



FRAND Licensing and Standards-Essential Patents: Concocting for Impending Technologies

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	<i>Abstract</i> Engineering of innumerable advancement in telecommunications placed India at a plinth of one of the largest telecommunication markets. In essence, most of these ingenuities pivot around a strong information, communication technology (“ITC”) platform; therefore, at the juncture of business and innovation Intellectual Property Rights (“IPR”) has a perilous role to play. Specifically, the success of India’s national development aspirations will depend on a court system and the competition Commission of India (“CCI”) to set enforcement standards and guidelines across the Intellectual Property Rights (“IPR”) regime associated with those initiatives. In this section we review decisions by Indian courts to explore emergence of any trends or standards of review. Specifically, this paper explores how Indian courts have approached the Fair Reasonable and Non-Discriminatory (“FRAND”) terms to adjudicate disputes arising from standard-essential patents (“SEPs”). Further, the paper compares and contrasts court decisions on disputes arising from SEP licensing under FRAND terms across various international jurisdictions to set a benchmark for considerations by Indian legal experts. The work outlines the multidimensional nature of IPR in relation to licensing SEPs which presents not only legal issues but also business, technology and associated government policy issues.
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One of the major and most impactful economic development initiatives of India is digital technology (“DT”). The DT environment includes the global information, communication technology (“ITC”) market which is one of the fastest growing and changing industries because of continuous innovation taking place at exponential pace. Collectively, the rate of technological change in biotechnology, communication, robotics, information systems, nano technology and energy systems is fueled by advances in ITC which in turn is enabled by computing power per unit cost which is doubling about every 18 months. In these dynamically changing technology sectors, connectivity in processing, sensing, storage and software is advancing the world’s internet and telephony capabilities. Data is merging with these industries and various technologies. All businesses have become computable and nearly an infinite amount of information is being transmitted at ever decreasing cost. In this fast growing, highly competitive sector of the global economy, there are huge advances in innovation covered by heterogenous intellectual property rights (“IPRs”).

Most of the current IPR or ownership of intellectual property (“IP”) in these technologies involves several thousands of patents that cover various aspects of technologies which typically need to be combined to build a product or service. Essentially, the ITC market is a network system of goods and services. For example, some of the prominent segments of the telecommunication industry include long-distance carriers, wireless communications, domestic and international telecom services, communications equipment, processing systems and products, and data storage and management. Further, as artificial intelligence (“AI”), augmented reality (“AR”), virtual reality (“VR”), big data (“BD”), quantum computing (“QC”), internet of things (“IOT”) and robotics (“BOT”) become ubiquitous, the complexity of communications across these technologies would involve several IP from various IPR holders.

To be effective and economically advantageous, these emerging new technologies and their interface features require “network interoperability”, “compatibility of goods, services and applications”, “Interworking modules and ability to host multi-operator environments”. This means that to efficiently exploit the diverse innovation across multiple sectors of these technologies, there is a need to set standards or protocols for interoperability as well as a process by which IP-licensing is enabled among the various IPR holders. Further, globally interoperable system bridges the gap between the innumerable regulation and national protocols for all international transactions and businesses. More than ever, this global reality compels most of the emerging technologies, products and services to conform with standards and proprieties for unified interoperability with one another. Setting these standards is primarily the responsibility of standard setting organizations (“SSOs”). Standard setting organization has frolicked a protagonist to endorse and ease the standards as well as the licences between the holder of an Intellectual Property and its implementers

“Generally, SSOs function as facilitators for a certain industry by bringing together SEP holders and members in their industry network. In this role, SSOs are neutral intermediaries between SEP holders and implementers by setting standards, policies and procedures which are acceptable to all the participants. Since SSO are a business, they compete in recruiting innovators with SEP’s and try to build influence across the industry they serve. Indirectly, SSOs enable standardization to be implemented in an industry by facilitating innovations which are selected to be standards. While there are no uniform processes and standards governing SSOs, there is, however, a common objective for SSOs to support market efficiency by connecting SEP owners and implementers. Therefore, SSOs are an important agency to enhance technology transfer and licensing terms.” Consumers and Market has been benefited sequentially; as fair, reasonable and nondiscriminatory (“FRAND”) terms as guidelines for licensing of SEP’s is being adapted by the SSO’s. The FRAND terms are “non-specific and allow a range of bargaining positions to both parties”. This has made the FRAND terms a target for academic and legal scrutiny.

