



Contemplating FRAND Commitments and Standard Essential Patent Enforcement through Judicial Pronouncements in the United States of America, India, and the European Union

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Standard Essential Patents cover the fundamental technologies used with industry standards, whether telecommunication, data transfer, or any other such standards. Thus, owners of SEPs can license only on FRAND terms, leaving market access reasonably open. Yet, the rights of SEP holders will bring very complex compliance issues under the competition law because countries such as India and the European Union have adopted different approaches for enforcing SEPs and the respective FRAND obligations. The EU has a well-established framework for enforcing SEP through the support of competition law and precedents from court judgments such as the *Huawei v ZTE* case, which encourages transparency in licensing arrangements. Through this framework, SEP holders cannot misuse their dominant positions by either collecting extreme royalties or pressuring by injunction without following the terms of FRAND. India, however, has an evolving SEP enforcement framework. Recent judicial decisions around the Delhi High Court indeed reflect a direction towards implementing FRAND commitments, but simultaneously, challenges continue to exist, such as those relating to the over-declaration of non-essential patents and the pre-litigation mechanisms being absent for determining essentiality. This paper analyzes the enforcement of FRAND obligations and SEPs in India and the EU, focusing specifically on their roles within innovation, competition, and access to critical technologies. The EU's mature legal system contrasts with India's developing framework, which is influenced by competition law principles. The paper argues that India must refine its SEP enforcement mechanisms to ensure consistency and clarity in its judicial and regulatory practices. Lately the judicial pronouncements in the USA as well have clarified their stance on compliance with FRAND regulations by the patent holders, especially falling in SEP protection. These decisions have emphasized that deciding the royalty rates in licensing agreements for the SEPs in compliance with FRAND regulations is inherently different from technologies that fall under normal patent protection, as they do not have to comply to meet the FRAND standards. To conclude, the paper advocates for harmonizing SEP enforcement across jurisdictions. A pre-litigation essentiality assessment in India, to start with, and clearer guidelines on SEP licensing based on observed practices in the EU are some of the key proposals in the paper. All these would remove uncertainties from the legalities, ensure fair access to such technology, and drive global innovation.

Keywords: Standard Essential Patents, FRAND, Telecommunication, Licensing, Technology Access

“Standard-essential patents” (SEPs) are critical to any technology that must comply with established standards, such as mobile communications and Wi-Fi, because products cannot be made or sold without using the patented technology. By defining what technologies are indispensable, SEPs both drive technical innovation and open access to global markets. To prevent SEP holders from abusing their market power, they must offer licenses on Fair, Reasonable, and Non-Discriminatory (FRAND) terms. FRAND requires SEP owners to set reasonable royalties and licensing conditions, ensuring that no single patentee can obstruct competition. However, FRAND's precise meaning varies by context, often

causing uncertainty for both patent holders and implementers.

Different jurisdictions interpret and apply FRAND differently. The European Union has developed a cohesive legal framework proportionately anchored in competition law and judicial precedents that resolves conflicts over FRAND and SEP licensing and provides predictability. India is likewise striving for a unified approach: its courts increasingly demand FRAND compliance, but reliance on EU specified terms can create divergence from global consensus. These varying legal regimes in the EU, India, and the United States complicate compliance for multinational companies.

This chapter examines the substantive laws, judicial decisions, and enforcement practices

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governing FRAND obligations and SEPs in the USA, India, and the EU. It analyses how these differences influence worldwide access to advanced technologies, spur or hinder the innovation, and shape competition. In doing so, it clarifies each jurisdiction's legal position on FRAND and SEP enforcement and assesses how well they align when patent rights intersect with standard-setting commitments.

SEP And FRAND Enforcement in The EU

Legal Framework for SEP in the EU

The governance of SEPs in the European Union is based on a somewhat intricate legal structure that includes clauses from EU treaties, rules, directives, and case law. This will undoubtedly strike a balance between encouraging innovation, protecting intellectual property rights, and fostering competitive market dynamics. In order to create the European SEP legal framework, it was based on foundational treaties, directives, and regulations as well as the most recent reforms that came and departed.¹ The governance of SEPs in the European Union is based on a somewhat intricate legal structure that includes clauses from treaties of the European Union, the rules, directives, and the judicial pronouncements. This will definitely strike a balance between encouraging technological advancement and the protection of the intellectual property rights of the owners and aiming to achieve both not at the cost of the licensees of the SEPs and while fostering the competitive market dynamics.²

