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Refusal to License in EU and its Influences in China

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Abstract

Refusal to license involves the interface area between IP law and competition law. An undertaking has the right to refuse to license its IPRs to any other undertakings according to IP law. Meanwhile, this right can be limited by competition law. Competition law, in certain circumstances, prohibits a refusal to license IPRs by a dominant undertaking which constitutes an abuse of a dominant position. Moreover, every jurisdiction has its own method on regulating whether a refusal to license constitutes an abuse.

EU's method is set out in Article 102 *TFEU* and case law of CJEU. A dominant undertaking's refusal to license can be confirmed as an abuse only in exceptional circumstances, after the examination of the market concerned and the analysis of the undertaking's behavior. This method is concluded as an exceptional circumstances test which has been diversely explained based on each case's specific facts in EU case law.

China's legislation on refusal to license in the field of competition law has been influenced by EU. China followed the EU's method at the legislative level, while at the practical level the Chinese competition authorities and the courts are hesitating to apply and enforce those new competition legislations.

Preface

When I was studying law in China, I got limited knowledge of competition law, even if Chinese first Anti-trust law had been enacted in 2007. Thank Swedish government for exempting the tuition fee of non-EU PHD students' partners, because of this, I could get the chance to be in a law school again and to go deeper into the competition law. Thank Dr. Justin Pierce for giving us an overview about EU competition law through his wonderful course. Thank my supervisor Professor Hans Henrik Lindgard for inspiring me on the interface area between competition law and IP law, especially for your fruitful course "Licencing in an International Contest" and your guidance to my thesis writing.

Thank my mom for traveling from China to Sweden and helping me to take care of my baby for three months during the thesis season. I could not finish this thesis without your help. Thank my dear husband Minchao for your patience to bear my bad temper before every deadline and also for your editing help for the thesis.

At last, I hope the competition law can play a more and more important role in China. Every jurisdiction can find its own way to balance the competition regulation and innovation, based on its own social situation.

Abbreviations

AG	Advocate General
AMC	Anti-monopoly Commission
<i>AML</i>	Anti-monopoly Law
<i>AUCL</i>	Anti-unfair Competition Law
CJEU	The Court of Justice of the European Union
DG Comp	The Competition Directorate-General
ECJ	The European Court of Justice
GC	General Court
IP	Intellectual Property
IPRs	Intellectual Property Rights
MOFCOM	Ministry of Commerce
NDRC	National Development and Reform Commission
SAIC	State Administration of Industry and Commerce
SPC	Supreme People's Court
<i>the Charter</i>	Charter of Fundamental Rights of the European Union
the Council	The Council of the EU
<i>TEU</i>	The Treaty on European Union
<i>TFEU</i>	The Treaty on European Union

1. Introduction

1.1. Background

A refusal to supply refers to the practice that an undertaking unilaterally refuses to supply certain products, services or facilities to other undertakings. When an undertaking refuses to supply its Intellectual Property Rights (IPRs), this undertaking's behavior is a refusal to license. A non-dominant undertaking's refusal to supply/license is legal because it will not harm competition or consumer welfare. The consumer can always search for alternatives under this situation. However, according to competition law, a refusal to supply/license by a dominant undertaking will be considered as illegal when it constitutes an abuse of a dominant position. Refusal to supply/license exists in a broad range of business practices. It can be an actual refusal that a dominant undertaking directly refuses the requests on supplying certain tangible products, services, facilities, or licensing IPRs from an existing customer or a new customer, or a constructive refusal that the dominant undertaking indirectly refuses other undertaking's requests, such as supplying with unreasonable conditions, unacceptable high price or unduly delaying.¹

Refusal to license involves the interface area between intellectual property (IP) law and competition law. IP law aims to stimulate innovation through protecting IP holders' IP rights. Comparing with tangible property, intellectual property includes more innovations. IPRs are licensed in a limited period and can be licensed many times, while tangible property is usually supplied by a one-time deal.² Thus, IP is more attractive for an undertaking comparing to the tangible property. IP holders are willing to invest a large amount of time and money to develop IP. In the consideration of the specialty of IP, confirming an illegal refusal to license IPRs should be considered more carefully than confirming an illegal refusal to supply tangible property, because it may undermine the IP holders' enthusiasm for innovation and ultimately may harm consumer welfare. Standard Essential Patents (SEPs) is a special type of patents which have become one of the industrial standards. SEPs are vital for every undertaking in the relevant industry. Therefore confirming an illegal refusal to license SEPs should be more carefully. This thesis will focus on refusal to license but refusal to supply and refusal to license SEPs will also be mentioned.

How to identify an illegal refusal to license depends on the regulations of competition law. Different jurisdictions' competition law is diverse, therefore the methods of identifying an illegal refusal are diverse. With the internationalization of competition law, some jurisdictions influence

¹ *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings* [2009] OJ C 45/7, para. 78, 79.

² C-7/97, *Bronner*, ECLI:EU:C:1998:264, Opinion of AG Jacobs, para. 62.

others on the competition legislation. This paper takes EU and China as examples to analyse the methods of identifying an illegal refusal. EU was chosen because EU is one of the most influential competition law models.³ China was chosen because China is the world's second largest economy by nominal GDP⁴ and one of EU's main trade partner. In previous studies, China was considered as a learner of EU on competition legislation in previous researches.⁵

EU has been developing its method of regulating refusal to license through legislations and case law for a long time. According to Article 102 *TFEU*, in order to confirm an illegal refusal to license, the first step is defining the relevant product and geographic market, and then assessing whether the relevant undertaking is holding a dominant position in the relevant market. Commission Notice and the case law provided details regulations to assess that. From case law, EU has developed the exceptional circumstances test which is the illegal refusal to license can only be confirmed when four conditions fulfilled. This paper analyses the developing process and the implications of the four conditions. The exceptional circumstances test was developed from the essential facilities doctrine which regulated refusal to supply cases. However, the implications and scope of the four conditions have been multiple explained based on each cases' own facts in EU case law. Furthermore, the exceptional circumstances test may have a potential to include other parameters after *Microsoft*. The EU courts have a broad discretion to decide how to explain the exceptional circumstances test. Although it has the risk of causing legal uncertainty, the consumer welfare on which the Commission emphasized, will be protected better. The judgment of *Huawei* which involved a refusal to license standard essential patents (SEPs) also presents the ECJ's attitude on interpreting the exceptional circumstances test flexibly.

China's *Anti-monopoly Law (AML)* took effect in 2008. Prior to *AML*, China regulated refusal to license conduct by *Anti-unfair Competition Law (AUCL)*, *contract law* or *patent law*. At the legislation level, *AML* and its detailed regulations have been setting up a similar exceptional circumstances test structure which was influenced by EU. However, at the practical level, the local courts and competition departments are hesitated to do apply thesis rules, although the Supreme People's Court (SPC) and national competition authority encouraged the lower level courts and competition departments to apply *AML* and its regulations to judge the relevant cases. In *Huawei/IDC* which involved a dominant undertaking refused to license essential standard patents,

³ Wu, Qianlan, *EU-China Competition Dialogue: A New Step in the Internationalisation of EU Competition Law*, *European Law Journal*, Volume 18, Issue 3, may 2012, p. 461-477.

⁴ World Bank, *World Bank forecasts for China, June 2016*, <http://pubdocs.worldbank.org/en/842861463605615468/Global-Economic-Prospect-2016-Divergences-and-risks.pdf#page=22> (accessed on 18th February, 2017)

⁵ *Supra* note 3.

the court made a judgement from the perspectives of *patent law* and *contract law* but not with the exceptional circumstances test in the competition legislations. In *Yingding/Sinopec*, the crucial part of the judgement was from the perspective of *contract law*, even though *AML*'s regulation on refusal to supply was also analysed.

1.2. Current Research Situations

Refusal to license is a popular research topic. Some researches focused on EU's own situation⁶ and some are interested in the comparison of EU and US, since both of them has been developing their own approaches for a long time in accordance with their own societies.⁷ Not many researches focus on the China's situation⁸ because the *AML* has only existed in a short period and relevant cases are insufficiency. Some of the researches highlighted the importance of this topic in practical level.⁹

The aim of competition law is explained not only by the jurists but also by the economists. Some studies focused on the influence of different legal schools on the aim of competition law, and the others uses economic methodology to analyse the aims. In addition, the comparison of the aims such as protecting competitors or consumers¹⁰, innovation or competition¹¹ has also been analysed.

1.3. Purpose and Research Questions

The main purpose of the thesis is to analyse, in the field of competition law, how EU regulates refusal to license, and how EU influences China on regulating refusal to license. In order to achieve this purpose, the competition legal systems and the regulations and case law about refusal to license in EU and China will be explained firstly.

⁶ Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution* (Hart Publishing 2009); Lidgard, H.H., *Application of Article 82 EC to Abusive Exclusionary Conduct — Refusal to Supply or to License*, (2009) 4 *Reuropar ättslig Tidskrift*.; Turney, J., *Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: the Primacy of Securing Optimal Innovation*, (2005) *Spring Northwestern Journal of Technology and Intellectual Property*, Volume3, Number 2.

⁷ *Monopolists' Refusal to Deal in IP: US Courts and EU Institutions line up along some Cultural and Jurisdictional Cleavages*, European Policy for Intellectual Property (EPIP), 3rd Annual Conference of the EPIP Association, http://www.epip.dk/conferences/epip03/papers/Maggiolino_Berna%20paper_final%20version_September%2011.pdf (accessed on 26th May, 2016); Schweitzer, H., *Controlling the Unilateral Exercise of Intellectual Property Rights: A Multitude of Approaches but No Way Ahead? — The Transatlantic Search for a New Approach*, *EUI LAW Working Paper*, No. 2007/31.

⁸ Jiang, T.C., *China and EU Antitrust Review of Refusal to license IPR*, (Maklu-Publisher 2015); Huang, Y., Wang, E.X., and Zhang, R.X., *Essential Facilities Doctrine and Its Application in Intellectual Property Space Under China's Anti-Monopoly Law*, (2015) 22, *George Mason Law Review* p.1103-1126.

⁹ Emch, A. and Stallibrass, D. (eds), *Review of China's Anti-Monopoly Law – The First Five Years* (Wolters Kluwer 2013).

¹⁰ Fox., E.M., *We Protect Competition, You Protect Competitors*, *World Competition* 2003, 26(2): p.149-165.

¹¹ Hovenkamp, H., *Antitrust and Innovation: Where We are and Where We should be Going*, (2011) *Antitrust Law Journal*, No. 3.; Colomo, P.I., *Restriction on Innovation in EU Competition Law*, (2016) *European Law Review*.

In other words, two research questions will be discussed in this thesis:

- ❖ How does EU regulate refusal to license in the field of competition law?
- ❖ How does EU influence China on regulating refusal to license in the field of competition law?

1.4. Methodology and Materials

In order to achieve this research purpose, the traditional legal method is applied to describe the competition legal systems and competition legislations in EU and China. The interpretation methods applied by The Court of Justice of the European Union (CJEU) and Chinese courts is also taken into account. In addition, the legal historical perspective is important to interpret the development of EU's approach on assessing refusal to license. The comparative study method is applied to compare the regulations and practices of refusal to license in EU and China.

Since this thesis will compare both the situations in EU and China, it will combine the English language materials and the Chinese language materials. As far as the EU side, English language materials will be used, including the EU legislations, the judgements of CJEU, AG Opinions and various research papers and reports. As far as the China side, Chinese legislations and some research papers about Chinese competition law are in English language, and the judgements of the Chinese courts and the reports are in Chinese language.

1.5. Delimitation

As mentioned before, this thesis will focus on how a refusal to license by a dominant undertaking constitutes an abuse of a dominant position in EU and China. The remedies after confirming an abuse will not be discussed. Only unilateral refusal to license will be touched in this thesis, bilateral or multilateral refusal will not be analysed. Block exemption will not be mentioned either.

