

Intellectual Property Rights, And Competition Law
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Lecture - 31
Standard Essential Patents and FRAND Terms

Hello, welcome to this new module on Standard Essential Patents, FRAND Terms and various issues emerging out of the anti-trust regulations of European Union. In the earlier modules, we discussed various safe harbour provisions laid down in TTBER guideline for IP licensing agreements where the licensee as well as the licensor can get a safe harbour which will be free from antitrust issues as laid down in the Article 101 or Article 102.

In a technology transfer agreement, there may be one or more IP involved, which may be in the form of patents, industrial designs or software copyrights. But, the case becomes difficult when the patent is an essential patent. Essential patent means necessary to define a technical standard. For example, in smart phones different networks have different technology such as 2G, 3G, 4G, even 5G. These are different standards of wireless communication. Other example includes DVD format, which all of us have used at certain point of time.

So, these are known as technical standard which all the operators, all the players in the respective segment use in order to be compatible to users on different devices or in different fields of use such as smart phones, smart homes, internet of things(IoT).

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Industry standard

- A **technical standard** is defined as
“a document, established by consensus and approved by a recognized body, that provides, for common and repeated use, rules, guidelines or characteristics for activities or their results, aimed at the achievement of the optimum degree of order in a given context
- Standard setting organization:
 - ISO (International Organization for Standardization) and ETSI (European Telecommunications Standards Institute)
- Commonly known models of technical standards include GSM™, 3G, 4G, DECT™, smart cards, Wireless, Wi-fi, Mpeg, DSL, telemetry and DVD.



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With the emergence of technology, industry standards are being set. So, when a patent comes under an industrial standard or a particular standard relevant for any technology, it becomes important to technology licensing agreement. The case becomes somewhat different in comparison to other IP licensing agreements. So, before looking into standard essential patents and FRAND terms, let us discuss what are standards and how the standard essential patents are being defined.

A technical standard is defined as a document established by consensus and approved by a recognised body that provides for common and repeated use, the rules, guidelines and characteristics of various activities and aimed at achievement of an optimum degree of order in a given context. There are various standard setting organisations, for example, ISO, which stands for International Organization for Standardisation; ETSI, the European Telecommunications Standards Institute, IEEE, etc.

There are various standard setting organization which define a particular technology to be a standard. These standards are very important in terms of inter-operability of a particular technique or an invention. The commonly used example for technical standard include GSM technology, 3G technology, 4G technology, DECT technology, Smart cards, wireless, Wi-Fi, MPEG formers, DSL.

The standards are set by not only one technical institution, it is a work of more than one technical institute which develops various techniques which is further given the definition of a standard because of their importance in the relevant area of use.

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Standard Essential Patent (SEP)

- A patent that protects technology essential to a standard is called a standard-essential patent (SEP).
- Patent holders contribute technology for developing standards within standard developing organisations (SDOs).
- Once a standard is established and the holders of the SEPs have given a commitment to license them on fair, reasonable and non-discriminatory (FRAND) terms, the technology included in the standard should be available to any potential user of the standard.

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Once a standard has been defined, the technology becomes the new standard to be used in the field of use, but when there is a patent for that technology, then the patent is known as the standard essential patents. A patent that protects the technology essential to a standard is called a *standard essential patent* or the *SEP*.

The patent holder contributes the technology for developing standard. Once a standard is established the holder gives the standard patents to the standard setting organization and in turn, they agree to license those technologies to all those potential users who want to use them on FRAND terms, which is reasonably favourable to both the parties or which is known as the *fair, reasonable and non-discriminatory terms*.

Once a technology has been set as a standard, the technology is named as essential technology or standard essential patent and by virtue of the right given by the patent owner, the organisation is ready to give this technology to potential users on FRAND terms. FRAND terms should be economically favourable to both the parties so that it will further help to innovate, so that fair use and fair competition in the market can exist.

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Licensing and Enforcement Issues in SEP

- Technology users accuse SEP holders of
 - charging excessive licensing fees based on weak patent portfolios and
 - using litigation threats.
- SEP holders claim that technology users 'free ride' on their innovations and consciously infringe intellectual property rights (IPR) without engaging in good faith licensing negotiations



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But, the situation is not so simple as it appears. The technology users, accuse the SEP holders for charging excessive licensing fees based on weak patent portfolio. Also there are continuous threats coming from SEP holders to the technology users for the infringement of their technology and the claim of SEP holders that the technology users want a free ride on their innovation and they consciously infringe their intellectual property rights without engaging in good faith licensing negotiation.

The issues are from both the sides, because the SEP holder have a valuable asset with them. So, they try to assert their monopolistic power by charging high licensing fees and if someone does not agree with the licensing fees, they may get threatened by litigation charges. Simultaneously, the technology users use the technology without permission. When licensing negotiation fails technology users start using the technology without permission which may result into litigation. These are the two main issues of both the parties. So, let us see how the European Commission deals with these issues.

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- When the standard constitutes a barrier to entry, the company could thereby control the product or service market to which the standard relates.
- This in turn could allow companies to behave in anti-competitive ways, for example by 'holding-up' users after the adoption of the standard either by refusing to license the necessary IPR or by extracting excess rents by way of excessive royalty fees thereby preventing effective access to the standard



When such a situation arises, the standard itself becomes a barrier to the entry of new technology and also controls the service market or product market in which the standard applies. In this way, it leads to anti-competitive behaviour amongst the parties in the market. There are other phenomenon like holding up, patent thickets which may arise and stop the development of new technology and effective access to standards.

