give compulsory license to competitors in the work group server market in order to end the infringement of Article 102.

Consequently, the European courts did not succeed in clarifying what circumstances may establish 'objective justification'. Many researchers criticized that the 'objective justification' criterion is still unclear.

¹⁶⁶ Microsoft asked the court of justice for the annulment of the commission's decision. Before the appeal was heard, the commission took a further decision to penalize Microsoft another 280.5 € million for continued non-compliance with its 2004 decision.

4.3.1.5 Future Implications of the Huawei judgment on the “exceptional circumstances” doctrine

In *Huawei Case*, other circumstances were relevant more than those typically categorized under the “exceptional circumstances” doctrine. *Huawei Case* dealt with refusal to license a standard-essential patent (SEP) which is a patent that claims an invention that must be used to comply with a technical standard. Standards organizations often require members of (SEP) to grant licenses to their patent on FRAND terms.¹⁶⁷ The assessment of refusal to license a SEP was examined through the stages and justifications that were made in *Huawei Case* decision.

Huawei was active in the telecommunications sector and the proprietor of a European patent, ‘the long term evolution’ (LTE) which was declared by the leading standard-setting organization (SSO) as a standard-essential patent (SEP) for the fourth generation (4G) mobile phones systems. The ‘long term evolution’ (LTE) standard is a standard for wireless high-speed data communication for mobile phones. As a consequence of the declaration of the patent as a (SEP), Huawei made a commitment to license the essential patent to third parties on ‘FRAND terms’. ZTE, a Chinese telecommunications company, marketed products that incorporated the LTE software technology and inevitably used the SEP without paying any royalties to Huawei. The parties started negotiations in an attempt to reach a licensing agreement on FRAND terms. Huawei proposed a royalty fee, which it considered it as a reasonable royalty fee. However, ZTE did not agree on that fee, and proposed a trivial royalty. Thus, the parties were unsuccessful to reach a mutual understanding of a licensing agreement based on FRAND terms. ZTE continued to utilize the LTE technology without paying

¹⁶⁷ FRAND is the acronym for fair, reasonable and non-discriminatory. This term generally arises in competition law cases where an owner of intellectual property rights refuses to grant a license or refuses to grant a license on FRAND terms.

royalties, which forced Huawei to file a suit against ZTE in front of German district court. Opposing Huawei's claim, ZTE claimed that Huawei was abusing its dominant position by instituting an action for injunction relief and by refusing to grant a license to its essential patent on FRAND terms.

The German Court asked the ECJ a several questions, but the main question was whether and under which circumstances a SEP holder who has made a FRAND commitment to a SSO infringes Article 102 TFEU by filing a law suit against a third party that is willing to negotiate and enter a licensing agreement on FRAND terms.

The ECJ started its judgment by pointing out that the existence of a dominant position was undisputed between the parties. Therefore, the ECJ was only obliged to provide guidance in relation to the existence of abusive practice.

The ECJ began its assessment of Huawei's conduct by referring that Huawei's right to bring an action for the injunctive relief was part of several rights of the proprietor of an IPR, and the exercise of such a right cannot, in itself, constitute an abuse even if it was an act of an undertaking holding a dominant position.¹⁶⁸ As for Huawei's conduct, the ECJ repeated the 'exceptional circumstances' doctrine adapted in *Magill Case* and *IMS Health case*. However, the ECJ distinguished *Huawei Case* from the previous cases in two significant aspects. First, the ECJ distinguished between standard-essential patents from a patent that is not essential to a standard. According to the ECJ, SEP products normally prevent third parties from manufacturing competing products since they cannot diverge the SEP without compromising the essential functions of the product in question, which is not the case for non-SEP products.¹⁶⁹ The ECJ declared that there was not any dispute between the parties that Huawei's patent was standard-essential

¹⁶⁸ Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH, case C-170/13, 16/07/2015, para 47

(<https://bit.ly/3sPn2hU>)

