FRAND in India: The Delhi High Court's emerging jurisprudence on royalties for standard-essential patents

J. Gregory Sidak*

The nascent giant

Although India has the world's second-largest telecommunications network (on the basis of total number of telephone users),[1] Indian jurisprudence on fair, reasonable, and nondiscriminatory (FRAND) licensing practices for standard-essential patents (SEPs) is at a nascent stage. As of May 2015, the Delhi High Court has passed interim orders in only two patent-infringement cases concerning FRAND licensing.[2] In addition, the Competition Commission of India (CCI) is simultaneously addressing the first complaints ever filed in India concerning FRAND licensing. Although the CCI has passed initial orders addressing both complaints, it has not reached a final decision in any case.[3]

Telefonaktiebolaget LM Ericsson ('Ericsson') is the common party in each of those proceedings. As Ericsson is an SEP holder and a receiver of licensing royalties, the result of those FRAND proceedings will have a significant effect the company's licensing practices in India—and, by extension, the licensing practices of other holders of portfolios of SEPs that form telecommunications standards. In this article, I examine six FRAND proceedings to date in India and their potential effects on holders of telecommunications SEP portfolios in India. After analysing the decisions that the Delhi High Court and the CCI have rendered in the infringement suits and antitrust complaints, I explain that the Delhi High Court's decisions use the value of a downstream product as a royalty base and rely on comparable licences to derive a FRAND royalty rate, consistent with economic principles and judicial and industry trends.

The author

- J. Gregory Sidak is Chairman, Criterion Economics, L.L.C., Washington, DC.

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This article

- Indian jurisprudence on fair, reasonable, and nondiscriminatory (FRAND) licensing practices for standard-essential patents (SEPs) is at a relatively nascent stage. Unlike US and EU courts, which have dealt with cases concerning calculating a FRAND royalty for a considerable time, Indian courts and the Indian antitrust authority—the Competition Commission of India (CCI)—have only just begun to decide such cases.
- In its initial orders in the first two antitrust complaints concerning SEPs, the CCI seemed to favour using the smallest salable patent-practising component (SSPPC) as the royalty base to determine a FRAND royalty. However, in the short time since the CCI's orders, the Delhi High Court has rendered contrary decisions in two SEP infringement suits. The Delhi High Court's decisions use the value of the downstream product as a royalty base and rely on comparable licences to determine a FRAND royalty. The Delhi High Court's decisions are not only consistent with sound economic principles, but also indicate that the court is responding to the judicial and industry trends in the rest of the world.
- Because the CCI is still investigating the antitrust complaints with respect to the same SEPs, the CCI could benefit from considering the legal and economic arguments in the Delhi High Court's decisions. It would be counterproductive for the emerging FRAND jurisprudence in India if the judiciary and the competition authority take opposing views toward the rights of SEP holders and SEP implementers.

* Email: jgsidak@criterioneconomics.com.

1 *Indian Telecommunication Industry Analysis*, India Brand Equity Foundation (Oct 2014), http://www.ibef.org/industry/indian-telecommunications-industry-analysis-presentation; *India Needs Umbrella Body in Telecom Standards to Foster Creation of IPR and Develop Indigenous Products*, Economic Times (16 August 2012), http://articles.economictimes.indiatimes.com/2012-08-16/news/33232949_1_telecom-equipment-indian-ipr-telecom-market.

2 Judgment, *Telefonaktiebolaget LM Ericsson v Mercury Elecs. & Another*, Interim Application No. 3825 of 2013 and Interim Application No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, High Ct of Delhi (12 November 2014), http://lobis.nic.in/dhc/GSS/judgement/17-11-2014/GSS12112014S4422013.pdf; Judgment, *Telefonaktiebolaget LM Ericsson v Intex Techs. (India) Ltd*, Interim Application No. 6735 of 2014 in Civil Suit (Original Side) No. 1045 of 2014, High Ct of Delhi (13 March 2015), http://lobis.nic.in/dhc/MAN/judgement/16-03-2015/MAN13032015S10452014.pdf.