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The FRAND Commitment

- FRAND commitments are designed to ensure that essential IPR protected technology incorporated in a standard is accessible to the users of that standard on fair, reasonable and non-discriminatory terms and conditions.
- FRAND commitments can prevent IPR holders from making the implementation of a standard difficult by refusing to license or by requesting unfair or unreasonable fees (in other words excessive fees) after the industry has been locked-into the standard or by charging discriminatory royalty fees.



So, in order to avoid these hassles FRAND terms have been defined. The FRAND commitments are designed to ensure that essential technology protected through these standard essential patents should be accessible to all the users on fair, reasonable and non-discriminatory terms and conditions.

The FRAND commitments can prevent IPR holders from refusing to implement the standard or from refusing licensing request or charging unfair fees or excessive fees. Sometimes IPR holders try to license SEP along with non-SEPs i.e. those technologies which are non-essential or non-essential patents.

For example, in smart-phones, Wi-Fi, 4G, 3G are a part of standard essential patent, but sometimes several non-essential patents are also included along with the main technology such as swiping activity in the screen or screen resolution patent or other non-SEPs. So, when there is a licensing negotiation IP holders try to bundle up IP rights which may lead to disagreement between parties, failure of the agreement and anti-competitive behaviour in the market.

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EU Competition Law Issues

- Patent hold ups, Patent Thickets
- Portfolio licensing: The SEP-holder forcing the potential licensee to take a license to its entire SEP portfolio may lead to the violation of EU competition rules, in particular in the context of injunctions related to FRAND-encumbered SEPs

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This is also known as portfolio licensing. SEP holders are holders of a number of patents. So, they at a time try to license their technology together. They force the potential licensee to take license of the entire licensor portfolio. The licensee may think that all the

patents are not essential for its technology development process or product development process and are not required for him to get license of and that becomes the main reason of dispute in many of the cases.

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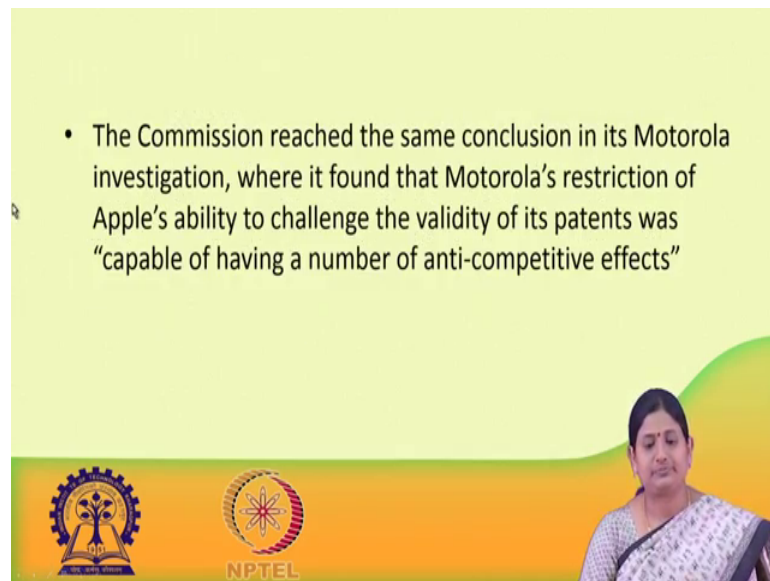
- The ECJ in Huawei case confirmed that, the potential licensee has the right to challenge, in parallel to the negotiations relating to the grant of a license, the validity of those patents and/or to contest their essentiality to the standard and/or their actual use, or reserve the right to do so in the future.
- The Court also clarified that the exercise of such right cannot be interpreted as a sign of unwillingness.

In the European Union, there are many cases regarding standard essential patents and FRAND terms; notably, Huawei versus ZTE, Samsung and Motorola decisions. These have set the European economic area with regard to antitrust issues arising out of the standard essential patents.

In the Huawei case, the European court of justice has confirmed that the potential licensee has the right to challenge, in parallel to the negotiation for a license, the validity of those patents or to contest the essential standards or their actual use or reserve the rights to do so in future.

It does not mean that once the patent holder has SEP in hand, he is immune from all the aspects of competition law and the licensee may challenge the negotiation or the grant of the license deals. This has been clarified by the court that the exercise of such right cannot be interpreted as a sign of un-willingness. We will discuss all these cases in detail in the later part.

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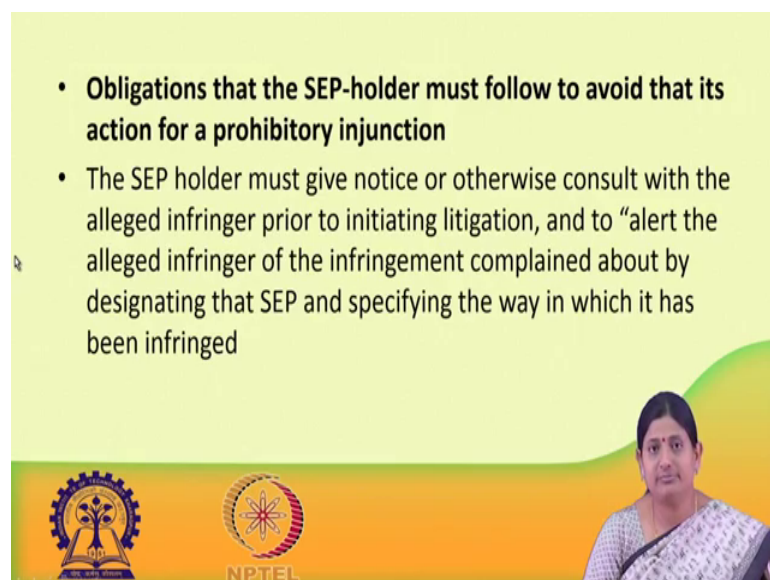
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- The Commission reached the same conclusion in its Motorola investigation, where it found that Motorola's restriction of Apple's ability to challenge the validity of its patents was "capable of having a number of anti-competitive effects"

IIT Bombay NPTEL

Samsung versus Apple and Motorola versus Apple, both the cases were decided during the same time and the commission reached the same conclusion in those cases and found that Motorola's restrictions on Apple's ability to challenge the validity of its patent was capable of having a number of anti-competitive effects.