The EPC 1973

The European Patent Convention was formed as a cohesive framework to offer patent protection to all member states. This signified the initiation of securing patent protection across all member states through a standardized procedure, allowing a single application to be submitted to the European Patent Office (EPO). While the EPC does not encompass SEPs, it has established a legal framework for the protection of inventions that are later determined to be fundamental to technical standards.³ Founded on the ideas of patent law as defined in the European Patent Convention (EPC), Standard Essential Patents (SEPs) are absolutely vital for the use of standardized technologies. Every patent awarded under the EPC shows extraordinary quality in terms of novelty, inventive step, and industrial applicability, therefore laying a basis for EU criteria-based protection of invention.⁴

IPRED 2004/48/EC on Enforcement of Intellectual Property Rights

Another name for the IPRED directive is Directive 2004/48/EC. This directive establishes clauses for civil measures and remedies for intellectual property rights infringement, therefore standardizing intellectual property rights throughout the whole EU. Therefore, it is essential for SEPs and IPRED to let SEP holders successfully defend their rights while also preserving a balance that protects these rights without undulating competition or innovation being much hampered. Moreover, IPRED imposes the proportionality principle, which means that enforcement strategies should match the degree of the infringement and the larger public interest. For SEPs used in standardized products especially, this component is quite relevant.⁵

Regulation (EU) No. 1215/2012 (BRUSSELS 1st RECAST)

The Brussels 1st Recast Legislation addresses jurisdictional concerns in cross-border patent disputes, including those involving SEPs. The directive is the crucial instrument of jurisdiction in EU patent disputes since establishing standards and applying them globally is a concern across all the jurisdictions. In order to increase the regularity and the transparency of litigation, it implements norms that are used to recognize and implement decisions between member states. This rule guarantees that the rights of SEP owners may be used consistently, and it provides implementers with an obvious structure for contesting claims in the concerned jurisdictions.⁶

Articles 101 and 102 of the TFEU

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Patents. Article 101 of TFEU furthers the agenda of competition policy and to prevent it from internal market distortion because of exclusivity that intellectual property rights provide to the owners. So, the rules surrounding SEPs have to consider the idea of not impeding the competition as mandated by Article 101, including exclusive arrangements or territorial limitations.⁸

It is required on parts of the holders of SEPs to declare their patents and consent to license their technology in compliance with FRAND conditions throughout the standard-setting process and they must also comply with Article 102 of TFEU.⁹ The holder of Standard Essential Patents (SEPs) typically occupies a dominant position, as these patents are important for the implementation of technical standards. This encompasses the prevalence of exorbitant royalties, the failure to license SEPs under FRAND conditions, and various forms of licensing discrimination. This would be an abuse under Article 102. Article 102 prohibits SEP proprietors from exploiting their position to the harm of competition and consumers.

Regulation (EU) no. 1025/2012 on European Standardization

It serves as the regulatory framework for development inside Europe under Regulation (EU) No 1025/2012, thereby incorporating organizations that establish standards, which must also adhere to a method of developing these standards that is non-mandatory, transparent, and independent. SEP owners must disclose any patented products throughout the development phase for pertinent patents and present them under licensable conditions based on FRAND principles. The technologies in question are governed by this legislation, which is essential for protecting the advantages of standardization in interoperability and cost-effectiveness from being undermined by restrictive and abusive licensing methods.

Draft Regulation on SEPS (2023)

The recently proposed law on SEPs introduces significant alterations to the licensing and enforcement processes of SEPs, aiming to enhance transparency and equity.

(i) **Compulsory Submission:** All patents shall be owned by the proprietor of the SEP and must be submitted to the EUIPO, including patent numbers, country of registration, and applicable technological standards. It has markedly enhanced openness, enabling implementing parties to more effectively detect and identify the SEPs than previously.

(ii) **Annual Essentiality assessments:** The relevant status for patents selected each year shall be evaluated according to established standards.

(iii) **FRAND Determination Framework:** The notice elucidates a systematic procedure for establishing FRAND conditions that encompass cumulative royalty rates. SEP owners and implementers shall get guidance on a non-binding basis from conciliators.