¹⁶⁹ Ibid, para 49

patent. Secondly, the ECJ confirmed the fact that Huawei's patent obtained SEP status just gave it an obligation to grant licenses to the SEP on FRAND terms, which created legitimate expectations on part of third parties that the right-holder would actually provide licenses on such terms.¹⁷⁰ The ECJ argued that the right-holder of the SEP captures a position from which it can deploy a claim for injunctive relief in order to prevent products manufactured by competitors from appearing, and thereby, reserve to itself the manufacture of the product in question. Subsequently, the ECJ held that, in principle, in exceptional circumstances, a refusal by a possessor of a SEP to grant a license to a third party on FRAND terms might constitute an abuse of a dominant position under Article 102 TFEU. Nevertheless, the ECJ indicated that the proprietor of the SEP is obliged to grant a license to its patent only on FRAND terms, and pointed out that there were not any agreement between the parties on what were the licensing conditions that constituted FRAND terms.¹⁷¹

In the second part of the judgment, the ECJ set out a negotiation procedure which contains conditions that the SEP holder and the potential licensee must follow in order to avoid antitrust and IP liability, respectively:¹⁷²

1. Before filing a suit against the SEP user, the licensor must alert him of the alleged infringement and specify the way in which the patent is infringed
2. The potential licensee must express its willingness to be a part of a licensing agreement on FRAND terms.

¹⁷⁰ Ibid, para 51

¹⁷¹ Huawei Technologies Co. Ltd v ZTE Corp. and ZTE Deutschland GmbH, supra, para 53

¹⁷² Ibid, para 60-68

3. The SEP holder must present to the willing licensee a written offer for a license on FRAND terms that explains the amount of royalty, the method for calculating the royalty
4. The potential licensee must then respond to the SEP licensor's offer in good faith, without any delay and in accordance with recognized commercial practices in the industry.
5. If the willing licensee does not accept the licensor offer, it must -without any delay- submit a replacement offer that corresponds to FRAND terms.
6. If the potential licensee is already using the SEP before reaching an agreement between the parties, and the SEP holder rejected the licensee's offer, the potential licensee must provide appropriate security such as bank guarantee in accordance with recognized commercial practice.
7. When the parties cannot come to an agreement, the parties may request that an independent third party shall determine the level of the royalty.

Huawei Case is not a classic case of refusal to license. *Huawei Case* concerned the prohibitive nature of a dominant position that holds a standard-essential patent that takes an action for injunctive relief. The ECJ in its decision recited the general principles that were adapted in *Magill* and *IMS Health* cases and confirmed that in 'exceptional circumstances' the exercise of an IPR can amount to an abuse under Article 102 TFEU. Subsequently, the court recited the existence of the two exceptional circumstances that distinguished Huawei from previous case law. First, the nature of

the patent that was considered to be SEP by a SSO automatically indicates that it was ‘indispensable’¹⁷³, which meant that according to *Bronner Case* and *IMS Health case* that without the SEP it would be impossible or at least unreasonably difficult to compete viably on the market. The nature of the SEP indicates that a competitor or another third party will practically always need acquiring access to the SEP in order to develop products that can interoperate with that market standard. The second ‘exceptional circumstances’ that the court found in this case was that the Huawei’s patent acquired SEP status only in return for Huawei’s commitment to grant licenses to the SEP on FRAND terms. Based on these two ‘exceptional circumstances’ the court found that the mere refusal to license a standard-essential patent means that the ‘exceptional circumstances’ doctrine is satisfied. Even though, the ECJ did not refer to the ‘new product’ requirement in Huawei, but it referred that the refusal to license the SEP prevents products manufactured by competitors from appearing on the market, which is a strong insinuation of that criterion and indirectly reflecting the criterion of ‘elimination of competition’. Consequently, the criteria to find a refusal to provide a license to a SEP as an abuse seems to set lower standards than for other IPRs that do not enjoy ‘standard-essential’ status.