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- **Obligations that the SEP-holder must follow to avoid that its action for a prohibitory injunction**
- The SEP holder must give notice or otherwise consult with the alleged infringer prior to initiating litigation, and to "alert the alleged infringer of the infringement complained about by designating that SEP and specifying the way in which it has been infringed"

IIT Bombay NPTEL

Let's go into detail of it. The court has given certain obligations that the SEP holder must follow to avoid action for a prohibitory injunction. The SEP holder must give notice or

otherwise consult within the alleged infringer prior to initiating any such litigation and it should alert the alleged infringer by the designating the SEP the infringement of which is complained of and by specifying the way in which the party is infringing the technology in question.

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Samsung vs Apple

- Samsung owned SEPs related to various mobile telecommunications standards and has committed to license these SEPs on FRAND terms.
- The Samsung SEPs in question related to the European Telecommunications Standardisation Institute's (ETSI) 3G UMTS standard, a key industry standard for mobile and wireless communications.


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In Samsung versus Apple, Samsung had many standard essential patents related to various mobile technologies. The technology which was in question in this case was ETSI, 3G UMTS standard which is a key industrial standard for mobile and wireless communication. This technology was given the status of a standard essential patent.

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- In April 2011, Samsung started to seek injunctions against Apple on the basis of its SEPs.
- The Commission investigated, in particular, whether in doing so Samsung has failed to honour its irrevocable commitment given in 1998 to the ETSI to license SEP in FRAND terms. The Commission also examined whether such behaviour amounts to an abuse of a dominant position prohibited by Article 102 of the TFEU.
- In December 2012, the Commission informed Samsung of its preliminary view that it considered Apple a willing licensee on FRAND terms for Samsung's SEPs and that against this background, the seeking of injunctions against Apple based on Samsung's SEPs in several EU Member States may constitute an abuse of a dominant position in breach of Article



In April 2011, Samsung started to seek injunctions against Apple on the basis of its standard essential patent on 3D technology. After investigation by the commission, the commission posed question that whether Samsung failed to honour the irrevocable commitment which they had given to ETSI, the European Telecommunication Standard setting organization, of providing the technology on FRAND term basis and whether it was a violation of Article 102 or the abuse of the dominant position as per the treaty of functioning of the European Union.

In December 2012, the commission informed Samsung of their preliminary view that that they considered Apple a willing licensee on FRAND terms for Samsung's SEP and alleged that against this background seeking injunction against Apple was an abuse of dominant position and breach of the Article 102.

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Samsung's commitments

- To address the Commission's concerns, Samsung has committed not to seek any injunctions in the European Economic Area (EEA) for a period of five years on the basis of any of its SEPs, present and future, that relate to technologies implemented in smartphones and tablets against any company that agrees to a particular framework for licensing the relevant SEPs.



When the technology was given the status of a standard essential patent, Samsung committed to the standard setting organization that it will provide technology on a FRAND term basis. Apple was willing to take the license on fair and reasonable terms. It is a separate issue that their negotiation did not materialise, but Apple was willing to take the technology on certain conditions.

To deny Apple a license was an abuse of dominant position. To address the commission's concern, Samsung has committed not to seek injunction against Apple company for 5 years in European economic area in the present or in the future when it relates to technologies implemented in smart phones as well as in tablets. It agreed to not seek license against companies that agree to a particular framework of licensing for the relevant standard essential patents.

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- The licensing framework provides for:
 - a negotiation period of up to 12 months; and
 - if no agreement is reached, a third party determination of FRAND terms by a court if either party chooses, or by an arbitrator if both parties agree on this.
- An independent monitoring trustee will advise the Commission in overseeing the proper implementation of the commitments.



It provided the condition that the licensing framework should be provided for a negotiation period of upto 12 months i.e. negotiation can be carried out for a period of 12 months and if no agreement is reached in that time period a third party determination of FRAND terms, by the court or by any other party which the two parties choose or by an arbitrator if both the parties agree, can be done.

The court tried to settle the dispute by giving them reasonable amount of time to reach a consensus for the licensing agreement and in case there was no consensus between the two parties, a third party can decide what will be favourable licensing term and condition for these kind of licensing agreement. Further, an independent monitoring trustee will be advised by the commission to oversee the proper implementation in the commitments.

So, this is one of the landmark decision, in the history of the European Union where the court tried to achieve a settlement between the parties, either by the parties themselves or through mediation by third party.

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Motorola vs Apple

- In the “Motorola” case, the European Commission found that Motorola’s seeking and enforcement of injunctions against Apple before the Mannheim District Court and the Dusseldorf District Court on the basis of a smartphone SEP constitutes an abuse of dominant position in view of the specific circumstances in which the injunctions were used.
- The SEP in question held by Motorola relates to the ETSI GPRS standard, part of the GSM standard, which is a key industry standard for mobile and wireless communications



In Motorola versus Apple, the European Commission found that Motorola was seeking an injunction and also trying to enforce the injunction against Apple before the Court of Mannheim district and district court in Germany. These were related to standard essential patent in a smart phone and the standard essential patent in question was related to GPRS standard otherwise known as the GSM standard which is a key industrial standard for mobile and wireless network.