The EU cases will be limited in the cases from the CJEU, including General Court (GC) and the Court of Justice (ECJ). The Commission's decision will not be discussed. The Chinese cases will be limited in the judgements from the SPC, high people's court and intermediate people's court. The judgements from the basic people's courts will not be mentioned. Corresponding to the EU's situation, the Chinese competition authorities' decision will not be discussed either.

Furthermore, TRIPS will not be involved, because TRIPS does not have the principal influence on both EU and China. The thesis will only focus on the refusal to license situations in EU and China separately from a competitive perspective, but not the cooperation and coordination between them.

2. The Refusal to License in EU

2.1. Competition Legislation and Institutions in EU

Sources of EU law can be divided into primary law, secondary law and supplementary law. Primary law is the Treaties establishing EU. Secondary law includes the unilateral secondary law such as regulations, directives, decisions, opinions, recommendations, papers, and convention, or agreements such as international agreements, agreements between Member States. Supplementary law includes the case law, international law and general principles of law.¹² Competition legislation exists among these three sources of EU law.

2.1.1. Primary Law—the Treaties

The Treaty on European Union (*TEU*), the Treaty on the Functioning of the European Union (*TFEU*) and the Charter of Fundamental Rights of the European Union (*the Charter*) constitute the Treaties which is the foundation of EU.¹³ *TEU* established EU and divided the competences between EU and Member States. *TEU* influences the relevant courts decisions about how to explain the detailed completion regulations. For instance, Article 3 *TEU* which stipulates the objectives of EU including establishing an internal market was implemented in the judgements of some competition related cases.¹⁴ *TFEU* sets out more detailed provisions. Article 101 to 108 *TFEU* regulate competition and state aid rules.¹⁵ In particular, Article 101 and Article 102 *TFEU* are two important competition provisions. Article 101 *TFEU* prohibits several undertakings constituting agreements or collusion that will affect competition and trade between Member States. And Article 102 *TFEU* prohibits dominant undertakings abusing their dominant positions. *The Charter* has no direct provision on competition law, but it protects effective procedural process, such as a fair trial and defense's rights in competition related cases.¹⁶

2.1.2. Secondary Law—Regulations, Guidance and their Legislators: the Council and the Commission

The Council of the EU (the Council) represents the voice of EU member governments, adopts EU laws and coordinates EU policies.¹⁷ The Council adopted *Regulation 17*, *Regulation 1/2003* and

¹² *Sources of European Union Law*, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3A114534> (accessed on 26th May, 2016).

¹³ Jones, A., and Sufrin, B., *EU Competition Law: Text, Cases and Materials* (fifth edition, Oxford University Press, 2014), p. 98.

¹⁴ Joined cases C-56 and C-58/64, *Consten and Grundig*, ECLI:EU:C:1966:41, p. 340.

¹⁵ Jones, *supra* note 11, p.100.

¹⁶ Jones, *supra* note 11, p.101.

¹⁷ *Council of European Union* http://europa.eu/about-eu/institutions-bodies/council-eu/index_en.htm (accessed in 26th May, 2016)

Merger Regulation in the competition area. Through these Regulations, the Council delegates to the Commission of enforcing competition rules and adopting block exemptions regulations.¹⁸

The European Commission (the Commission) is the most important EU institution to enforcement EU competition rules.¹⁹ Every Member States has a Commissioner in the Commission and every Commissioner has responsibility for a special area.²⁰ There is one Commissioner who has responsibility for competition. The Competition Directorate-General (DG Comp) is one of the Commission department in charge of the competition sphere.²¹

Commission Guidances²² are important parts of EU competition law, even though these Guidances are not legally binding to CJEU, Member States' national competition authorities and national courts. Commission Guidances are the substantive soft law that detail the competition regulation on *TFEU* and interpreted how the Commission works on the competitive related cases. These Guidances are particularly useful for the undertakings to understand the Commission approaches on competition practices.

2.1.3. Supplementary Law—the Case Law and the Courts

The Court of Justice of the European Union (CJEU) is the judicial system of EU which comprises the Civil Service Tribunal, the GC²³ and the ECJ plus 11 Advocates-General²⁴. CJEU has the responsibility to implement and interpret the Treaties and secondary legislation. Different from a common law system, no written law clearly regulates that the CJEU should follow the precedent. However, the CJEU pursuits for the consistency.²⁵ It is not common that the subsequent judgment is contrary to the precedent. Therefore, the CJEU's judgements are important to understand the EU law.

There are two types of competition related cases in the CJEU. Firstly, the GC accepts the cases from individuals who is not satisfied with the Commission's decision.²⁶ Appeals can be made from the GC to the ECJ. In this situation, the ECJ limits itself in the GC's judgment without full

¹⁸ Jones, *supra* note 11, p.101.

¹⁹ Article 17 *TEU* defined the Commission's responsibility.

²⁰ *European Commission*, http://europa.eu/about-eu/institutions-bodies/european-commission/index_en.htm#goto_3 (accessed on 26th May, 2016)

²¹ Jones, *supra* note 11, p. 102.

²² Some of them are called Notices or Guidelines.

²³ The GC's previous name is the Court of First Instance (CFI) prior to Lisbon Treaty before 2009.

²⁴ An Advocate General wrote Opinion before ECJ's judgment on a case as an assistant. Jones, *supra* note 11, p. 102.

²⁵ *Ibid.*

²⁶ Article 263 *TFEU*.

investigation or analysis on the relevant case.²⁷ Secondly, the ECJ accepts the preliminary ruling from national courts of Member States. The national court can directly apply EU competition law. When national courts have questions on explaining and applying EU law, they can request the ECJ for a preliminary ruling which replies the questions by interpreting EU law. In this situation, ECJ's judgement is limited in the scope of national courts' questions.

2.1.4. The Relationship Between EU and Member States

When there is a conflict between EU law and national law, EU law should be applied first.²⁸ In the absence of Community law, it is for national law to regulate the relevant matters.²⁹ Competition law exists in every Member State. EU competition law should be applied at the same time with the national competition law when assessing an abuse of a dominant position. *Regulation 1/2003* clarifies this principle:

“When Member States' national competition authorities or national courts apply national competition law to any abuse prohibited by Article 102 of the Treaty, they should also apply Article 102 of the Treaty.”³⁰

IP law also exists in every Member State. Article 345 *TFEU* makes sure Member State's right of governing the system of property ownership including IP:

“The treaties shall in no way prejudice the rules in Member States governing the system of property ownership.”³¹

The EU case law made a distinction between the existence of IP and exercise of IP. EU had no competence with respect to the existence of IP whereas the exercise of IP can be regulated by EU law.³² *Commission Guidelines on Technology Transfer Agreement* confirmed this principle:

“The fact that intellectual property laws grant exclusive rights of exploitation does not imply that intellectual property rights are immune from competition law intervention.”³³

²⁷ Jones, *supra* note 11, p. 106.

²⁸ Colino, S.M., *Competition Law of the EU and UK*, (OUP Oxford 2011), p. 47.

²⁹ C-242/95, *GT-Link*, ECLI:EU:C:1997:376, para. 24.

³⁰ Article 3 *Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty*.

³¹ Article 345 *TFEU*. There is no EU law distinguishes tangible property and intangible property.

³² *Consten and Grundig*, *supra* note 12, p. 345.

³³ *Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements*, 2014/C 89/03, para. 7.

2.2. EU's Approach on Regulating Refusal to License

EU's approach on regulating refusal to license was established by case law. An IP holder cannot be deemed as occupying a dominant position *per se*. In *Deutsche Grammophon*, the ECJ confirmed that the undertaking with a copyright did not occupy a dominant position merely by exercising his exclusive right.³⁴ Furthermore, a dominant undertaking's refusal to license cannot be considered as abusing its dominant position *per se* either. In *Magill*, the ECJ reiterated this principle:

“A refusal to grant a license even if it is the act of an undertaking holding a dominant position, cannot in itself constitute abuse of a dominant position.”³⁵

However, there is always a risk for a dominant undertaking to refuse to license. ECJ held in *T d émarketing* that a dominant undertaking with economic strength in the relevant market which enabled it to hinder the effective competition could not preclude the application of Article 102 TFEU.³⁶ In some situations, holding an IP is helpful for the IP holder to get the dominant position in the relevant market. For the purpose to identify whether an undertaking's refusal to license is illegal, Article 102 TFEU should be examined.

Article 102 TFEU deals with the dominant undertakings' unilateral conduct which prohibits a dominant undertaking abusing its dominant position insofar as it may affect trade between Member States.³⁷ In the light of Article 102 TFEU, when accessing whether an undertaking's refusal to license is incompatible with competition law, firstly, whether the undertaking is dominant in the relevant market should be analysed. In order to answer this question, the preliminary step is to define the relevant market³⁸, and to analyse the undertaking's position and its competitive constraints on that market.³⁹ EU case law and the *Commission Notice on the definition of relevant market* provides a systematic method to define the relevant market and to access the dominant position. Secondly, whether there is abuse of a dominant undertaking should be analysed. Article 102 TFEU lists several different abusive behaviors, nevertheless it does not include all abusive behaviors. Based on the case law, essential facilities doctrine was applied for accessing the abuse in refusal to supply cases, whereas exceptional circumstances test was applied to the refusal to license cases.

³⁴ C-78/70, *Deutsche Grammophon*, ECLI:EU:C:1971:59, para. 16.

³⁵ Joined cases C-241/91P and C-242/91P, *Magill*, ECLI:EU:C:1995:98, para. 49.

³⁶ C-311/84, *T d émarketing*, ECLI:EU:C:1985:394, para.12.

³⁷ Article 102 TFEU.

³⁸ C-6/72, *Continental Can*, ECLI:EU:C:1973:22, para. 32. *Bronner*, *supra* note 2, para. 32.

³⁹ Jones, *supra* note 11, p. 304.

2.2.1. Defining Dominant Position in the Relevant Market

a) Relevant Market

The first step to assess an undertaking's position in the relevant market is to define the relevant market including the product market and the geographic market. The dominant position of an undertaking can be easier depicted under a narrow definition of the relevant market than a broader definition.⁴⁰ EU case law has provided useful methodologies on the market definition from various aspects. In addition, *Commission Notice on the definition of relevant market* also rendered a systematic methodology to describe how the Commission define the relevant market.

The *Commission Notice on the definition of relevant market* defines the relevant product market as:

“Comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of the products' characteristics, their prices and their intended use.”⁴¹

In case law, CJEU focused on interchangeability which “based on the qualitative criteria of characteristics, prices and intended use”⁴². In *Hoffmann-La Roche*, ECJ examined the demand substitutability and held each group of vitamins was considered as a separate market because different groups of vitamins had different purposes.⁴³ In *Michelin I*, ECJ examined the supply substitutability and held partial interchangeability was enough for defining the product market. In the context of identifying a dominant position, the crucial issue is whether there is a competitive restraint on other product.⁴⁴ Additionally, the quantitative criteria such as SSNIP also be applied on some cases. In *France T d'acom*, GC firstly examined the product characteristics and then applied SSNIP test⁴⁵ according to the *Commission Notice on the definition of relevant market*.⁴⁶

The *Commission Notice on the definition of relevant market* defined the relevant geographic market as:

⁴⁰ Craig, P., Búrca, G.D., *EU Law: Text, Cases, and Materials*, (fifth edition, Oxford University Press, 2011), p. 1012.

⁴¹ *Commission Notice on the definition of relevant market for the purposes of Community competition law*, OJ C 372, 9.12.1997, para. 7.

⁴² Jones, *supra* note 11, p. 64.

