



FACULTY OF LAW
Lund University

Per Sillén

“The vinaigrette of standardisation”

Interplay between IPR and Competition in light of the Hold-Up problem

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Supervisor: Henrik Norinder

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Summary

The subject of this thesis is the interplay between IPR and competition Law regarding standardisation. In reviewing the legal sources in the field the complexity of the process will be enlightened and the question to answer is what mixture that is to be “perfect” in that sense. Focus lies on the risks of “hold-up “ situations where holders of IPR abuse the system in search for higher amounts of royalties. As a start, standardisation as a phenomenon is investigated and presented from different views. Two famous US cases are reviewed in the matter of patent hold-ups to assess how the legal framework in both the US and EU adapts to the issues in standard setting. The EU approach is also reviewed with a glimpse at the FRAND system. As a closing chapter, the EU Commissions guidelines from 2011 are reviewed and assessed in whether the lessons learned from case law are taken into account.

Preface

I want to present my deepest thanks to the Department of Business Law and Lund University for giving me the opportunity to attend the Masters Programme in European Business Law. The Faculty of Law has provided invaluable sources and guidance through these two years.

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Per Sillén

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Abbreviations

EU	European Union
TFEU	Treaty on The Functioning of the European Union
US	United States
IPR	Intellectual Property Rights
SSO	Standard Setting Organisation
IP	Intellectual Property
ETSI	European Telecommunications Institute
CEN	Comité Européen de Normalisation
CENELEC	Comité Européen de Normalisation Electrotechnique
ESO	European Standardisation Organisations
RAND	Reasonable and Non-Discriminatory
FRAND	Fair, Reasonable and Non-Discriminatory
EC Treaty	Treaty Establishing the European Community
FTC	Federal Trade Commission
DRAM	Dynamic Random Access Memory
PC	Personal Computer
USD	United States Dollars
DOJ	Department of Justice
JEDEC	Joint Electronic Device Engineering Council
IEEE	Institute of Electrical and Electronics Engineers
SDRAM	Synchronous Dynamic Random Access Memory
DC	District of Columbia
NPE	Non-Practicing Entity
UMTS	Universal Mobile Telecommunications System
ICT	Information and Communications Technology
NGMN	Next Generation Mobile Networks Alliance
R&D	Research and Development

1. Introduction

1.1 Subject

The purpose of this thesis is to examine the interplay between Intellectual Property Rights and Competition Law regarding Standard Setting in the EU. Focus will lie on the potential misuse of Intellectual Property Rights therein referred to as hold-up or ambush situations and how these can restrict competition in different ways. The two different legal areas with common aims are continuing to overlap each other in various situations in EU jurisprudence. Standardisation is a hot subject where the two meet again. Since both fields have the aim of spurring innovation and development there is a natural overlap, however, in the case of standard setting, the clash between the two is even more interesting. Standard setting has the potential to benefit both producers and consumers as well as risks are involved of misuse of Intellectual Property Rights leading to competition limitation and/or monopolization. In the process of setting a standard, these issues must be regarded and a lot of focus lies on the disclosure of Intellectual Property rights ex ante the standard is adopted. Free competition has its benefits, but also weaknesses especially from the consumers' perspective. Too many options, lack of interoperability and unsure product survival can be effects for the consumer letting competition be set free.

Especially in the internal market of the EU, product-interoperability and customer protection are important matters, which make standardisation a natural step to gather undertakings in a joint path to follow. A combination of competition and Intellectual Property Rights is however required in the standard setting process to make companies climate of invention and development as giving as possible. This mixture demands the legal system to adapt in a way that makes it to an important guidance tool for Standard Setting Organisations and companies. In taking advantage of it's Intellectual Property Rights in a standard setting process, companies' actions can fall under articles 101 and 102 TFEU, restricting competition or being in a

dominant position as a result of its Intellectual Property Rights in the adopted standard.

Along with the Treaty articles, the Commission has adopted guidelines for interpreting article 101 in relation to horizontal cooperation agreements. In the 2011 edition, an entire chapter is dedicated to Standardisation agreements, defining the importance of standardisation at the EU market today and broadens the rules of competition even more. Since EU is working frequently in developing the standardisation system and the competition rules are getting strengthened through development in case law, you can wonder how the mixture of Intellectual Property Rights and Competition in standardisation should look to be an effective instrument for strengthening the internal market. Through the thesis, the relationship between IPR and competition rules in standardisation will be examined from a historical perspective, comparison will be made between lessons learned in the field from both US case law and EU legislation to end up with the latest version of the European Commissions Guidelines from 2011 with a glimpse on what the future may bring.

1.2 Problem

The problem I've chosen to investigate is what mixture of Intellectual Property Rights and Competition that is to be seen as the most effective regarding standard setting. In "effective mixture" lies having both objectives and purposes of the two legal fields unharmed in the mix and that the end consumer doesn't suffer from it. Having the risks of hold-up situations and incentives from both sides in mind, the mixture tends to be a hard case to solve. As the title of the thesis hints, standardisation is a vinaigrette of IPR and Competition and you have to "shake the two parts" a bit to make them work together. It is clear that the two legal fields share the same purpose and objectives, however concern has to be given to the risks in having more of one and less of the other which can make the vinaigrette too harsh for the consumer.

The question that rises is :

What is the perfect mixture of IPR and Competition law in EU standardisation?

1.3 Method and Materials

The method used for the thesis is a traditional legal method, examining the different legal sources in the field. From a teleological view, the very purpose and background of standardisation will be reviewed in order to fully understand the context and relationship to legislation of the subject.

Through current doctrine in the field, the relationship between the two legal fields will be presented as well as the very meaning of standardisation as a phenomenon with strengths and weaknesses.

Further, case law and current rules will be reviewed with focus on how the interplay has developed through time in the US and EU and where we are today in the field. Two famous US cases regarding misuse of IPR in standard setting will be enlightened followed by a review of what the latest European Commissions Guidelines put to the matter.

Putting the chapters together will later present a conclusion and answer to the given problem.

1.4 Previous Works

A lot of thoughts and guidance have been given by the collection of articles in Anderman and Ezrachis' "Intellectual Property and Competition Law: New Frontiers". This book was however written prior to the adoption of the 2011 Guidelines, which will be added to the reasoning in the thesis. Most of the articles dealing with the subject are as well written prior to the adoption of the Guidelines, which have made them assess and build their reasoning on the Draft Guidelines from 2010 launched for consultation. In this way again, the final adopted version of the Guidelines will function as a closing chapter for the different angles represented through the chapters.

1.5 Delimitations

The thesis will deal with *technology* standards set by *Standard Setting Organisations*. The reason for this is that the subject of standardisation is wide and that these are the standards being the most obvious for consumers. The legal aspects will focus mainly on the EU, but comparison will be made to the US since the market of trade is global and EU and the US follow each other in that sense in order to maintain a dynamic trade. Many scholars see Patent Pooling as effective in the standardisation process. The thesis will not assess whether this is a fact since the scope will not allow further concern in the light of hold-up situations.

1.6 Disposition

In the second chapter, the scene will be set with a presentation of the different angles of standardisation and why this phenomenon has occurred. The historical views of standardisation and its issues will be presented along with a review of the relationship between standardisation and Intellectual Property Rights and the differences between the US and EU in the matter of abuse of these rights.

The third chapter will start to review the different approaches on standardisation agreements. The US will be well represented since most of the guidance lies in the American case law. The cases of Rambus and N-Data will be presented and reviewed in order to fully understand the complexity of standardisation, patent misuse and hold-up situations.

In the fourth chapter, the European approach will be reviewed. Since there is little case law compared to the US, this chapter mainly deals with how the Treaty Articles are to be interpreted concerning the issues enlightened by the previous chapters. Many scholars have assessed the EU approach on standardisation relying on the 2010 Draft of the latest Guidelines on the applicability of Art 101 on horizontal cooperation agreements, hence the Draft will occur frequently in this chapter waiting for the fifth chapter where

the 2011 current Guidelines will be reviewed, checking if the different opinions on the draft from the fourth chapter have been taken in mind.

Finally, a conclusion will be made of the different lessons from previous chapters with a potential answer to the problem along with a glimpse of what the future may bring.

2. Setting the scene – the current legal situation

2.1 Why Standardisation?

In the global development of technology, innovation is of great importance as well as the legal aspects in the process. The interplay between Intellectual Property and Competition Law has led to questions about the incentives for innovation. Intellectual Property Rights (IPRs), and the exercise of these spur innovation and development in one way as well as competition rules and competition authorities have the same aim and purpose.

As a tool for development and innovation, standard setting has become frequent for both private actors and public Standard Setting Organizations (SSOs). The standard setting process has during the last decades developed into an interface between IPRs and the aspects of exercising these rights on one side and competition law at the other side having competition authorities with the aims of providing incentives to innovation and access to industry standards.

Standards of technology are used to frame the interaction of components and products in a technological system. Standards can be described as the *language* that technologies use to communicate.¹ In the Information and communications technology market, standards are particularly important regarding the amount of suppliers and the rapidly changing technology. Regarding standard setting, one should reflect on what angle you have in your interpretation of the phenomenon. As an economist, as a competition lawyer or a lawyer specialized in intellectual property? The different angles will be represented through this chapter. If standardisation is handled in the right way, it creates economic efficiency and benefits for consumers.

¹ Simcoe, 2005 p. 2

Standards can rise from market-based technology process as *de facto* standards or being set by SSOs as *committee standards*. Focus here will lie on the latter process. Several SSOs promote *open standards* to be adopted by participants. The term “open standards” reflects on that the technical specifications are widely, or freely, available to potential implementers.² One of the major problems with openness in standard setting is that individual firms face a dilemma hoping they will benefit from participation. In plain language, they want all technology in the standard to be open, except for their own contribution. This tension between the incentive to invent and to profit from it are set clear in examining the role of IPRs in the standard setting process. Proponents of the open source model among firms on one side are trying to create legal institutions making it possible to profit from licensing intellectual property. On the other side, firms are on regular basis trading with IP, “hustling” SSOs to adopt standards that in the end will infringe on their own patents. At the same time, authorities and SSOs are caught in the middle, making efforts to create frameworks for balancing the different interests. One central argument of why the standard setting has developed into a highly popular and contentious subject is that the nature of innovation has changed into many different specialized, technology-developing firms applying business models relying strongly on IP.