Global SEP Owner V. Local SEP Implementer

Indian courts are developing a precedence for review of various legal disputes arising from Standard Essential Patents (“SEP”). The “Ericsson V Micromax” litigation is perhaps the most significant case to date that has been adjudicated in India. In that case, Ericsson brought a suit against Micromax “for infringement of its patents related to SEPs issued in India”. While there were initial discussions and apparent understanding for licensing the SEPs under fair Reasonable and Nondiscriminatory (“FRAND”) license terms, no payments were made to Ericsson. Ericsson filed a law suit with the Delhi High Court. The court granted an injunctive relief to Ericsson and ordered Micromax to pay royalties. The New Delhi High Court decided the royalty rate by using a comparative review of 26 licenses which Ericsson has granted in India.

The specifics of the “Ericsson V Micromax” case is as follows:

“In March 2013, Ericsson brought a suit against Micromax, an Indian supplier of mobile devices, for infringement of its eight patents related to 2G and 3G SEPs registered in India. The suit asked for damages and a permanent injunction against Micromax. According to the court documents, Ericsson initiated licensing negotiations with Micromax in 2009 after sending an initial notice of infringement. After repeated notices, Ericsson and Micromax finally did agree to negotiate a FRAND license. Based on the negotiations Micromax agreed to pay the rates Ericsson had initially proposed in November 2012. However, Micromax never entered into any agreement to license Ericsson's SEPs. Subsequently, Ericsson filed a lawsuit.

After the hearing in December 2014, the Delhi High Court granted an injunction to Ericsson against Micromax based on the infringed 2G and 3G technologies. The Court also directed Micromax to pay royalties to Ericsson

ranging from 0.8%–1.3% of the net selling price of the devices containing the infringed technology. In order to compute the royalty rates, the court asked Ericsson to produce comparable licenses. Specifically, the Court wanted to use Ericsson's SEP's implemented in the 2G and 3G standards that Ericsson had signed with third parties who are comparatively situated with the defendants. The court based its calculation on 26 comparable licenses that Ericsson had signed with other Indian parties. The interim agreement also stated that Micromax and the Customs department would have to notify Ericsson when a consignment of Micromax devices arrives in India. Following an inspection by Ericsson's representative, the consignment will be cleared for release and immediately handed over to Micromax. Upon sale, Micromax will transfer royalties to Ericsson based on the court's established rate."

Yet another law suit by Ericsson against Gionee for infringement of certain SEPs resulted in the court adapting a royalty payment based on the Micromax rate, to be paid to Ericsson. Gionee was sued by Ericsson, for infringement of eight SEPs. The Court fixed "an interim royalty to be paid by Gionee to Ericsson for one month and the rate was calculated on the basis of the devices sold by Gionee worth approximately \$24 million in India."

In April 2014, Intex has become the party of dispute against Ericsson; suit was being filed against intex alleging the "infringement of eight SEP's related to 2G and 3G standards and sought a permanent injunction and damages." In March 2015, the Delhi High Court issued an "interim decision granting an injunction against Intex and directed Intex to transfer the determined royalties to Ericsson."

"The facts of the case are intricate and are considered carefully in the interim decision by the presiding judge, Justice Manmohan Singh. Ericsson argued that because its asserted patents are 2G and 3G SEPs, any entity that makes, uses, sells or imports devices complying with these standards infringes on these patents. Ericsson produced a record of having initiated a licensing negotiation with Intex in December 2008, with repeated interactions until 2013, but no agreement was reached. Ericsson argued that Intex had taken two contradictory stands on the issue of validity and infringement of Ericsson's SEPs. Ericsson produced a record that its licensing negotiations continued with Intex in 2013, during which time, on the one hand, Intex continued to correspond with Ericsson about a potential licensing agreement but, on the other hand, initiated proceedings against Ericsson with the Intellectual Property Appellate Board ("IPAB") for the revocation of Ericsson's patents as well as initiated a complaint against Ericsson with the CCI alleging abuse of dominance by Ericsson due to its prominent position in ownership of SEPs for a standard for which there is no other alternative. Intex argued that the court should not grant an injunction against it because there was no clear evidence of validity of Ericsson's patents and damages were adequate to compensate Ericsson for its claim."