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- Commission identified the relevant market as the market for the licensing of the technology, as specified in the GPRS standard technical specifications, on which Motorola’s Cudak GPRS SEP reads.
- The market for the downstream products (mainly smartphones) on which GPRS standard-compliant products are sold was therefore considered not relevant to the case in question, as *“the turnover achieved with the licensing of the GPRS SEPs is different from the turnover achieved with GPRS standard-compliant products in the output market”*.
- The geographical scope was deemed to be EEA-wide.



In all the cases of abuse of dominant position, the court tries to find out what is a relevant market and what is a geographical market. So, in this case, the court tried to identify the relevant market. The market for licensing of the technology specified by the technical's specification was Motorola's Cudak GPRS standard essential patent.

The market for the downstream products i.e. smart phones on which the GPRS standard compliant products are sold, was not considered relevant in this case because the turnover achieved with the licensing of GPRS and SEP technology was different from the turnover achieved with the GPRS standard compliant products. Only the licensing of GPRS technology was considered to be the relevant market in this case and the geographical market was the European economic area.

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- After analysing the demand-side and the supply-side substitutability of Motorola's technology EC concluded that it has no substitutes and Motorola holds a 100% share of the market concerned, being the exclusive owner of the Cudak patent, which is essential for the implementation of the GPRS standard.
- *Two factors are of particular importance for this assessing dominance:*
 - *first, the indispensability of the GPRS standard on which Motorola's Cudak GPRS SEP reads for manufacturers of standard-compliant products, and,*
 - *second, the industry lock-in to that standard"*


Next, the court looked into whether Motorola held a dominant position in the market or not. For this, both the demand side and the supply side substitutability was analysed and the European Commission concluded that Motorola does not have any substitute in the European economic area and Motorola holds 100 percent share in the market and it is the dominant player in the market for GPRS standard.

The court considered two important factors while assessing the dominant position. First, the indispensability of the GPRS standard on which Motorola's Cudak GPRS SEP was

read for manufacturing a standard compliant product. Second, the industry locked-in to the standard i.e. the court tried to find out whether there is any substitutable technology available in the European economic area for Cudak GPRS standard essential patent or not and it found that there is no substitute. The product was popular in the market and people were used to this technology and it gained a popular demand.

It was really indispensable or un-substitutable in the market and all the industries are which are operating in that field were trying to use and adopt the technology. The industry had locked-in to the standard. Both the factors were satisfied and for that reason the court also decided that Motorola is holding a dominant position in this particular GPRS standard. Once the dominant position was established, now the second question arises whether there is an abuse of dominant position or not.

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- the Commission came to the conclusion that the seeking and enforcement of an injunction by a patent holder, including a SEP holder, is generally a legitimate course of action, but the context is different when a FRAND-encumbered SEP is under consideration
- With regard to Apple's willingness to enter into a licence agreement on FRAND terms, it was inferred by the circumstance that Apple's offer *"allowed Motorola to set the royalties according to its equitable discretion, [...] without any limitations other than FRAND and article 102 TFEU"*.

The commission came to the conclusion that seeking an enforcement of an injunction by a patent holder including SEP holder is a legitimate course of action. Because, as a holder of intellectual property right, one has the very right to seek an injunction against any unwilling or any user which has not taken permission from the intellectual property owner.




In this case also, the SEP holder can seek the enforcement of the injunction as a legitimate course of action, but when the FRAND terms are associated with SEP then the situation becomes different from the normal cases. In this case particularly, Apple's willingness to enter into a licensing agreement with Motorola and Apple already allowed Motorola to set the royalties according to its equitable discretion. In lieu of these evidences, the situation became critical.

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- *Moreover, this proposal allowed for a full judicial review of the amount of FRAND royalties, whereby both Motorola and Apple could submit their own evaluations, calculations and reasoning for consideration to the competent court*
- according to the Commission, the assessment of Motorola's conduct as an abuse of dominant position strikes a fair balance between the three interests at issue, which are the rights linked to IP, the right of access to a tribunal and freedom to conduct business

No fine was imposed



Further, Motorola was allowed to review the amount of FRAND royalties whereby both Motorola and Apple could submit their own evaluations, calculations and reasoning for the consideration by the competent court. So, according to the commission the assessment of Motorola's conduct as an abuse of dominant position strikes a fair balance between the three interests at issue; First: the rights linked with intellectual property, Second: the right of access to the tribunal and Third: the freedom to conduct business.

In this case no fine was imposed on Motorola; however, the court tried to strike a balance between these two parties and tried to settle a favourable licensing condition between the two parties.

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- The two antitrust decisions in the Motorola and Samsung cases provides a path to “**patent peace**” in the telecommunications industry.

In the Samsung and Motorola cases, the Commission clarifies that

...in the standardisation context, where the SEPs holders have committed to (i) license their SEPs and (ii) do so on fair, reasonable, non-discriminatory (FRAND) terms, it is anti-competitive to seek to exclude competitors from the market by seeking injunctions on the basis of SEPs if the licensee is willing to take a license on FRAND terms. In these circumstances, the seeking of injunctions can distort licensing negotiations and lead to unfair licensing terms, with a negative impact on consumer choice and prices.

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These two antitrust decisions of Motorola as well as Samsung provides a path for **patent peace**. In both these cases the commission clarified that, in standardisation context, when the SEP holders have committed to license their standard essential patents on fair, reasonable and non-discriminatory terms, it is anti-competitive to seek to exclude the competitors from the market by seeking injunction on the basis of SEPs if the licensee is willing to take a license on FRAND terms.


In certain circumstances, seeking an injunction can distort the licensing negotiation and lead to unfair licensing terms with a negative impact on the consumer choices as well as the prices. Since, in both the cases, Apple was willing to enter into licensing negotiation and it offered the best FRAND terms possible from its end, Apple initiated an action, although it did not materialise, that does not mean that it is infringing IP rights. Both the parties should try to achieve a harmonisation in the selection of royalties or other condition as laid down.