According to Simcoe, policy makers and SSOs must have these issues in mind when forming policies for IP and enforcing regulations. The trend seems to be that companies the last decades have gone from a cooperation point in standardisation, over to business models focused on owning IP as a primary source for profit.³ Since companies have started to get specialized in technology development and commercialization, this have lead to that the market has become more active regarding technology inputs. Here, companies either focus on to procure standard-based inputs of technology and/or profit from their inventions. Not many of the companies supplying the technology input market are not “competing on implementation” since

² Ibid

³ Simcoe 2005 p. 3

they are specialized at supplying technology which leads to less incentives to compete on standards.⁴ These problems have an impact on how current SSOs line of work should be planned. Through time, SSOs have kept out from dealing with issues of licensing IPR, reluctant due to the risk of getting scrutinized by competition authorities for anti-competitive behaviour. There has been some development however, where SSOs have overviewed their policies for IPR trying to establish balance between the cooperation and ensuring participation in the standard process.

Plainly, standards are rules created for designing new products for relevant markets. These rules endorse coordination between products or components, designed independently, by a common ground to govern their interaction. The effects of compatibility standards have been widely examined through literature, focused on network effects and their ability to create positive feedback in the technology adoption process.⁵ Commonly, this leads to competition between rival technologies where one dominant design or technology prevails as the set industry or de facto standard. The process is often referred to as “standards war” with examples like *Blu-Ray* technology vs. *HD-DVD* or *Apple* vs. *Windows* in the field of Internet browsers. The competitive process when it comes to standard wars is obvious, however, the negative effects must also be regarded. From the consumers’ perspective, the outcomes of one technology as the adopted one according to the standard doesn’t have to be the superior one.

As an alternative to standard wars, voluntary Standard Setting Organisations (SSOs) play an important role in standard setting. Sometimes the term “*de jure*” standards is used to describe the outcome of SSOs, however these institutions hardly ever have legal authority. Most SSOs are participated in on voluntary basis, with weak powers to actually enforce the rules of technology they provide. Since SSOs operate in industries with high demands of coordination, their role in the standard setting process can have

⁴ Ibid p. 4

⁵ Ibid p. 5

greater impact than at first sight. In the European standardisation system, the three SSOs: *ETSI*, *CEN* and *CENELEC* create the foundation of the system, working closely together with the national standard setting organizations as the formal European Standardisation Organisations (ESOs).⁶

The ESOs have as objective to *“implement standards to facilitate the exchange of goods, information and services through the elimination of barriers to trade caused by provisions of a technical nature, and thereby to ensure a large unified European market promoting competitiveness and fostering innovation”*.⁷ How beneficial this system ever may be seen, barriers of other nature are to be seen in the process of standardisation. One of the major obstacles is the issue of IPRs involved in the process, both ex ante and ex post.

2.2. Intellectual property in Standard setting

The term Intellectual Property reflects on patent, trademark and copyright protection. However, in the light of standard setting, patents are the ones making the majority of the related IPR.⁸ Patents assure the inventors of the right to exclude others from using the invention in mind for a specified period of time. From another perspective, patents lead to policy making with the intent to spur innovation as well as solving the appropriability for inventors. For companies who cannot access or acquire the assets required to market their inventions profitably, this incentive is especially of importance. This results in that patents have important parts in the development of vertical specialization in research and development by limiting the risks faced by developers of specialized technology applying business models that sell inputs instead of implementations. Any process or administrative policy that provides for granting possible profit from

⁶ CEN: Comité Européen de Normalisation, CENELEC: Comité Européen de Normalisation Electrotechnique and ETSI: European Telecommunications Institute.

⁷ EXPRESS Report p. 8

⁸ Study on the Interplay between Standards and Intellectual Property p 11

property rights leads to some form of “*rent-seeking behaviour*”.⁹ Developers of standards face a major obstacle in respect of the role of IPRs. The increase of patents creates opportunities for a higher amount of actors to impose a “tax” on implementers; the development of open innovation has created a situation where “taxation” is the more attractive strategy. As a result, SSOs are having difficulties with when and how participants should disclose about IPR (patents), how the rights and obligations connected to the participation should be formed; the scope of SSO policies; and whether authorities should be involved in the enforcement of these. According to Simcoe 2005, it was unclear if the current framework could stand up for these questions. Creating such frameworks is however a cumulative process.

The former European Commissioner of Competition, *Neelie Kroes*, stated in a speech from 2008 that standardisation “*encourages competition on the merits between technologies from different companies, and helps prevent lock-in*”.¹⁰ SSOs contribute to the process with participating companies who can choose the most effective technology and later switch to a superior when the current one becomes obsolete, following the development. Companies can in this way cooperate in setting the standard for the purpose of reducing investment-risks, and at the same time allow innovators adopting the standard to compete *in the implementation of the standard*. From a European perspective, the benefits of standard setting are held forward in the Commission’s guidelines on the applicability of Article 101 to horizontal cooperation agreements. The Guidelines provide an exemption from the application of Article 101, which prohibits agreements, that restricts or distort competition, insofar they affect trade between member states. IPR have a large impact on innovation, since the rights covers many technologies being candidates for standardisation. The major benefits of standards lie primarily on interoperability possibilities and the opportunity for patent holders to get royalties for their contribution to the standard. Innovators owning IPR on their behalf wish to secure royalty flows and at

⁹ Simcoe p 18

¹⁰ SPEECH/08/317

the same time they want to harvest the profit from the increase of demand for their technology that a standard may lead to.¹¹ These facts leads to that IPR companies tend to seek alternative ways instead of using formal standard setting bodies, since regulations of public procurement often impacts their level of royalties. Instead they turn towards less restrictive SSOs, where terms of use, the essential character of patents, and royalty rates can be negotiated in a flexible manner.

Together, standardisation and IPRs have an important interplay on the market. However, there is a clash between IPR and competition law involved at the same scene. The IPR holders of patents in a standard may at some point start to demand excessive licensing fees or just not license or supply components at all du to the *rent seeking* behaviour as stated before. This leads to several problems:

First, participants in a standard setting process tries to get their IPR involved in the standard and later demand royalties on those excessively. Several participants with this agenda lead the process to a situation of rent-stacking.

Second, parties involved may neglect to disclose all of their IPR during the standard setting process, which leads to that unsuspecting users get surprised with demands of royalties adopting the standard in a *patent-ambush (hold-up)*.

Third, the parties may try to contribute a far great amount of IPR in the standard, resulting in a wave of disclosures hiding the true, essential IPRs comprised in the standard. This procedure is referred to as a *patent thicket*.

¹¹ Patterson p. 17

Fourth, participants holding important IPR in the standard may start to cross-license, damaging others through excessive royalties, or even excluding them from fully enjoy then benefits of the standard.¹²

The different procedures described above are all to be seen to damage innovation and can be sanctioned by SSOs, competition law or subject to court interference. Efforts have been made in securing that licences should be granted on reasonable and non-discriminatory (RAND) or fair, reasonable and non-discriminatory (FRAND) terms. These efforts have in common to try to create ex ante disclosure of terms of licensing and royalties. The exact scope of the FRAND requirements is still unclear. As well, ex ante disclosure place burdens on innovators who have to pay costs for negotiation etc. before any profit is secure. As a result, SSO policies tend to be limited in their requirements to just “reasonable disclosure”.¹³ These limitations, due to that RAND or FRAND need to be interpreted *ex post*, justifies competition authorities to scrutinize SSOs and their terms, creating a framework for IP law and competition for standard setting.

2.3. Abusing IPR - The divide between the US and EU

Even if the different markets face similar problems and situations, the US and EU have slightly different ways of addressing the legal framework in which standardisation and IPR should be governed. The difference is especially obvious in the views of to what extent competition authorities should intervene in situations dealing with excessive pricing or other abuses of dominant position involving IPR. Unlike US law where monopoly pricing is left unregulated, EU regulations do intervene due to lesser belief in markets self-regulatory abilities where “essential facilities” are concerned.¹⁴ The difference contributes to two questions of where the two fields collide. First, the clash between IPR and competition law in EU and secondly, how the ways of solution regarding abuse of dominant power.

¹² Kamperman p. 6

¹³ Lemley, 1889

¹⁴ Gal 2004 p 4

Since the market for standards are global, the different views have global impact on trade.

The US perspective deals with patent abuse within the patent system itself. An important, policy setting case is the case of *eBay v. MercExchange*.¹⁵ The technology involved in this case was for online auctions. The company eBay had used and tried to by the technology that it used in its “Buy it now” technology which patents were held by MercExchange who sued eBay after abandoning the efforts to buy. In court, MercExchange was successful in proving that an infringement occurred, however, it failed to get a permanent injunction on eBay for the unapproved use of its technology. The reason for this was that MercExchange wasn’t using the patent itself, just licensing it. The Court of Appeals reversed the decision by reason of that there was a general rule that courts will issue such injunctions on patent infringements if the situation didn’t involve exceptional circumstances. The Supreme Court stated that injunctions shouldn’t be automatically granted for patent infringement, as it is an equitable remedy. At the same time, injunctions shouldn’t be denied just because the plaintiff isn’t using the patent. According to the Supreme Court, the plaintiff should rather be able to point that:

(1) it has suffered an irreparable injury; (2) that remedies available at law are inadequate to compensate for that injury; (3) that considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be dis- served by a permanent injunction. The decision to grant or deny such relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion. (...)

