



# Jus Corpus Law Journal

Open Access Law Journal – Copyright © 2025 – ISSN 2582-7820

Editor-in-Chief – Prof. (Dr.) Rhishikesh Dave; Publisher – Ayush Pandey

This is an Open Access article distributed under the terms of the Creative Commons Attribution-Non-Commercial-Share Alike 4.0 International (CC-BY-NC-SA 4.0) License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium provided the original work is properly cited.

---

## Standard Essential Patents: Addressing Innovation, Fair Competition, and Legal Complexities

Bhanusshre S<sup>a</sup>

<sup>a</sup>Symbiosis Law School, Hyderabad, India

*Received* 03 December 2024; *Accepted* 04 January 2025; *Published* 07 January 2025

---

*Technological advancements rely heavily on the standardization of critical components, safeguarded by Standard Essential Patents (SEPs). These patents are integral to ensuring interoperability across devices and systems, driving innovation in industries such as telecommunications and electronics. This widely recognized ‘standard’ in any field is a fundamental and concurrent element in making a product commercially competitive and viable. Governed by Fair, Reasonable, and Non-Discriminatory (FRAND) terms, SEPs strike a balance between rewarding patent holders and preventing anti-competitive practices. Despite this, challenges like excessive royalties, patent hold-ups, and transparency issues persist. Globally, frameworks in the U.S. and EU prioritize adherence to FRAND obligations, promoting transparency and limiting injunctions against willing licensees. India, though a growing hub for technology, lacks dedicated SEP provisions, leading to ambiguities and disputes. This paper provides a detailed analysis of SEPs and FRAND principles, examining their significance, challenges, and global best practices in their governance. It also highlights the need for India to develop a robust SEP framework, incorporating mandatory disclosure requirements, transparent licensing procedures, and a publicly accessible patent database. By adopting these measures, India can create a fair and innovation-driven ecosystem, effectively addressing SEP-related disputes and fostering healthy competition.*

**Keywords:** *standard essential patents, frand, patent, standard.*

## INTRODUCTION

Technological standards serve as the foundation for innovation and global collaboration in today's world. These standards ensure the smooth operation of various systems and devices that facilitate compatibility and improved user experiences. At the heart of these standards lie **Standard Essential Patents** – intellectual property rights that protect technologies indispensable for implementing these standards. To put it simply, when you use a smartphone to connect to a 5G network, the device must follow specific technical standards to ensure conformity. The technologies required to meet these standards are protected by patents held by various companies called Standard Essential Patents (hereinafter referred to as 'SEPs'). Manufacturers like Apple and Samsung must obtain licenses for these SEPs to meet the 5G standards and connect seamlessly to 5G networks.

Some patents have become essential in the industry, making it compulsory for other companies to design their products to align with these established standards. These standards are registered in the form of SEPs. These patents prohibit the manufacturers from misusing patented technology that is standard without proper authorization. The main objective of standardization is to balance patent holders' monopoly over technology-driven products with the rights of licensees who utilize these products. In return, these licensees must pay royalties for their use.

A laptop, for instance, must adhere to a vast array of standards, often requiring the incorporation of patented technologies. However, much like a builder who purchases bricks rather than manufacturing them, the same principle applies to the technological components that make up any product. SEPs typically safeguard these critical technological elements.<sup>1</sup>

## WHAT TYPES OF PATENTS ARE CLASSIFIED AS ESSENTIAL UNDER SEPS?

A patent becomes essential under a SEP when it claims an invention that is mandatory to comply with a technical standard set by recognized standardization organizations like IEEE, ETSI, etc, which come under the purview of Standard Setting Organizations (SSO). They evaluate its

---

<sup>1</sup> Prashant Siwal and Ashwini, 'An Introduction to Standard Essential Patents Part -III' (2023) 28(3) Journal of Intellectual Property Rights <<https://doi.org/10.56042/jipr.v28i3.1269>> accessed 27 November 2024

essentiality and whether the standard is mandatory to practise. It plays a critical role, particularly in industries such as telecommunications, electronics and software. A distinctive characteristic of this patent is that there is no viable alternative to implementing the standard without using the patented technology.