(iv) **Pragmatic Licensing Practice:** The proposed legislation targets the involvement of S'EP owners in the predatory pricing of their license, which makes it impossible to access on reasonable terms, which ultimately impedes the free and fair competition in the market, resulting in standard products being out of access owing to their high costs. Legislation aims at making the SEP licensing ecosystem fair and transparent, which ultimately benefits all the stakeholders.

Judicial Interpretations and Precedents

The *Samsung v Apple*,¹⁰ is a landmark judgment which establishes the balanced approach between the enforcement of the regulation on SEPs and competition law in the European Union, focusing on the conflicting crossroads of intellectual property rights¹¹ on one hand and FRAND commitments and Article 102 TFEU on the other. In the present case, Samsung initiated a suit to get injunction against Apple for the infringement of standard essential patents (SEPs) concerning UMTS technology, despite the assurance given by Apple to license such Standard Essential patents in compliance with FRAND terms. This case took into consideration the context and the potential injury prone to be caused to the innovation, access to markets, and competition in weighing whether such injunctions against a licensee at will would be an abuse of competition law. The Commission held that stance of Samsung was in contravention of Article 102 TFEU, since threats of injunctions against a willing licensee obviously ensure the fair access to standardized technology.

In addressing these concerns, Samsung has consented to refrain from pursuing an injunction in Europe against licensees negotiating in good faith, thereby instituting a 12-month framework for negotiation and arbitration. This decision advances the notion of good faith in FRAND discussions while simultaneously balancing the rights of SEP holders and implementers. This case will have substantial jurisprudential consequences on SEP jurisprudence and will guarantee that enforcement is accountable for

maintaining competition. It aligns with key rulings such as *Huawei v ZTE*, establishing a foundation for the nuanced equilibrium between innovation and market fairness and providing a framework for future standard essential patent licensing and enforcement.

The case of *Huawei Technologies Co., Ltd. v ZTE Corporation*,¹² is the inaugural major ruling in standard essential patent (SEP) law, wherein the equilibrium between the rights of SEP holders and implementers is methodically organized under the obligations of Fair, Reasonable, and Non-Discriminatory (FRAND) terms. Huawei accused ZTE of violating its 4G-related standard essential patents without authorization, raising the issue of whether pursuing an injunction constitutes an abuse of dominance under Article 102 TFEU. The CJEU instituted a protocol for the parties, delineating the obligation of the SEP holder to notify the alleged infringer of the infringement, extend a FRAND-compliant offer, and engage in good faith negotiations. The purported infringement is required to respond without delay. Counteroffers must also adhere to FRAND principles. Non-compliance may warrant injunctions without violating competition law. This judgment aims to balance the rights of Standard Essential Patent (SEP) holders while preventing anti-competitive practices that hinder innovation and market predictability in SEP licensing. It seeks to deter opportunism through the enforcement of good faith negotiations, disregarding regional limitations within the EU, as its implications extend globally in matters related to SEP and associated jurisprudence in policy formation. This verdict reinforces the notion that FRAND obligations are essential for competition, innovation, patent exclusivity, and public access to standardized technologies, together with equitable licensing policies.

The dynamics of the FRAND duties of SEP conflicts within the linked technologies of the automotive industry are reflected in the case of *Nokia v Daimler AG*,¹³ Nokia claimed that Daimler was using its patented technologies in its cars without a FRAND license since it owned SEPs that were crucial to wireless communication standards. Instead, Daimler contended that the suppliers ought to grant patent licenses. Nokia was granted injunctive relief by the Regional Court of Mannheim, which also confirmed that the company was still in compliance with its FRAND obligations. It brought to light Daimler's lack of good faith in direct negotiations with Nokia because the latter flatly rejected its counteroffer as inadequate for resolving the issue.

Although it argues that implementers cannot avoid direct negotiations by outsourcing licensing to suppliers, it simply reinforces the idea that SEP holders are required to provide FRAND licenses. It provided much-needed direction for complicated supply chain sectors by confirming SEP holders' power to prosecute patents directly against producers of final products, disregarding supplier agreements. Therefore, this judgment establishes a norm for resolving SEP issues in sectors that are characterized by fast innovation and standardization.