3 *Micromax Informatics Ltd v Telefonaktiebolaget LM Ericsson*, Case No. 50 of 2013, Competition Comm'n of India (12 November 2013), http://cci.gov.in/May2011/OrderOfCommission/261/502013.pdf; *Intex Techs. (India) Ltd v Telefonaktiebolaget LM Ericsson*, Case No. 76 of 2013, Competition Comm'n of India (16 January 2014), http://cci.gov.in/May2011/OrderOfCommission/261/762013.pdf; *Best IT World (India) Private Ltd. v Telefonaktiebolaget LM Ericsson*, Case No. 4 of 2015, Competition Comm'n of India (12 May 2015), http://www.cci.gov.in/May2011/OrderOfCommission/261/042015.pdf.

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FRAND proceedings in India

Ericsson has sued several indigenous and several Chinese telecommunications device manufacturers for infringement of its 2G and 3G SEPs. In turn, some of those indigenous manufacturers have filed complaints against Ericsson with the Indian antirust authority, the CCI, alleging that Ericsson's SEP licensing practices are anticompetitive and violate Ericsson's FRAND commitments. I shall now analyse six of those proceedings to which Ericsson is a party.

Micromax's complaint against Ericsson with the CCI

In 2013, Micromax Informatics Limited filed a complaint with the CCI, alleging that Ericsson abused its allegedly dominant position by imposing exorbitant royalties for the use of its SEPs, thereby violating the Competition Act 2002.[4] Micromax argued that the royalty rates that Ericsson demanded should have been based on the value of the chipset technology in the phone and that Ericsson should not 'arbitrarily' calculate the royalty as a percentage of the sales price of the licensed, downstream product (typically, a mobile phone handset).[5] Further, using the sales price of the downstream product as the royalty base constitutes 'misuse of SEPs' that 'would ultimately harm consumers'.[6] Micromax added that Ericsson was able to impose exorbitant royalties because it was aware that 'there was no alternative technology available' and it was 'the sole licensor for the SEPs' necessarily implemented in 2G and 3G wireless telecommunication standards.[7] Micromax also asserted that Ericsson had demanded that all prospective licensees sign nondisclosure agreements (NDAs), which 'shows that royalty being charged from [Micromax] may be many times the royalty' that Ericsson charges other potential licensees.

Based on those arguments, the CCI passed its preliminary order on 12 November 2013, in which it first defined the relevant product market as the market for the GSM and CDMA standards, with the relevant geographic market being India.[8] Second, the CCI said that, in the relevant product market, Ericsson was 'the largest holder of SEPs for mobile communications like the 2G, 3G and 4G patents used for smart phones, tablets etc.', for which there was no available alternative to existing or prospective licensees.[9] The CCI thus concluded that, based on the strength and large number of its patents, Ericsson had a dominant position in the market for devices that implement the GSM or CDMA standards. Third, the CCI expressed that 'FRAND licenses are primarily intended to prevent patent hold-up and royalty stacking' and observed that patent holdup undermines 'the competitive process of choosing among technologies' and threatens 'the integrity of standard-setting activities'.[10] It also said that Ericsson's royalty rates were excessive and discriminatory, given that they were set as a percentage of the price of downstream products instead of as a percentage of the price of the GSM or CDMA chip. The CCI concluded that the requested royalties 'had no linkage to the patented product'[11] and were thus 'discriminatory as well as contrary to FRAND terms'.[12] Specifically, the CCI reasoned that a 1.25 per cent rate applied to a GSM-enabled phone whose sales price is INR 100 would yield a royalty of INR 1.25, whereas the same 1.25 per cent rate applied to a GSM-enabled phone whose sales price is INR 1000 would yield a royalty of INR 12.50, with the result that '[c]harging . . . two different licence fees per unit phone for use of the same technology is prima facie discriminatory and also reflects excessive pricing vis-à-vis high cost phones'.[13] The CCI also clarified that the 'provisions of the Competition Act are in addition to and not in derogation of other laws'.[14] The CCI therefore initially ruled that Micromax was within its right to bring those antitrust issues before the CCI and that pendency of infringement suits before the Delhi High Court did not preclude the CCI's jurisdiction to hear the complaint under the Competition Act.

The CCI concluded that, because Micromax had established a prima facie case that Ericsson had abused its dominant position in seeking excessive royalties for its SEP portfolio from Micromax, those allegations warranted further investigation (and hearings, if necessary) by the Director General (DG).[15] Moreover, the CCI directed the DG to 'conduct the investigation without being swayed in any manner whatsoever' by the observations that the CCI made in the order.[16]

4 For the specific allegations that Micromax made, as recorded by the Competition Commission of India in its order, see *Micromax Informatics Ltd*, Case No. 50, ¶ 8, at 4; see also the Competition Act 2002, § 4, No. 12, Acts of Parliament, 2003).