But merely seeking or enforcing an injunction over SEP is not the solution and it may lead to anti-competitive effect in the market and also hamper the innovation in the market and limit consumer choices.

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Earlier judgement

- In **Orange-Book-Standard** case, the German Federal Court of Justice had adopted a more **favourable approach to patent owners**.
- The Bundesgerichtshof stated that in order to avoid an injunction, the licence seeker should meet two specific conditions not mentioned by the European Commission in its decisions:
 - i) making an unconditional binding offer for the conclusion of a licence that the patent owner cannot refuse without being in breach of its obligations;
 - ii) satisfying in advance the obligations ensuing from the licence agreement that is being concluded. These criteria have been further specified by the German lower courts, which generally set very strict conditions on the licence seeker






Motorola and Apple judgment are recent decisions where the court tried to favour the licensee or tried to achieve a harmonious situation between the two parties, but in the earlier judgments more favourable approach was given to the patent owners. For example, in the Orange Book Standard case, the German Federal Court of Justice has adopted a more favourable approach for the patent owners.

The court stated that in order to avoid an injunction, the license seeker should meet two specific conditions which has not been mentioned by the ECs decision. First: to make an unconditional binding offer for the conclusion of a license which the patent owner cannot refuse without being in breach of its obligation i.e. the licensor would have to provide the best offer to the licensee to get the technology in place and the licensing offer should be such that the patent owner could not refuse it. And Second: satisfying in advance the obligations to ensure that the license agreement is being concluded.

These criteria have been further specified by the German lower courts, which are \ very strict conditions for the license seekers. All the burden is on the license seeker rather than the patent owners. With the Samsung and Motorola decisions, the burden shifted to the patent owners. This is a gradual shift as the standards are developing in the European market and in the global market. The gradual shift in the approach of the court can be seen in these cases.

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- In Huawei v ZTE, Samsung and Motorola cases, the ECJ and EC has clarified the limits of the SEP-holder's rights to seek injunctions against a prospective licensee who has allegedly infringed that patent.



In Huawei versus ZTE, Samsung and Motorola cases, the European Court of Justice and the European Commission has clarified the limits of the SEP holder's right to seek injunction against a prospective licensee, who has allegedly infringed their patents. These three cases are landmark decisions, where the court has given various guidelines and clarified the limits of the SEP right holders.

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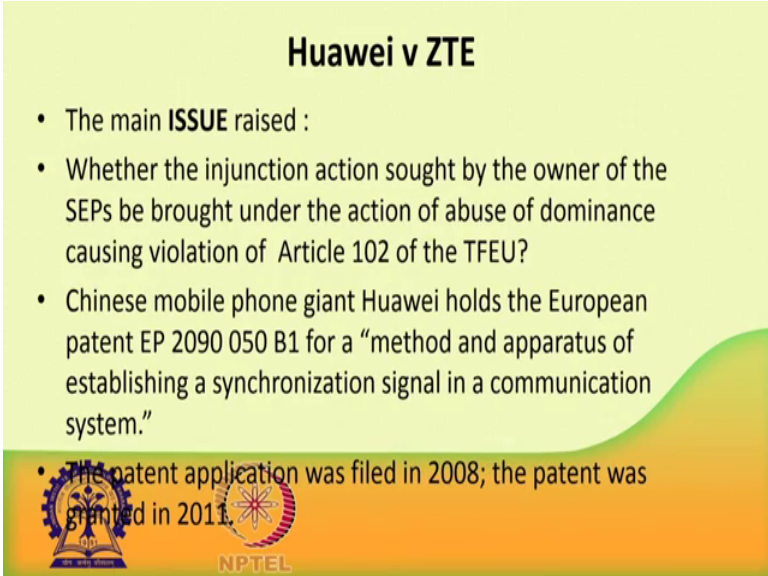
- The technology issued for synchronizing signals sent out by a transmitter to a receiver in the mobile communication environment, essentially by describing how to transform a certain signal in a particularly efficient way by defining so-called Fourier frequency coefficients that are centrally symmetric.
- Huawei notified the patent as "standard-essential" for the LTE standard of mobile phone communication to ETSI
- In exchange for this declaration of an SEP, the patent holder, Huawei, agrees to hand out licenses at FRAND terms



In the Huawei case, both the parties were Chinese manufacturer of smart phones. Huawei had a patent on LTE technology, which is one of the important technology for mobile communication. This patent was conferred the status of standard essential patent. ZTE company, one of the leading Chinese company tried to enter into a cross licensing negotiation with Huawei on FRAND terms, but the licensing agreement did not materialise. The technology in question was for synchronising signals sent out by a transmitter to a receiver in the mobile communication environment, it transforms signals in an efficient way by defining Fourier frequency coefficient which is centrally symmetric.



The technology related with LTE technology and ZTE wanted to have a cross-license on it. ZTE had certain patent which they thought would be relevant for Huawei for implementation of their production. This is the reason why ZTE tried to have a cross licensing negotiation with Huawei.

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Huawei v ZTE

- The main **ISSUE** raised :
- Whether the injunction action sought by the owner of the SEPs be brought under the action of abuse of dominance causing violation of Article 102 of the TFEU?
- Chinese mobile phone giant Huawei holds the European patent EP 2090 050 B1 for a “method and apparatus of establishing a synchronization signal in a communication system.”
- The patent application was filed in 2008; the patent was granted in 2011.

  NPTEL

As the licensing negotiation did not materialise Huawei tried to enforce an injunction against ZTE. In this case, the main issue raised was whether the injunction against ZTE by SEP holder i.e. Huawei was in violation of Article 102 of treaty of functioning of European Union or not. The patent in question was filed in the year 2008 and granted in 2011.