SEPs are vital for ensuring interconnectivity, fair competition and innovation. By safeguarding essential technologies, SEPs enable devices and services from different manufacturers to work together seamlessly. The FRAND (Fair, Reasonable, and Non-Discriminatory) licensing framework ensures that SEP holders are compensated fairly while maintaining accessible technology for all implementers. SEPs reduce legal barriers, encourage global cooperation, and protect R&D investments, driving technological advancement and providing consumers with better products.

### **HOW DO SEPS WORK?**

It begins with representatives from various industries convening under Standard-Setting Organizations. These SSOs are responsible for formulating technical specifications for a standard. During this process, participating companies often commit to licensing their patented technologies under Fair, Reasonable, and Non-Discriminatory (FRAND) terms.

Once a standard is established, any entity wishing to produce standard-compliant products that utilize one or more SEPs must negotiate licensing terms with the SEP holders, which typically result in a licensing agreement formalized under FRAND terms. SEPs play a significant role in the technologies underpinning various standards set by SSOs. For instance, the European Telecommunications Standards Institute (ETSI) has over 155,000 declared SEPs. Standards like GSM and 3G/UMTS, developed by ETSI, are linked to more than 23,500 SEPs. Adherence to these standards is mandatory for nearly all European smartphones and tablets.<sup>2</sup>

To ensure transparency, SSOs' intellectual property rights policies require patent holders to disclose any patents they believe to be essential to the standards. However, SSOs do not verify the accuracy of these crucial claims. This has led to a phenomenon known as 'over-declaration,'

---

<sup>2</sup> *Ibid*

where patents are labelled as critical even when they may not strictly meet the criteria. While disclosures referencing specific technological requirements of standards provide some indication of essentiality, current declaration methods do not consistently yield accurate information regarding the true status of claimed SEPs.

### **FRAND: A PATH TO FAIR PLAY**

Licensing patents are essential to the industry standards and significantly impact the companies' willingness to invest in standardization activities. However, the exclusive rights granted by patents to the inventors may undermine the purpose of making standards accessible to all for public use. In order to address this issue, most SSOs have established IPR policies that require their members to license SEPs on Fair, Reasonable, and Non- Discriminatory (FRAND) terms. It is a licensing commitment. These commitments aim to safeguard the interests of technology implementers while also ensuring patent holders are fairly compensated for their research and development investments.<sup>3</sup>

**Fair:** Licensing terms must not be exploitative and should reflect the value of the technology.

**Reasonable:** Royalties should align with the contribution of the SEP to the overall standard, avoiding excessive demands.

**Non-discriminatory:** SEP holders must offer licenses on equal terms to all interested parties, ensuring a level playing field.

FRAND aims to prevent patent owners from exploiting the core value of their assets for unfair financial gain or leveraging their position for undue advantage. It ensures that intellectual property holders address standardization challenges posed by technologies in a structured and balanced manner. Licensing a SEP under FRAND terms represents a collaborative agreement between the Standard Setting Organization (SSO) and the SEP owner, promoting equitable access and fair compensation.

---

<sup>3</sup> *Ibid*

A major reason for the need for FRAND is due to the issue of patent hold-ups. Patent hold-up arises when a patent holder exploits its position by demanding excessive royalties or imposing unreasonable licensing conditions after the patented technology has been incorporated into an industry standard. This exploitation occurs because once a technology becomes essential to a standard, companies adhering to that standard have no practical alternative but to use the patented technology. This can lead to inflated costs for manufacturers and consumers, hinder innovation, and create barriers to market entry.<sup>4</sup>

To counteract the risk of patent hold-ups, most SSOs require patent holders to commit to licensing their SEPs on FRAND terms. Additionally, patent holders make unimaginable demands on the licensees by threatening to use injunctions. FRAND helps prevent such exploitation and misuse by patent holders.