¹⁷³ Haris Catovic, *supra*, page 115.

Chapter 3

Conclusions and recommendation

This thesis has discussed the cases in which refusal to grant a license for IPR to a third party constitute an abuse in the meaning of Article 102 TFEU. In order to amount such a refusal to an abusive practice, firstly, the refusal has to be committed by an undertaking that holds a “dominant position” in the common market. Therefore, chapter one defines dominance and shows that it is a very long complex process to announce that an undertaking holds a dominant position in the common market. whereas, chapter two discusses the concept of abuse and shows that in order to amount refusal to license IP to an abusive practice under Article 102 TFEU, such a refusal must be adjoined with the presence of several exceptional circumstances. Consequently, this master thesis has come to several conclusions as follows:

1. Dominance is a position of economic strength that an undertaking holds, making it capable of controlling the relevant market independently from any competitors, customers, suppliers, or consumers.
2. The concept of “dominant position” is a vague term; therefore, there’re several factors which help determine whether an undertaking holds a dominant position or not such as market share, Commercial advantages, technical advantages, Statutory monopoly and exclusive right, barriers to entry.
3. The possession of IP does not automatically means holding a dominant position in the market.

4. To determine whether the intellectual property right-holder occupy a dominant position on the common market or not, one must identify the relevant product to be able to move to defining the relevant product market upon which dominance is being measured, and its geographic dimension.
5. One must differentiate between refusal to grant a license for intellectual property right in primary market and secondary market. In general, refusal to supply or license intellectual property right can be legitimate competition in the primary market but could become abusive in a secondary market in certain circumstances.
6. In primary market the legal position of the acquirer of a patent license is different from that of the original proprietor of the protective right.
7. In secondary market, refusal to license intellectual property right can be seen as an abusive conduct by competition law, if the refusal is united with the existence of “exceptional circumstances” doctrine.
8. The “exceptional circumstances” requires four cumulative conditions. Firstly, the refusal to license intellectual property denies access to a product or service that is ‘indispensable’ for the continuation of a particular business. Secondly, the refusal prevents the emergence of a ‘new product’ for which there is potential consumer demand. Thirdly, the refusal is ‘likely’ to eliminate any competition on a secondary market. Fourthly, the absence of objective justifications which justify the refusal.
9. The European case law showed that the “exceptional circumstances” doctrine is a flexible doctrine and other circumstances were seen relevant other than those typically categorized under it. This was especially highlighted in *Huawei’s case*,

where the ECJ introduced an entirely new “exceptional circumstances” within the SEP context.

10. The European courts has adapted case-by-case doctrine when it came to refusal to license IP cases; which means that the European courts examine each case on its own merits and study the circumstances surrounding that specific instance of a refusal to license.

Recommendation

The European courts did not succeed in defining what circumstances may objectively justify refusal to license IPR by a dominant undertaking. It refused any plea given in any case without declaring what circumstances may be classified as “objective justification”. Therefore, the researcher recommends the European Courts to give a definition to the circumstances that may objectively justify a refusal to license IPR by a dominant undertaking to a third party.

The researcher suggests some justifications that can objectively justify refusal to grant a license for an IPR by a dominant undertaking to a third party, that can be helpful to any advocate dealing with this kind of cases.

1. When the dominant undertaking itself has just started to rely on the IPR to develop a new product of the same type that the potential licensor is claiming he would introduce on the secondary market.
2. When the IPR concerned is the only and fundamental basis for the dominant undertaking’s production, and if another competitor was given a license to this IPR, this might deprive the undertaking of its very economic basis.
3. When giving a license to IPR would interfere with the improvement, expansion or development of the intellectual property right itself.

4. The potential licensee was not a creditworthy; did not have the professional and technical skills needed to utilize the technology protected by IPRs.