⁴³ C-85/76, *Hoffmann-La Roche*, ECLI:EU:C:1979:36, para. 28.

⁴⁴ C-322/81, *Michelin I*, ECLI:EU:C:1983:313, para. 48.

⁴⁵ SSNIP is short of Small but Significant Non-transitory Increase in Price. It assumes when a small (5-10%) rise of the product's price, whether the customers will change to purchase products from other areas. If the answer is yes, the product and products from other areas form the same market. See more on Jones, *supra* note 11, p. 67.

⁴⁶ GC, T-340/03, *France T d'acom*, ECLI:EU:T:2007:22, para. 82-89.

“Comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighboring areas because the conditions of competition are appreciably different in those areas.”⁴⁷

SSNIP test can also be used to define the geographic market. Furthermore, the *Commission Notice on the definition of relevant market* provided several parameters should be considered as well, for instance, past evidence of diversion of orders to other areas, basic demand characteristics, views of customers and competitors, current geographic pattern of purchases, trade flows/pattern of shipments, barriers and switching costs associated to divert orders to companies located in other areas and so on.⁴⁸

Geographic market’s definition can be industrial-specific. In transport industry related cases, the geographic could be defined narrow. One air route or ferry route may be defined as a separate market.⁴⁹ In the absence of Community rule governing IP, it is for the domestic legal system of each Member State to governing IPRs. Therefore in *Magill*, the relevant geographic market was limited in the national level for the reason that the undertaking’s dominant position was granted by the national law.⁵⁰ Comparing to the traditional industry, the geographic market of high-tech products usually can be defined broader since the high-tech products are developed and sold cross border. In *Microsoft*, the relevant geographic market was defined as global.⁵¹ As well as in *Intel*, the Commission stated:

“The main supplies compete globally, CPU architectures are the same around the world, the main customers operate on a worldwide basis, and the cost of shipping CPUs around the world is compared to their cost of manufacture.”⁵²

b) Dominant Position in the Relevant Market

The definition of a dominant position was established by case law. In *Hoffmann-La Roche* the ECJ defined a dominant position as:

⁴⁷ *Commission Notice on the definition of relevant market*, *supra* note 39, para. 8.

⁴⁸ *Ibid*, para. 44-52.

⁴⁹ Jones, *supra* note 11, p. 327.

⁵⁰ *Magill*, *supra* note 32, para. 24.

⁵¹ GC, T-201/04, *Microsoft*, ECLI:EU:T:2007:289, para. 774.

⁵² Case No M.7688, *Intel*, para. 23.

“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.”⁵³

This definition did not provide fixed parameters to assess a dominant position but emphasized on assessing the undertaking’s ability to influence the relevant market’s competition.⁵⁴

When assessing market power, market share is usually an important parameter. “Very large market share” can *per se* be considered as dominant. In *Hoffmann-La Roche*, the ECJ set this principle:

“Very large shares are in themselves, and save in exceptional circumstances, evidence of a dominant position.”⁵⁵

In *AKZO*, the ECJ explained it further that an undertaking with over 50% market share could be considered as a “very large market share” and be indicated as a dominant.⁵⁶ When the market share is not very large, the undertakings competitive constraints on that market should be examined. The ECJ claimed that in *Hoffmann-La Roche*:

“the relationship between the market shares of the undertaking concerned and of its competitors, especially those of the next largest could be considered.”⁵⁷

In *British Airways*, the GC found that even British Airways only held 39.7% in the relevant market, its market share was seven times bigger than its biggest competitor. The dominant position was constituted because British Airways “remained very largely preponderant”⁵⁸. Different from the case law, the Commission set a safe harbor which suggests in the Guidance:

“Dominance is not likely if the undertaking’s market share is below 40%.”⁵⁹

There are other important parameters indicating dominant, for instance, barriers to entry and expansion, economies of scale and so on.⁶⁰

⁵³ *Hoffmann-La Roche*, *supra* note 40, para. 38.

⁵⁴ Jones, *supra* note 11, p. 299.

⁵⁵ *Hoffmann-La Roche*, *supra* note 40, para. 41.; GC, T-30/89, *Hilti*, ECLI:EU:T:1991:70, para. 92.

⁵⁶ C-550/07P, *AKZO*, ECLI:EU:C:2010:512, para. 60.

⁵⁷ *Hoffmann-La Roche*, *supra* note 40, para. 48.

⁵⁸ GC, T-219/99, *British Airways*, ECLI:EU:T:2003:343, para. 210-224.

⁵⁹ *Guidance on the Commission’s Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings* 2009 OJ C 45/2, para. 14.

2.2.2. Assessing Abuse of a Dominant Position in a Refusal to License

Article 102 *TFEU* lists certain conducts which can be recognized as abusive practices:

“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. Such abuse may, in particular, consist in: (a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions; (b) limiting production, markets or technical development to the prejudice of consumers; (c) applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; (d) making the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.”⁶¹

The case law explained that Article 102 *TFEU* only took some examples but it was not an exhaustive list.⁶² There is no objective justification of Article 102 *TFEU*. Specific to the refusal to supply/license cases, CJEU has developed essential facilities doctrine and exceptional circumstances test to assess an abuse. Essential facilities doctrine originated from US law and was used for assessing an abuse in a refusal to supply.⁶³ There is no unified definition of essential facilities doctrine. Some researches summarized that, for example, Cotter stated essential facilities doctrine as:

“A monopolist to provide access to a facility that the monopolist controls and that is deemed necessary for effective competition.”⁶⁴

In EU, the CJEU and the Commission also used essential facilities doctrine to deal with refusal to supply, even without the terminology of “essential facility”. Exceptional circumstances test followed essential facilities doctrine’s rationale and added one more condition.⁶⁵ The essential

⁶⁰ More explanation about the methods of accessing the dominant position can be found in Graig, *supra* note 38, p.1019- 1022 and Jones, *supra* note 11, p. 347-360.

⁶¹ Article 102 *TFEU*.

⁶² C-238/87, *Volvo*, ECLI:EU:C:1988:477, para. 9.

⁶³ Jones, *supra* note 11, p. 513.

⁶⁴ Cotter, Thomas F., *The Essential Facilities Doctrine, Antitrust Law and Economics*, Hylton, Keith N., ed., Edward Elgar Publishing, 2008.

⁶⁵ There are different understandings on the relationship between essential facilities doctrine and exceptional circumstances test. Turnery thought essential facilities doctrine was used in refusal to license cases, since *IMS* was a case “establish a clear principle on essential facilities in the context of IPRs”. Jones and Sufrin held there was no essential facilities doctrine applied in refusal to license cases, since the ECJ never used the term “essential facilities” in these cases. Turney, James, *Defining the limits of the EU essential facilities doctrine on IPRs: the primacy of securing optimal innovation*, *Northwestern Journal of Technology and Intellectual Property*, Volume3, Number 2 (Spring 2005)

facilities doctrine was firstly touched by the ECJ in *Commercial Solvents* and then was developed as exceptional circumstances test in a series refusal to supply/license cases.

2.3. Exceptional Circumstances Test and CJEU's Interpretations

The following cases interpreted the meaning of essential facilities doctrine and exceptional circumstances test, and explained that under what circumstances these two theories should be applied. These cases come from the GC and ECJ with chronological order.

2.3.1. *Commercial Solvents*⁶⁶—Essential Facilities Doctrine for a Refusal to Supply

Commercial Solvents is a case concerning refusal to supply to an existing customer. CSC was a main supplier of amino-butanol—a kind of chemical. It held the dominant undertaking in the market of amino-butanol. Zoja was CSC's customers who purchased amino-butanol to produce another chemical Ethambutol, and Zoja was one of the principle manufactures of Ethambutol. CSC decided to stop supplying amino-butanol to Zoja. The Commission ruled that this refusal to supply constituted abuse of a dominant position which incompatible with Article 102 *TFEU*. CSC appealed this decision. The ECJ rejected this appeal and upheld the Commission's decision.

The ECJ found the fact that CSC's refusal to supply was for the purpose of facilitating its own access to the downstream market. There was a risk of eliminating competition in the downstream market.⁶⁷ In *B&I/Sealink*, the Commission defined "essential facility" as:

"A facility or infrastructure without access to which competitors cannot provide services to their customers."⁶⁸

Refer to this definition, the raw material amino-butanol in this case constituted the essential facility because Zoja could not produce its product Ethambutol without amino-butanol.

Therefore, even missing the terminology of "essential facility", the essential facilities doctrine was actually applied in this case. According to the judgement this case, the essential facilities doctrine could be concluded as: the dominant undertaking's refusal to supply should be considered as abuse of its dominant position, when three conditions are fulfilled:

- 1) *indispensable condition*: the relevant product is indispensable to its competitors in the downstream market;

Jones, s, p. 513-518.

⁶⁶ Joint case 6 and 7-73, *Commercial Solvents*, ECLI:EU:C:1974:18.

⁶⁷ *Ibid*, para. 24.

⁶⁸ *Ibid*, para. 66.

- 2) *excluding competition condition*: the owner of the relevant product enjoys a dominant position in the upstream market and aims at eliminating its competitors in the downstream market;
- 3) *no justification condition*: there is no objective justification.

2.3.2. *Magill*⁶⁹—Exceptional Circumstances Test for a Refusal to License

Magill was an undertaking who planned to publish a new weekly TV guide including programs of all channels in Ireland. RTE, ITP and BBC were three main TV stations who owned the copyrights of the programs' information of their own channels. These three TV stations refused to license the relevant copyrights to Magill. The Commission claimed that this refusal to license constituted abuse of a dominant position. After the GC's confirmation of the Commission's judgement, this case went to the ECJ.

In this case, the ECJ set up exceptional circumstances test. Following the previous case *Volvo*⁷⁰, the ECJ said a refusal to license by a dominant undertaking cannot *per se* constitute abuse of a dominant position. However, "the exercise of an exclusive right by the proprietor may, in exceptional circumstances, involve abusive conduct"⁷¹. The exceptional circumstances in this case were:

- 1) *indispensable condition*: the only source of the information on TV programs is the indispensable raw material for a weekly TV guide, and the weekly TV guide has no substitution;
- 2) *new product condition*: the refusal prevented the appearance of a new product, a comprehensive weekly TV guide;
- 3) *no justification condition*: there was no justification;
- 4) *excluding competition condition*: the dominant undertakings through their refusal conducts to reserve themselves in the secondary market by excluding all competition on that market.⁷²

Therefore, the ECJ reaffirmed the three TV stations' refusal to license was abuse of a dominant position.

⁶⁹ *Magill*, *supra* note 32.

⁷⁰ *Volvo*, *supra* note 60, para. 7-8.

⁷¹ *Magill*, *supra* note 32, para. 49-50.

⁷² *Magill*, *supra* note 32, para. 46-56.

Obviously, *indispensable condition*, *no justification condition* and *excluding competition condition* in this case were based on the essential facilities doctrine in *Commercial Solvents*, whereas the *new product requirement* was a new added condition.⁷³

2.3.3. *Ladbroke*⁷⁴—Alternative Conditions of the Exceptional Circumstances Test

Ladbroke was a Belgian undertaking who operated betting shops. PMU had exclusive responsibility for organizing off-course betting in France. PMU refused to supply broadcasts of French horse races to Ladbroke. The Commission held this refusal could not constitute abuse of a dominant position and then the case went to the GC. The GC maintained the Commission's decision.