The Delhi High Court resolute that the patents claimed gives an apparent impression to be valid. The court referred the statement given by Intex in its complaint to the CCI that "Ericsson's Patents are essential to 2G and 3G, leaving companies complying with these standards no choice other than implementing these SEP's"; the itemized complaint deemed to be an admission of infringement of SEP's embrace by Ericsson. Intex's statement before the IPAB was also being fetched attention of the court wherein it admitted that the "the patents in suit were directly related to its business". Constructed on the aforementioned facts and the opposing spot taken by Intex, the Court institute Intex an "unwilling licensee", i.e., a "licensee not negotiating in good faith." Further, the Delhi High Court scrutinize Ericsson's practice of charging royalties grounded on the "price of the device and considered them consistent with its FRAND commitments", allude to the US decision in *CSIRO v. Cisco*, where the Court of Eastern District of Texas had vetoed that "the royalty base should be based on the chipset price, and the Chinese decision by the National Development and Reform Commission ("NDRC") for Qualcomm's 3G and 4G SEPs, where it calculated royalty rates as a percentage of the net selling price of devices incorporating those technologies." The court upheld the royalty rates calculated for the *Ericsson v. Micromax* interim decision as there was an analogy between the facts of both the cases. Notably, the Delhi High Court's decision of "granting an interim injunction to an unwilling licensee" preludes a topical hallmark verdict by the European Court of Justice on the "*Huawei Technologies v. ZTE Corporation*" which make available an advantageous direction that a "SEP owner does not abuse its dominant position when seeking injunctive relief against an unwilling licensee."

In December 2014, on the analogous grounds sued against Micromax and Intex ; Ericsson sued Xiaomi before the Delhi High Court for its conventional 2G and 3G SEPs.

"Ericsson had allegedly asked Xiaomi to take a license for its SEPs, but Xiaomi launched infringing products in India and created an Indian subsidiary for marketing the infringing products without obtaining a license. The

court issued an interim injunction against Xiaomi to restrain it from importing or selling any infringing devices in India. Xiaomi appealed and argued that since it had obtained the chipset implementing Ericsson's asserted patented technology from Qualcomm Inc., which had a license from Ericsson, its products did not infringe Ericsson's patents."

On the bases of provisional prearrangement, "Xiaomi was allowed to import and sell only devices containing Qualcomm's chipsets in India." Contrasting the Micromax and Intex cases, "no royalty rate has been determined by the court."

Another exemplary case relates to a law suit filed by Ericsson in 2013 against Micromax in the Delhi High Court, on the deed of Micromax filing a complaint before CCI contending charging exorbitant royalties for its SEP's leads to the abuse of dominant power by Ericsson.

"...[D]espite having committed to FRAND terms, a few SEP holders have engaged in holdup, which have triggered antitrust or anti-competition legal actions. Similarly, Micromax argued that the royalty rates being charged by Ericsson were on the basis of the value of the device and not the value of the chipset in which the patented technology was implemented, thus constituting a "misuse of SEPs" that would ultimately harm consumers. Micromax also submitted that Ericsson had subjected all its present and prospective licensees to signing a non-disclosure agreement ("NDA"), which prevented the disclosure of commercial terms between similarly placed patent seekers, allegedly demonstrating that the royalty charged to Micromax may be many times more than the royalty being charged from other licensees. As a matter of reference, a few SEP holders have engaged in "hold-up" or "misuse" of their SEP position by refusing to license, threatening injunctions and collecting exorbitant royalty from licensees."

For holding of SEP's of 2G, 3G, and 4G technologies; Ericsson abuse of dominant position was being well thought out by the CCI. The CCI suggested that "FRAND licenses are primarily intended to prevent patent hold-up and royalty stacking."