5 *Micromax Informatics Ltd*, Case No. 50, ¶ 8, at 4.

6 Ibid.

7 Ibid.

8 Ibid ¶ 15, at 7.

9 Ibid ¶ 16, at 7.

10 Ibid ¶ 13, at 6.

11 Ibid ¶ 17, at 7–8.

12 Ibid.

13 Ibid.

14 Ibid ¶ 18, at 8.

15 Ibid ¶ 19, at 8. The Director General draws authority to investigate, and conduct hearings into Ericsson's activities from The Competition Act, 2002, § 26, No. 12, Acts of Parliament, 2003).

16 *Micromax Informatics Ltd*, Case No. 50, at 9.

Intex's complaint against Ericsson with the CCI

In 2013, Intex Technologies (India) Limited filed a complaint against Ericsson with the CCI.[17] Intex alleged that Ericsson's licensing terms in its 'Term Sheet for Global Patent License Agreement' were exorbitant and unfair and thus constituted an abuse of its allegedly dominant position in India's telecommunications market.[18] Intex also argued that Ericsson's demand that potential licensees (including Intex) sign an NDA was restrictive and violated Ericsson's FRAND commitment.[19] First, Intex argued that the NDA was 'strongly suggestive' that 'different royalty rates/commercial terms were being offered to potential licensees of the same category'.[20] Second, Intex alleged that Ericsson had abused its position to compel Intex to sign the NDA by refusing to share the details of Intex's patent infringement unless Intex signed the NDA.[21] Third, Intex stated that the NDA precluded Intex from discussing with its vendors the infringement of Ericsson's patents. Because Intex required its vendors to make representations with respect to non-infringement of a third party's intellectual property, Intex alleged that the NDA unreasonably restricted Intex from making those representations.[22] Fourth, Intex argued that, through the NDA, Ericsson forced Intex to agree to address its grievances in an inconvenient foreign forum (Singapore), thereby preventing Intex from addressing potential disputes in local courts.[23]

On the basis of Intex's assertions, the CCI concluded that Intex had established a *prima facie* case that Ericsson had abused its dominant position. Several of the CCI's conclusions in the *Intex* complaint resembled the conclusions that the CCI had drawn in the *Micromax* complaint. For example, the CCI concluded that (1) the relevant geographic market would be India and the relevant product markets would be the GSM and CDMA standards;[24] (2) Ericsson had a dominant position in the markets for GSM and CDMA technologies in India, based on the strength and large number of its GSM and CDMA patents;[25] and (3) the royalties that Ericsson demanded for the use of its SEPs 'had no linkage to the patented product' and were thus 'discriminatory as well as contrary to FRAND terms'.[26] The CCI further said that a refusal to share the commercial terms of the FRAND licence 'fortifie[d] the accusation . . . regarding alleged discriminatory commercial terms'.[27] The CCI also said that charging 'different licensing fees for the use of the same technology' also reflected 'excessive pricing vis-à-vis high cost phones'.[28] In addition, the CCI said that imposing a jurisdiction clause that prevented Intex from adjudicating its disputes in a 'country where both parties were in business' also provided *prima facie* evidence of an abuse of a dominant position.[29] Finally, the CCI noted that there was an ongoing investigation by the DG against Ericsson on similar grounds.[30] Therefore, having formed a *prima facie* opinion that Ericsson had abused its dominant position by imposing excessive royalties and a restrictive NDA, the CCI ordered that the DG combine the investigation with the claims that Micromax and Intex had brought against Ericsson.[31] The CCI also directed the DG (as the CCI directed in the *Micromax* complaint) that the CCI's observations in the order not impede or affect the DG's investigation.[32]

Ericsson's suit against Micromax in the Delhi High Court

In March 2013, Ericsson sued Micromax for infringement of Ericsson's eight patents registered in India that were essential to the 2G and 3G standards.[33] Ericsson sought damages and a permanent injunction against Micromax.[34] Ericsson and Micromax initially agreed to negotiate a FRAND licence, and, pending the negotiation, Micromax agreed to make interim royalty payments to Ericsson at the rates that Ericsson had proposed to Micromax in November 2012.[35] Table 1 lists the royalty rate that Micromax agreed to pay Ericsson. In addition, Micromax agreed to pay Ericsson $2.50 for each data card that Micromax sold that incorporated the allegedly infringed patents.[36]

17 *Intex Techs. (India) Ltd v Telefonaktiebolaget LM Ericsson,* Case No. 76 of 2013, ¶ 6, Competition Comm'n of India (16 January 2014).