¹⁵ 547 U.S. 388 (2006)

In his opinion of the case, *Justice Kennedy* was further sceptical towards granting injunctions in cases where patents held, not being essential for the produced product.

“ An industry has developed in which firms use patents not as a basis for producing and selling goods but, instead, primarily for obtaining licensing fees. ... For these firms, an injunction, and the potentially serious sanctions arising from its violation, can be employed as a bargaining tool to charge exorbitant fees to companies that seek to buy licences to practice the patent... When the patented invention is but a small component of the product companies seek to produce and the threat of an injunction is employed simply for undue leverage in negotiations, legal damages may well be sufficient to compensate for the infringement and an injunction may not serve the public interest. In addition injunctive relief may have different consequences for the burgeoning number of patents over business methods which were not of much economic and legal significance in earlier times. The potential vagueness and suspect validity of some of these patents may affect the calculus under the four-factor test. “

The four-factor test functions on the basis of four grounds determining if a use is fair under US law. The case of eBay strengthens injunction reliefs as an equitable remedy under US law and further creates a requirement of use regarding patents through the back door. Regarding standards, the case shows that including non-essential patents and low quality patents, or failure to disclose ex ante in the process are to be seen as abusive. The case along with *Qualcomm Inc. v. Broadcom Corp*¹⁶, visualize that these issues are incorporated in the framework of US patent law. If a patent is enforceable or not lies in however the patent holders conduct are to be seen as an offense. The scope of the decision is limited geographically, but SSOs are affected however globally since it

¹⁶ Qualcomm, Inc. v. Broadcom Corp., 2008 WL 66932

leads to that non-disclosed patents are not to be enforceable in the United States.

In the EU, the legal development of the same matter is slightly different. Instead of handling with issues regarding the abuse of IPR in standard setting, EU competition law steps in on the grounds of distributional justice and consumers' interests. A misuse of patent can be actionable if it can be set as an abuse of dominant position through bilateral or unilateral conduct where the holder of IPR is in a position of dominance.

¹⁷ Through EU case law, a dominant position is described as:

“A position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of its consumers.”¹⁸

In this way, IPR can contribute to a company to obtain dominant position, its however not necessary to obtain total dominance.

The ESOs are requested by the Commission to do standards work within the framework of Directive 98/34/EEC and Commissions guidelines. These frameworks create grounds of the structure, mandates and line of work for ESOs. In the matter of the interplay of IPR and competition law, the measures of dealing with misuse of patents, the frameworks are incorporated in EU competition law.

¹⁷ Kamperman p. 10

¹⁸ C 27/76 United Brands Co. And United Brands Continental BV v. Commission.

3. The US approach on standardisation

3.1 A matter of antitrust law

In both EU and the US, competition authorities have taken a positive position towards standardisation cooperation due to the effects on consumer welfare through interoperability, innovation, developed technology combinations. Before regulation 1/2003 was adopted, standardisation agreements weren't regarded as necessary to notify on under article 81 (now 101 TFEU) of the EC Treaty.¹⁹ Standard setting actions can however be having likenesses to a cartel under the regulations of competition where parties fix prices, taking advantage in sharing pricing information, or agree on limiting output or sales restriction. Restrictions on competition of this kind are well known actionable under EU competition law as well as abusing dominant position regulated in art. 102 TFEU. Standardisation cooperation can however affect competition in other, more sophisticated, ways.

“Antitrust's purpose is to protect competition while giving firms reasonable freedom to innovate, develop, produce, and distribute their products. Although standard setting can enable firms to improve along all of these avenues of business progress, it also can facilitate both of antitrust's twin evils: collusion and exclusion.”²⁰

Standards can affect competition potentially in controlling incentives or abilities for innovation, variation of products, market access and price setting. Setting a standard can for example raise costs for rival technologies or exclude them, no matter if there was a rationale behind the actions. Two different levels of restriction of the open standards can

¹⁹ Glader p. 626

²⁰ Hovenkamp, p. 87

be seen from a practical way, the access to the process and access to the adopted standard.²¹

Access to the process reflects on the rules and restrictions of admission and participation as well as the decision rules, specifications on technology and designs of IPR policy. Regarding access and availability to the standards, the documentation and specifications to be able to implement it.

Actions for standardisation are generally to be seen as agreements of cooperation, regulated through Article 101 TFEU (cartels) and in some situations Article 102 TFEU in matters of dominance. Through the development of EU standard setting, there has been lack of guidance in the Commissions guidelines on the applicability of art 101 in horizontal cooperation agreements. In the 2011 edition, the chapter has however been broadened, which will be assessed in the last chapter. As a start, the US approach will be examined with case law focusing on Section 5 of the FTC Act. Further, the issues regarding the applicability of Article 101 during the absence of such a chapter will be presented, to compare later with the 7th chapter in the 2011 guidelines, checking if they are up to the task.

3.2 Section 5 of the Federal Trade Commission

As stated earlier, the US system incorporates the rules of abuse of IPR in the patent system itself. However in terms of standardisation, US antitrust authorities have scrutinized standardisation agreements during long time.²² This due to the well known fact that standardisation as well as contribute to innovation and consumers interest, can be misused to limit competition among rival companies or to obtain monopoly power. The US legal framework for standard setting agreements is specialized in FTC Act, Section 5.

²¹ Glader p. 627

²² Alden F Abbot and Nicholas J Kim p 325

It has been discussed in the US however Section 5 can be applied in cases where the Sherman or Clayton lacks scope. Recently, commission decisions show that the commission is welcoming the role of Section 5 to apply on cases beyond the two antitrust laws. The Supreme Court recognizes specifically that Section 5 is applicable even in cases where the behaviour stands outside the federal antitrust laws.²³In the case of *Sperry & Hutchinson* ²⁴, where the court stated that FTC was in power to define and proscribe unfair competitive practices that did not infringe “...*either the letter or the spirit of the antitrust laws.*”²⁵ The court added to that Section 5 had broader scope than the antitrust laws, that FTC had power through Section 5 to proscribe measures “...as unfair or deceptive in their effect upon costumers regardless of their nature or quality as competitive practises or their effect on competition.²⁶ In contrast to the Sherman Act, Section 5 focuses on protecting consumers from unfair practices²⁷

A subsequent case showed the Courts intention of broadening the scope of Section 5 where it was stated that it could cover “...not only practices that violate the Sherman act and other antitrust laws, but also practices that the Commission determines are against public policy for other reasons.”²⁸ In examining the limitations on Section 5, three important decisions must be taken in mind. First, in the decision of *Boise Cascade*²⁹the court held that the FTC *must show* that the measure taken has effects on competition as price fixing- or stabilizing, in this case in the plywood industry. Allowing the claims of the FTC would in this case “..*blur the distinction between guilty and innocent commercial behaviour.*”³⁰ The case hinders the availability of Section 5 by itself to be a back door to liability when the measure taken by the company in

²³ Alden F Abbot and Nicholas J Kim p 326

²⁴ *FTC v Sperry & Hutchinson Co*, 405 US 233, 92 S Ct 898 (1972)

²⁵ *Sperry & Hutchinson* 241.

²⁶ *Ibid* 241.

²⁷ Wallace p. 670

²⁸ *FTC v Indiana Federation of Dentists*, 476 US 447, 454 (1986)

²⁹ *Boise Cascade Corp v FTC*, 637 F 2d 573 (9th Cir 1980)

³⁰ *Ibid* 582.

question falls within the scope of antitrust laws but is in lack of facts making it claimable. Secondly, a measure claimable under Section 5 must have some proof of that it's oppressive. In the case of *Ethyl*³¹ the 2d Circuit reversed an order of the FTC, stating that Du Pont, Ethyl and other actors of the anti-knock gasoline additive market through independent and unilateral conduct breached Section 5. This through sales at delivered price including costs of transportation, giving advance notice of price increases over the required contract and use of a "most favoured clause" with sellers.³² The FTC however noted that the measures taken were not collusive and had legitimate business purpose, but the actions collectively affected competition in breach of Section 5 by facilitating parallel prices on levels not allowed. The second circuit withheld that Section 5 had a purpose broader than the antitrust laws but enlightened the importance of clear standards limiting the use of FTC as arbitrary and capricious power. The Court held that FTC had:

"..a duty to define the conditions under which (the questioned conduct) would be unfair so that business will have an inkling as to what they can lawfully do rather than be left in a state of complete unpredictability"³³

On these grounds, the Court didn't find any guidelines as such, so it created minimum standards of its own. It pointed out that, in lack of a tacit agreement, some "indicia of oppressiveness" must exist to make the measure actionable.³⁴ These indicia could be evidence of anti-competitive intent or purpose or the absence of legitimate business reasons for the measure. In this way, the case demands that a proper action under Section 5 must include an "unfairness plus factor", which is influenced by the "plus factor" test of the Sherman Act for conscious

³¹ E.I. Du Pont De Nemours & Co v FTC, 729 F 2d 128 (2d Cir 1984)

³² Ibid 130

³³ Ibid

³⁴ Ibid 139

parallelism.³⁵ In the third case, *OAG*³⁶, the Court changed an order finding that a monopolist publisher of flight schedule guides owed a duty under Section 5 to not discriminate between certified air carriers and commuter airlines.³⁷ The publisher listed just certificated airlines (paying to get listed), which FTC found as a violation of Section 5. The court held that letting Section 5 to apply on the situation, it would give too much power to FTC in substituting its own business judgement for the one of the monopolist when it clearly affects competition in another industry. To be actionable, the measure taken must be coercive. In this way, the case of *OAG* limits Section 5 to that it cannot be used as “recapture” business behaviour outside the scope of antitrust laws without proof of bad faith or forcing intent.