The GC distinguished this case's situation with the *Magill*. Firstly, the GC said this refusal

“could not fall within the prohibition laid down by Article 102, unless it concerned a product or service which was either essential for the exercise of the activity in question or was a new product whose introduction might be prevented.”⁷⁵

In other words, the televised broadcasting of horse races in this case was neither an essential facility which there was indispensable, nor a new product which might be prevented and had potential demand from consumers. Therefore there was no incompatibility with Article 102 TFEU. The GC expressed its opinion clearly that the *indispensable condition* and *new product condition* are alternative but not additional.⁷⁶

Secondly, the GC examined the *excluding competition condition*. The GC defined the broadcasting of horse races and the taking of bets as two markets and Belgium as the geographic market. Because PMU was not involved in either of the two product markets in Belgium, PMU had no intention to exclude Ladbroke. Thus, the *excluding competition condition* was not constituted either.⁷⁷

2.3.4. *Bronner*⁷⁸—a Deeper Understanding of the Indispensability Condition

Bronner published an Austrian daily newspaper. Mediaprint operated a national home delivery system of its own newspaper and its system was the only nationwide network in Austria.

⁷³ Schweitzer, Heike, *Controlling the Unilateral Exercise of Intellectual Property Rights: A Multitude of Approaches but No Way Ahead? The Transatlantic Search for a New Approach* <http://cadmus.eui.eu/bitstream/handle/1814/7625/LAW-2007-31.pdf?sequence=3&isAllowed=y> (accessed 26th May, 2016)

⁷⁴ GC, T-504/93, *Ladbroke*, ECLI:EU:T:1997:84.

⁷⁵ *Ibid*, para. 130.

⁷⁶ *Ibid*, para. 131-132.

⁷⁷ *Ibid*, para. 133.

⁷⁸ *Bronner*, *supra* note 2.

Mediaprint refused to supply its national home delivery system for the purpose of delivering Bronner's newspaper according to Bronner's request. Austrian Court asked for a preliminary ruling in front of the ECJ about whether the refusal in the present case constituted abuse of a dominant position.

The ECJ referred to the exceptional circumstances test in *Magill* as well and explained deeper about the concept of "indispensability" in this case. Firstly, other methods of distributing daily newspaper existed.⁷⁹ Secondly, there was no technical, legal or economic obstacle to establish a new nationwide home delivery system. Moreover, the economic obstacle should be understood as it was not economically viable to create a substitute.⁸⁰ Therefore, the ECJ concluded that the *indispensability condition* was not fulfilled and this refusal to supply could not constitute abuse of a dominant position.

2.3.5. IMS⁸¹—a Comprehensive Analysis of Exceptional Circumstances Test

IMS provided data services on sales and prescribing of pharmaceutical products in Germany by virtue of a "1,860 brick structure" which was a *de facto* industry standard in the relevant market. NDC that was also active in the same relevant market designed another brick structure which was close to the IMS's. The German Court found IMS's activity constituted the infringement of IMS's copyright. After that, NDC requested IMS to license its copyright of "1,860 brick structure" to them, but that was refused by IMS. The German Court asked for a preliminary ruling referring to whether such a refusal constituted abuse of a dominant position.

Contrary to the GC's decision on *Ladbroke*, the ECJ claimed here that abuse of a dominant position was constituted when three cumulative conditions were satisfied:

- 1) this refusal prevent the new product;
- 2) the relevant product or service was indispensable and that refusal would exclude any or all competition on a downstream market;
- 3) there was no justification.

These three conditions are the same as the four conditions of exceptional circumstances test which set up in *Magill*. In this case, the ECJ went further on interpreting these conditions. Firstly, the ECJ defined that "new products" was the product that the requesting undertaking intended to produce

⁷⁹ Ibid, para. 42-44.

⁸⁰ Ibid, para. 45.

⁸¹ C-418/01, *IMS*, ECLI:EU:C:2004:257.

and were not offered by the IP holder. Besides, there was a potential consumer demand of this “new product”.⁸² Secondly, the ECJ stated when determining the “indispensability”, two points should be considered: whether there were alternative products or services and whether there were “technical, legal or economic obstacles to make it impossible or at least unreasonably difficult to create the alternatives” which followed the judgement of *Bronner*⁸³. Thirdly, refer to the *excluding competition condition*, the ECJ explained more about the two markets. The upstream market was constituted by a certain product or service, while the downstream market was constituted by another product or service which was produced by the upstream market’s product or service.⁸⁴ About identifying the market, the ECJ interpreted it as “a potential market or even a hypothetical market” would be sufficient.⁸⁵

2.3.6. *Microsoft*⁸⁶—a Wider Understanding of Exceptional Circumstances Test

Microsoft provided operating systems (OS) — Windows, both for client personal computers (PC) and work group servers. Sun was an undertaking who requested Microsoft to supply and to authorize the use of interoperability information of Windows in order to develop and distribute their own products to competing with Microsoft in the OS for work group servers market. Microsoft refused this request. Sun complained this to EU Commission. The Commission decided Microsoft’s refusal to license constituted the abuse of a dominant position. Microsoft was imposed a fine and had to disclose the interoperability information to any undertaking who want to develop and distribute their own OS work group systems. Then Microsoft brought this case to the GC and GC sustained the Commission’s decision.

After affirming Microsoft’s dominant position in the relevant market⁸⁷, the GC applied the exceptional circumstances test to assess abuse as well.⁸⁸ Firstly, the *indispensable condition* was confirmed by the GC. The GC found Windows domain architecture was the *de facto* standard for work group servers.⁸⁹ Moreover, the interoperability information which Microsoft refused to license

⁸² Ibid, para. 48-49.

⁸³ Ibid, para. 22.

⁸⁴ Ibid, para. 43.

⁸⁵ Ibid, para. 44.

⁸⁶ *Microsoft, supra* note 49. There were two abusive acts involved in this case. One is Microsoft refused to license relevant information to Sun, the other is Microsoft tied Windows Media Player with its OS for PC. This thesis only analyses the previous one.

⁸⁷ The Commission defined OS for client PC and OS for work group servers were two separate product markets and the geographic market was worldwide. Microsoft was dominant in the OS for client PC with over 90% market share. In the market of OS for work group servers, Microsoft was also dominant with at least 60% market share. Ibid, para. 30-35.

⁸⁸ Ibid, para. 331-333.

⁸⁹ Ibid, para. 392.

played a key role in the uptake of Windows work group server.⁹⁰ Since the degree of interoperability influenced the efficiency of the non-Windows work group servers⁹¹ and no other methods or solutions could achieve such high degree of interoperability⁹², the interoperability information was indispensable. Based on this, the GC concluded this refusal reinforced Microsoft's competitive position and led to consumers to use its own product instead of its competitors' in the work group servers market.⁹³

Secondly, the GC proved the *excluding competition condition* existed in this case. The GC said it was not necessary to state that all competition in the relevant market would be eliminated. If this refusal behavior by Microsoft was liable or likely to eliminate all effective competition, the abuse can be established. The competitors on the market remained "a marginal presence in certain inches" did not mean such competition existed.⁹⁴ The following two points were enough to prove Microsoft excluded competition on the OS work group servers market. One was that Microsoft's refusal dedicated to its competitors' products to marginal positions or even unprofitable.⁹⁵ Another was once there was a risk of eliminating competition, the excluding competition condition would be fulfilled.⁹⁶

Thirdly, the GC ruled Microsoft's refusal prevented the appearance of the *new product*. The new product was explained by the GC in this case: a new product needed to be added substantial parts with significant investment in money and time by the competitors. The competitors only reproduced Microsoft's product by accessing interoperability information would not be considered as a new product.⁹⁷

At last, the GC confirmed holding IPRs could not in itself be an objective justification.⁹⁸

2.4. Summary

2.4.1. From Protecting Competitors to Protecting Consumers

EU competition law was regarded as protecting competitors rather than protecting consumers.⁹⁹ However, the *Commission Guidance in applying Article 102* states the Commission will focus on

⁹⁰ Ibid, para. 393.

⁹¹ Ibid, para. 421.

⁹² Ibid, para. 413.

⁹³ Ibid, para. 422.

⁹⁴ Ibid, para. 563.

⁹⁵ Ibid, para. 593.

⁹⁶ Ibid, para. 619.

⁹⁷ Ibid, para. 657-658.

⁹⁸ Ibid, para. 690.

the undertaking's conducts which are "most harmful to consumers".¹⁰⁰ In *Post Danmark*, the ECJ stated when assessing the dominant undertaking's conduct, the consumers' interests should be considered.¹⁰¹ The concept of consumers in EU competition law encompasses both intermediate customers as competitors and end-consumers.¹⁰² The conducts which harm to consumers include "higher prices, reduced output, less choice, diminished innovation"¹⁰³ and so on.

The transition process from protecting competitors to protecting competition is embodied in the refusal to supply/license cases. In *Commercial Solvents*, the ECJ analysed the dominant undertaking's refusal to supply would eliminating "one of the principal manufacturers" and have "risks eliminating all competition".¹⁰⁴ There was no consideration of consumer welfare. At that time, protecting competition process and competitors' benefits were the primary aim of EU competition law. However, in *IMS*, when balancing the interest in protecting IPRs and protecting free competition, the ECJ said "the latter can prevail only when refusal to license prevents the development of the secondary market to the detriment of consumers"¹⁰⁵. Consumer welfare became an important consideration in assessing abuse of a dominant position. In *Microsoft*, when identifying a new product, the GC considered the "limitation on consumer choice"¹⁰⁶. Moreover, the GC also confirmed that "incentive of innovation" which benefits consumers can be an objective justification, even Microsoft did not provide enough evidence for it in this case.¹⁰⁷

2.4.2. Essential Facilities Doctrine and Exceptional Circumstances Test

Article 102 *TFEU* is used to balance the protection of a dominant undertaking's economic freedom and the protection of free competition. Essential facilities doctrine and exceptional circumstances test are two theories of assessing whether a refusal to supply/license constitutes abuse of a dominant position under Article 102 *TFEU*. In EU, the essential facilities doctrine was used in refusal to supply cases, in particularly when ports, railways and other physical facilities were considered as

⁹⁹ Fox, Eleanor M., *We Protect Completion, You Protect Competitors*, *World Competition* 26(2): 149-165, 2003.

¹⁰⁰ *Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings* para. 5.

¹⁰¹ C-209/10, *Post Danmark*, EU:C:2012:172, para. 44.

¹⁰² Jones, *supra* note 11, p. 45.

¹⁰³ *Ibid*, p. 43.

¹⁰⁴ *Commercial Solvents*, *supra* note 63, para. 25.

¹⁰⁵ para. 48.

¹⁰⁶ *Microsoft*, *supra* note 49, para. 652.

¹⁰⁷ *Ibid*. para. 709.

the essential facilities.¹⁰⁸ The circumstances test was examined in a series of refusal to license cases and also a refusal to supply case, *Bronner*. They share the same rationale that the free competition rule only prevails when a refusal of an indispensable product excluded competition with no objective justification. Compared to the essential facilities doctrine, the exceptional circumstances test was added a new product condition. When assessing abuse, the dominant undertaking has a larger room to legally exercise its IPRs in the case of adopting exceptional circumstances test than the case of adopting essential facilities doctrine. However the courts' burden of prove on abuse is heavier. This development from essential facilities doctrine to exceptional circumstances test reflects the CJEU's thought that IPRs should be considered more carefully than the ordinary tangible property.

Subsequent to *Magill* in which the exceptional circumstances test was established, the basic structure of four conditions has not been changed in the following cases. However, the interpretation of each condition was different case by case.