Bibliography

Legislations

1. Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Annex 1C, 15\04\1994
(<https://bit.ly/3mn0pxD>)
2. The Treaty on European Union and the Treaty on the Functioning of the European Union (2016) OJ 1 201/01
(<https://bit.ly/3sm8ztF>)

Case law

3. Aerospatiale V Alenia/de Havilland, case no. IV/M.053, 12\05\1991
(<https://bit.ly/3CjwLQn>)
4. Airtours Case V Commission of the European Communities, Case T-342/99, 6\6\2002
(<https://bit.ly/3mLNuF6>)
5. BPB Industries Plc and British Gypsum Ltd V Commission of the European Communities, Case T-65/89, 01\04\1993
(<https://bit.ly/3pKqhoH>)
6. British Midland V Aer Lingus, case IV.33.544, 26\02\1992
(<https://bit.ly/3ISRi0L>)
7. Centre belge d'études de marché - Télémarketing (CBEM) V SA Compagnie luxembourgeoise de télédiffusion (CLT) and Information publicité Benelux (IPB), case 311\84, 03\10\1985
(<https://bit.ly/3sO8vmB>)

8. Cewal V the Commission, case 93/82/EEC, 23\12\1993
(<https://bit.ly/3mJ5sYW>)
9. Hilti V Commission, Case T-30/89, 12\12\1991
(<https://bit.ly/3mJ6wMm>)
10. Hoffmann-La Roche & Co. AG V Commission of the European Communities,
case 85\76, 13\02\1979
(shorturl.at/uIM69)
11. Huawei Technologies Co. Ltd V ZTE Corp. and ZTE Deutschland GmbH, case
C-170\13, 16\07\2015
(<https://bit.ly/3sPn2hU>)
12. IMS Health GmbH & Co. OHG V NDC Health GmbH & Co. KG, the court of
justice, case C-418\01, 29\04\2004, para 52-53
(<https://bit.ly/3HZFsAV>)
13. IMS Health GmbH & Co. OHG V NDC Health GmbH & Co. KG, the
commission decision, case T-48\01R, 2002
([EUR-Lex - 62001CJ0418 - EN - EUR-Lex \(europa.eu\)](http://eur-lex.europa.eu/lexuris/ui.do?uri=CELEX:62001CJ0418:EN))
14. Istituto Chemioterapico Italiano S.p.A. and Commercial Solvents Corporation
V Commission of the European Communities, case 6 and 7\73, 06\03\1974
(<https://bit.ly/3pbud1S>)
15. London European V Sabena, case IV\32.318, 04\11\1988.
(<https://bit.ly/3vNaRDZ>)
16. Magill TV Guide V ITP, BBC and RTE, case IV\31.851, 21\12\1988
(<https://bit.ly/3pDKWeg>)
17. Maxicar V Régie nationale des usines Renault, case 53\87, 05\10\1988, para 47
(<https://bit.ly/3Chg2gJ>)

18. Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG, case C-7\97, 26\11\1998
<https://bit.ly/3HMDaEQ>
19. Microsoft Corp. V Commission of the European Communities, the court of justice, case T-201\04, 17\09\2007
<https://bit.ly/3KmXvIS>
20. Napp pharmaceutical holdings limited and subsidiaries (Napp), case 98/2/2001, 30\03\2001
<https://bit.ly/3tyyb5R>
21. NV Nederlandsche Banden Industrie Michelin V Commission of the European Communities, case 322\81, 09\11\ 1983
<https://bit.ly/3CwRnoJ>
22. Oscar Bronner GmbH & Co. KG V Mediaprint Zeitungs- und Zeitschriftenverlag GmbH & Co. KG, Mediaprint Zeitungsvertriebsgesellschaft mbH & Co. KG and Mediaprint Anzeigengesellschaft mbH & Co. KG, case C-7\97, 26\11\1998
<https://bit.ly/3HMDaEQ>
23. Radio Telefis Eireann (RTE) and Independent Television Publications Ltd (ITP) V Commission of the European Communities, Joined cases C-241\91P and C-242\91P, 06\04\1995
<https://bit.ly/3sMA3sm>
24. Sea Containers V Stena Sealink - Interim measures, Case iv\34.689, 21\12\1993
<https://bit.ly/3HQVpsS>