Putting these cases together, the *Sperry & Hutchinson* and the following cases of *Boise Cascade*, *Ethyl* and *OAG*, questionable business behaviours are still falling between the chairs of the Acts and case law. In the light of this, US courts have emphasized the importance of proper guidance and standards to FTC’s application of Section 5. *Abbott and Kim* suggest a three-part test for the application of Section 5 in the light of the trio of *Boise Cascade*, *Ethyl* and *OAG*. The conduct is to be seen as actionable if it:

- is culpable in that it does not involve competition on the merits.***
- should have been seen as questionable before the fact.***
- actually causes net harm to competition, or raises a substantial risk of such harm.***

This test could result in that the Section 5 principles of liability get ensured in its predictability. These principles taken together correspond with the judicial concern of restricting Section 5 to be applicable just in

³⁵ Ibid 139

³⁶ *Official Airlines Guides, Inc v FTC*, 630 F 2d 920 (2d Cir 1980)

³⁷ Ibid 921

cases where there is an oppressive conduct with violation of duties having harmful effects on competition that can be predictable.

In the light of this reasoning, Standard Setting can involve situations where the process is to be questionable regarding competition.

3.3 Patent hold-up and Section 5 FTC

As stated before in the previous chapter, one situation of abusing IPR in standard setting can be patent hold-up. The situation tests Section 5 in its applicability in circumstances falling outside the scope of antitrust laws. As well as in EU, the US have through FTC and DOJ³⁸ scrutinized and emphasized in guidance and analysis regarding collaborative standards. As we know, *de facto* standards can rise from market competition itself and can also be formed under SSOs where companies collaborate to set the standard for certain industries. This collaboration, where consumer choice and competition get set aside, fetch the eye of the antitrust authorities and the SSOs are thoroughly scrutinized by them. Having the benefits of standardisation in mind, actions that hinder or affect the standardisation process in an anti-competitive way are to be seen as actionable under the antitrust laws. However in matters of hold-ups in standard setting, one have to regard the similarities of hold-up in contract law. The situation is defined as where a party of a contract draws excessive value or benefits from the other party based on circumstances leading to an exceptional need. Just the risk of hold-up can give effects on the parties' incentives to invest in the contract or relationship that the contract actually was aimed to support.³⁹ In the context of standard setting, a hold-up situation can arise where one or more parties invest in a technology standard that is covered by other parties IPR. In this situation one standing alone patent holder may commence a hold-up situation to extent the profits of the IPR. Since SSOs are setting which technology that are to be involved in the standard, another technology involved can lack substitutes *because* of its

³⁸ Department of Justice

³⁹ IP 2 Report p.11

involvement in the standard. The company holding the essential IP can in that way draw higher profit from the patent that it wouldn't have *ex ante* which in the end results in higher customer costs. SSOs try to eliminate these risks in formulating policies and rules for the participants to follow. In US case law in the field, two different cases are highly interesting: *Rambus* and *N-Data*.

3.4 The case of Rambus

Among cases referring to patent ambush, the case of *Rambus Inc*⁴⁰ may be the most famous one. The FTC filed a complaint towards Rambus regarding questionable conduct by was to be neither a case for Section 5 alone as won by the FTC⁴¹. In the scope of Section 5, Rambus can be interesting as an applicable alternative for the Sherman Act in situations not in breach of the antitrust laws but still are questionable opportunistic behaviour by an SSO-member.

Rambus is a company developing, patents and licences computer memory technologies. The company is holding patents and pending applications concerning high-performance dynamic random access memory, also referred to as DRAM and the architecture of them. Rambus filed their first application for patent on DRAM in 1990.⁴² Later in 1992, ten divisional patent applications were filed claiming benefits of the parent.⁴³ By June 1996, Rambus had gathered over 29 relevant patents in the US.⁴⁴

DRAM is an essential component in devices ranging from PCs to fax machines and videogames and the sales of DRAMs in the US exceeded 12 billion USD.⁴⁵ In the late 1980s, processing technology was advancing beyond the technology of memory, and as a result, the then

⁴⁰ *Rambus Inc v FTC*, 522 F 3d 456, 459 (DC Cir 2008)

⁴¹ "Rambus Complaint", In re Rambus Inc. Docket No 9302, FTC.

⁴² Rambus Complaint art 34.

⁴³ Ibid art 37.

⁴⁴ Ibid art 84.

⁴⁵ Ibid art 9.

existing DRAM architectures lead to a “memory bottleneck”.⁴⁶ As a solution to the problem, JEDEC⁴⁷ was an SSO promoting and developing standards for products like DRAM. Any company of the electronic equipment industry could participate as members in the organization. To become member, all the company had to do was to file an application, pay membership fee and agree to abide the Rules of JEDEC. By Oct 1993, the JEDEC manual involved the provision:

“The chairperson of any JEDEC committee [expressly defined to include, among other things, subcommittees] must call to the attention of all those present the requirements contained in EIA Legal Guides, and the obligation of all participants to inform the meeting of any knowledge they may have of any patents, or pending patents, that might be involved in the work they are undertaking.”⁴⁸

Further, the JEDEC manual by Oct 1993 required that :

-no standard be drafted to include “patented items” – or “items and processes for which a patent has been applied” – absent both

(1) a well-supported technical justification for inclusion of the patented item; and

(2) express written assurance from the patent holder that a license to the patented technology will be made available either “without compensation” or under “reasonable terms and conditions that are demonstrably free of any unfair discrimination.”⁴⁹

Rambus attended the first JEDEC meeting first as a guest, December 1991 and joined formally short after. Rambus attended meetings

⁴⁶ Ibid art 11.

⁴⁷ Joint Electron Device Engineering Council

⁴⁸ Rambus Complaint art 21.

⁴⁹ Ibid art 22.

deciding on standard technologies for SDRAMs as a solution for the “bottleneck problem” but did however not disclose the patents they were holding relating to the technologies to be adopted.⁵⁰ Rambus also attended meetings regarding standards in clock-synchronising technology, where it also held patent applications. Rambus never disclosed this to JEDEC. Later on, the technology was adopted in the standard and involved Rambus patents.⁵¹ Rambus left the SSO of JEDEC by sending a letter to the Secretary of the committee on JC-42⁵² in June 1996. In the letter, representatives for Rambus stated that they would still license its technology, but on terms that maybe wouldn’t be consistent with JEDEC’s manual or other SSOs. Along with the letter Rambus sent a list of 23 US and foreign patents tied to the company. The letter contained the following statement:

“Recently at JEDEC meetings the subject of Rambus patents has been raised. Rambus plans to continue to license its proprietary technology on terms that are consistent with the business plan of Rambus, and those terms may not be consistent with the terms set by standards bodies, including JEDEC. A number of major companies are already licensees of Rambus technology. We trust that you will understand that Rambus reserves all rights regarding its intellectual property. Rambus does, however, encourage companies to contact Dave Mooring of Rambus to discuss licensing terms and to sign up as licensees.

To the extent that anyone is interested in the patents of Rambus, I have enclosed a list of Rambus U.S. and foreign patents. Rambus has also applied for a number of additional patents in order to protect Rambus technology.”⁵³

⁵⁰ Ibid art 61.

⁵¹ Ibid art 70.

⁵² JEDECs subcommittee on RAM devices.

⁵³ Rambus Complaint art 83.

During the time Rambus was involved in JEDEC, it never disclosed any of its relevant patents or pending applications. In 1999, Rambus started to collect royalties from DRAM manufacturers, using JEDEC-compliant technologies that infringed Rambus' patents.⁵⁴

3.5 FTC reacts

The 18th of June 2002, the FTC filed its complaint against Rambus. The FTC claimed that Rambus had been violating Section 5 in three separate ways. Firstly, the FTC held Rambus responsible for conducting in a system of anti-competitive and exclusionary measures leading to that they obtained monopoly power in the market of SDRAMs in violation of Section 2 of the Sherman Act. Secondly, the FTC claimed that Rambus tried to monopolize the market for SDRAMs resulting in a dangerous risk of monopolization of the markets, also in breach of Section 2. Thirdly, the FTC held that Rambus restrained trade in an unreasonable way constituting unfair methods of competition under Section 5.⁵⁵ The FTC argued that the conduct of disturbing the standard setting process was in itself anti-competitive and outweighing any benefit on competition.⁵⁶ On grounds of the precious cases of *Allied Tube*⁵⁷ and *ASME*⁵⁸, the FTC held Section 2 applicable in scrutinizing the deceptive conduct in the context of standard setting.

The FTC further stated that regarding the cooperative climate in the SSO, participants are less wary of deception, which makes the conduct possible to result in substantial anti-competitive harm.⁵⁹ The lack of obligations to disclose was also noted and that deceptive conduct can occur even in these cases. To evaluate the duty to disclose in those circumstances, one must take into account the rules were interpreted by

⁵⁴ Ibid art 92.

⁵⁵ Ibid art 122-124.

⁵⁶ "Opinion of the Commission", In the matter of Re Rambus. Docket No 9302, FTC p.30

⁵⁷ *Allied Tube & Conduit Corp v Indian Head Inc*, 486 US 492, 509 (1988)

⁵⁸ *American Society of Mechanical Engineers v Hydrolevel Corp*, 456 US 556, 574 (1982)

⁵⁹ Opinion of the Commission p.34

other SSO members and their understanding of their duties to disclose.⁶⁰ The FTC further made an analysis of the potential harm created by patent hold-up in standard setting. In setting firm rules of disclosure, the SSO members is allowed to make well-grounded choices of technologies based on what royalty or licence requirement following.