In the case of *VoiceAge EVS v HMD Global*,¹⁴ exemplifies the complexities associated with the enforcement of regulation on SEPs and FRAND in licensing agreements within the telecommunications sector. Voice Age has accused HMD of a number of SEPs pertaining to enhanced voice services, and lawsuits have been submitted to the regional courts in Mannheim and Munich. Upon the issuance of a judgment by the Munich Court, the Plaintiff asserted that HMD violated the Voice Age patents and rejected the FRAND defense presented by the defendants. This dismissal was based on the defendants' failure to exhibit a timely, good faith intention to negotiate, as well as their reliance on ambiguous communications with Voice Age, which necessitated delaying tactics on their part and in relation to the broader context.

In April 2024, the European Commission submitted an Amicus Curiae, reiterating the necessity for adherence to the principles established in *Huawei v ZTE*, alongside the imperatives of transparency and procedural equity in the negotiation of FRAND terms. This case has established a precedent in SEP litigation by clarifying that both implementers and SEP holders have a proactive obligation to maintain transparency throughout negotiations. It will establish how mobile makers and other market participants will reliably and effectively handle SEP licensing, and it contains forward-looking criteria of what will be considered acceptable FRAND compliance.

Regulatory Oversight by the European Commission and its Impact on Innovation and Competition

This addressed anti-competitive conduct involving the enforcement of Standard Essential Patent (SEP) requirements by the European Commission under competition law, including additional royalties.¹⁵ Recently, the Commission's proposals encompass the establishment of a register of Standard Essential Patents (SEPs) administered by the EU, with essentiality

assessments performed by the EU Intellectual Property Office to improve SEP licensing transparency, rectify information asymmetry, and guarantee equitable negotiation conditions for licensees. Despite this framework, issues remain, particularly for small enterprises rather than large technology providers. Licensing procedures are intricate and burdensome, and the implementation of enforcement criteria differs among EU member states; these elements result in a disjointed system. Issues of this sort impede access to SEP and produce disparate outcomes.

As a result, there is now legal certainty, and the organized atmosphere that this EU framework provides encourages innovation. Recent regulatory approaches aim to enhance equitable access to the technology in question via transparent and market-driven SEP licenses. This methodology is advantageous for areas like telecommunications and IoT that depend on standardized technologies.¹⁶ Consequently, the EU system fosters equilibrium between innovation and equitable competition in these rapidly evolving industries.

Relationship between SSOs and SEP License

The formulation of a standard generally entails a Standards Setting Organization.¹⁷ Standard Setting Organisations are pertinent as they offer a platform to corporations, colleges, and individuals globally within sectors for cooperation and involvement while formulating and setting up required standards.¹⁸ Standard-Setting Organisations generally assess multiple alternative technologies to ascertain which ones to integrate into a standard. Considering the advantages of standards, SSOs are vital in the advancement of products and technologies. Ultimately, SSOs determine which technological solutions are more likely to be included into widely developed goods.

Similar to the adage among economists that there is no free lunch, the same principle applies to SSOs and standards that they set for the grant of SEPs for the concerned technology. The justification for the same is, the advantages of Standard Settings Organizations setting parameters include possible disadvantages on the competition front in the relevant market. The establishment process of the SSO standard necessitates collaboration among entities that would generally compete, were it not for their participation in the SSO process. Consequently, SSO operations may generate prospective consequences that are unfair to competitors. Typically, membership

to SSO is accessible to all industry players who meet the required criteria, therefore it mitigates the risk of exclusion of any technological solution from the standard review and process to select the technology qualified for SEP protection.

On another front, the concern is about an anticompetitive issue concerning the SSO process, which is related to the implementation of patent rights associated with technology necessary for implementing a standard—commonly known as SEP. When a standard Setting Organisations adopt their required standards, owners of Standard Essential patents take in control decisions about control access to the rights of such standards, enabling them to collect licensing fees that correspond to the standard's resultant value.¹⁹ Once a standard is adopted, the industry becomes committed to the chosen technology, leaving implementers with no option except to licensing the rights of Standard Essential Patents in exchange of royalties that reflect the absence of technological alternatives of the concerned technology and/or the increased market valuation as a result of technology being protected by SEPs, consequently elevating the licensing fees for SEP holders. This mostly non-competitive licensing stance for implementers may raise significant concerns due to the extensive adoption of a selected standard, both nationally and internationally. The extensive adoption allows SEP patent holders to maximize their profits based on market demand, potentially encompassing the valuation given to the standard, due to increased market valuation and the absence of the substitutable alternative technology. Once a standard is established, it does not only excludes previously unadopted technology but also new technologies that emerge post-adoption.