25. Società Italiana Vetro SpA, Fabbrica Pisana SpA and PPG Vernante Pennitalia SpA V Commission of the European Communities, Joined cases T-68/89, T-77/89 and T-78/89, 10\03\1992
(<https://bit.ly/39udqlx>)
26. Tetra Pak International SA V Commission of the European Communities, Case T-83\91, 06\10\1994
(<https://bit.ly/3hJg6wd>)
27. Tetra Pak International SA V Commission of the European Communities, case C-333\94P, 1996
(<https://bit.ly/3hIKXsT>)
28. United Brands Company and United Brands Continental BV V Commission of the European Communities, case 27\76, 14\02\1978, para 38
(<https://bit.ly/3KfOp2s>)
29. Volvo V Maxicar, case 238\87, 17\07\1987
(<https://bit.ly/3IPsmY7>)

Books

30. Bellamy and Child, *European Union law of competition* (7th edition, oxford university press, United Kingdom, 2013)
31. Bishop Simon and Walker Mike, *The economics of EC competition law: concepts, application and measurement* (3rd edition, sweet and Maxwell, London, 2010)

32. Christina Bohannon and Herbert Hovenkamp, *Creation without Restraint: Promoting Liberty and Rivalry in Innovation*, (1st edition, Oxford University Press, United Kingdom, 2012)
33. Drexler, J., *Research handbook on intellectual property and competition law* (3rd edition, Edward Elgar, USA, 2008)
34. Faul and Nikpay, *The EU law of competition*, (3rd edition, Oxford University Press, United Kingdom, 2015)
35. Giorgio Monti, *EC competition law*, (1st edition, Cambridge University Press, USA, 2007)
36. Gunnar Niels, Helen Jenkis and James Kavanagh, *Economics for competition lawyers* (2nd edition, Oxford University Press, United Kingdom, 2016)
37. James Boyle, *Intellectual property: law & the information society*, (1st edition, Createspace Independent Publishing Platform, USA, 2014)
38. Massimo Motta, *Competition policy theory and practice* (12th edition, Cambridge University Press, New York, 2009)
39. Piet Jan Slot and Martin Farley, *An introduction to competition law* (2nd edition, Hart Publishing, London, 2017)
40. Renato Nazzini, *The foundations of European Union competition law: the objective and principles of article 102* (1st edition, Oxford Scholarship, United States, 2012)
41. Reto M. Hilty, *Compulsory licensing: practical experiences and ways forward* (1st edition, Springer Heidelberg, New York, 2015)
42. Richard Davis, *Triton on intellectual property in Europe* (5th edition, Thomson Reuters Publishing as Sweet and Maxwell, London, 2018)

43. Steven Anderman and Ariel Ezrachi, *Intellectual property and competition law: new frontiers* (1st edition, oxford university press, United Kingdom, 2011)
44. Steve Anderman and Hedvig Schmidt, *EU competition law and intellectual property rights* (2ND edition, oxford university press, United Kingdom, 2011)
45. Van Bael and Bellis, *Competition law of the European community* (5TH edition, Kluwer law international, the Netherlands, 2010)
46. Valentine Korah, *An introductory guide to EEC competition law and practice* (4th edition, sweet and maxwell, London, 1990)
47. Which and Bailey, *Competition law* (8th edition, oxford university press, United Kingdom, 2015)

Master thesis

48. Haris Catovic, "Refusal to license intellectual property rights as abuse of dominant position in EU competition law" (master thesis, Stockholm university, Stockholm, 2015)
49. Lena Salomonsson, "Competition law vs. intellectual property law – a difficult act of balance" (master thesis, university of lund, Sweden, 2007)
50. Rotich Jebron, "The interface between competition law and intellectual property law in Kenya" (master thesis, university of Nairobi, Kenya, 2016)
51. Sara Fredriksson, "When the refusal to deal becomes an abuse of a dominant position" (master thesis, lund university, Sweden, 2001)