3.6 Rambus' Conduct: Deceptive *and* Exclusionary

Based on the facts of these conducts, the FTC found Rambus actions both deceptive and exclusionary.⁶¹ In its opinion, the FTC pointed out two types of conduct that were to be seen as particularly exclusionary and deceptive:

(1) Rambus made potentially deceptive omissions via its continuing concealment of its patents and patent applications until after the DDR SDRAM standard was in place; and

(2) Rambus made outright misrepresentations when it gave evasive and misleading responses to questions about its conduct.⁶²

In order to sort out that the conducts were actually deceptive, the FTC turned to the disclosure obligations of the JEDEC members. These obligations were according to the FTC giving the members of the SSO incitements to believe that the standard setting process should be based on cooperation and free from deception. In that way, the actions of Rambus was likely to “infect” the other members’ choices of technology

⁶³

The FTC concluded that the policies of JEDEC along with the actions of its members made the members believe that the process should be free from deception and cooperative with respect to that members “*would not*

⁶⁰ Ibid. p.35

⁶¹ Ibid. p.36-37

⁶² Ibid. p.50

⁶³ Ibid. p.51-52

*try to distort the process by acting deceptively with respect to the patents they possessed or expected to possess”.*⁶⁴ Rambus misused these expectations in being part in the process without disclosing relevant information about their patent portfolio and claiming these encompassing the developing standard.⁶⁵ In distorting the choices of JEDEC and undermining the SSOs’ protection of patent hold-ups, this deceptive conduct made Rambus to obtain monopoly power and harmed competition.⁶⁶

3.7 FTC holds causation in the alterative

In addition to exclusionary conduct and being in position of monopoly, Section 2 required that the exclusionary deception of Rambus had to be linked to the obtaining of monopoly position.⁶⁷ The Commission held that the monopoly position was obtained linked to the JEDEC members’ adoption of the standard and Rambus technologies in it. The first connecting factor the FTC stated was that there were alternative technologies to the Rambus ones when the JEDEC made their decision and could have been chosen instead if the patents and pending applications had been properly disclosed.⁶⁸ The second cause link was that the market most certain to coalesce with the JEDEC standard.⁶⁹ In the matter of causation, the FTC relied on that if JEDEC would have known about Rambus’ standards they would have either excluded the patented technology or demanded RAND terms in an ex ante negotiation.⁷⁰ This choice of showing causation in the alternatives was to be a bad one, as the case will further tell. Another factor was that the

⁶⁴ Ibid p.66.

⁶⁵ Ibid p.66-67.

⁶⁶ Ibid. p.68.

⁶⁷ Opinion of the Commission p. 73-74.

⁶⁸ Ibid. p.76.

⁶⁹ Ibid. p.79.

⁷⁰ Ibid. p.74

FTC required that Rambus should license at “reasonable rates” that were based on negation ex ante the standard was set in a hypothetical way.⁷¹

3.8 The DC circuit dismiss violations of Section 2

The FTC lost when Rambus appealed in the District of Columbia circuit, where the courts’ decision pointed out that the Commission was unable to show the monopolization factor.⁷² Since the FTC case failed under Section 2, new guidelines were given by the decision in the application and scope of Section 5 by itself in a limiting way.

Rambus appeal pointed out that the Commission’s grounds for holding the consequences of Rambus non-disclosure in the alternative were weak. Further Rambus argued that the FTC held Rambus responsible for preventing JEDEC from either choosing non protected technology, or get a RAND commitment from Rambus in licensing its technologies. Rambus argued that hindering a RAND commitment couldn’t be seen as a violation of antitrust laws.⁷³ Since Rambus left it undisputed that the IPR led to monopoly power, the main object was left to be to examine however Rambus breached Section 2 with exclusionary conduct.

The FTC did not examine which one of the effects (RAND commitment or other technology) that was most likely. In this sense the core became for the court to identify if preventing a RAND commitment was a violation and concluded that based on the case of *NYNEX*⁷⁴. The court there stated that a lawful monopolist could act deceptive without harming competition in the monopolized market.⁷⁵ Since the FTC recognized that JEDEC may would have elected the Rambus technology even if the patents and applications were properly disclosed, the court saw it as JEDEC just lost an opportunity to secure a FRAND commitment from Rambus which in itself is not seen as harm on competition from alternative technologies on relevant

⁷¹ Opinion of the Commission on Remedy, In Re Rambus Inc Docket No. 9302

⁷² Rambus Inc v FTC No. 07-1086, DC Cir 2008 p. 23

⁷³ Opinion of the Commission p. 24

⁷⁴ *NYNEX Corp v Discon Inc*, 525 US 128 1998 (*NYNEX*)

⁷⁵ *NYNEX* 464

markets.⁷⁶ Accordingly, the court dismissed the claims based on that the commission failed to show that Rambus' actions were exclusionary and couldn't constitute unlawful monopolization in breach of Section 2 of the Sherman Act.⁷⁷

3.9 Conclusions on Rambus

DC Circuit was also reluctant to trust the strength of standalone Section 5 in the matter. The court considered the margins of disclosure JEDEC required for its members and how Rambus failed to disclose those in assessing the applicability of Section 5. Further, the court took notice about the commissions reliance on disclosure expectations where JEDEC's policies suffered from lack of defining details. The conclusion was that the FTC had taken an aggressive interpretation of rather weak evidence and therefore FTC lost the case in the DC circuit. According to *Abbott & Kim*, the Rambus case contributes with three limiting principles. First, Section 5 shouldn't be applied in preventing hold-ups from conducts that could have been foreseen and mitigated by the SSO if it had applied appropriate rules for the participants at the time the standard was decided. Second, the less clear a policy is in a SSO, the harder it should get for the FTC to prove a breach of the policy. Third, the unclarity in the policy should in itself prevent participants from hold-up situations as they in this way have the opportunity to get knowledge and mitigate the risk *ex ante*. Also a fourth principle of limitation could be thinkable; that the FTC should more tend to use Section 5 in enforcing disclosure rules than licensing rules. This since the Rambus case clearly showed that SSO policies of disclosure could be that vague that it discourages actions by the FTC.

On the European side, the outcome of Rambus didn't draw as much attention as in the US, since Rambus accepted the Commission's demands concerning the royalty amounts. The European Commission

⁷⁶ Ibid 466

⁷⁷ Ibid 467

sent a statement of objections in 2007 on Rambus' actions stating that those were in breach of Art 82 EC (now 102 TFEU) by seeking unrealistic royalties. The settlement was accepted by Rambus who agreed to cap its royalties relating to the patented technology of the standard.⁷⁸

3.10 N-data

Another case of importance in the matter of the applicability of Section 5 and Standard Setting Organisations is the case of Negotiated Data Solutions hereinafter N-Data.⁷⁹ This is an example of conduct that falls within Section 5 and FTC action. Since the commission didn't allege that the conducts violated the Antitrust Laws (unlike Rambus) the case gives guidance in the application on Section 5 in the context of non-SSO participants where the conducts violates Section 5 on its own.

The FTC issued a complaint against N- Data in January 2008 where they alleged violation of Section 5 in both unfair competition and unfair acts or practices. The case was built on that N-Data had obtained patents from National Semiconductor, which they intended to get royalties from in a manner not consistent with the licensing commitment of the SSO where National Semiconductor was participant. The license would be all paid and unbound by royalties after 1000 USD was paid on one occasion.⁸⁰ In 1994, the IEEE⁸¹ adopted standard in Fast Ethernet, which involved the protected *NWay autonegotiation technology*. Manufacturers incorporated the standard in 1995 after the SSO published the Fast Ethernet standard in millions of devices as computers, routers, modems etc. In 1998, the National Semiconductor assigned the patents of NWay to N-Data's predecessor, Vertical Networks, Inc. The process involved a

⁷⁸ MEMO/09/273 and Commission Decision in Case COMP/38.636 – RAMBUS

⁷⁹ Complaint In re Negotiated Data Solutions LLC, Docket No. 051-0094 (2007)

⁸⁰ Ibid p.3 para 14.

⁸¹ Institute of Electrical and Electronics Engineers

copy of the letter of license rules, which was acknowledged by Vertical.⁸²

In 2002, Vertical sent letters to approximately 64 companies with demands of licensing fees on per-unit basis. The FTC regarded those fees as “a substantial increase” over National’s agreement of 1994.⁸³ After commencing litigations on companies not willing to pay more than the insurance of 1994, Vertical assigned further the patents to N-Data who continued in Verticals’ path of sending letters and mitigate manufacturers using the patents.

The FTC held N-Data responsible for exploiting the incorporation of NWay in the standard and setting aside a well-known commitment made by its predecessor.⁸⁴ Further the commission stated that N-Data was part in a patent hold-up situation where manufacturers were locked in to the standard, having the costs of seeking alternatives in mind.

3.11 A Consent Order proposed by the FTC

The FTC acknowledged that since N-Data had not made any commitment to IEEE, the conduct was not to be seen as violation of the Sherman Act. However, since the conducts had effects on prices for the entire industry and had impact on IEEE standard setting in the future, N-Data violated standalone Section 5 by acts of unfair competition and unfair act or practice.⁸⁵ The actions could further lead to reducing the value of standardisation in making it easier for “opportunistic lawsuits” to occur according to the FTC.⁸⁶ The effect of this should be that companies in the future should lack trust in standards and seek to avoid incorporation of any patented technology in fear of similar situations. The FTC stated firmly that the Commission itself was created “precisely” to prevent this kind of behaviour along with that Section 5

⁸² Ibid p.5 para 27.

⁸³ Ibid para 28.

⁸⁴ Analysis of Proposed Consent Order to Aid Public Comment
In the Matter of Negotiated Data Solutions LLC, File No. 051 0094 p.4

⁸⁵ Ibid p.4

⁸⁶ Ibid p.5

could serve an unusually important role where contractual remedies may be ineffective.⁸⁷

The Proposed Consent Order:

“prohibits N-Data from enforcing the Relevant Patents, defined in the order, unless it has first offered to license them on terms specified by the order. The terms of that license follow from those promised by National Semiconductor in its letter of June 7, 1994, to the IEEE. Specifically, N-Data must offer a paid-up, royalty-free license to the Relevant Patents in the Licensed Field of Use in exchange for a one-time fee of \$1,000.”⁸⁸

N-Data agreed on the Consent Order but did however have opposing comments on the reasoning and submitted a statement during the time of public comment where they disagreed on the facts and legal theories given by FTC.