Two markets should be analysed at the outset. After the primary step of recognizing two separate markets, whether the dominant undertaking excluded competition in the secondary market could be assessed. In the development of exceptional circumstances test, firstly, the market definition has been changed. Prior to *IMS*, only an actual existing market could be considered as a market in this test. However, in *IMS*, the ECJ pointed out "a potential market or even a hypothetical market" could also be satisfied with the market definition. According to this market definition, it increased the possibility of the dominant undertaking to be recognized as abuse, because it's more easier for the courts to confirm the excluding competition condition. More cases can be caught by this test through this broad definition of the market. In another word, the CJEU would like to expand the scope of applying this test. Secondly, the relationship between two markets has changed. Prior to *Microsoft*, the relevant two markets were vertical. Products from downstream market were produced by products from the upstream market. For instance, in *Magill*, the TV program information in the upstream market could produce the weekly TV guides in the downstream.¹⁰⁹ While, two markets in *Microsoft* were conglomerate. The OS for client PC was a central market for Microsoft and the OS for work group servers was a neighboring market.¹¹⁰ Microsoft depended on its market power in the central market to expand its market power in a neighboring market by

¹⁰⁸ Anderman, Steven, *The epithet that dares not speak its name: the essential facilities concept in Article 82 EC and IPRs after the Microsoft case* in Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution* (Hart Publishing 2009).

¹⁰⁹ *Magill*, *supra* note 32, para. 24.

¹¹⁰ Heinemann, Andrea, *The contestability of IP-protected markets in Drexel*, Josef (ed.), *Research handbook on intellectual property and competition law* (Edward Elgar 2008).

refusal to license interoperability information. The changing of the relationship between two markets will attract more cases adopting exceptional circumstances test as well.

In different cases, the interpretation of *indispensability* was not unified. In *Bronner*, there were other existing methods. Although other methods were more costly and less attractive compared to the refused product, they still could be considered as substitutes.¹¹¹ In *Microsoft*, although there were other products as well¹¹², they were not considered as substitutes and Microsoft's product was identified as indispensable by the Commission and the GC.

The concept of *new product* was initially applied in *Magill* without further interpretation. The ECJ in *IMS* explained a new product was a product that competitors intended to produce but the dominant undertaking did not have. Besides, a potential demand from consumers was also required.¹¹³ This definition is ambiguous. A new product can be both a total new one which haven't entered into the current relevant market and competed with the dominant's existing product, and a partial new one which was improved from the existing products.¹¹⁴ In *Microsoft*, the new product was interpreted as a product which did not simple duplicate existing products and the substantial elements arising from competitors own efforts was needed.¹¹⁵

With respect to the *no justification condition*, it is for the dominant undertaking to concern and prove the justification, not for the Commission or the Courts.¹¹⁶ In *Microsoft*, the GC rejected several arguments of Microsoft. Firstly, holding an IPRs could not constitute an objective justification. The GC explained that if holding an IPRs could successfully justify, there was no need to apply exceptional circumstances test.¹¹⁷ Secondly, business secret as an objective justification was rejected by the GC either. The GC considered although the IPRs which the undertaking refused to license was a business secret, that was "the consequence of a unilateral business decision on Microsoft's part"¹¹⁸. Besides, the interoperability information which Microsoft refused to license was indispensable. Thirdly, Microsoft said "disclosure would eliminate future incentives to invest in the creation of more intellectual property"¹¹⁹. The GC agreed "incentives to innovation" could be an

¹¹¹ *Bronner*, *supra* note 2, para 45-46.

¹¹² *Microsoft*, *supra* note 49, para. 343.

¹¹³ *IMS*, *supra* note 78, para 48-49.

¹¹⁴ *IMS*, *supra* note 78, Opinion of AG, ECLI:EU:C:2003:537, para. 62.

¹¹⁵ *Microsoft*, *supra* note 49.

¹¹⁶ *Ibid*, para. 688.

¹¹⁷ *Ibid*, para. 690.

¹¹⁸ *Ibid*, para. 693.

¹¹⁹ *Ibid*, para. 698.

objective justification¹²⁰, however Microsoft did not “specify the technologies or products to which it thus referred”¹²¹.

Competing on the merits may be potentially constituted an objective justification which a dominant undertaking can rely on.¹²² *Commission Guidance on the enforcement priorities in applying Article 102 TFEU* confirmed “a dominant undertaking is entitled to compete on the merits”¹²³, especially when consumers can benefit from it¹²⁴. In *TeliaSonera*, the ECJ held the Article 102 TFEU did not prevent the dominant undertaking to compete on its own merits.¹²⁵ Furthermore, in *Post Denmark*, the ECJ emphasized that:

“Competition on the merits may lead to the departure from the market or the marginalization of competitors that are less efficient and so less attractive to consumers from the point of view of, among other things, price, choice, quality or innovation.”¹²⁶

2.4.3. Variations of Exceptional Circumstances Test

The exceptional circumstances test can be diverse based on each case’s own situation. For example, in *Ladbroke*, the *indispensable condition* and the *new product condition* were explained as two alternative conditions.¹²⁷ In contrast, after *Bronner*, these two conditions were interpreted as two additional conditions.¹²⁸ The latter judgement did not simply mean an annulment of the precedent. Both these two decisions should be considered as variations of exceptional circumstances test. In the light of GC’s judgement in *Ladbroke*, the different facts in *Magill* and in *Ladbroke* were carefully distinguished on choosing different variations of the test.¹²⁹ Another example is that different variations of the test was applied when there were different understandings of “competitors” in *Magill* and in *Microsoft*. In *Magill*, the ECJ thought the competitors were “new entrant seeking to access”¹³⁰. However, in *Microsoft*, the competitors were explained as the existing trading partners who “had enjoyed a long period of interoperability with windows based on its

¹²⁰ Ibid, para. 709.

¹²¹ Ibid, para. 698.

¹²² Vesterdorf, Bo, *Theories of self-referencing and duty to deal—two sides of the same coin?*, Competition Law & Policy Debate, Volume 1, Issue 1, February 2015.

¹²³ *Guidance on its enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings*, OJ C 45, 24.2.2009, para. 1.

¹²⁴ Ibid, para. 5.

¹²⁵ C-52/09, *TeliaSonera*, ECLI:EU:C:2011:83, para. 24.

¹²⁶ *Post Denmark*, *supra* note 98, para. 22.

¹²⁷ *Ladbroke*, *supra* note 71.

¹²⁸ *Bronner*, *supra* note 2.

¹²⁹ *Ladbroke*, *supra* note 71, para. 130.

¹³⁰ *Magill*, *supra* note 32.

willing supply of interface information”. CJEU did not clearly define whether the new entrants type cases should apply the same test in *Magill* or the existing customers type cases should apply the same test in *Microsoft*. CJEU preferred to distinguish every case’s own situations to use different variations of the exceptional circumstances test, but not only to follow the precedent rigidly.

In *Microsoft*, both the ECJ and the Commission implied that the conditions of exceptional circumstances test were not exhausted and it was possible to develop new variations of the test with more conditions. The ECJ expressed this opinion as:

“In *IMS Health*, the Court of Justice merely established a list of criteria which it was ‘sufficient’ to satisfy. In reality, in order to determine whether the conduct of an undertaking in a dominant position which refuses to supply constitutes abuse of a dominant position, the Commission must examine the entire range of factors surrounding that refusal and in particular the economic and regulatory background to it.”¹³¹

The commission said there was no “existence of an exhaustive checklist of exceptional circumstances”¹³². These expressions emphasized on each cases different situations and entrusted both the CJEU and the Commission a larger discretion to deal with the refusal to license case. More conditions in the test, more difficult to confirm the abuse. It reflects the EU’s prudent attitude on confirming the abuse of a dominant position.

2.5. A new Challenge — SEPs with FRAND Commitment

Standards setting organizations are voluntary associations who set up technical interoperability standards to global manufactures, such as telecommunications standards CDMA, GSM, UMTS, LTE and networking standards USB, Wi-Fi, Bluetooth.¹³³ If a patent became part of these standards, this patents is a standard essential patent (“SEP”). When a patent the patent holder have to “commit in advance to license it to all third parties on fair, reasonable and non-discriminatory terms (‘FRAND’)”¹³⁴. From a global perspective, most of the FRAND related litigations focused on that the SEP holder breached its commitment of FRAND such as asking for unreasonable royalties,

¹³¹ *Microsoft*, *supra* note 49, para.303.

¹³² Comp/C-3/37.792 *Microsoft Decision*, para. 555

¹³³ Contreras, J.L., *Patents, Technical Standards and Standards-Setting Organizations: A survey of the Empirical, Legal and Economics Literature* http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2641569 (accessed on 26th May, 2016)

¹³⁴ Vestager, Margrethe, *Speech - 11 September 2015 Intellectual property and competition 19th IBA Competition Conference, Florence 11 September 2015 - version 01*, https://ec.europa.eu/commission/2014-2019/vestager/announcements/intellectual-property-and-competition_en (accessed on 26th May, 2016)

or whether the SEP holder can seek for injunctions to prevent an existing infringement of that SEP after the commitment of FRAND.¹³⁵

Refer to the refusal to supply's definition in the Commission Guidance, charging for unreasonable royalties is a constructive refusal.¹³⁶ The SEP holder asked for unreasonable royalties to license a SEP constituted a refusal to license IPRs. Whether the exceptional circumstances test is suitable for a FRAND related case became a new challenge in EU.

In *Huawei*, Huawei had a SEP with the commitment of FRAND. Huawei refused ZTE's request of licensing this relevant SEP after negotiation. Huawei sought for an injunction in front of a German court to stop ZTE's infringement on its SEP. The German court asked for a preliminary ruling.

The ECJ reiterated that a dominant undertaking's exercising IPRs was not *per se* illegal. In exceptional circumstances, there was abuse of a dominant position.¹³⁷ The particularities in this case should be distinguished with the previous case law.¹³⁸ The ECJ distinguished SEP from a normal patent and found that, firstly, the SEP is indispensable to all competitors, and secondly, the SEP holder can prevent competitors from entering the relevant market and reserve itself in the existing market.¹³⁹ Therefore, a refusal by the SEP holder to grant a license may constitute infringement of Article 102 *TFEU*.

However, when three special requirements fulfilled, the abuse could be justified if:

- 1) Prior to an action, the SEP holder had alerted alleged infringer about the infringement; and
- 2) After the alleged infringer's expression on its willingness to conclude FRAND agreement, the SEP holder have to provide a specific written offer; and
- 3) When the alleged infringer continued to use the SEP, the infringer has not diligently responded to that offer.¹⁴⁰

Literally, the ECJ used the terminology of "exceptional circumstances". However, in the light of the *indispensable condition* and *excluding competition condition* which the ECJ applied and with the absence of *new product condition* which was set up in the exceptional circumstances test from *Magill*, this case's rationale is more close to the essential facilities doctrine in *Commercial Solvents*

¹³⁵ *Contreras*, *supra* note 129.

¹³⁶ *Ibid*.

¹³⁷ C-170/13, *Huawei*, ECLI:EU:C:2015:477, para. 46-47.

¹³⁸ *Ibid*, para. 48.

¹³⁹ *Ibid*, para. 49-52.

¹⁴⁰ *Ibid*, para. 71.

with the absence of *new product condition*. That is to say, the scope of the exceptional circumstances is smaller in this case than the precedents and it is more earlier for the ECJ to verify abuse of a dominant position. At the same time, the ECJ also presented a procedural rule for the dominant undertaking to justify in case the alleged infringer willful infringed the dominant undertaking's IPRs.

Why did the ECJ set a heavier burden on a dominant undertaking for a refusal to license a SEP in *Huawei* than a refusal to license an ordinary IPR in *Magill*? Most SEPs existed in the digital markets.¹⁴¹ Innovation is the most important element for the undertakings competing on the digital markets. IPRs play a more important role on the digital markets than other industries.¹⁴² The digital market have a “winner-takes-all” effects.¹⁴³ One dominant undertaking can enjoy a strong market position by holding SEPs. Under this circumstances, it's not surprise for the ECJ adopted a stricter rule on a dominant undertaking holding an SEP than others holding the ordinary IPR.