"...[T]he CCI noted harms which may arise from patent hold-up, but did not address its impact on fair and free competition. The CCI also stated that the practices adopted by Ericsson were excessive and discriminatory, and contrary to FRAND terms, as the royalty rates being charged had no linkage to the patented product. Thus, the CCI took issue with the royalties being charged as a percentage of the net selling price of the device rather than the chip implementing the 2G or 3G technology. The CCI argued that for the use of the GSM chip in a phone costing Rs 100, the royalty of 1.25% would be Rs 1.25, but for the use of the same chip in a phone of Rs 1000, the royalty would be Rs 12.5, and that the price differential in the royalty for the patent holder is without any contribution to the product of the licensee. The CCI argued that the charging of two different license fees per unit phone for the use of the same technology prima facie is discriminatory and reflects excessive pricing."

The CCI clinched that "Micromax had established a prima facie case of Ericsson's abuse of its dominant position and directed the DG to further investigate without being swayed in any manner by the strong observations already made by the CCI in its opinion."

It should be noted that various Jurisdictions accuse and regulate unilateral conduct of an SEP holder to be illegal and exclusionary when it is monopolistic. Further, for example, the European commission condemns unilateral conduct by a dominant SEP holder when their actions become exploitative-abuse, which includes unduly high royalty and licensing fees. One main concern about antitrust agencies such as the CCI regulating business dealings will lead to overregulation the free market. Moreover, SEP holders who have gained a dominant position because of their superior management and innovation should be allowed to exploit their hard-earned competitive advantage. In part, one argument against agencies regulating transactions between SEP holders and licensees is to ensure and incentivize investment in innovation.

In 2013, Intex Technologies (India) Limited filed a complaint against Ericsson with the CCI. Intex also laid before the CCI corresponding to Micromax "Ericsson abuse of dominant position in India's telecommunication market". Intex also precisely accumulating that "Ericsson's demand that potential licensees sign a non-disclosure agreement (NDA) was restrictive and violated Ericsson's FRAND commitment."

"...Intex argued that the NDA was "strongly suggestive" that different royalty rates/commercial terms were being offered to potential licensees of the same category and alleged that Ericsson had abused its position to

force Intex to sign the NDA. Further, Intex alleged that the NDA unreasonably restricted Intex from discussing the infringement of Ericsson's patents with its vendors whom Intex needed to rely on for making representations regarding non-infringement."

On countless deductions, however, the CCI opinion was directly at odds with the Delhi High Court's interim decision.

Further bearing in mind yet one more case, in May 2015, Best IT World (India) Private Limited (known as iBall) filed a complaint against Ericsson with the CCI. Contrasting the accusations made by Micromax and Intex; iBall engrossed more on Ericsson's "strict and onerous terms through the NDA that Ericsson required iBall to sign for conducting the licensing negotiations."

"...These terms included settling all disputes through arbitration in Stockholm, requiring confidentiality for 10 years, and covering past as well as future sales within the scope of the license agreement. iBall alleged that this conduct—including the threat of patent infringement proceedings, the demand of "unreasonably high royalties" calculated as a percentage of the price of the standards-compliant products, and the bundling of "patents irrelevant to iBall's products" in the license agreement, violated the Competition Act."

The CCI discoursed that Ericsson's practice of "forcing a party to execute NDA and imposing excessive and unfair royalty rates, prima facie, amount to abuse of dominance in violation of section 4 of the Act." Therefore, the CCI directed the DG "to investigate Ericsson's licensing practices and highlighted that iBall's allegations were similar to the allegations made by Micromax and Intel." In the complaints filed against Ericsson by Micromax, Intex and iBall, the CCI institute Ericsson apparently guilty of abusing its dominant position, in response to which Ericsson filed writ petitions in the High Court of Delhi against the CCI's orders directing the DG to investigate further and file a report. The pivotal point was questioning the DG's authority to file the report. The Court said that "the DG can conduct the investigations. However, the Court instructed that the DG shall not submit a final report and also restrained the CCI from passing final orders in all three matters."