18 For the specific allegations that Intex made, as recorded by the CCI in its order, see *ibid* ¶ 6, at 3.

19 Ibid ¶ 7, at 3.

20 Ibid.

21 Ibid.

22 Ibid ¶ 9, at 4.

23 Ibid.

24 Ibid ¶ 15, at 6.

25 Ibid ¶ 16, at 6.

26 Ibid ¶ 17, at 6.

27 Ibid.

28 Ibid.

29 Ibid.

30 Ibid ¶ 19, at 7–8.

31 Ibid.

32 Ibid ¶ 21, at 8.

33 Order, *Telefonaktiebolaget LM Ericsson v Mercury Elecs. & Another,* Interim Application No. 3825 of 2013 in Civil Suit (Original Side) No. 442 of 2013, High Ct of Delhi (6 March 2013), http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=46519&yr=2013.

34 Ibid.

35 Order, *Telefonaktiebolaget LM Ericsson v Mercury Elecs. & Another*, Interim Application No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, High Ct of Delhi (19 March 2013), http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=57850&yr=2013.

36 Ibid.

Table 1. Royalty rates that Micromax agreed to pay Ericsson as an interim arrangement

Standard incorporated in mobile device	Royalty rate (as a percentage of the net sales price of the mobile device)
GSM	1.25%
GPRS + GSM	1.75%
EDGE + GPRS + GSM	2.00%
WCDMA/HSPA	2.00%

Source: Order, *Telefonaktiebolaget LM Ericsson v Mercury Electronics & Another*, Interim Application No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, High Ct of Delhi (19 March 2013). (http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=57850&yr=2013).

The Delhi High Court allowed Micromax to make payments, as reported in Table 1, pending the outcome of Ericsson's and Micromax's negotiation.

Ericsson and Micromax did not however reach an amicable arrangement, and Micromax never entered into an agreement to license Ericsson's SEPs. Consequently, the Delhi High Court directed Ericsson to produce 26 licences that Ericsson had signed with other Indian parties. After examining the royalty rates in those licences, on 12 November 2014 the court directed Micromax to pay royalty amounts to Ericsson based on the percentages of the net selling prices of the devices incorporating the 2G and 3G standards.[37] The court also clarified that the rates that it determined were 'not a determination of the FRAND rates for the Ericsson portfolio' but were merely an interim arrangement pending the final outcome of the trial.[38] Table 2 reports the royalty rates that the Delhi High Court directed Micromax to pay to Ericsson.

The court relied on comparable licences to determine a FRAND royalty. The court also used the net sales price of the downstream device as a royalty base, which comports with recent judicial trends and sound economic reasoning. I analyse both points in detail below.

Ericsson's suit against Intex in the Delhi High Court

In April 2014, Ericsson sued Intex in the Delhi High Court for the infringement of Ericsson's eight patents essential to the 2G and 3G standards registered in India.[39] Ericsson sought a permanent injunction and damages against Intex.[40] On 13 March 2015, the Delhi High Court issued an interim decision granting an injunction against Intex and directed Intex to pay Ericsson royalty amounts as determined in the judgment.

Ericsson argued that, because the patents in suit were essential to the 2G and 3G standards, any entity that imports, makes, sells, or offers to sell any device (including handsets and tablets) complying with the 2G or 3G standards would necessarily need to obtain a licence from Ericsson.[41] Ericsson contended that it offered to Intex, a manufacturer and seller of telecommunications devices,[42] 'a licence for its entire portfolio of patents (including the suit patents)' consistent with the FRAND commitment that Ericsson gave to various standard-setting organizations (SSOs),[43] but Intex failed to secure a licence for Ericsson's portfolio.[44] Intex, on the other hand, argued that it was 'not aware about any significant portfolio of [Ericsson's] patents in India that are essential for compliance by [Intex]'.[45] Ericsson countered that Intex initiated several proceedings against Ericsson, including filing complaints before the CCI and the Intellectual Property Appellate Board (IPAB).[46] Ericsson alleged that those proceedings represented an inherent admission that Ericsson's patents were essential to the 2G and 3G standards and that Intex's products had incorporated and infringed Ericsson's SEPs.[47]