¹⁴¹ The digital market includes operating systems, applications for smart mobile devices and the stores through which those apps are distributed, search engines, social networks, and the provision of digital content through websites or software. Kadar, M., *European Union Competition Law in the Digital Era*, *Zeitschrift für Wettbewerbsrecht*, 4/2015, p. 342.

¹⁴² *Ibid.*

¹⁴³ *Ibid.*

3. Competition Legislation and Institutions in China

China enacted its first competition law - *AML* in 2007. *AML* was considered as a result of the influence from international factors such as US, EU and international organizations.¹⁴⁴ Both US and EU have set Competition Dialogues with China which provided informal technical assistance to the Chinese competition legislation.¹⁴⁵ The US-China Business Council which is a private and nonprofit organization wrote several reports about Chinese competition policy and provides details suggestions about Chinese competition legislation.¹⁴⁶ At the legislation level of refusal to license, China has been setting an exceptional circumstances test structure which is similar to EU. At the practical level, these regulations of refusal to license are seldom applied.

3.1. Competition Legislation and Institutions in China

3.1.1. Primary Law—National Law: *AML* and *AUCL*

In the competition area, the primary law in China is national law, including *AML* and *anti-unfair competition law (AUCL)*. *AML* was enacted by Standing Committee of the National People's Congress (NPCSC) and came into force in 2008 after more than 10 years drafting.¹⁴⁷ *AML* was the first Chinese law which focused on the competition area as a whole. Prior to *AML*, the competition related cases were regulated by *AUCL*, contract law, price law, bidding law, foreign trade law and so on.¹⁴⁸ The aim of the *AML* was stated in Article 1 as:

“Prevent and restrain monopolistic conduct, protect fair market competition, enhance economic efficiency, safeguard the interests of consumers of society as a whole, and promote the healthy development of socialist market economy.”¹⁴⁹

Compared to the EU competition law, they share the common standpoints on protecting competition and economic efficiency. Besides, *AML* clearly points out the protection of consumer welfare, while promoting a socialist market economy is a unique aim in *AML*. However, promoting a socialist

¹⁴⁴ *Supra* note 3.

¹⁴⁵ *Ibid.*

¹⁴⁶ The US-China Business Council, *Update: Competition Policy & Enforcement in China* <https://www.uschina.org/sites/default/files/2015.05%20USCBC%20Update%20on%20Competition%20Enforcement%20in%20China.pdf> (access on 8th January, 2017)

¹⁴⁷ Case *Dexian v Sony*, Shanghai No. 1 Intermediate People's Court, judgement is available on http://www.cnipr.net/article_show.asp?article_id=20529 (in Chinese, access on 29th May, 2016)

¹⁴⁸ Harris, H.S., Wang, P.J., Zhang, Y., Cohen, M.A., and Evrard.,S.J., *Anti-monopoly Law and Practice in China*, (Oxford University Press 2011), p. 331- 368.

¹⁴⁹ Article 1 *AML*.

market economy is a common expression among many Chinese legislations and is not unique in *AML*.¹⁵⁰ *AML* defines three types of monopolistic conducts that should be prohibited:

“Monopolistic agreements among business operators; abuse of dominant market positions by business operators; and concentration of business operators that eliminates or restricts competition or might be eliminating or restricting competition.”¹⁵¹

AUCL was also enacted by NPCSC and took effect in 1993 which aims at:

“Safeguard the healthy development of the socialist market economy, encourage and protect fair market competition, prohibit unfair competition, safeguard the legal rights and interests of managers”.¹⁵²

Based on the expressions in *AML* and *AUCL*, *AML* regulates anti-monopoly conducts, while *AUCL* regulates anti-unfair competition conducts. Anti-monopoly conducts restrict or exclude competition, while anti-unfair competition conducts adopt unfair or unlawful business strategy but allow other competitors existing. The precondition of anti-unfair competition conduct is the existing of a competition market.¹⁵³ Even so, there are some coincident areas between *AML* and *AUCL*. Before the enactment of *AML*, some competition related cases were judged by *AUCL*.¹⁵⁴

3.1.2. Secondary Law—the State Council’s Administrative Laws

According to Article 9 *AML*, the State Council established the Anti-monopoly Commission (AMC) for the purpose of organizing competition works, coordinating anti-monopoly law enforcement and drafting competition policies and guidelines.¹⁵⁵ AMC enacted several important administrative laws which are nationwide legally binding to interpreting national law. For instance, *Guidelines on the Definition of the Relevant Market by the Anti-monopoly Commission of the State Council* which took effect in 2009 and *Provisions on Administrative Penalties for Price Violation Behavior* which took effect in 2010.

¹⁵⁰ For instance, Article 1 of *Price Law* and Article 1 of *Anti-unfair Competition Law* also expressed one of their aims as “promoting the development of the sociology market economy”. This expression should not be explained as any special meaning which is different from competition laws of other jurisdictions.

¹⁵¹ Article 3 *AML*.

¹⁵² Article 1 *AUCL*.

¹⁵³ MOFCOM, *The Relationship between AML and AUCL*

<http://tfs.mofcom.gov.cn/article/bc/200509/20050900341909.shtml>, (in Chinese, accessed on 26th May, 2016)

¹⁵⁴ *Supra* note 147.

¹⁵⁵ Article 9 *AML*.

3.1.3. Tertiary law—Government Agencies’ Regulations and Provincial Governments’ Regulations

According to Article 10(1) *AML*, AMC authorized several government agencies including National Development and Reform Commission (NDRC), Ministry of Commerce (MOFCOM) and State Administration of Industry and Commerce (SAIC) to take charge of the enforcement of *AML*.¹⁵⁶

These three agencies have different competences:

- 1) NDRC is responsible for price monopoly;
- 2) MOFCOM focuses on merger control;
- 3) SAIC pays more attention on the monopoly agreement, abuse dominant position and abuse of administrative power to eliminate or restrict competition and other non-pricing monopoly conduct.¹⁵⁷

MOFCOM’s responsibility is clear, while the jurisdiction boundary between the NDRC and SAIC is ambiguous. For instance, both the SAIC and NDRC claimed they have the right to regulate some parts of the provisions about abuse dominant position.¹⁵⁸ Besides, every agency enjoys the rights of enacting their own regulations to implement *AML*. These agencies regulations do not have legal binding, but have jurisdiction on the departments’ own working area. These regulations occupy similar legal position as EU Commission’s guidance in EU competition legislation structure.

Article 10(2) *AML* stated agencies in the provincial government can be empowered by AMC to enforce *AML* as well. The provincial government can enact local regulations which apply it’s administration area.

3.1.4. Supplementary Law—Case Law and the Court

There are four levels of courts in China: the basic people’s courts, intermediate people’s courts, high people’s courts, and the Supreme People’s Court (SPC).¹⁵⁹ SPC has the power to enact judicial interpretation of law which is legal binding for courts of all level.¹⁶⁰ Similar to EU case law, the case law from Chinese courts have no legal binding either. But some cases can be considered as a kind of soft law which the following cases should follow. For instance, SPC irregularly publishes a certain number of guiding cases which provide references to all levels of courts. Most of the

¹⁵⁶ Article 10(1) *AML*.

¹⁵⁷ Wang, X.L., *Some Observation and Thoughts to Recent Enforcement of AML*, http://www.saic.gov.cn/gslld/llyj/xxb/201410/t20141015_149027.html (in Chinese, accessed 26th May 2016)

¹⁵⁸ *Supra* note 148, p.91.

¹⁵⁹ Article 2 *PRC Organic Law of the People’s Courts*.

¹⁶⁰ Cheng, W., *The Legal Position of SPC’s Judicial interpretation* (in Chinese), *Peking University Law Journal*, Vol.28, No.1 (2016) p.263-279.

lawsuits started in the basic people's courts, and can be appealed to a higher level court. Some complicated cases or cases with a great influence can be started from an intermediate court or a high court.

3.2. China's Approach on Regulating Refusal to License

China's competition law and IP law are all nationwide which is different from EU, who has a harmonized competition law but no harmonized IP law. Article 55 of *AML* clarified the respective jurisdiction between *AML* and *IP law*. The undertaking's conduct which aims to eliminate or restrict market competition by abusing their IPRs will fall within the scope of *AML*, while the undertaking's conduct which exercises its IPRs according to *IP law* will be regulated by the relevant *IP law*.¹⁶¹

China's competition legislation shares the same rationale with EU competition law when analyzing whether a refusal to license is abuse of a dominant position: firstly defining the relevant market including the product market and the geographic market, secondly assessing whether the relevant undertaking occupies the dominant position in the relevant market, and at last assessing whether the refusal to license is abuse of a dominant position.

Article 17 *AML* provides a non-exhausting list of abusive conducts which is similar to Article 102 *TFEU*.¹⁶² In Article 17 *AML*, refusal to deal without jurisdictions is one of the conducts that the undertaking abuses its dominant position. As the supplement, SAIC's *Provisions of the State Administration for Industry and Commerce on Prohibiting the Abuse of Intellectual Property Rights to Preclude or Restrict Competition (IPR Provisions)* which took effect in 2015 plays an important role on providing a detailed method of assessing abuse.¹⁶³

3.2.1. Relevant Market

AMC enacted *Guide for the Definition of the Relevant Market (AMC's Guide)* in 2009. This Guide provided a systematic methodology of define relevant market which is closed to EU competition law. Some case law from the courts judgement and the agencies' decision applied the method in the *AMC's Guide*.

The relevant product market is defined in the *AMC's Guide* as:

¹⁶¹ Article 55 *AML*.

¹⁶² Article 17 *AML*.

¹⁶³ *Provisions on the Prohibition of the Abuse of Intellectual Property Rights to Exclude or Restrict Competition*, English version available at http://www.kangxin.com/en/index.php?optionid=927&auto_id=726 (accessed on 26th May, 2016).

“A market comprised of a group or a category of products that are considered by consumers to have a relatively strong substitution relationship based on the characteristics, uses and prices of the products. These products have a relatively intense competitive relationship, and it may be considered as the product scope within which business operators compete with each other in the *AML* enforcement.”¹⁶⁴

The relevant geographic market in this Guide is defined as:

“A scope of geographic areas within which consumers can acquire commodities that have a relatively strong substitution relationship. Such areas have a relatively intense competitive relationship with each other, and it may be considered as the geographic scope within which business operators compete with each other in the *AML* enforcement.”

Article 7 *AMC’s Guide* states that different methods can be used in the practice of enforcement *AML* in different circumstances. Substitution analysis based on the products’ characteristics, uses and prices is the core method including demand substitution and supply substitution. When the market scope is not clear or is difficult to determine, the relevant market can be defined by the “hypothetical monopolist test”¹⁶⁵ which is interpreted with details in Article 10 and 11.¹⁶⁶

3.2.2. Dominant Position in the Relevant Market

Article 18 *AML* lists several factors on assessing a dominant position, including the undertaking’s market share and its competitive status in the relevant market, the ability of the undertaking to control the relevant product’s sales market and the raw material supply market, the undertaking’s financial and technological conditions, other undertakings’ extent of reliance on the relevant undertaking, the degree of difficulty for other undertakings to enter into the relevant market and other relevant factors.¹⁶⁷ Article 19 *AML* regulates that a dominant position can be presumed when the undertaking’s market share over 50%.¹⁶⁸ This regulation is the same as the ECJ’s judgement in *AKZO*.¹⁶⁹ Article 6 of *IPR Provisions* regulates holding an IP is not *per se* considered as holding a

¹⁶⁴ Article 3 *Commission Notice on the definition of relevant market*. *Supra* note 39.