Comments handed in to the FTC on behalf of N-Data:

“N-Data believes that the complaint and related statements of the majority do not convey an accurate impression of the pertinent facts. One consequence appears to be the circulation in the press and on the Internet of incorrect and misleading information that has the potential to damage N-Data. N-Data also believes that its conduct ought not be regarded by the Commission as a violation of Section 5 of the Federal Trade Commission Act (“Section 5”).”⁸⁹

N-Data argued in its comments that since there was no violation of antitrust laws, the case would give Section 5 along with the FTC too broad applicability and power.⁹⁰

⁸⁷ Ibid p.6

⁸⁸ Ibid p.9

⁸⁹ Public Comments on Behalf of Negotiated Data Solutions FTC File No. 0510094

⁹⁰ Ibid p. 5

3.12 Does N-Data limit Section 5 further?

The FTC noted in N-Data that just breaking an earlier commitment in the standard setting process couldn't be enough to become an unfair act or practice under Section 5.⁹¹ The standard setting process was however infected through the breach of the previous commitment and the conduct would lead to that competition was harmed in that sense. In this way, in the standard setting context, the effect is sufficient to be in breach of Section 5. *Abbott & Kim* points out that the process in SSO standard setting encourages the FTC's interventionist role. Furthermore, according to public policy, intervention by the FTC should be encouraged to save future defendants from costs through litigation that never should have been brought in the first place.⁹²

N-Data roots the principle of Rambus that the obligation has to be clear and a breach has to be concluded. The amount of \$1000 was clear and unambiguous and if the SSO (IEEE) had made the obligation irrevocable, there had been no doubt that Section 5 was applicable. In this way, a lesson learned from N-Data is that as Section 5 is directly applicable in circumstances where the obligations of licensing are objective and irrevocable.

Another principle from Rambus is that the SSO is responsible for mitigating the risk of patent hold-up by. Section 5 is not to be applicable in circumstances that could have been prevented by setting clear rules of conduct for the participant. Putting all of these facts together, the FTC was authorized to intervene in this case.

What do we learn from putting together Rambus and N-Data then? The two cases limit the application of Section 5 in some particular ways. It cannot be used to protect from actions that could have been prevented by the SSO or anticipated by the participants. Section 5 should however be applied in justifying clear and unambiguous disclosure obligations. This as long as they are objective and irrevocable and that the SSO couldn't

⁹¹ Analysis of Proposed Consent Order to Aid Public Comment p.9

⁹² *Abbott & Kim* p. 351

have anticipated or mitigated the risks of breaching the rule. Section 5 cannot be used to enforce an alleged breach of a general RAND commitment. Even if costs for end consumers cannot be shown in effect of a standard setting hold-up, the actions should be liable under the unfair methods of competition theory of Section 5 if it could be proven that the actions are harming the integrity of the standard setting process.⁹³

Even the applicability of Section 5 tend to look limited it still remain the most effective tool to prevent and solve hold-up situations in the standard setting process on the US side. The antitrust laws cannot reach the scope of upcoming hold-up situations as we can see through the mentioned case law, even if some development are to be seen in forming the applicability of Section 5, it is the best way to handle abuses that occur in the standard setting context.⁹⁴

3.13 Comments on the mentioned case law

The case of Rambus has been scrutinized and criticized by several scholars. Commissioner of the FTC, *J. Thomas Rosch*, criticized the outcome of the case and held that the DC circuit lay too much of the blame on the SSO, JEDEC. The problem seemed more to be the lack of clear disclosure rules than that Rambus actually had acted in a deceptive way when manipulating the standard setting process.⁹⁵ Further, Rosch criticized the relying on the NYNEX case. The FTC Commissioner held that the court reasoned that a conduct by a monopolist to exploit its monopoly power could be seen as culpable but is not a violation of antitrust laws based on NYNEX. However did the monopolist in NYNEX gain its monopoly power lawfully, which was not the case in Rambus according to Rosch.⁹⁶ According to Rosch, the general way in similar cases is to determine how the world would have looked like “but

⁹³ Abbot & Kim p. 353

⁹⁴ Ibid p. 354

⁹⁵ Rosch p. 2

⁹⁶ Ibid p. 3

for” the deceptive conduct, in this case by Rambus. This is often difficult and different scenarios have to be considered.

In the Rambus case, the commission identified two possible outcomes in a world without the deceptive conduct: JEDEC would have excluded Rambus’ patented technology from the standard or would have demanded RAND assurances with *ex ante* licensing negotiations.⁹⁷ The commission didn’t rule which one that was more likely to occur and focused on if it was to be seen as an antitrust violation to avoid a RAND commitment by the conduct. According to Rosch would a RAND commitment check Rambus’ monopoly power and signal the marketplace that the standard required a licensing agreement from the company.

Rosch strongly urge to appeal the Rambus decision in a petition for *certiorari*.

Rosch, in his comments, advises the FTC to continue its aggressive enforcement and however focus more on causation in the future to be sure. He also acknowledges the added burden, but emphasizes that the stakes are high and that the real burden is borne in the end by consumers. Along with Abbott & Kim, Rosch also recognize Section 5 as the most effective tool in preventing hold-ups in standard setting and that N-Data is “just the beginning.”⁹⁸

Wallace joins the gang in claiming the Rambus decision to be inconsistent with previous precedent. Despite the decision, he recommends SSOs to change their rules to deal with the hold-up problem more efficiently.⁹⁹ The fact that Rambus’ actions were considered in breach with the European rules and that this was accepted by the company, gives further reluctance on whether the outcome would be different if the FTC had brought the case forward in another way.

⁹⁷ Ibid p. 5

⁹⁸ Ibid p. 15

⁹⁹ Wallace p. 693

4. The EU Approach on Standardisation

Through history it can be seen how patents is used to protect the own companies inventions and technologies. In the last decade, a new business model relating to patents are emerging, especially in the ICT sector. These businesses acquire alleged essential patents with intent to get substantial royalties. Such companies are often referred to as non-practising entities or NPEs and don't contribute to the market with products or services. This kind of businesses wait until the industry is locked on to a standard through e.g. investing in infrastructure to produce the standardized technology and then tax the industry with demands of royalties. As we have discovered, this is old news in the standard setting context. How this type of companies can act in this way can have many reasons. Most often, NPEs are not part of a SSO and in that way have no obligations to license on FRAND terms. The patents are often acquired from companies in forms of financial trouble regarding their patents like a surplus to requirements.¹⁰⁰ Further, NPEs tend not to be involved in standards related to R&D and often acquire the patents from third parties after the standard is adopted (see N-Data). NPEs are rarely bothered by that the SSOs could be reluctant to accept their technology in future standardisation.

Some scholars do however see positive effects in NPEs or "Patent Trolls" on the market and economy as a whole.¹⁰¹ However, in the terms of standard setting, this kind of behaviour seems more likely to damage the process than gain it. The primary advantage enjoyed by NPEs is that they don't have any production units that require cross

¹⁰⁰ Chappatte & Walter p 376

¹⁰¹ See Geradin, Damien, Layne-Farrar, Anne and Padila, Jorge A, "Elves or Trolls? The Role of Non-Practicing Patent Owners in the Innovation Economy"

licensing that otherwise could restrain the behaviour a bit. The risk of hold-up situations from NPEs increases when the standard in question involves complex and detailed technology. An example of this is the third generation mobile standard, UMTS, where the ETSI database tells that over 50 companies hold over 10 000 patents and applications essential to the technology. This kind of standardisation result in that users and manufacturers can't go around the problem through re-designing or re-inventing. In this way, NPEs get a strong bargaining position even if they hold just a few of several patents in a standardized technology.¹⁰²

The NPE litigation problem has been common in the US due to large amounts in damages and lack of the risk that the "loser pays" is non-existent. As we have seen through recent case law, the FTC and courts in the US have taken a more aggressive leap towards this kind of business behaviour. This has resulted in that the EU has become a more interesting playground for this kind of companies since permanent injunctions are still available in this area compared to the American market. The amounts are not at the same level, but the availability of injunctions creates incentives for the firms to litigate in pursuit of strong bargaining positions in licensing. Recent case law in the EU shows that Germany and the Netherlands are becoming popular fields for NPE litigations.

Now let's have a look at how European Competition law deals with these issues.

When standard setting involves a process of collaboration that could restrict competition in some way, art 101 TFEU will be breached unless it can be accepted through the block exemption of art 101(3). In those circumstances, the standard contribute to e.g. economic progress and gain consumers in different ways. In making the application of the competition rules clear, the European Commission has provided

¹⁰² Lemley, Ten Things to Do about Holdup of Standards p 2.

guidelines on the application of Article 101 when it comes to horizontal cooperation agreements in different versions. The latest version is dated 2011 and will be analysed in the next chapter. Many scholars have used the “Draft” of the guidelines from 2010 along with the previous version on Art. 81 EC in analysing weaknesses and problems with standard setting, competition law and hold-up problems.¹⁰³

4.1 EU Competition Law requires FRAND

One important principle in EU standardisation is that all patents being essential to a standard must be licensed on FRAND terms preventing that the competition of the downstream market should be unharmed. This principle is already set in the previous version of the commission’s guidelines (on Art 81 EC) and has since been applied by the commission in practice. The first step in reviewing the guidelines was taken in 4 May 2010, when the Commission launched a public consultation that later on resulted in the draft version of the guidelines to become completed with the final version of 2011. The later version includes a specialized chapter governing standardisation agreements, which can be seen as a welcomed introduction regarding our subject. In the draft, it becomes clear that according to the guidelines, Art 101 must be interpreted as it requires essential patents in standards must be licensed on FRAND terms. According to the draft Guidelines, the rules of the SSOs:

“must seek to avoid the misuse of the standardisation process through hold-ups and the charging of abusive royalty rates by IPR holders. These objectives should be ensured in standard-setting organisations through rules which are binding on the standard-setting organisation's members.”¹⁰⁴

¹⁰³ Draft Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2010) (“Draft Guidelines”)

¹⁰⁴ Draft Guidelines art 280

The conclusion of this is that Article 101 TFEU demands FRAND licensing in standardisation according to the 2010 Draft.