Ericsson argued that section 48 of The Patents Act, 1970 entitled Ericsson to prevent an unauthorized third party from making, using, selling, or importing an infringing product until the validity of the patents in suit had been established, and Ericsson thus demanded that the court issue an injunction against Intex.[48] Ericsson further alleged that Intex's sale of infringing products ran into 'Crores of Rupees as millions of units would have been sold by [Intex]',[49] and therefore claimed damages of INR 560 000 000 (approximately equivalent to US $9 000 000).[50]

Intex objected to Ericsson's request for an injunction, emphasizing that the Indian Supreme Court had interpreted section 13(4) of the Patent Act to mean that 'no patent which is granted in India enjoys presumptive validity owing to the mere factum of grant', and that 'the

37 Judgment, *Telefonaktiebolaget LM Ericsson v Mercury Elecs. & Another*, Interim Application No. 3825 of 2013 and Interim Application No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, ¶¶ 1–4, High Ct of Delhi (12 November 2014), http://lobis.nic.in/dhc/GSS/judgement/17-11-2014/GSS12112014S4422013.pdf.

38 Ibid ¶ 9, at 4.

39 Judgment, *Telefonaktiebolaget LM Ericsson v Intex Techs. (India) Limited*, Interim Application No. 6735 of 2014 in Civil Suit (Original Side) No. 1045 of 2014, ¶¶ 1, 8, High Ct of Delhi (13 March 2015), http://lobis.nic.in/dhc/MAN/judgement/16-03-2015/MAN13032015S10452014.pdf.

40 Ibid ¶ 1, at 1.

41 Ibid ¶ 16, at 16.

42 Ibid ¶ 7, at 10.

43 Ibid ¶ 8, at 10.

44 Ibid.

45 Ibid ¶ 22, at 25.

46 Ibid ¶ 25, at 28.

47 Ibid ¶¶ 31–32, at 30–31.

48 Ibid ¶ 36, at 33.

49 Ibid ¶ 37, at 33.

50 Ibid ¶¶ 38–39, at 34.

Table 2. Royalty rates that the Delhi High Court Determined in *Ericsson v Micromax*

Time period	Standard incorporated in mobile device	Royalty rate (as a percentage of the net selling price of the mobile device)
Filing of Suit to 12 November 2015	GSM	0.8%
Filing of Suit to 12 November 2015	GPRS + GSM	0.8%
Filing of Suit to 12 November 2015	EDGE + GPRS + GSM	1.0%
Filing of Suit to 12 November 2015	WCDMA/HSPA	1.0%
13 November 2015 to 12 November 2016	GSM	0.8%
13 November 2015 to 12 November 2016	GPRS + GSM	0.8%
13 November 2015 to 12 November 2016	EDGE + GPRS + GSM	1.1%
13 November 2015 to 12 November 2016	WCDMA/HSPA	1.1%
13 November 2016 to 12 November 2020 (or end of trial, whichever is earlier)	GSM	0.8%
13 November 2016 to 12 November 2020 (or end of trial, whichever is earlier)	GPRS + GSM	1.0%
13 November 2016 to 12 November 2020 (or end of trial, whichever is earlier)	EDGE + GPRS + GSM	1.3%
13 November 2016 to 12 November 2020 (or end of trial, whichever is earlier)	WCDMA/HSPA	1.3%

Source: Judgment, *Telefonaktiebolaget LM Ericsson v. Mercury Electronics & Another*, Interim Application No. 3825 of 2013 and Interim Application No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, ¶¶ 1–4, High Ct. of Delhi (12 November 2014) (http://lobis.nic.in/dhc/GSS/judgement/17-11-2014/GSS12112014S4422013.pdf).

validity of a patent must be established before the issue of infringement is considered by the Court'.[51] It alleged that Ericsson had not disclosed all information regarding its foreign patents when filing patent applications in India, thus violating section 8 of the Patent Act[52] and further alleged that Ericsson had not disclosed to the court that, in similar suits litigated in Italy and France between Ericsson and other multinational companies, courts had rejected Ericsson's demand for an injunction and had not expressly determined whether Ericsson's patents were essential to the standards.[53] Intex also rejected Ericsson's allegation that, by filing complaints against Ericsson before several forums, it had admitted the validity, essentiality, or infringement of any patents in suit.[54] In addition, Intex challenged the expertise of Mr Vijay Ghate, Ericsson's technical expert, alleging that the expert had been tutored and arguing that no value or credibility be placed on his report,[55] and alleged that Ericsson's conduct and negotiation strategies did not comply with the obligations arising from Ericsson's FRAND commitment, and that Intex could not be considered an unwilling licensee.[56] Thus, Intex maintained, the court should not grant an injunction against Intex because (1) there was no clear evidence regarding validity or essentiality of Ericsson's patents, and (2) damages were an adequate remedy to redress Ericsson's claim.[57]