¹⁶⁵ The hypothetical monopolist test is under the precondition that the sales conditions of other products remain unchanged, whether the hypothetical monopolist is able to continuously (normally one year) increase the price of the target commodity to a small extent (normally 5% to 10%). If, after the price of the target product increases, the hypothetical monopolist still has a stand to profit even the sales volume drops, the target commodity constitutes the relevant commodity market. This test method is similar to the SSNIP test in *EU Commission Notice on the definition of relevant market*. *Supra* note 39.

¹⁶⁶ *Ibid* Article 7.

¹⁶⁷ Article 18 *AML*.

¹⁶⁸ Article 19 *AML*.

¹⁶⁹ *AKZO*, *supra* footnote 54.

dominant position, but it is a relevant factor which should be considered when confirming a dominant position.¹⁷⁰

Moreover, SAIC's *Provisions for the Industry and Commerce Administrations on the Prohibition of Abuse of Dominant Market Position (Abuse Dominant Position Provisions)* interpreted with details on the previous two articles.¹⁷¹

3.3. Essential Facilities Doctrine to a Refusal to Supply

Refusal to supply to a trading partner without any objective justification is regarded as abuse of a dominant position refer to Article 17 AML. Article 4(5) of *Abuse Dominant Position Provisions* set up essential facilities doctrine to assess whether a refusal to supply can constitute abuse. Several points should be considered to assess a essential facility, such as:

“Feasibility in separately investing in and building or developing such facilities, degree of the counter party's reliance on such facilities for effective production and operation, possibility of the business operator making such facilities available, and its impact over the production and operation of the business operator.”¹⁷²

The judgement of *Yingding/Sinopec* revealed how case law deal with a refusal the supply in China.¹⁷³ Yingding is a private biodiesel company in Yunnan and Sinopec is one of the major stated-owned oil and gas companies in the whole China. Sinopec refused to distribute biodiesel which was produced from the wasted-cooking oil by Yingding in its distribution system. Yingding sued Sinopec.

The judgement invoked Article 6 and 17(3) AML and stated that the illegal refusal to supply was constituted, when the following conditions could be fulfilled:

- 1) The undertaking holds the dominant position in the relevant market; and
- 2) the undertaking refused to supply by making use of its dominant position; and
- 3) the refusal excluded and restricted competition and without justifications.

¹⁷⁰ Article 6 IPR Provisions.

¹⁷¹ *Provisions for the Industry and Commerce Administrations on the Prohibition of Abuse of Dominant Market Position*, English version available at <http://www.lawinfochina.com/display.aspx?lib=law&id=8540&CGid=> (accessed on 29th May, 2016)

¹⁷² Article 4 SAIC's provisions on abuse dominant position, English version available at <http://www.lawinfochina.com/display.aspx?id=8540&lib=law&SearchKeyword=Prohibition%20of%20Abuse%20of%20Dominant%20Market%20Position&SearchCKeyword=>, (accessed on 29th May, 2016).

¹⁷³ Case *Yingding/Sinopec*, Kunming Intermediate People's Court, judgement is available on <http://www.competitionlaw.cn/info/1026/23887.htm>, (in Chinese, accessed on 18th February, 2017).

The court confirmed Sinopec's dominant position in the relevant market. However, the court held that the plaintiff never provided a clear offer to the defendant. Therefore, the refusal to supply could not be confined because of the lack of refusal behavior. In this case, the crucial point of this judgement is from the perspective of *contract law*, even *AML* regulations on refusal to supply was analysed.

3.4. Exceptional Circumstances Test to a Refusal to License

Article 7 *IPR Provisions* states four conditions to confirm a illegal refusal to license:

- 1) *no justification condition*; and
- 2) *indispensable condition*: there are no other reasonable substitutes for the IPRs in the relevant market and the IPRs are necessary for other undertakings to participate in competition in the relevant market; and
- 3) *harming competition condition*: refusal to license the IPRs will have adverse impact on competition or innovation in the relevant market, and harm the consumer or public interests; and
- 4) *no unreasonable harm condition*: licensing the IPRs will not cause unreasonable harm to this IPRs holder.

Referring to this Article, it can be concluded that China learned EU's structure of regulating illegal refusal to license which is the exceptional circumstances test. However, these conditions are different from the conditions of the test in EU. Until now, no judgement can be found from public resources and can be applied this article, and there is no current effective law or regulation which can explain more on these four conditions. Therefore, the meanings of the conditions are vague and need to be explained with more details. The detailed legislation is on the road now. NDRC has released the second draft of its *Antitrust Guidelines for Abuse IPRs* for public comments¹⁷⁴ and SAIC has released the seventh draft of its *Antitrust Guidelines for Abuse IPRs* for public comments.¹⁷⁵

¹⁷⁴ *The U.S. Chamber of Commerce and the American Chamber of Commerce in China Joint Comments to the National Development and Reform Commission on the Guideline on Intellectual Property Abuse (Draft for Comments)* <https://chinaipr2.files.wordpress.com/2016/03/ndrc-ip-abuse-guidelines-english.pdf> (accessed on 18th February, 2017).

¹⁷⁵ *The U.S. Chamber of Commerce and the American Chamber of Commerce in China Joint Comments to the State Administration of Industry and Commerce on the Guideline on Intellectual Property Abuse (Draft for Comments 7th Version)*, <https://chinaipr2.files.wordpress.com/2016/03/saic-ip-abuse-guidelines-english.pdf> (accessed on 18th February, 2017).

Besides, there is an on-going case about whether a refusal to license a non-essential patent constitutes abuse of dominant position. Four undertakings in Ningbo sued Hitachi Metal in front of Ningbo Intermediate Court. Hitachi Metal is the world biggest company who produces and sells neodymium-iron-boron magnets, and is holding more than 600 related patents. The plaintiffs claimed Hitachi Metal's refusal to license its relevant IPRs to them constituted abuse of its dominant position.¹⁷⁶ This case was registered in December 2014. According to the Chinese Civil Procedural Law, the civil case should be settled in 6 months with a 6-month extension if there is necessary. Further extension needs a higher level court's approval.¹⁷⁷ This case has lasted for more than 2 years, which reveals the difficulty of the court to deal with the refusal to license.

3.5. SEPs with FRAND Commitment in China - Different Road with EU

Huawei and IDC negotiated several times about licensing IDC's SEPs. IDC brought an action in US seeking for an injunction and then Huawei brought another action in China asking for determining the SEPs royalty rate based on FRAND commitment.¹⁷⁸ The court of first instance stated the SEPs royalty rate was 0.019% by interpreting FRAND commitment. IDC appealed and the court of the second instance ruled according to the interpretation of FRAND, the SEPs holder could not refuse to license SEPs for the SEPs users who would like to pay for reasonable licensing fee in good faith. The judgement focused on the interpretation of FRAND commitment. The court explained the meaning of FRAND literally, IPRs policies of European Telecommunications Standards Institute, US Telecommunications Industry Association, Chinese patent law and contract law.

In *Huawei/IDC*, the Chinese court did not apply the competition regulation about refusal to supply/license. The courts held refusal to license SEPs was illegal by explaining the meaning of FRAND commitment from patent law and contract law. This was different with the EU's method on ruling refusal to license SEPs.

3.6. Summary

China learned EU's structure of regulating refusal to supply/license. At the legislation level, China set out the essential facilities doctrine and exceptional circumstances test to assess an illegal refusal

¹⁷⁶ *IPR Abuse and Refusals to License*, <https://chinaipr.com/2016/03/13/ipr-abuse-and-refusals-to-license/> (accessed on 18th February, 2017); *Hitachi Metals case in China the latest sign that 'de-facto standards' are moving into regulators' crosshairs*, <http://www.iam-media.com/blog/detail.aspx?g=12dbcdc1-170c-4b1a-b346-463f4257c260> (accessed on 18th February, 2017).

¹⁷⁷ Article 135 *Chinese Civil Procedural Law*, English version is available at <http://www.lawinfochina.com/display.aspx?lib=law&id=19#menu20> (accessed on 26th May, 2016).

¹⁷⁸ Case *Huawei v IDC*, Guangdong provincial high people's court, Judgement is available at <http://www.gdcourts.gov.cn/gdgy/s/cpwsqk/wsscan?wsid=LM4300000020140417024309113155&ajlb=5> (in Chinese, accessed on 26th May, 2016)

to supply/license after confirming the relevant undertakings dominant position in the relevant market. However, the conditions in the exceptional circumstances test are not totally the same with EU law. The meaning of the conditions is also vague which need to be interpreted with more details. At the practical level, there is only one settled case related to refusal to supply and no settled case related to refusal to license non-essential patents in China. Moreover, not as EU law, China has the horizontal civil law and IP law. There are a lot of overlap between competition laws and other laws, such as *AUCL*, *IP law* or *contract law*. China has been used to apply other laws instead of competition law to regulate the competition related cases.

3.6.1. Abuse of IPRs

In EU, as mentioned before, the existence of IPRs is regulated by the national IP law while the exercise of IPRs has the possibility to be regulated by EU competition law.¹⁷⁹ In China, article 55 *AML* defines its jurisdiction on IPRs related anti-competitive conducts.¹⁸⁰ Exercising IPRs according to IP law is excluded from the scope of *AML*, while “abuse of IPRs” in order to eliminate or restrict competition is applicable. The concept of “abuse of IPRs” became a controversial issue.¹⁸¹ The concept of “abuse of IPRs” is ambiguous. *AML* does not explain more about it. Article 3 of *SAIC’s provisions on abuse IPRs* interprets “abuse of IPRs to eliminate or restrict competition” as “an undertaking’s exercise of IPRs in violation of *AML* to implement a monopolistic agreement, abuse its dominant market position, or commit any other monopolistic conduct”¹⁸². According to article 55, “abuse of IPRs” is the precondition to apply *AML*. However, refer to article 3 of *SAIC’s* definition, to identify an “abuse of IPRs” firstly the undertaking’s conduct of exercising IPRs should violated *AML*. The “abuse of IPRs” is the result of applying *AML*. These two regulations conflict with each other which need to be explained more in the future.

3.6.2. Early Stage of Developing Refusal to Supply/License Legislation

In EU, the essential facilities doctrine and exceptional circumstances test which regulate refusal to supply/license were set up by case law. The later cases followed and developed the previous precedents. In China, the development of regulating refusal to supply/license is pushed from top to

¹⁷⁹ *Supra* note 27.

¹⁸⁰ *Supra* note 153.

¹⁸¹ American Bar Association, *Joint Submission of the American Bar Association’s Sections of Antitrust Law and International Law and Practice on the Proposed Anti-Monopoly Law of the People’s Republic of China (15th July 2003)*, in supplementation of the *Joint Submission of the American Bar Association’s Sections of Antitrust law, Intellectual Property Law and International law on the Proposed Anti-Monopoly Law of the People Republic of China (19th May 2005)*, available at http://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments_prc2005wapp.authcheckdam.pdf (in Chinese, accessed on 26th May 2016)

¹⁸² Article 3 *SAIC’s provisions on abuse IPRs*.

bottom and still on its way of developing. The *AML* was enacted firstly, then some additional legislation were enacted to supplement to the *AML*. In order to make the competition legislations more popular in the courts, SPC even enacted a judicial interpretation in 2008 to encourage every high people's court to apply *AML* together with *AUCL* on the cases of abusing IPRs.¹⁸³ In the competition administration system, SAIC also issued a document that lists several abusive conducts of public undertakings and urges every province's Industry and Commerce Administrative department to investigate such conducts.¹⁸⁴ Both the courts and the competition authorities are pushing the enforcement of the *AML* and relevant competition regulations. However, until now, very limited cases which applied the refusal to supply/license legislation could be found in public yet. The development of the relevant legislation is still on the theoretical level.