The following important observations were made by the Court in this matter:

- Jurisdiction of the CCI: Countering the allegation of demand of excessive royalty and imposition of unfair and unreasonable terms for grant of patent licenses, Ericsson argued that neither patents nor licenses for patents are "goods" or "services", due to which a patent holder does not fall under the definition of an "enterprise" as per Section 2(h) of the Competition Act. The court held that "patents are goods, and consequently, Ericsson would fall within the definition of an enterprise." It was also noted that the subject matter of the complaints made by Micromax and Intex cannot be excluded from the purview of the Competition Act and that, "whether there is any abuse of dominance is solely within the scope of the Competition Act and a civil court cannot decide whether an enterprise has abused its dominant position and pass orders as are contemplated under Section 27 of the Competition Act."
- Conflict between the Patents Act and the Competition Act: The court opined that "in the event of any irreconcilable inconsistency between the two legislations, the Patent Act being a specialized statute, would override the general statute, even though the general statute contains a non-obstinate clause (section 60 of the Competition Act, 2002)."
- Scope of section 3 of the Competition Act: The court held that there is no overlap or inconsistency of section 3, which pertains to anti-competitive agreements, with the Patents Act. It also observed that the proceedings under the Competition Act are not in the nature of a private suit and that the scope of enquiry under section 3 would be restricted to whether there has abuse of dominant position as per the Competition Act.
- Abuse of dominant position by Ericsson: Micromax was being endangered by the Ericsson, to fetch it before Securities Exchange Board of India, on its attempt of declaring Initial Public offer (IPO). The court held that, "Such threats were, undoubtedly, made with the object of influencing Micromax to conclude a licensing agreement... in certain cases, such threats by a proprietor of a SEP, who is found to be in a dominant position, could be held to be an abuse of dominance".

The CCI and the Delhi High Court are fragmented on whether to apply the price of the end product or the SSPPU (the smallest salable patent practicing unit) as the royalty base. In Ericsson v. Micromax, the CCI noted that "Ericsson's practice of calculating royalties as a percentage of the price of a downstream product was 'excessive' and 'discriminatory', and instead favored a calculation based on the SSPPU." In high-pitched disparity, the Delhi High Court ordered Micromax "to pay FRAND royalties based on the percentages of the net selling prices of the devices incorporating its SEP technologies, and relied on comparable licenses to determine the appropriate FRAND royalty rate." Further, the court secure the royalty rate a"s 0.8% to 1.3% of

the net selling price of the mobile device; unlike the FRAND rates reached in the Microsoft opinion in the U.S., and the Huawei decision in China.”

Yet another exemplary case is *Dolby International AB and Anr. V. GDN Enterprise Private Limited & Ors.* “Dolby filed a suit against two major Chinese companies namely, Oppo and Vivo. Dolby claimed that both these companies infringed its patent rights by using its audio technologies without having acquired a license for the same. As per the order passed by the Delhi High Court, both the companies were directed to pay the arrears to Dolby at a royalty rate of ₹ 34 per handset. In return, they could continue selling and manufacturing.”

In the intervening time, parties decided to refer to mediation for setting up of further licensing terms of their contract recently in the year 2018; the cases, *Koninklijke Philips N.V. & Anr v Rajesh Bansal (Mangalam Technology)* and *Koninklijke Philips N.V. & Anr v Bhagirathi Electronics and others*, have marked the history in the SEP litigation. The matter related to an essential DVD video player patent with reference number IN184753, and specifically to channel (de)coding technology used for DVD video playback function in a DVD video player.

The decision rendered by the Delhi High Court in the combined cases creates more clarity for Philips and other innovators. The judgment provides confidence that India recognizes and allows for a legal environment that protects investments in R&D. Philips respects IP rights of third parties and believes that other companies should reciprocate by abiding by the same standards and expectations.