## **CROSS-LICENSING AND PATENT POOLING**

Cross-licensing and patent pooling are strategies used to manage SEPs that are necessary for complying with technical standards. Cross-licensing is an agreement between two or more patent holders to grant each other rights to use their respective patents. It is pertinent to note that in the context of SEPs, it helps avoid litigation and the burden of negotiating for separate licenses for each patent. To understand it better, a company holding essential patents for 4G or 5G technologies in the telecommunications industry might cross-license its patents with other companies holding complementary technologies. This mutual exchange ensures that both parties have access to the technologies they need to implement a standard without the fear of patent infringement lawsuits.

Patent pooling involves the combination of patents from multiple holders into a single entity or pool. This pool then offers a consolidated license to third parties who need access to the pooled patents in order to comply with a specific technical standard. In a patent pool, a collection of SEPs related to a particular standard is aggregated into a single licensing arrangement. Licensees

---

<sup>4</sup> Jorge L. Contreras, 'A Research Agenda for Standards-Essential Patents' in Enrico Bonadio and Noam Shemtov (eds), *A Research Agenda for Patent Law* (S.J. Quinney College of Law 2024)

can then obtain a license to all the patents in the pool through a single negotiation, streamlining the process of obtaining all necessary patents.

## SEPs AND COMPETITION LAW

Generally, competition or anti-trust laws do not interfere with intellectual property rights, as innovation plays a key role in boosting competition. However, once a company secures IPR protection for its technology, competition laws do not mandate that the patent be widely utilized or prevent the patent holder from charging high royalty fees. The success of FRAND terms in preventing exploitation relies on their enforceability. SSOs often raise competition concerns since they involve agreements between competitors on product specifications, which overlap with IPR issues. Essential Patents, however, are treated differently due to their crucial role in industry standards. Competition authorities ensure these patents are not exploited to unfairly dominate the market, such as by charging exorbitant royalties. FRAND commitments address this by ensuring essential patents are accessible to others on fair terms, creating a balanced and beneficial solution that promotes industry development while maintaining healthy competition.

## THE INDIAN PERSPECTIVE

The Indian intellectual property landscape saw a significant shift in 2011 when Ericsson raised concerns over the importation of mobile phones by Kingtech Electronics (India), claiming that the devices violated several of their SEPs related to AMR Codec (Adaptive Multi-Rate) technology. This marked the beginning of SEP-related litigation in India. However, within the Indian legal framework, the Patents Act does not have any specific provisions addressing SEPs, and there are no distinct procedural requirements or conditions that must be followed in relation to them.

SEPs are a relatively new concept in India, first gaining prominence in the case of *Micromax Informatics Limited v Telefonaktiebolaget LM Ericsson*<sup>5</sup>. In this case, Micromax complained with the Competition Commission of India (CCI), alleging that Ericsson was abusing its dominant market position by charging exorbitant royalties for its SEPs. This, according to

---

<sup>5</sup> *Micromax Informatics Limited v Telefonaktiebolaget LM Ericsson* (2019) AIRONLINE Del 2502

Micromax, constituted a violation of the Competition Act, 2002 due to the imposition of unfair and discriminatory licensing terms.

In this case, it was clear that Ericsson’s conduct was both discriminatory and violated FRAND terms. The matter was brought before the High Court, focusing on the alleged infringement of intellectual property rights. Additionally, Ericsson argued that the Competition Commission of India (CCI) had no authority to address the issue. According to § 3(5) of the Competition Act, 2002<sup>6</sup>, a person’s intellectual property rights are safeguarded under reasonable conditions. § 4(1) of the Act<sup>7</sup> prohibits the abuse of dominant market positions, and § 4(2)<sup>8</sup> deems unfair or discriminatory terms in transactions as an abuse of dominance. Therefore, the Commission holds the jurisdiction to examine competition law violations.<sup>9</sup>