¹⁸³ SPC, *SPC Notice on AML studies* <http://ip.people.com.cn/GB/192427/209992/13490777.html> (in Chinese, accessed 26th May 2016)

¹⁸⁴ SAIC's *Notice on the Public Undertaking's Restriction Competition Conducts and Abusive Conducts* http://www.saic.gov.cn/zwgk/zyfb/zjwj/fld/201604/t20160408_167829.html (in Chinese, accessed on 26th May 2016)

4. Conclusion

In both EU and China, a non-dominant undertaking has no risk of refusal to license IPRs, while a dominant undertaking's refusal to license may be incompatible with competition law. Every jurisdiction's method of regulating refusal to license is different.

Research question 1: How does EU regulate refusal to license in the field of competition law? Three steps should be followed based on EU competition legislations and case law: defining relevant market, including the geographic market and the product market; identifying a dominant position; and assessing whether there is an abuse of a dominant position. Furthermore, EU case law has developed a legal framework of exceptional circumstances test to deal with the refusal to license cases. The exceptional circumstances test is based on the theory of the essential facilities doctrine and includes four conditions: *indispensable condition*, *new product condition*, *excluding competition condition* and *no justification condition*. When four conditions are fulfilled, the relevant dominant undertaking's conduct will be deemed as abuse of a dominant position. The interpretations of the four conditions are various based on each case's own facts, and there are opportunities to include more conditions in the exceptional circumstances test in the future. Although it may cause the problem of legal uncertainty, this exceptional circumstances test will benefit for the innovation and consumers and is compatible with the EU Commission's modernization of competition law.

Research question 2: How does EU influence China on regulating refusal to license in the field of competition law? China adopted a similar legal framework to assess the legality of a dominant undertaking's refusal to license IPRs. An exceptional circumstances test also be used in China. However, the meaning and the scope of the "exceptional circumstances" is slightly different with EU. China is building its competition legal system from top to bottom. Both the SPC and the central competition authority encourage the lower level courts and the provincial competition administrative departments to apply *AML* and its relevant secondary legislations. It's a pity that no typical case law until now applying the Chinese exceptional circumstances test. The ambiguous meaning of "abuse of IPRs" and the unclear distinction among *AML* and other laws, such as *AUCL* and *contract law* have hindered and may continue to hinder the courts to apply the exceptional circumstances test.

Bibliography

Legislation

EU Legislation

- *The Treaty on European Union*
- *The Treaty on the Functioning of the European Union*
- *Charter of Fundamental Rights of the European Union*
- *Guidelines on the Application of Article 101 of the Treaty on the Functioning of the European Union to Technology Transfer Agreements*, 2014/C 89/03.
- *Commission Notice on the definition of relevant market for the purposes of Community competition law*, OJ C 372, 9.12.1997.
- *Guidance on the Commission's Enforcement Priorities in Applying Article 82 of the EC Treaty to Abusive Exclusionary Conduct by Dominant Undertakings*, 2009 OJ C 45/2.
- *Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty.*

China Legislation

- *Anti-monopoly Law*
- *Anti-unfair Competition Law*
- *Civil Procedural Law*
- *PRC Organic Law of the People's Courts*
- *Provisions for the Industry and Commerce Administrations on the Prohibition of Abuse of Dominant Market Position*
- *Provisions on the Prohibition of the Abuse of Intellectual Property Rights to Exclude or Restrict Competition*
- *SAIC's Notice on the Public Undertaking's Restriction Competition Conducts and Abusive Conducts*
- *SAIC's provisions on abuse IPRs*

Books

- Colino., S.M., *Competition Law of the EU and UK*, (OUP Oxford 2011).
- Craig, P., Búrca, G.D., *EU Law: Text, Cases, and Materials*, (fifth edition, Oxford University Press, 2011).
- Emch, A. and Stallibrass, D. (eds), *Review of China's Anti-Monopoly Law – The First Five Years* (Wolters Kluwer 2013).
- Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution* (Hart Publishing 2009).
- Harris, H.S., Wang, P.J., Zhang, Y., Cohen, M.A., and Evrard.,S.J., *Anti-monopoly Law and Practice in China*, (Oxford University Press 2011).
- Jiang, T.C., *China and EU Antitrust Review of Refusal to license IPR*, (Maklu-Publisher 2015).
- Jones, A., and Sufrin, B., *EU Competition Law: Text, Cases and Materials* (fifth edition, Oxford University Press, 2014).

Articles

- Anderman, Steven, *The epithet that dares not speak its name: the essential facilities concept in Article 82 EC and IPRs after the Microsoft case* in Ezrachi, A. (ed), *Article 82 EC: Reflections on its Recent Evolution* (Hart Publishing 2009).
- Cheng, W., *The Legal Position of SPC's Judicial interpretation* (in Chinese), Peking University Law Journal, Vol.28, No.1 (2016) p.263-279.
- Colomo, P.I., *Restriction on Innovation in EU Competition Law*, (2016) European Law Review 41.
- Fox., E.M., *We Protect Competition, You Protect Competitors*, (2003) World Competition 26(2): p.149-165.
- Heinemann, Andrea, *The contestability of IP-protected markets* in Drexl, Josef (ed.), *Research handbook on intellectual property and competition law* (Edward Elgar 2008).
- Hovenkamp, H., *Antitrust and Innovation: Where We are and Where We should be Going*, (2011) Antitrust Law Journal No. 3.
- Huang, Y., Wang, E.X., and Zhang, R.X., *Essential Facilities Doctrine and Its Application in Intellectual Property Space Under China's Anti-Monopoly Law*, (2015) 22 George Mason Law Review, p.1103-1126.
- Kadar, M., *European Union Competition Law in the Digital era*, Zeitschrift für Wettbewerbsrecht, 4/2015.

- Lidgard, H.H., *Application of Article 82 EC to Abusive Exclusionary Conduct — Refusal to Supply or to License*, (2009) 4 Reuropar ättslig Tidskrift.
- Scheweizer, H., *Controlling the Unilateral Exercise of Intellectual Property Rights: A Multitude of Approaches but No Way Ahead? — The Transatlantic Search for a New Approach*, EUI LAW Working Paper No. 2007/31.
- Turney, J., *Defining the Limits of the EU Essential Facilities Doctrine on Intellectual Property Rights: the Primacy of Securing Optimal Innovation*, (2005) Spring Northwestern Journal of Technology and Intellectual Property, Volume3, Number 2.
- Vesterdorf, Bo, *Theories of self-referencing and duty to deal—two sides of the same coin?*, Competition Law & Policy Debate, Volume 1, Issue 1, February 2015.
- Wu, Qianlan, *EU–China Competition Dialogue: A New Step in the Internationalisation of EU Competition Law*, European Law Journal, Volume 18, Issue 3, may 2012, p. 461-477.

Internet Sources

- American Bar Association, *Joint Submission of the American Bar Association’s Sections of Antitrust Law and International Law and Practice on the Proposed Anti-Monopoly Law of the People’s Republic of China (15th July 2003), in supplementation of the Joint Submission of the American Bar Association’s Sections of Antitrust law, Intellectual Property Law and International law on the Proposed Anti-Monopoly Law of the People Republic of China (19th May 2005)*, available at http://www.americanbar.org/content/dam/aba/administrative/antitrust_law/comments_prc2005wa_pp.authcheckdam.pdf (in Chinese, accessed on 26th May 2016)
- Contreras, J.L., *Patents, Technical Standards and Standards-Setting Organizations: A survey of the Empirical, Legal and Economics Literature*, http://papers.ssrn.com/sol3/Papers.cfm?abstract_id=2641569 (accessed on 26th May, 2016)
- MOFCOM, *The Relationship between AML and AUCL* <http://tfs.mofcom.gov.cn/article/bc/200509/20050900341909.shtml>, (in Chinese, accessed on 26th May, 2016)
- SPC, *SPC Notice on AML studies*, <http://ip.people.com.cn/GB/192427/209992/13490777.html> (in Chinese, accessed 26th May 2016)
- The US-China Business Council, *Update: Competition Policy & Enforcement in China* <https://www.uschina.org/sites/default/files/2015.05%20USCBC%20Update%20on%20Competition%20Enforcement%20in%20%20China.pdf> (access on 8th January, 2017)

- Vestager, Margrethe, *Speech - 11 September 2015 Intellectual property and competition 19th IBA Competition Conference, Florence 11 September 2015 - version 01*, https://ec.europa.eu/commission/2014-2019/vestager/announcements/intellectual-property-and-competition_en (accessed on 26th May, 2016)
- World Bank, *World Bank forecasts for China, June 2016*, <http://pubdocs.worldbank.org/en/842861463605615468/Global-Economic-Prospects-June-2016-Divergences-and-risks.pdf#page=22> (accessed on 18th February, 2017)
- *Council of European Union*, http://europa.eu/about-eu/institutions-bodies/council-eu/index_en.htm (accessed in 26th May, 2016)
- *European Commission*, http://europa.eu/about-eu/institutions-bodies/european-commission/index_en.htm#goto_3 (accessed on 26th May, 2016)
- *Monopolists' Refusal to Deal in IP: US Courts and EU Institutions line up along some Cultural and Jurisdictional Cleavages, European Policy for Intellectual Property (EPIP), 3rd Annual Conference of the EPIP Association*, http://www.epip.dk/conferences/epip03/papers/Maggiolino_Berna%20paper_final%20version_September%2011.pdf (accessed on 26th May, 2016).
- *Sources of European Union Law*, <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3A114534> (accessed on 26th May, 2016).

Table of Cases

EU Cases

The General Court Cases

- *GC, T-30/89, Hilti, ECLI:EU:T:1991:70*
- *GC, T-219/99, British Airways, ECLI:EU:T:2003:343*
- *GC, T-340/03, France Télécom, ECLI:EU:T:2007:22.*
- *GC, T-201/04, Microsoft, ECLI:EU:T:2007:289.*

The Court of Justice

- *C-78/70, Deutsche Grammophon, ECLI:EU:C:1971:59*
- *C-6/72, Continental Can, ECLI:EU:C:1973:22*

- C-85/76, *Hoffmann-La Roche*, ECLI:EU:C:1979:36
- C-322/81, *Michelin I*, ECLI:EU:C:1983:313
- C-311/84, *T d émarketing*, ECLI:EU:C:1985:394
- Joined cases C-6/90 and C-9/90, *Andrea Francovich and Danila Bonifaci and others v Italian Republic*, ECLI:EU:C:1991:428
- Joined cases C-241/91P and C-242/91P, *Magill*, ECLI:EU:C:1995:98
- C-242/95, *GT-Link*, ECLI:EU:C:1997:376
- C-7/97, *Bronner*, ECLI:EU:C:1998:264
- C-550/07P, *AKZO*, ECLI:EU:C:2010:512
- C-52/09, *TeliaSonera*, ECLI:EU:C:2011:83
- C-209/10, *Post Danmark*, EU:C:2012:172
- C-170/13, *Huawei*, ECLI:EU:C:2015:477

AG Opinion

- *Bronner*, Opinion of AG, ECLI:EU:C:1998:264.
- *IMS*, Opinion of AG, ECLI:EU:C:2003:537.

The Commission

- Case No M.7688, *Intel*.
- Comp/C-3/37.792 *Microsoft Decision*.

China Cases

- Case *Dexian v Sony*, Shanghai the full text of the judgement is available in Chinese, http://www.cnipr.net/article_show.asp?article_id=20529 (in Chinese, access on 29th May, 2016)
- Case *Huawei v IDC*, Guangdong provincial high people's court. Judgement is available at <http://www.gdcourts.gov.cn/gdgy/s/cpwsgk/wsscan?wsid=LM4300000020140417024309113155&ajlb=5> (in Chinese, accessed on 26th May, 2016)

- Case *Yingding/Sinopec*, Kunming Intermediate People's Court, judgement is available on <http://www.competitionlaw.cn/info/1026/23887.htm> (in Chinese, accessed on 18th February, 2017).