Additionally, manufacturers of products using the standard technology may invest a lot of money in the process of manufacturing the product based on the standard's selection in an anticipation and also as a consequence of its ubiquitous acceptance. This results in a significant sink in costs, which, when combined with the standard's widespread adoption, prevents consumers from pursuing alternative design options available in the market due to its expensive switching cost.²⁰ Higher switching costs may allow holders of SEPs to secure license payments, potentially at royalty rates exceeding those that would exist without the standard's adoption. Consequently, owners of patented technology can gain higher rates of profits in terms of higher royalty rates after market value is committed to a standard, as well as an increase in the

sale of the licenses resulting from extensive standard adoption in exchange for a license for their tech, just because of the fact that their technology is protected under SEP. The situation where, capacity of SEP owners to secure comparatively elevated license fees due to industry players being constrained by a higher industry standard and/or encountering switching costs which is very much significant, is usually known as the "patent hold-up." Broader criteria of a standard and greater the substitution cost to an alternative technology is, the higher the chances are that licensing fees imposed by an owner of the patented technology is going to be higher than imagined.²¹ An SEP holder receiving elevated licensing fees fundamentally signifies the licensee's potential of benefiting from network effects created by the standard for its own benefit. By doing that, holders of SEP may effectively inhibit creators of the said technology and also the customers from realizing the advantages of network effects to its fullest extent. If patent holders successfully impose increased license fees, this escalates the costs for product producers, so partially mitigating the benefits for producers of technology arising from the widespread execution of a standard.²² Moreover, elevated production costs may lead to decreased earnings for the manufacturers, high-end costs for the consumers, and postponed investments by the producers in the items that adhere to the set standard.²³

Recent U.S. Court Decisions on FRAND Standards

Agencies in United States of America have acknowledged licensing SEPs in compliance with FRAND regulations as a strategy to alleviate the potent risk of 'patent hold-up'. The said agencies also acknowledge that specific elements of SSO's procedures supervising the licensing agreements may impede the effectiveness of any commitment made to SSOs to comply with the FRAND terms by the SEP owners. As an example mentioned above, the licensing policies issued by SSO typically lack well-defined criteria for determining which license payments qualify as FRAND. Moreover, patent holders may neglect to adhere to a policy issued by SSO. Noncompliance with the policy issued by SSO on FRAND terms of licensing may occur when a patent holder exploits a negotiating advantage and participates in patent hold-up. Conversely, negotiating parties may justifiably differ over which terms meet the criteria for FRAND. No common authority or methodology exists for determining terms and

conditions for compliance with the FRAND regulations. So far, licensing regulations passed by the SSOs typically lack a clear definition of terms part of the FRAND commitment. Rulings in the past decade from the courts in United States, along with directives from United States authorities, elucidate the criteria to determine the licensing terms for Standard Essential Patents. Several key insights emanating from such recent rulings, pertain to the applicability of FRAND terms and specific prerequisites for securing such terms.

In *Realtek Semiconductor, Corp. v LSI Corp.*,²⁴ the lower court scrutinized FRAND terms in contrast to the assessment of the royalty to be charged and the concerned injunction claims. The patent owner in Realtek provided letters of assurance to the Standard Setting Organization, pledging adherence to the licensing policy of SSO on FRAND terms and conditions. Consequently, court in the Realtek case construed the pledge of compliance with the FRAND standards as a "contract" that imposes a responsibility on the patentee. According to this reasoning, the court in Realtek concluded that, firstly, the requirement was violated owing to a request for an injunction by the SEP owner before ensuring to grant the license in compliance with FRAND terms, and secondly, to adhere to the terms of a contract, the owner of the patent must provide access to the license for the Standard Essential Patents in accordance with the FRAND regulations.

The Federal court recognized required essence of a patentee's FRAND promise to a Standards Setting Organization.²⁵ The Federal Circuit in the Ericsson case clarifies that the obligatory FRAND commitment in licensing agreements is not universal and possibly can "vary from case to case," asserting that owners of the patent are obliged to adhere to unique conditions of FRAND licensing terms detailed in an agreement between the patentee and the Standard Setting Organization in the concerned cases. In the present case, Ericsson adduced that, besides an obligatory character of a FRAND commitment to a Standards Setting Organization, FRAND responsibilities are ambiguous and may differ to an extent among SSOs themselves.