Intex also claimed that Ericsson had violated its FRAND obligation in that the rates that Ericsson offered Intex exceeded the rates that Ericsson offered Micromax and Gionee. This, in Intex's view, violated Ericsson's FRAND obligation.[58] Intex also challenged Ericsson's practice of 'charging royalties on the basis of the sale price of the mobile phone as opposed to the profit margin on the sale price of the baseband processor/ chipset' and quoted the American judgments in *Microsoft v Motorola*[59] and *Innovatio IP Ventures*[60] to support its contention.[61] Intex also cited another US decision, *Realtek v LSI*,[62] to support its assertion that the 'use of ex-

51 Ibid ¶ 40, at 34 (presumably quoting Intex's sealed filing in *Intex Techs. (India) Ltd. v Telefonaktiebolaget LM Ericsson*, Case No. 76 of 2013, Competition Comm'n of India (16 Jan. 2014)).

52 Ibid ¶ 40(v), at 35–36.

53 Ibid ¶¶ 41–42, at 37–38.

54 Ibid ¶ 51, at 43.

55 Ibid ¶ 52, at 43–44.

56 Ibid ¶¶ 54–55, at 44–45.

57 Ibid ¶¶ 65, 68, at 52–54.

58 Ibid ¶ 72, at 58.

59 *Microsoft Corp. v Motorola, Inc*, No. C10-1823JLR, 2013 WL 2111217 (W.D. Wash. 25 April 2013) (Robart, J.).

60 *In re Innovatio IP Ventures, L.L.C.* Patent Litigation, MDL No. 2303, 2013 WL 5593609 (N.D. Ill. 3 October 2013) (Holderman, J.).

61 *Telefonaktiebolaget LM Ericsson v Intex Techs.* ¶ 73, at 63.

62 *Realtek Semiconductor Corp. v LSI Corp.*, 946 F. Supp. 2d 998 (N.D. Cal. 2013) (Whyte, J.).

clusionary remedies by owners of alleged SEPs has been frowned upon by US courts as well which are usually perceived as being pro-patentees', thus arguing that the court should not grant an injunction against Intex.[63]

In response, Ericsson contended that '[t]he [US Department of Justice] and [US Patent and Trademark Office] recognize that the right of a patent holder to exclude others from practicing patented inventions is fundamental to obtaining these benefits'.[64] Ericsson also argued that an exclusion order (such as the injunction sought against Intex) is appropriate when a licensee (1) refuses to accept a FRAND licence, (2) demands terms outside an SEP holder's FRAND commitment, (3) does not engage in a negotiation to determine FRAND terms, or (4) is not subject to the jurisdiction of a court that could award damages.[65]

Ericsson's disclosure of information regarding its foreign patents

The Delhi High Court explained that section 8 of the Patent Act imposed an obligation on a prospective patentee to disclose foreign prosecution details about corresponding patents.[66] However, claims granted in different countries need not be exactly identical. Thus, the court explained, as long as a prospective patentee informs the Indian Patent Office of all the major jurisdictions in which a patent has been granted and submits substantial details regarding the same, the prospective patentee fulfills the requirement of section 8.[67] The court said that section 8 of the Patent Act does not imply that 'every shred of paper filed in every foreign country has to be filed in the Indian Patent Office'.[68] The court concluded that Ericsson had disclosed substantial details regarding its patents and had therefore complied with the requirements of section 8.[69]

Validity of Ericsson's patents

The Delhi High Court found that, although the subject matter of the patents in suit 'cannot be examined minutely or be interpreted in microscopically [*sic*] manner at the interim stage in a suit for infringement of patent', prima facie 'the suit patents appear to be valid'.[70] In reaching its conclusion, the court referred to Intex's statements in its complaint to the CCI that Ericsson's SEPs, 'which form a part of the 2G/3G technology, are necessarily to be applied/used by any Indian telecom/mobile phone operator', leaving Intex and other companies with no alternative other 'than to implement the SEPs owned by Ericsson in the domain of 2G/3G technology, including the suit patents'.[71] The court observed that the premise of Intex's complaint was that Ericsson owns SEPs that are in fact essential to telecommunication devices.[72] The court also highlighted Intex's statement in its complaint before the IPAB, in which Intex admitted that the patents in suit directly related to Intex's business.[73] The court found that Intex had clearly admitted that Ericsson patents were in fact SEPs. The court said that, '[u]nless the suit patents are declared as invalid in revocation petitions filed by [Intex], the same cannot be allowed to be infringed by [Intex], who is also unwilling to execute a FRAND licence'.[74] The court thus concluded that Ericsson's patents in suit were valid and infringed.