The constantly embryonic SEP Jurisprudence was being demonstrated by the aforementioned case laws. With the access of many new digital technologies and digital India initiatives; it is now imperative to elucidate the legal position on some pertinent issues. It is manifested from the above-mentioned cases that every so often the Delhi High Court and CCI have reserved unlike positions on various issues. They gain their jurisdiction from two different statutes namely, The Patent Act 1970 and The Competition Act 2002. “Both the institutions have different objectives which in turn leads to completely different outcomes. CCI uses the approach of Smallest Saleable Patent Practicing Component (SSPPC) while the Delhi High Court has relied upon the net price of the Downstream Product and resorting to the comparison of the licenses.”

Conclusion

India and implications of the growing jurisprudence and understanding, worldwide on SEP and FRAND litigation, from the available information it seems that the concept may no longer be new, but Indian courts and authorities are taking time in developing sound principles for good precedential value, that would help in adjudication of such case laws. However, the lack of understanding among the legal practitioners and among market players is something that needs to be rectified. The discussion paper by the Government of India has not seem to provide any material answers to the questions it had posed. One such question was that whether any separate regulatory authority must be there to adjudicate SEP cases in India. From what can be gathered and concluded through the above thesis is that, there might not be a need for separate regulatory body, but the manner in which regulation takes place must be reviewed. There must be separate technical trials for matters related to essentiality of patents or patentability, and separate trials for determining the Competition Law and FRAND rate issues. In, these cases FRAND arbitration and mediation may be of help to the parties and might be a better option, but for India at present, the lack of jurisdiction calls for case laws with judgements that hold good precedential value.

Organizations can be developed to make sure that the administration of SEP licensing process goes on smoothly and on FRAND terms. These organizations can play a huge role in decreasing the amount of litigation and injunctions which resulted in smartphone wars throughout the world. With new technologies like Internet of Things (IoT), AI and Blockchains coming in and developing fast, the electronics and communication industry is only going to be in need of large amount of standard setting operations, and also licensing of the same. Some concrete rules and regulations might help the in developing a better mechanism, however the existing rules if followed in a sound manner by the parties, through the help of independent and unbiased administrators, before the matter reaches to any dispute, would be really helpful and fruitful to the entire SEP licensing scenario.