Article 102 applies to a firm in dominant position achieved by market power. In the light of standardisation, a firm can obtain the dominant position through the incorporation of its IPRs in a standard. A lock in situation makes the company holding essential IPRs even more dominant according to Article 102 TFEU. In this situation, a company's responsibility when it comes to licensing its technology grows. Companies in the downstream market must be granted the technology on FRAND terms due to the lock in situation on a standard.

“An abuse of the market power gained by virtue of IPR being included in a standard constitutes an infringement of Article 102. In this context and in case of a dispute, the assessment of whether fees imposed for patents in the standard-setting context are unfair or unreasonable, will be based on whether the fees bear a reasonable relationship to the economic value of the patents.”¹⁰⁵

4.2 Art 101 and 102 allows the commitment to travel

Being a matter of EU competition law, as most ICT standards in the EU market, patents declared essential to a standard must be granted to participants on FRAND terms. The FRAND commitment should therefore travel with the patent in changes of ownership. It was conferred by the Draft guidelines from 2010 that:

“To ensure the effectiveness of the FRAND commitment, there should also be a requirement on all IPR holders who provide such a commitment to take all necessary measures to ensure that any

¹⁰⁵ Ibid art 284

undertaking to which the IPR owner transfers its IPR (including the right to license that IPR) is bound by that commitment.”¹⁰⁶

If a patent is taken over, determination of the maximum FRAND royalty gets interesting. According to the reasoning in N-Data, exploiting ex post market power by charging higher rates on royalties than the previous patent holder is to be seen as unfair.

The EU rules of competition provides some certainty on the FRAND limits of royalties, however some risk of litigation concerning NPEs is still obvious regarding what is to be seen as fair and reasonable in the matter. The system is still quite unpredictable and transparency is needed to determine the rates in securing the benefits with standardisation from the beginning. A manufacturer has to plan his in business economically in order to adapt to the standard and in that case it has to be clear what to expect in rates if there is no cross-licensing to use. Having complexity of patents in mind, this assessment can be hard to make regarding the amount of patents that can be involved in such a standard. A solution to this is to implement a system where a royalty stack is easy to assess along with how that should be estimated between the different patent owners.¹⁰⁷

The European Commission is strongly positive and active concerning standards in the EU. This has been seen throughout its communications and papers released during the last decade. One to mention is the White Paper issued by the Commission Directorate General for Industry and Enterprise from 2009.¹⁰⁸ In the paper notice is taken on the importance of modernising standardisation policies in order to fully exploit the potential and benefits of standard setting.

¹⁰⁶ Ibid art 286

¹⁰⁷ Chappatte & Walter p. 382

¹⁰⁸ Commission White Paper, "Modernising ICT Standardisation in the EU-The Way Forward" COM (2009)

The white paper suggests that SSOs should:

-implement clear, transparent and balanced IPR policies which do not discriminate and allow competition among different business models,

-ensure the effectiveness of procedures for IPR disclosures,

-consider a declaration of the most restrictive licensing terms, possibly including the (maximum) royalty rates before adoption of a standard as a potential route to providing more predictability and transparency.¹⁰⁹

Support for this line of reasoning is given by the previous mentioned former EU commissioner of competition, Neelie Kroes, again in a speech, “Setting the Standards High” from 2009. In her speech, Kroes enlightens the importance on that competition on price can occur before the standard is set, and the choice of technology can be based on total understanding of the price and quality similar to decisions taken by businesses every day.¹¹⁰ Although this solution of *ex ante declaration* may be seen attractive, they raise some questions if they can be seen as an effective solution to the hold-up problem and if they lead to FRAND rates. Opponents fear that they *ex ante* declarations can give opposite effect.

4.3 Alternatives to improve the FRAND System

As an alternative to *ex ante* declarations, *ex ante auctions* can be another way to solve the NPE hold-up problem. In an *ex ante* auction procedure, a competitive process where different patent owners have incentives to lower prices having the profits of the future standard in mind, hence they rely on the rewards flowing from the inclusion of their own technology

¹⁰⁹ Ibid para 2.4

¹¹⁰ SPEECH/09/475 (2009)

in the standard. If an ex ante auction should work in standard setting, two requirements have to be fulfilled according to Chappatte & Walter:

“(1) the alternative technology that are candidates for inclusion in a standard must be well developed, ie known and stable; and

(3) the essential patent landscape must be sufficiently transparent in order to identify which companies own the patents that are essential to each alternative technology.”¹¹¹

These requirements are especially hard to meet in complex, dynamic standardisation processes. In the telecommunication field, where high technologies and patents are the most frequent occurring, standards are not created in this environment. The SSOs governing the field, like ETSI, decides through participants on technical requirements, which are then developed on R&D basis by the participants in the standard setting process. Thus, it is a dynamic process between several contributors through R&D taking sometimes several months or years in the process. In these types of processes, important and innovation R&D is developing along side with the standardisation process. In this way, many licensors or patent holders can't expect the wideness of their patents potential value before the standard is adopted. In situations like these, where the outcome is unclear prior to the adoption of the standard, where it is uncertain which patent applications that will be granted or what weight different patents will have in the set standard, it gets impossible to hold an ex ante auction regarding those technologies.¹¹²

If the circumstances wont allow an ex ante auction, a system of independent ex ante declarations could give rise to the gathered amount of royalties. Restrictive licensing terms and strict declaration rules can lead to that companies seek too maximize the ex post negotiation situation for their IPR. Another point is that a large number of potential

¹¹¹ Chappatte & Walter p. 383

¹¹² Ibid p. 384

royalty collectors could ex ante adoption be likely to result in an exaggerated rate of royalty for the standard in absence of an effective auction.

As an example of this, Chappatte and Walter enlighten a situation from 2007 where NGMN, an organization set up 2006 for collecting information from leading mobile operators to develop a vision for mobile networks and technology. The purpose of the initiative was to get indication of the royalty costs for technology consumers regarding potential future standards in the field. Each participant were to provide information to an independent third party their main proposed licensing terms and conditions. Even though the outcome is confidential, the fact that the gathered rate of royalties on the essential IPR was far excessive is well known.¹¹³

Another solution for solving the problem is that SSOs are to define FRAND on standard-by-standard basis before the adoption of the standard. In 1999, ETSI launched a report on IPR issuing recommendations for the licensing of essential patents regarding UMTS (Universal Mobile Telecommunications Systems).¹¹⁴ It recommended that maximum cumulative royalty rates should be set in single figures to reflect on what's "affordable". The reason for this was to set a reasonable balance between the interests of different patent holders, purchasers of infrastructure to meet the standard and end consumers. The report also recommended that the rate should be divided among the essential patent holders in light of the principle of equality of essential patents.¹¹⁵ In the light of this, SSOs should have the opportunity to reach consensus on the appropriate definition of FRAND on a standard-by-standard basis. The main purpose of the SSO members should be to achieve a cumulative rate of royalties that represents fair balance. This means that as well as the essential patent holders should get reasonable

¹¹³ Ibid p. 385

¹¹⁴ ETSI, Third Generation Mobile Communications: The way forward for IPR (1999)

¹¹⁵ Ibid p. 20

rate of return for their investments in R&D, the costs of implementation should be sufficiently low to make way for a competitive downstream market to benefit end-consumers.¹¹⁶ This balance is given for specific standards, since having one for all ICT standards would be unlikely beneficial regarding the facts above.

Opponents of this procedure proclaims that this is in breach of Art 101 TFEU since such measures are most likely to be seen as a cartel. The Draft Guidelines recognizes the benefits of increased openness:

“...it is important that parties involved in the selection of a standard be fully informed not only as to the available technical options and the associated IPR, but also as to the likely cost of that IPR. Therefore, should a standard-setting organisation's IPR policy require, or allow, IPR holders to individually disclose their most restrictive licensing terms, including the maximum royalty rates they would charge, prior to the adoption of the standard this will not lead to a restriction of competition within the meaning of Article 101(1) as long as the rules do not allow for the joint negotiation or discussion of licensing terms in particular royalty rates.”¹¹⁷

The Draft Guidelines do not however provide any guidance in how Art 101 (3) will be assessed in such circumstances. Several scholars were pointing out the lack of guidance regarding FRAND and disputes around the definition in the Draft.

It is clear that the Draft Guidelines is welcoming a “safe harbour approach”, where standardisation agreements with the “right terms” should have no negative effect on competition. The Draft also points out the importance of licensing on FRAND terms, and that the commitment should be irrevocable regarding third parties.

¹¹⁶ Chappatte & Walter p. 387

¹¹⁷ Ibid

5. The 2011 Guidelines

The current version of the *Commissions Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements* from 2011 is to be seen as the latest and most specialized tool to govern standardisation processes and the interplay between IPR and Competition law in EU. In the Guidelines, the entire 7th chapter is focused on standardisation agreements, something that its predecessors were in lack of regarding the complexity in the field. As we have seen, standardisation is to be assessed as horizontal cooperation agreements; hence the Guidelines from 2011 are highly interesting regarding our subject. In this chapter, the Guidelines will be reviewed piece by piece, in order to implement some of our questions and uncertainties from the previous chapters. The Commissions view on standardisation will be enlightened and assessment will be made whether there has been a change in the legal framework, adapting to the issues of standardisation.