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- In October 2010, the Chinese mobile phone company ZTE, producing LTE base stations, started to negotiate with counterparts at Huawei for cross-licensing since ZTE thought it holds patents in LTE that Huawei needs to ascribe to.
- After six months, the negotiations failed;
- in April 2011, Huawei filed a patent infringement action against ZTE in the Düsseldorf Regional Court, claiming an injunction against ZTE.



ZTE used to produce LTE base stations. The negotiation started in the year 2010. After 6 months of negotiation they could not reach a settlement and the negotiation failed. In April 2011, Huawei filed a patent infringement action against ZTE in district court of Germany and filed for an injunction against ZTE.



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Legal questions:

- The Düsseldorf court asked:
- (1) Does the proprietor of [an SEP] which informs a standardization body that it is willing to grant any third party a license on [FRAND] terms abuse its dominant market position if it brings an action for an injunction against a patent infringer even though the infringer has declared that it is willing to negotiate concerning such a license?

or

- Is an abuse of the dominant market position to be presumed only where the infringer has submitted to the proprietor of the [SEP] an acceptable, unconditional offer to conclude a licensing agreement which the patentee cannot refuse without unfairly impeding the infringer or breaching the prohibition of discrimination, and the infringer fulfils its contractual obligations for acts of use already performed in anticipation of the licence to be granted?



The district court of Germany, *the Düsseldorf court*, asked five questions, out of only the first question was answered by the European court of justice. The first question was

does the proprietor of an SEP, who informed the standardisation body that it is willing to grant any third party licensing on FRAND terms, abuses its dominant market position if it brings an action for injunction against any patent infringer, even though the infringer has declared that it is willing to negotiate a license.

As we know, when a patent is declared as a standard essential patent by a standard setting organization, after this declaration, the patent owner agrees to provide license to any potential users on FRAND terms. So, when patent owners have agreed to this clause, is it going against that declaration when they are seeking an injunction against the alleged patent infringer.


The second part of this first question was: is an abuse of the dominant market position to be presumed only where, the infringer has submitted to the proprietor of the SEP an acceptable unconditional offer to conclude a licensing agreement, which the patent owner cannot refuse without unfairly impeding the infringer or breaching the prohibition of discrimination and, the infringer fulfils their contractual obligations in anticipation of the license.

When the infringer has given the proprietor the offer for licensing agreement which the patent owner cannot refuse, only after that condition can we ascertain the abuse of dominant position. When can the dominant position be considered to be an abuse of dominant position?

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(2) If abuse of a dominant market position is already to be presumed as a consequence of the infringer's willingness to negotiate:

- Does Article 102 TFEU lay down particular qualitative and/or time requirements in relation to the willingness to negotiate?
- In particular, can willingness to negotiate be presumed where the patent infringer has merely stated (orally) in a general way that it is prepared to enter into negotiations, or
- must the infringer already have entered into negotiations by, for example, submitting specific conditions upon which it is prepared to conclude a licensing agreement?

The slide features a yellow background with a green and orange gradient at the bottom. On the left, there is a logo of a gear with a tree inside, and next to it is the NPTEL logo, which consists of a circular emblem with a star-like pattern and the text 'NPTEL' below it. On the right side of the slide, there is a small inset video of a woman with dark hair, wearing a patterned sari, who appears to be speaking.

The second question asked by the district court was: if abuse of dominant market position is already to be presumed as a consequence of infringer's willingness to negotiate does the Article 102 lay down any particular qualitative or time requirement in relation to the willingness to negotiate i.e. is there any timeline defined in the Article 102 within which the licensing agreement should be negotiated?

Can the willingness to negotiate be presumed where the patent infringer has merely stated, for example, orally, in a general way, that they are prepared to enter into negotiation. Is an oral agreement valid in these cases or, there should be specific condition that, the licensee, the wilful potential user, should show his willingness to enter into the license. Is oral willingness acceptable or whether there is any written requirement, specification requirement.

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- (3) If the submission of an acceptable, unconditional offer to conclude a licensing agreement is a prerequisite for abuse of a dominant market position:
- Does Article 102 TFEU lay down particular qualitative and/or time requirements in relation to that offer?
- Must the offer contain all the provisions which are normally included in licensing agreements in the field of technology in question?
- In particular, may the offer be made subject to the condition that the [SEP] is actually used and/or is shown to be valid?



The third question was: if the submission of an acceptable, unconditional offer to conclude a licensing agreement a prerequisite? Does Article 102 lay down any particular qualitative or time requirement in relation to the offer? How long would an offer be valid and should the offer contain all the provisions which are normally included in the licensing agreement, in that field of technology.

What should be the clauses laid down in the licensing agreement? Should there be any particular conditions which should be specified in the agreement, which will show whether the agreement is valid or not?