The court in the case of *Commonwealth Scientific and Industrial Research Organisation v Cisco Systems, Inc.*²⁶ examined the distinct situation in which an owner of SEP adhered to the FRAND policy mandated by the SSO only for one given standard and not for the other provided parallel standards. The

court in the present ruling focused its attention on the fact that it is mandatorily required on part of the patentee to be in compliance with the licensing policy issued by SSO due to patentee's submission of a letter of assurance on compliance. In the present case it was specifically said that the promise of assurance to abide by the SSO's guideline by the patentee to be in compliance with FRAND licensing terms and conditions, constitute[s] binding contractual commitments, thereby obligating the holder of the patent to license their technology protected under SEP in compliance with the FRAND terms. Nonetheless, it was concluded that it is not an obligation on the patentee by any licensing promise regarding any modifications or alterations to the standard.

SEP and FRAND Enforcement in India

Legal Framework for SEP in India

In India, the legal framework on Intellectual Property Rights surrounding SEPs is in its initial stage, as it is not mentioned expressly in statutory form in any law. Nevertheless, there are few concepts and policies mentioned in different statutes that fulfil the aim of SEPs and FRAND. Such as:

Under the Patents Act, 1970

According to the Patents Act of 1970: Section 2(1)(j) specifies a "patentable invention" as a novel product or a process that must include inventive steps along with human oversight and is able to be exhausted at an industrial scale. SEPs, being a part of technology protected under patent law exhausted on an industrial scale as part of industry standards, are also subject to legislative restraints. For example, SEPs for telecommunication, 4G, and 5G standards fall under this scope of protection.

Section 84: Section 84 explains the circumstances when the compulsory license can be granted for the patented technology which has not been made available to public in accordance with the mandates of Intellectual property laws. The request for such license can come from an individual and government also can apply for such license. Hence, compulsory licensing can be the significant step in acquiring SEPs on the pattern of FRAND regulations.

Section 140: This section prevents the licensing agreements of patent from imposing unfair restrictive terms and conditions. This includes, but is not limited to terms that are against the ideals of trade or which discourage innovations, and is often in the middle of disputes over SEP licensing and FRAND compliance.

The Competition Act, 2002

The Competition Act, 2002 was enacted to deal with anti-competitive practices, including the abuse of dominance and anti-competitive agreements of trade in respect of Standard Essential Patents (SEPs).

Section 4: Section 4 speaks about abuse of dominant position. SEP holders evidently have an edge in the relevant competitive market over other players because of the inherent exclusive ownership that is provided by the patent. This exclusivity is prone to promoting practices such as increased royalty rates, wilful refusal to license on FRAND terms, or unfair terms and conditions in the license agreement. The *Ericsson v Micromax*²⁷ case raised a pertinent question regarding the connection between protection under standard essential patents and charges of excessive royalty rates.

Section 3 addresses anti-competitive agreements. Restrictive agreements by way of licensing only or requiring access to standard essential patents with no alternative, are likely to breach this rule.

Judicial Interpretations and Precedents in India

India is still in its primitive stages of developing law around SEPs, which gives Indian market a wide playing field to learn from past bad and good practices from other concerned jurisdictions, although different case laws highlight the emphasis on compliance with FRAND terms. In the case of *Ericsson v Lava*²⁷, the Delhi High Court emphasized the fact that the owners of SEP must exhibit bona fide efforts to provide the licenses in compliance with the FRAND terms before they seek injunctions against the licensee. This decision is in consonance with the EU's *Huawei v ZTE*²⁸ in principle, and it is a step further, indicating towards progressive advancement in India's SEP jurisprudence.