5.1 Definition and Relevant Markets

The 7th chapter of the 2011 Guidelines starts not surprisingly with the definition of a standardisation agreement. It is here stated that an agreement as such have as primary objective to define technical or quality requirements that may comply with future or current products, production processes, methods or services. It is further pointed out that standardisation can take several forms, through SSOs, consortia or for a, agreements between independent companies.¹¹⁸ The Guidelines also recognize and consider the three European SSOs to be undertakings or association of undertakings, subject to competition law and the Articles 101 and 102 TFEU.¹¹⁹

¹¹⁸ 2011 Guidelines Art 257

¹¹⁹ Ibid Art 258

According to the 2011 Guidelines, standardisation can have effects on four possible markets. First, standardisation may impact the product or service market to which the standard relates. Second, when there is a question of selection of technology is involved, where the IPR are marketed separately from the products in mind, the standard can also have effects on the technology market. Third, the standard setting market can be affected if different standard setting bodies or agreements exist. Fourth, the guidelines also recognize potential effect on a distinct market for testing and certification.

5.2 Restrictions under Art 101(1) TFEU

The positive economic effects of standardisation are recognized in promoting economic interpretation on the internal market and encouraging development of new and improved products or markets and improved conditions on supply. Standardisation normally increases competition through standards and lower output and costs of sales, benefiting the economy as a whole. Further, the Guidelines also enlighten the possibilities of maintaining and enhancing quality, providing information and ensure interoperability and compatibility and in that sense increase the values for the consumers.¹²⁰

Having these benefits in mind, the Commission through their guidelines points out potential risks in standardisation as we may have foreseen. In specific circumstances, standardisation can give rise to restrictive effects on competition by potential restriction on price competition and limiting or controlling production, markets, innovation or development of technology.

The Commission see three main channels in how these effects can occur: reduction of price competition, foreclosure of innovative

¹²⁰ Ibid Art 263

technologies and exclusion or discrimination of certain companies by preventing them to have access to the standard.¹²¹

First, if companies are engaging anti-competitive discussions in the standard- setting context, it could lead to reduction or elimination of price competition in the concerned markets and thereby ease a collusive outcome on the market.¹²²

Second, there are risks of standards having detailed specifications of technology regarding that they may limit technical development and innovation. During the development of a standard, alternative technologies can be competing for the inclusion of the standard. When one technology gets selected and the standard is set, the alternative technologies may have difficulties to entry and may even be excluded from the market.

When IPRs are involved, the commission points out three groups of companies with different interests in the process can be distinguished. To begin with, there are upstream-only companies who solely develop and market technologies. These companies have licensing revenues as their only source of income and have incentives to maximize their royalties. Companies focused on the downstream market are as well represented in the Commissions view. They manufacture products or services based on technologies developed by others and do not hold IPR in that sense. For these companies, Royalties represent costs and not a source of revenue and consequently, their incentives are to minimize these costs. The last group of companies are the ones that both develop technology and manufacture products to sell. Their incentives are mixed. They both hold IPR and draw revenue from it as well as they may have to pay royalties to other companies holding IPR essential to the

¹²¹ Ibid Art 264

¹²² Ibid Art 265

standard. This lead to that these companies may cross license their IPR.¹²³

Third, standardisation may have anti-competitive effects by preventing certain companies from getting access to the results of the process, meaning the specification and/or the essential IPR for implementation. The commission identify a risk of anti-competitive effects if a company or companies are prevented or only granted access on prohibitive or discriminatory terms. Further, the Guidelines take a positive approach to *ex ante disclosure* policies:

“A system where potentially relevant IPR is disclosed up-front may increase the likelihood of effective access being granted to the standard since it allows the participants to identify which technologies are covered by IPR and which are not. This enables the participants to both factor in the potential effect on the final price of the result of the standard (for example choosing a technology without IPR is likely to have a positive effect on the final price) and to verify with the IPR holder whether they would be willing to license if their technology is included in the standard.”¹²⁴

As it earlier has been pointed out, the Commission states that intellectual property laws and competition laws share objectives. However, a participant holding essential IPR to a standard can in the context of standard setting get control over a standard. In setting a barrier of entry to a standard, an IPR holder can affect the market/s to which the standard relates. According to the Guidelines, this situation could lead to those companies in this position starts to behave in anticompetitive ways, for example “*holding-up*” users after the standard gets adopted. Regarding the previous review of the issues in patent disclosure, the

¹²³ 2011 Guidelines Art 267

¹²⁴ Ibid Art 268

Commission takes a firm and welcomed grip towards the hold-up problem.

The Commission however withholds in the guidelines that the possession or holding of essential IPR doesn't directly creates market power.¹²⁵

5.3 Standardisation agreements NOT restrictive of Competition

To be safe from Art 101(1), SSOs must ensure that participation should be unrestricted, the process has to be transparent and no obligation to comply could be contained in the agreement. Participants must be granted access to the standard on fair, reasonable and non-discriminatory terms (FRAND). Agreements meeting these requirements will normally not restrict competition according to the Guidelines.¹²⁶ When it comes to transparency, the Guidelines points out the need for the relevant SSO to have procedures which allow stakeholders to inform themselves of standards in all steps of the process.

When a standard includes IPR, a clear and balanced IPR policy adapted to the particular industry “increases the likelihood” that participants will be granted access to the standards elaborated by the SSO.¹²⁷

Furthermore, to ensure effective access to the standard, the given IPR policy needs to require participants who want their IPR to be included in the standard to provide an *irrevocable commitment* in writing that guarantee that their essential IPR to all third parties on fair, reasonable and non-discriminatory terms, (a FRAND commitment). This commitment should be given prior to the adoption of the standard.¹²⁸

¹²⁵ Ibid Art 269

¹²⁶ Ibid Art 280

¹²⁷ Ibid Art 284

¹²⁸ Ibid Art 285

However, compliance with Art 101 by the SSO does not require the organization to verify whether the licensing terms of participants fulfil the FRAND commitment. It's up to the participants for themselves to assess whether the terms and fees in particular fulfil the requirement. Therefore, participants will have to anticipate the implications of the commitment, especially on their ability to set their level of fees freely.¹²⁹ In case of a dispute regarding FRAND commitments, the assessment of the fees or terms will be based on the relationship to the economic value of the IPR.¹³⁰

Concerning Art 101(3) the 2011 Guidelines states that the efficiency gains must be considered on a case-to-case basis regarding effects on innovation and compatibility to assess whether a standardisation agreement is safe under Art 101 (3).¹³¹

It's obvious that the Commission has assessed the complexity and different issues with standard setting in providing its guidelines on the matter. The potential restrictions of competition are enlightened as well as the hold-up problem concerning the disclosure of IPR. The importance and actuality of standard setting are set forward just in having one entire chapter of the guidelines dedicated to the field. The different views and conclusions provided in the previous chapters are well answered in a way that leaves the door open for interpretation without harming the very purpose of standardisation as well as it safeguards the system from abuse.

The 2011 guidelines are effective as a tool to govern EU standardisation, for the time being. Lessons have been learned as we have discovered through previous chapters and legislators in the standardisation field will continue learning.

¹²⁹ Ibid Art 288

¹³⁰ Ibid Art 289

¹³¹ Ibid Art 311

6. Conclusions

It is clear that technology standards and their legal frameworks will continue to develop, perhaps however in different paces with legislation a few steps behind. Through history we have seen how standardisation gets discovered, how it gets set into system, the effects of it for later on getting legislated upon. Where we are now in the development is hard to say. The 2011 Guidelines may be the latest tool in governing standard setting, but for how long will it be effective?

As long as the new technologies are developed and standardised, new attempts to draw profit from IPR included in standards will occur. Our lessons from previous hold-up situations are taken into account in current legislation, but as we can see in the Rambus case, the complexity of both IPR and competition has an impact the Court decisions. The very purpose of both IPR and Competition is sometimes in the way of each other. It enlightens the complexity in protecting both consumers as well as holders of IPR and innovators or companies trading with IPR.

The complexities of technology standards are also highly important to consider when defining to what extent royalties can be demanded. Advanced, specialized products create higher amounts of patents involved and higher costs in R&D, which end up in higher rates of royalties demanded. SSOs have to consider the lessons learned from both Rambus and N-Data when adopting policies in order to secure participants from being held up by holders of IPR. Taking aggressive steps towards the hold-up problem is not always successful as we can see through the outcome in Rambus. An essential patent holder is not culpable as such, as you may think at first. IPRs do have a need for protection as well where we again end up in the same objectives for the two legal fields spurring innovation and competition. However in N-Data the outcome was different even if the situation had its similarities

to the Rambus case. Therefore in terms of standardisation, the way of action, the different facts of each situation concluding the meaning of market power as well as the intent of the IPR holder must be regarded when bringing actions on hold-up situations in the standard setting context.

A lot of reasoning leans on what is to be seen as FRAND in the different situations occurring through the thesis. The meaning is far from clear and depends on the different facts of the situations as well.

The perfect mix between IPR and Competition in standard setting can therefore not be determined. Having the complexity of the field in mind, the answer still is “It depends”.

As we have seen through the different chapters, careful assessment of several factors has to be done in determining what amounts of royalties that can be demanded along with when competition rules are authorized to step in order to balance the relationship between the two.

The balance between IPR and Competition regarding standard setting must be assessed on a case-by-case basis. Adopting more firm and limiting legislation can be an easy solution to deal with misuse of IPR in standard setting. After consideration however, one notices that this may limit the incentives for companies to standardise and the very purpose and benefits of standard setting gets lost.

The Commissions 2011 Guidelines are precise in their applicability on standardisation agreements, something that is still not certain regarding Section 5 FTC in the US. The Guidelines are clear in one sense regarding the lessons learned from previous experiences, they are however open for interpretation and awaits more complicated cases to test them further and form them for the future.

Still, the perfect vinaigrette of standardisation depends on what meal you are about to serve.

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