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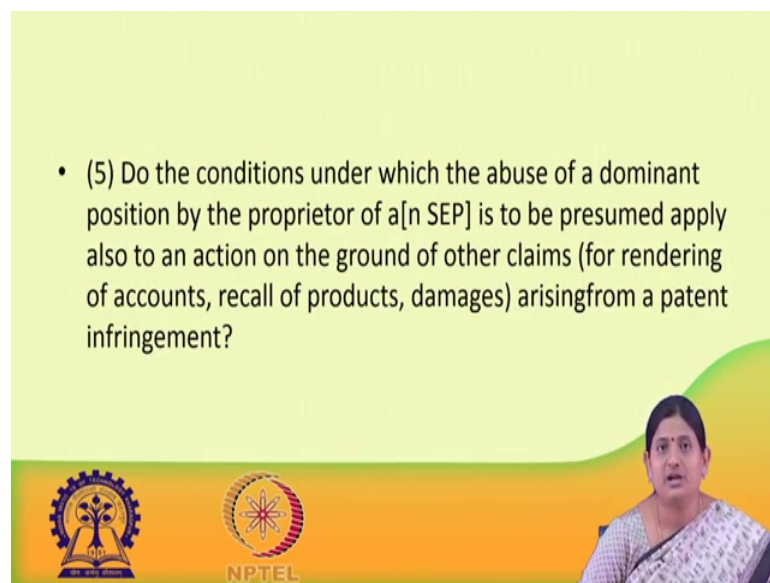
- (4) If the fulfilment of the infringer's obligations arising from the licence that is to be granted is a prerequisite for the abuse of a dominant market position:
- Does Article 102 TFEU lay down particular requirements with regard to those acts of fulfilment?
- Is the infringer particularly required to render an account for past acts of use and/or to pay royalties?
- May an obligation to pay royalties be discharged, if necessary, by depositing a security?



The fourth question: if the fulfilment of the infringer's obligation arising from the license that is to be granted is a prerequisite of the abuse of dominant market position? Is there any requirement with regard to these act of fulfilment under Article 102 or is the infringer required to render an account for the past act, use or pay royalties? For example, if the user has already used in the past, will there be any accountability for that?

Can the obligation to pay royalties be discharged if necessary by depositing a security? Will there be any security deposit for entering into licensing negotiation? Under which condition, it will be considered as an abuse of dominant position, what will be the criteria for licensing negotiation on the part of the licensor as well as the licensee?

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• (5) Do the conditions under which the abuse of a dominant position by the proprietor of a[n SEP] is to be presumed apply also to an action on the ground of other claims (for rendering of accounts, recall of products, damages) arising from a patent infringement?


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The last question in this relation was: Do the conditions under which the abuse of dominant position by the proprietor of an SEP is to be presumed apply also to action on the ground of other claims arising from patent infringement or not? These were the five questions, which the district court asked and the European court of justice answered only the first question.

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- **THE COURT'S RULING :**
- The court defined two conditions for the assessment of abuse of a dominant position by a plaintiff seeking an injunction – namely, where the alleged infringer:
 - unconditionally offered to enter into a licence agreement with the SEP holder with a royalty offer sufficiently high that the patent holder could not reasonably refuse or at a value to be determined by the plaintiff (subject to court review); and
 - behaved as if a licence had actually been taken – that is, rendered an account of its acts for use of the patent and paid respective royalties (eg, in an escrow account).

The court placed the burden of proving fulfilment of these conditions on the defendant




The court defined two conditions for the assessment of abuse of dominant position when the plaintiff is seeking an injunction. First: whether the alleged infringer unconditionally offered to enter into a licensing agreement with the SEP holder with a royalty offer sufficiently high that the patent owner cannot deny the offer or cannot refuse the offer or where the alleged infringer behaved as if the license has been given i.e. rendered an account of its act of use of the patent and paid respective royalties.

The court placed the burden of fulfilling those conditions on the defendant. The court deviated from earlier judgments of Samsung and Motorola. The court tried to settle down the matter, where both the parties can further negotiate the agreement and come to a mutually beneficial licensing negotiation.

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Unanswered questions by ECJ in Huawei case

- First, it is unclear in what circumstances the ownership of an SEP confers dominance.
- Second, while voluntary portfolio licensing is not illegal, an SEP-holder's 'all or nothing' licensing strategy may raise issues under both patent law and EU competition law.
- Third, although the European Commission has yet to scrutinize the refusal to license at component-level, it is not clear if such a refusal is contrary to the FRAND commitment and also to Art. 102 TFEU, as it may amount to a discriminatory refusal to deal, and/or lead to excessive royalties.
- Fourth, there is no official view on whether the SEP-holder's transfer of a subset of its SEPs to a Patent Assertion Entity (PAE) may breach EU competition law, and if so, in what circumstances.



Even though a middle ground was taken by the court, in this case, there were few questions which remain unanswered. First, it was unclear that under which circumstances the ownership of SEP confers dominance. Second, while voluntary portfolio licensing is not illegal, SEP holders force to take either all the portfolio or none. For example, in Huawei versus ZTE, there was nearly 450 LTE related technologies that Huawei was offering to ZTE and there were nearly 40 SEP holders.

You may imagine, entering into a licensing agreement for 450 technologies with 40 holders is not an easy task. It is difficult to reach into a settlement on mutually beneficial terms. Also, in such cases, whether license to the whole patent portfolio is required? If ZTE does not want to take the license for 450 standard essential patent, why should it give money on account of all those patents?

SEP owners try to give or bundle the number of SEPs which they are having, and try to license all of them to the potential user. In such cases, the dispute arises. Although the European Commission is yet to scrutinise the refusal to license at its component level, it is not clear if such refusal is contrary to FRAND commitment and Article 102 of the treaty of functioning of European Union, as it may amount to discriminatory refusal to deal or lead to excessive royalties.

So, who decides what is a FRAND term? Fair, reasonable and non-discriminatory term may be different in the eyes of the licensee and the licensor. If the agreement is not on FRAND terms then who will decide what is FRAND term and will there be any defined time period under which FRAND term be defined or negotiated? These are the questions which are still unresolved.

There is no official view, whether SEP holder's transfer of SEPs to a *Patent Assertion Entity* or the PAE, may breach EU competition law.

Patent pools, Patent thickets and *Patent portfolio licensing*, all these issue arises out of the SEP context. It may appear simple, that the SEP holder must agree to FRAND terms and conditions, but to reach FRAND terms and condition is very difficult, given the situation that the licensor tries to negotiate for all the SEPs or tries to associate non-SEPs with SEPs, while at the same time the licensee tries to free ride the technology and use it for his benefit.