There appears to be no well-defined process for evaluating the significance of a patent in a manner that would not impose substantial pressure on the licensing of standard essential patents and legal conflicts.²⁹ Indian courts have markedly delineated the parameters of FRAND duties. Examples include *Ericsson v Intex Technologies*,³⁰ in which the Delhi High Court stated that SEP holders are required to negotiate in good faith prior to seeking injunctive action. The rulings determined that a unilateral strategy by SEP holders to impose licensing terms without authentic negotiations on FRAND conditions contravenes the norms of equitable treatment. This decision aligns with worldwide best practices,

*exemplified by the European Union, where injunctions are considered only following good faith discussions. A significant ruling was issued in Micromax v Ericsson,*³¹ the determinations of royalty rates were scrutinized. This ruling said that royalty rates must be established based on analogous licenses that reflect prevailing market conditions. This verdict implies that royalties must not inhibit competition or hinder access to vital technologies. A balanced strategy for patent monetization was embraced.

Challenges in the Regulatory Framework

The ongoing enforceability of SEP is a problem in India that makes its legal systems less predictable and clear:

Over-Declaration of Patents: Indian SEP holders occasionally declare non-essential patents important, which compromises the integrity of standard-setting by resulting in inflated fees, exploitative licensing practices, and market distortion.³²

Absence of Pre-Litigation Mechanisms: Disputes in India are escalated straight to litigation because there are no institutional frameworks in place to conduct an early evaluation of SEP essentiality. In addition to raising litigation expenses and delaying conflict settlement, this most likely creates legal ambiguity.

Judicial Discretion over Injunctions: With the trend in *Ericsson v Lava*³³, judges' opinions on issuing an injunction in SEP dispute cases are, at best, completely contradictory. Such contradiction creates ambiguous legal precedents among stakeholders and leads to questionable enforcement outcomes.

Implications for Stakeholders

The vague nature of standards and analogous practices indirectly facilitates forum shopping, rendering SEP conflict litigation uncertain. This uncertainty may deter investment and postpone innovation in the Indian market. Ambiguity regarding the implementation of FRAND provisions hinders new entrants and discourages research and development. A definitive licensing system and an essentiality assessment would reduce risks for prospective licensees. Pre-litigation alternatives in India are limited, resulting in protracted and costly SEP battles that hinder access to essential technology and escalate consumer expenses.

Increasingly, judicial decisions are whittling down the under FRAND obligations of SEP owners in a bid for consistency and predictability in the legal landscape. Even amid those issues, stakeholders have

put forth the regulation of the over-declaration control and transparency on certain Standard Essential Patents (SEPs) as FRAND licensing.³⁴ This could make the SEP market in India fairer, more principled, and efficient for enforcement.

Comparative Analysis of SEP and FRAND Enforcement

This comparative analysis of the enforcement regimes for Standard Essential Patents in the European Union and India emphasizes certain differences that have an impact on the predictability, transparency, and consistency of SEP licensing and litigation with respect to these issues. Divergences in regulatory governance and institutional frameworks, exacerbated by judicial practices, significantly influence each region's capacity to implement its strategy regarding SEPs and FRAND duties successfully.

Established Framework v Fragmented Approach

The enforcement mechanism of Standard Essential Patents (SEP) in the EU is fundamentally based on competition law, reinforced by judicial precedent for SEP holders and those who implement it. In the case of *Huawei v ZTE*³⁵ it was discussed that the enforcement mechanism for Standard Essential Patents (SEPs) in the EU is fundamentally based on competition law, reinforced by judicial precedents for SEP holders and implementers. The case of *Huawei v ZTE* is a fundamental element in EU jurisprudence that establishes specific prerequisites for discussions. It compels SEP holders to negotiate in good faith regarding FRAND terms prior to seeking injunctions, so providing a balanced approach that prevents the exploitation of SEPs while maintaining competitive dynamics. Nevertheless, India lacks a cohesive structure resulting in fragmented SEP enforcement. In *Ericsson v. Lava*,³⁶ the Delhi High Court provides a favorable perspective on the acknowledgment of FRAND promises in India, while simultaneously delineating the potential for implementing more stringent criteria on patent essentiality and uniform requirements for injunctions. Such alternatives, however, introduce significant legal ambiguity and complicate SEP licensing and litigation.³⁷