Similar to the decision held in Micromax,<sup>10</sup> in the case of *iBall V Telefonaktiebolaget L.M. Ericsson (Publ) And Ericsson India Private Limited*<sup>11</sup>, iBall, an Indian IT and electronics company, complained Ericsson under § 19(1)(a) of the Competition Act 2002<sup>12</sup>. iBall claimed that Ericsson accused it of patent infringement and imposed stringent conditions, including a Non-Disclosure Agreement (NDA), without providing details of the patents. Ericsson demanded excessive royalties that were not aligned with the actual cost of the technology, violating FRAND terms and § 4 of the Competition Act<sup>13</sup>. The Competition Commission of India ruled that Ericsson’s actions were discriminatory and constituted an abuse of dominance.

***Telefonaktiebolaget LM Ericsson v Intex Technology (India) Limited*<sup>14</sup>**

In this case, the Delhi High Court imposed an injunction on Intex, requiring it to pay royalties to Ericsson. Ericsson claimed that Intex violated eight SEPs and did not obtain a license. Intex countered, asserting it was unaware of the patent portfolio and disputed the injunction,

---

<sup>6</sup> Competition Act 2002, s 3(5)

<sup>7</sup> Competition Act 2002, s 4(1)

<sup>8</sup> Competition Act 2002, s 4(2)

<sup>9</sup> *Ibid*

<sup>10</sup> Contreras (n 4)

<sup>11</sup> *Best IT World (India) Private Limited v Telefonaktiebolaget L.M. Ericsson* (2015) SCC OnLine CCI 76

<sup>12</sup> Competition Act 2002, s 19(1)(a)

<sup>13</sup> Competition Act 2002, s 4

<sup>14</sup> *Telefonaktiebolaget LM Ericsson v Intex Technology (India) Limited* (2015) SCC OnLine CCI 76

referencing a Supreme Court ruling that patents are not presumed valid just because they are granted. Intex also argued that Ericsson failed to disclose full information, violating § 8 of the Patent Act<sup>15</sup>.

The court found that Intex avoided entering into a FRAND agreement and infringed Ericsson's patents. It was decided that statutory rights cannot be negated until the patents' validity is determined. The injunction was granted to Ericsson, as failure to pay royalties or agree to FRAND terms would harm other licensors, resulting in irreparable loss for Ericsson.

## GLOBAL PRACTICES IN SEP FRAMEWORKS

### USA -

A 4-factor test for granting injunctive relief was set out in *eBay Inc. v MercExchange*:<sup>16</sup>

- (1) the plaintiff must prove irreparable harm,
- (2) monetary damages are inadequate,
- (3) the balance of hardships favours the plaintiff, and
- (4) granting the injunction would not harm the public interest. However, in *Apple v Motorola*<sup>17</sup>, the court found it difficult for plaintiffs to prove irreparable harm, indicating that injunctions may not always be appropriate in patent cases.

U.S. courts have adopted a careful approach when granting injunctions in patent infringement disputes, particularly regarding SEPs. Injunctions are usually only issued if the infringer refuses to accept a FRAND license. In cases like *Motorola Mobility Inc. v Google Inc*<sup>18</sup>, the Federal Trade Commission (FTC) has stepped in to enforce compliance with FRAND terms, and licensees who hinder or refuse negotiations may face injunctions, as seen in *Apple*.<sup>19</sup>

---

<sup>15</sup> Patent Act 1970, s 8

<sup>16</sup> *eBay Inc. et al. v MercExchange, L.L.C* [2006] 547 US 388

<sup>17</sup> *Apple Inc. v Motorola, Inc* [2014] 757 F.3d 1286

<sup>18</sup> *Ibid*

<sup>19</sup> *eBay Inc. et al. v MercExchange, L.L.C* [2006] 547 U.S. 388



In *Microsoft Corp. v Motorola, Inc.*<sup>20</sup>, the court ruled that an injunction granted in one country could not be enforced in another, opting instead to award damages. Similarly, in *CSIRO v Cisco Systems*<sup>21</sup> and *Ericsson v D-Link*<sup>22</sup>, courts required substantial evidence to prove claims of patent hold-up or excessive royalties, rejecting vague assertions.