Articles

52. Ana Novosad, "Some thoughts concerning the main goals of competition law" (2013) *jurisprudence*, volume 20, issue 2
53. Aurora Garcia and Nikolaos Georgantzis, "Dominance in the Tetra Pak case: an empirical approach" (1999) *European journal of law and economics*, volume 23, issue 6
54. Dolmans Maurits and others, "Are article 82 EC and intellectual property interoperable? The state of the law pending the judgement in *Microsoft v. commission*" (2007) *competition policy international*, volume 3, issue 1
55. James D. Hurwitz, "The impact of the continental can case on combinations and concentrations within the common market" (1974) *hastings law journal*, volume 25, issue 3
56. John Temple Lang, "Defining legitimate competition: companies' duties to supply competitors and access to essential services" (1994) *Fordham international law journal*, volume 18, issue 2
57. Killick, "IMS and Microsoft Judged in the cold lights of IMS" (2004) *the competition law review*, volume 1, issue 2
58. Ong and Burton, "Building brick barricades and other barriers to entry: abusing a dominant position by refusing to license intellectual property rights" (2005) *E.C.L.R.*, volume 26, issue 4
59. Pinar Akman, "The theory of abuse in google search: a positive and normative assessment under EU competition law" (2016) volume 2017, issue 2
60. Ruche verma. Shanya, "Clash between intellectual property law and competition law: a critical analysis" (2010) *RGNUL student law review*, volume 1, issue 1

61. Temple Lang, "anticompetitive abuses under article 82 involving Intellectual property rights" (2003) European competition law annual, volume 1, issue 2
62. Vesterdorf, "article 82 EC: where do we stand after Microsoft judgment?" (2008) global antitrust review, volume 1, issue 1
63. William Neilson and others, "intellectual property rights and competition law and policy: attempts in Canada and Japan to achieve reconciliation" (2002) Washington university global studies law review, volume 1, issue 1

Official documents of the European union

64. Commission notice on the definition of relevant market
(<https://bit.ly/3KmSWIs>)
65. Office for competition and consumers' protection
(<https://bit.ly/3CqYkYk>)
66. OECD, "competition on the merits" (2015)
(<https://bit.ly/3tDgnGN>)
67. United Nations conference on trade and development, Examining the interface between the objectives of competition policy and intellectual property
(<https://bit.ly/3hFYMIw>)

Internet sources

68. Alice Pham, "competition law and intellectual property rights: controlling abuse or abusing control?" (2008) CUTS international center
<https://bit.ly/33SLIfv>
69. Atul Patel, "Intellectual property law and competition law" (2011) journal of international commercial law and technology
<https://bit.ly/33yfs0H>
70. Carlos Correa, "Intellectual property and competition law" (2007) university of Buenos Aires
<https://bit.ly/3plw18R>
71. Det Fakultet, "Refusal to license IP as abuse of dominance balancing intellectual property and competition law"
<https://bit.ly/3plw18R>
72. Drexler, "Abuse of dominance in licensing and refusal to license" (2005) European competition law annual
73. Eric van Damme and others, "Abuse of a dominant position: cases and experiments" (2006) ssrn electronic journal
<https://bit.ly/3hIGHcT>
74. Felix Mezzanotte, "Using abuse of collective dominance in article 102 TFEU to fight tacit collusion: the problem of proof and inferential error" (2010) Kluwer law international
<https://bit.ly/3hFYMIw>
75. Max planck institute for intellectual property and competition law, "Copyright competition and development" (2013)
<https://bit.ly/3plw18R>

76. Springer U, "Meeting competition: justification of price discrimination under EC and US antitrust law" (1997) ECLR 251
77. Slaughter and May, "The EU competition rules on intellectual property licensing" (2016)
(<https://bit.ly/3plw18R>)