Regulatory Oversight and Institutional Mechanisms

The case of *Huawei v ZTE* is a fundamental element in EU jurisprudence that establishes specific standards for talks. It compels SEP holders to negotiate in good

faith regarding the enforcement mechanism of Standard Essential Patents (SEP) in the EU, which is fundamentally based on competition law, reinforced by judicial precedent for SEP holders and those who Implement it. In the case of *Huawei v ZTE*, the vigilant surveillance of the European Commission regarding compliance with Standard Essential Patents (SEPs) will not yield benefits for the EU in preventing abusive practices by SEP holders. The commission may impose penalties on abusive licensing practices, such as excessive royalty demands or injunctions pursued without any FRAND negotiations, based on its enforcement power of investigation. Regulatory involvement ensures equitable practices regarding standard essential patents (SEPs). In contrast, India lacks a similar institutional framework for the regulation of Standard Essential Patents (SEPs), particularly regarding pre-litigation assessments of essentiality. Consequently, initiating such a lawsuit incurs significant costs, and the resolution process is protracted. The lack of oversight contributes to legal ambiguity, imposing financial burdens on both implementers and SEP holders.

Patent Essentiality Challenges

Recent EU proposals will enhance SEP openness by establishing a competence center at the EUIPO focused on essentiality examinations and guidance regarding FRAND terms.³⁸ This endeavour diminishes knowledge asymmetry and fosters a more equitable environment within the SEP ecosystem. Ultimately, India's issue lies in the designation of certain patents as Standard Essential Patents (SEPs) when they are not, in fact, essential. These enable SEP holders to use market power and engage in anti-competitive practices.³⁹ The practice pattern compromises the integrity of standard-setting procedures, thereby impacting market entrance and equitable competition. Standard-setting organizations in the European Union, such as ETSI, actively implement a mechanism for thorough examination to mitigate over-declarations.

Judicial Discretion and Inconsistency

The EU regulation offers considerable predictability, with established precedents directing decisions on SEP-related matters. Consistency in this context facilitates effective license talks by balancing the rights granted to SEP holders with the demands of market competitiveness.⁸ Predictability in judicial results fosters an environment conducive to innovation while mitigating unfair competition by assuring adequate compensation for patent holders. In

contrast, Indian courts are progressively and convincingly acknowledging FRAND commitments; the standard criterion for granting an injunction is not established, resulting in varying judicial interpretations. For instance, some dispute the entitlement of a SEP holder to secure an injunction for not providing a reasonable license.

Implications for stakeholders

The disparities in SEP enforcement frameworks have significant implications for several stakeholders:

For Implementers: The EU framework provides predictability, allowing implementers to engage in SEP licensing with much reduced risk of legal uncertainties.

For SEP Holders: In the EU, established jurisprudence offers a reliable and rule-based framework for the enforcement of SEP rights, preventing potential abuse. No such criteria have been created in India, rendering litigation expensive and unpredictable for licensing.

For Multinational firms: The uncertainty surrounding enforcement by Indian firms may exacerbate risk, typified by the potential for forum shopping. Investment influx or expansion in the Indian technology business may be hindered by the revelation of vulnerabilities within an unreliable enforcement system.

Conclusion

Consequently, the current enforcement environment in India would be greatly enhanced by a prelitigation procedure or regulatory body for SEP declarations and FRAND duties. This would effectively resolve disputes over the relevant patent before escalating into expensive litigation, hence establishing a more transparent environment for dialogue between SEP holders and those who implement it. This seems to offer essential clarification, enabling a clearer understanding of the legal content and implications of FRAND conditions and responsibilities related to SEPs, hence reducing legal confusion for both parties. The integration of European Union norms with the principles established in *Huawei v. ZTE* would significantly strengthen India's framework for the enforcement of Standard Essential Patents (SEPs). This will prevent patent owners from exploiting their rights to obtain excessive royalties or hinder market competition, so rendering the licensing of SEPs in India more equitable and effective.

The prevalent rationale for intellectual property law is that inventions require adequate protection to ensure

inventors receive compensation for their creations, thereby fostering innovation. Nonetheless, the promotion of ideas and creativity does not warrant, nor necessitate, compensating patent holders above the intrinsic cost of the patented technology that the IP law intends to protect. In the absence of FRAND terms, the value derived from network effects will accrue to holders of standard-essential patents (SEPs). Appropriate FRAND terms that prevent SEP holders from capitalizing on network effects can yet maintain an optimal return for innovators, grounded in the technology itself. In other words, SEP holders do not need to extract the value of network effects to effectively incentivize innovation. Any value derived from standardization through efforts put collectively during the process of SSO might eventually reside in an open domain accessible by all.

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