### European Union -

The European Union shares a viewpoint similar to that of the United States regarding the granting of injunction relief to patent holders, even when the licensees accept FRAND terms. In the *Huawei v ZTE*<sup>23</sup> case, the Court of Justice of the European Union (CJEU) outlined rules for disputes involving SEPs. The court decided that licensees complying with FRAND terms should be prioritized over patent holders requesting injunctions. According to Article 102 of the Treaty on the Functioning of the European Union<sup>24</sup> (TFEU), SEP holders must not misuse their dominant position and must grant licenses under Fair, Reasonable, and Non-Discriminatory (FRAND) terms. If either party violates these conditions or acts in bad faith, an injunction may be granted.

The court also required that SEP holders must first notify the potential licensee of the infringement and offer the FRAND terms. If discussions fail, the licensee can seek judicial intervention to determine a FRAND rate. The ruling clarified that offering FRAND terms does not diminish the SEP holder's rights but creates certain duties before seeking injunctions. While the EU generally opposes anticompetitive injunctions, some EU countries, such as Germany, have patent-friendly laws that have a significant impact on global SEP practices.

### KEY TAKEAWAYS

**1. Strict Adherence to FRAND terms:** Drawing inspiration from the EU and US, wherein injunctions are denied usually unless there is a clear refusal to negotiate or offer a license, courts

<sup>20</sup> *Microsoft Corp. v Motorola, Inc.* [2012] 696 F.3d 872

<sup>21</sup> *Commonwealth Science and Industry Research Organisation (CSIRO) v Cisco Systems* [2015] Slip Op. 2015-1066

<sup>22</sup> *Ericsson, Inc. v D-Link Systems, Inc.* [2014] 773 F. 3d 120

<sup>23</sup> *Huawei Technologies Co. Ltd. v ZTE Corp., ZTE Deutschland GmbH* [2015] Case No C-170/13

<sup>24</sup> Treaty on the Functioning of the European Union 1958, art 102

and regulatory bodies in India, such as CCI, should ensure patentees are held to their commitments.

2. In India, cases like *iBall*<sup>25</sup> and *Intex*<sup>26</sup> have shown that lack of transparency can lead to disputes and abuse of dominant positions. Mandatory disclosure requirements must be implemented for SEP holders when seeking injunctions or royalty payments, similar to the EU's approach, ensuring that patentees transparently share their patent portfolios and the basis for their royalty demands.

3. India's lack of specific provisions regarding SEPs under the Patents Act leaves ambiguity. Dedicated provisions need to be introduced to address SEPs and FRAND terms, which outline clear definitions, rights, penalties and guidelines, ensuring clarity in enforcement and resolving patent disputes efficiently. The framework should include explicit procedures for licensing, royalty rates, and the enforcement of FRAND obligations.

4. All SEP holders should be mandated to register their patents and licensing terms on a publicly accessible database.

## CONCLUSION

In conclusion, SEPs are pivotal in enabling global innovation and interconnectivity across industries. The principles of FRAND ensure a balanced approach, fostering fair competition and preventing patent hold-up abuses. However, the complex dynamics of SEP-related disputes highlight the need for clear legal frameworks to prevent exploitation, particularly in emerging markets like India. The Indian legal system must adopt best practices from global jurisdictions, such as mandatory SEP disclosure and transparency in royalty demands, to safeguard against abusive practices. Further, introducing dedicated provisions under the Patents Act addressing SEPs and FRAND obligations would provide much-needed clarity and legal certainty. As India

---

<sup>25</sup> Contreras (n 4)

<sup>26</sup> Competition Act 2002, s 4

continues to witness SEP-related litigation, a robust and transparent legal structure will help protect both innovation and competition, driving equitable technological advancement.