Reference

1. "Ability for two or more networks, systems, devices, applications or components to communicate. With respect to the telecommunications industry, interoperability refers to the interworking of telecom services over multi-vendor, multi-carrier inter-connections. As networks continue to grow and diversify with the 5G and IoT era on the horizon, it is important they can interoperate to enable end-to-end communication." Available at: <https://www.rcrwireless.com/20180419/the-role-of-network-interoperability-in-telecommunications-tag27-tag99>.
2. See; Josh Lerner & Jene Tirole, "Standard Essential Patents", Harvard Business School Journal (2013) Available at: http://www.hbs.edu/faculty/Publication%20Files/14-038_c030ca39-5339-4447-b952-8132110260bf.pdf.
3. "The proper method of computing a FRAND royalty starts with what the cost to the licensee would have been of obtaining, just before the patented invention was declared essential to compliance with the industry standard, a license for the function performed by the patent. That cost would be a measure of the value of the patent. But once a patent becomes essential to a standard, the patentees bargaining power surges because a prospective licensee has no alternative to licensing the patent; he is at the patentee's mercy." (Apple, Inc. and Next Software Inc., v. Motorola, Inc. and Motorola Mobility, Inc., June 22, 2012, Case No. 1:11-cv-08540, page 18).
4. Telefonaktiebolaget LM Ericsson v. Mercury Elecs. & Another, High Ct. of Delhi (Mar. 6, 2013), Available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=46519&yr=2013
5. Ibid.
6. Telefonaktiebolaget LM Ericsson v. Mercury Elecs. & Another, High Ct. of Delhi (Nov. 12, 2014), Available at <http://lobis.nic.in/ddir/dhc/GSS/judgement/17-11-2014/GSS12112014S4422013.pdf> [
7. Telefonaktiebolaget LM Ericsson v. Gionee Communication Equipment Co. Ltd., High Ct of Delhi (Oct. 31, 2013) Available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=211053&yr=2013
8. Telefonaktiebolaget LM Ericsson v. Intex Techs. (India) Limited, High Ct of Delhi (Mar. 13, 2015), Available at <http://lobis.nic.in/ddir/dhc/MAN/judgement/16-03-2015/MAN13032015S10452014.pdf>
9. Intex Techs. (India) Ltd v. Telefonaktiebolaget LM Ericsson, Competition Commission of India (Jan. 16, 2014), Available at http://www.cci.gov.in/sites/default/files/762013_0.pdf
- 2014 WL 3805817 (E.D. Tex. 2014).
10. Telefonaktiebolaget LM Ericsson v. Competition Commission of India & Anr., High Ct. of Delhi (March 30, 2016) Available at 1. <http://lobis.nic.in/ddir/dhc/VIB/judgement/30-03-2016/VIB30032016CW4642014.pdf>;
11. (C-170/13) ECJ.
12. Telefonaktiebolaget LM Ericsson v. Xiaomi Technology and Others, High Ct of Delhi (Dec. 8, 2014), Available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=250092&yr=2014.
13. Ibid.
14. Ibid.
15. Telefonaktiebolaget LM Ericsson v. Mercury Elecs. & Another, High Ct. of Delhi (Mar. 6, 2013), Available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=46519&yr=2013.
16. Micromax Informatics Ltd v. Telefonaktiebolaget LM Ericsson, Competition Commission of India (Nov. 12, 2013), Available at <http://infojustice.org/wp-content/uploads/2013/12/CCI-Case-no-50-2013.pdf> .
17. Ibid.
18. Intex Techs. (India) Ltd v. Telefonaktiebolaget LM Ericsson, Competition Commission of India (Jan. 16, 2014), Available at http://www.cci.gov.in/sites/default/files/762013_0.pdf.
19. Best IT World (India) Private Ltd. v. Telefonaktiebolaget LM Ericsson, Competition Commission of India (May 12, 2015), Available at http://www.cci.gov.in/sites/default/files/042015_0.pdf.
20. Ibid, See also: Lakshane, R (2017). Compilation of Mobile Phone Patent Litigations in India. The Centre for Internet & Society. Available at <https://cis-india.org/a2k/blogs/compilation-of-mobile-phone-patent-litigation-cases-in-india>.
21. Best IT World (India) Private Ltd. v. Telefonaktiebolaget LM Ericsson, Competition Commission of India (May 12, 2015), Available at http://www.cci.gov.in/sites/default/files/042015_0.pdf.
22. Lakshane, R (2017). Compilation of Mobile Phone Patent Litigations in India. The Centre for Internet & Society. Available at <https://cis-india.org/a2k/blogs/compilation-of-mobile-phone-patent-litigation-cases-in-india>.
23. Best IT World (India) Private Ltd. v. Telefonaktiebolaget LM Ericsson, Competition Commission of India (May 12, 2015), Available at http://www.cci.gov.in/sites/default/files/042015_0.pdf.

24. Ibid.
25. Ibid.
26. Lakshane, R (2017). Compilation of Mobile Phone Patent Litigations in India. The Centre for Internet & Society. Available at <https://cis-india.org/a2k/blogs/compilation-of-mobile-phone-patent-litigation-cases-in-india>.
27. Telefonaktiebolaget LM Ericsson v. Mercury Elecs. & Another, High Ct. of Delhi (Mar. 6, 2013), Available at http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=46519&yr=2013
28. Li., B., (2016). The Global Convergence of FRAND Licensing Practices: Towards “Interoperable” Legal Standards. Berkeley Technology Law Journal, [online] Volume 31 (2), 456-457. Available at <http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=2113&context=btlj>
29. Li., B., (2016). The Global Convergence of FRAND Licensing Practices: Towards “Interoperable” Legal Standards. Berkeley Technology Law Journal, [online] Volume 31 (2), 456-457. Available at <http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=2113&context=btlj>.
30. CS(COMM) No. 1426/2016.
31. CS(OS) No. 1034/2009, decided on July 2018.
32. CS (OS) No.1082/2009, decided on July 2018.
33. Standard Essential Patents: The Philips Judgment and Unanswered Question, Available at: <https://www.lakshmisri.com/News-and-Publications/Publications/Articles/IPR/standard-essential-patents-the-philips-judgement-and-unanswered-questions>