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• In April 2016 Communication on Standardisation Priorities for the Digital Single Market, the Commission identified three main areas where the SEP licensing environment could be improved:

- opaque information on SEP exposure;
- unclear valuation of patented technologies reading on standards and the definition of FRAND; and
- the risk of uncertainty in enforcement of SEPs.

• In addition, the role of open source communities in the development of standards

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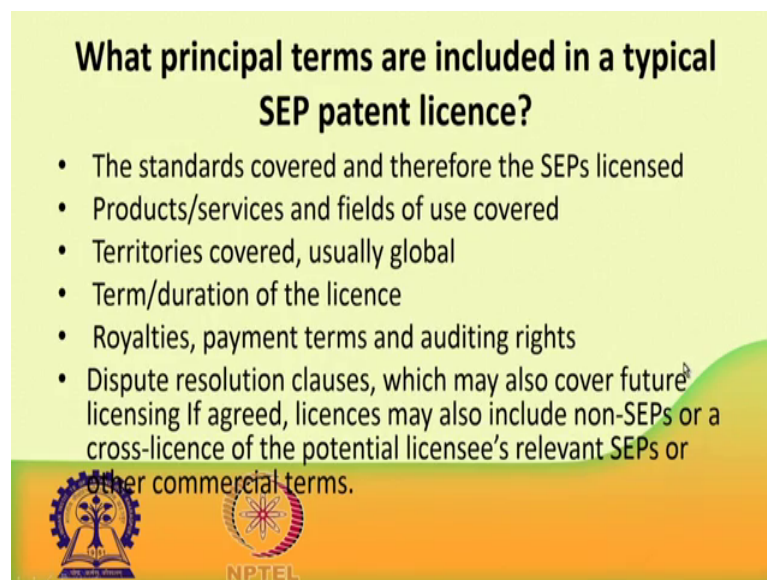
All these led to the recent debates in licensing of SEP technologies. In the month of June 2019, guidelines were set for the use of 5G technologies and other IoT SEPs. Similarly, in April 2016, the communication on the standardisation priority for single digital

market, the commission identified three main areas where the SEP licensing environment could be improved.

First: There should be opaque information on SEP exposure i.e. what is the SEP? Under what conditions the SEP is regarded as a standard or a technical standard? Second: Unclear valuation of the patented technologies reading on the standards and the definition of the FRAND and Third: the risk of uncertainty in the enforcement of SEPs.



In addition to these three criteria, the role of open source communities in the development of standards is also being taken as a major area where more work is required so that the SEP environment can be improved.

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What principal terms are included in a typical SEP patent licence?

- The standards covered and therefore the SEPs licensed
- Products/services and fields of use covered
- Territories covered, usually global
- Term/duration of the licence
- Royalties, payment terms and auditing rights
- Dispute resolution clauses, which may also cover future⁸ licensing If agreed, licences may also include non-SEPs or a cross-licence of the potential licensee's relevant SEPs or other commercial terms.

  NPTEL

In the recent guidelines, they gave certain emphasis on what principal terms are included in a patent SEP license. The license should cover: the standards covered and therefore, the SEPs licensed; product and services and field of use under which field the SEP can be used; what territory should be covered; the term of the license should be dealt; the royalties, payments and auditing rights to whom such rights should be given must be clear in the licensing agreement; the dispute resolution clauses, which may also cover the future licensing agreements if agreed and if both the parties agreed then the inclusion of non-standard essentials patents in the licensing agreement.

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How can the royalty in a SEP licence be structured?

- There is no single rule.
- Common royalty calculation terms - depending on the SEP owner's practices, circumstances and technology - are structured as either a per unit cost, or a percentage of the net selling price of the licensed product or service, or as lump sum payments.
- Equally, a calculation might include a cap or a floor, and the percentage, rate per unit or lump sum costs may be adjusted depending on sales volumes.



One of the main disputes arises in how to set the royalty on FRAND terms in the SEP license. There is no single rule by which a royalty can be decided. There are various common royalty calculation terms depending on the SEPs which the owner practices, or depending on the circumstance of the technology. Royalty is either decided on per unit cost or as a percentage of the net selling price of the licensed product or service or as lump sum payments.

If there are no previously calculated method, any recent examples can be taken in the technology area and may calculate the royalty accordingly. The calculation might include a cap or a floor and the percentage, rate per unit or lump sum cost may be adjusted depending on the total sales volume.

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What is a fair and reasonable licence?

- Methods used by courts can include looking to licences of similarly situated companies and wider economic evidence
- In the absence of such information, evidences a potential licensee can look to publicly available market data to provide some guidance on whether a licence offer is FRAND.
 - Public announcements on royalties by SEP owning companies and patent pools
 - Information on royalties and licensing terms available from court decisions

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The question “what is a fair and reasonable license” was also included in the latest guideline. The courts look into various case laws that have emerged in similarly situated companies. In the absence of such examples the potential licensee can look into the publicly available market data, which can provide a guidance on whether the license offer is on FRAND terms or not. For example, Public announcements on royalties by SEP owning companies, patent pools or information on royalties and licensing terms and available court decisions. There are certain guidelines, which has been provided for licensing of SEP related to 5G and IoT.

The documents will be shared in the link of the video. Please go through the documents. It would give you latest insight into how the guidelines are helping the standard essential patent owners as well as potential licensee. This is a controversial area, and the cases are being decided depending on the merits of the case.

Hope these few examples would give you an idea of SEP. We will discuss more about it in our next sections. We will deal with how the competition rules and intellectual property rights interact in the Indian competition law context.

So, stay tuned for the next module. Thank you.