Ericsson's choice of royalty base

The Delhi High Court found that Ericsson's practice of charging a royalty based on the price of the downstream device is FRAND.[75] In determining the royalty base for a FRAND royalty, the court asserted that, in *CSRIO v CISCO*, the US District Court for the Eastern District of Texas had 'rejected that royalty should be based on chipset price'.[76] The court also referred to the direction that the Chinese Competition Authority (the National Development and Reform Commission, NDRC) gave with respect to Qualcomm's SEPs for 3G and 4G technologies, fixing the royalty rates as a percentage of the net selling price of devices incorporating 3G and 4G standards.[77] The court further noted that a coordinate Delhi High Court bench, which passed an order in a similar suit concerning the same patents, had also determined royalty rates based on the net selling price of the devices.[78] The Delhi High Court in *Ericsson v Intex* concluded that, because the facts in both cases were similar, the court was not inclined to take a different view.[79] Moreover, the Delhi High Court relied on the

63 *Telefonaktiebolaget LM Ericsson v Intex Techs.* ¶ 74, at 64.

64 Ibid ¶ 89, at 96.

65 Ibid ¶ 90, at 97.

66 Ibid ¶ 103, at 125.

67 Ibid.

68 Ibid.

69 Ibid ¶ 104, at 125–26.

70 Ibid ¶ 127, at 232–33.

71 Ibid ¶ 130, at 234.

72 Ibid ¶ 141, at 241.

73 Ibid ¶ 134, at 238.

74 Ibid ¶ 147, at 244.

75 Ibid ¶ 158, at 250.

76 Ibid ¶ 156, at 249 (citing *Commonwealth Sci. & Indus. Research Org. v Cisco Sys., Inc,* No. 6:11-CV-343, 2014 WL 3805817 (E.D. Tex. 23 July 2014) (Davis, C.J.)).

77 Ibid ¶ 156, at 250 (citing *National Development and Reform Commission Ordered Rectification of Qualcomm's Monopolistic Behavior and Fined Six Billion Yuan*], National Development & Reform Commission, People's Republic of China (10 February 2015), http://www.ndrc.gov.cn/xwzx/xwfb/201502/t20150210_663822.html.

78 Ibid ¶ 160, at 251.

79 Ibid ¶ 161, at 254.

order issued in *Ericsson v Micromax* on 12 November 2014[80] and adopted the same royalty rates to calculate a FRAND royalty for Intex. However, the court did not specify the time period during which the rates would apply. Therefore, the time period during which the rates will apply for Intex may differ from the time period applicable to Micromax. The court also (1) restrained Intex from manufacturing, selling, or importing mobile devices that included the patents in suit during the pendency of the suit and (2) directed the customs authority to restrict importation of Intex's mobile devices that infringed Ericsson's SEPs.[81]

Ericsson's suit against Xiaomi in the Delhi High Court

In December 2014, Ericsson sued Xiaomi Technology Company Limited in the Delhi High Court for infringement of its eight patents essential to the 2G and 3G standards registered in India.[82] Ericsson had asked Xiaomi to obtain a licence from Ericsson for its SEPs; however, Xiaomi launched the infringing products in India in July 2014 without obtaining a licence.[83] Ericsson also argued that Xiaomi had expanded its operations in India by creating an Indian subsidiary to market the infringing products.[84] Xiaomi argued that it had entered into an exclusive agreement with Flipkart Internet Private Limited that sells and markets Xiaomi's products in India.[85] The court issued an interim injunction against Xiaomi, restraining it from importing or selling any infringing device, and the court also directed the customs authority not to allow Xiaomi's devices to be imported into India.[86]

Xiaomi appealed, arguing that it obtained the chipset containing Ericsson's patented technology from Qualcomm Incorporated, which in turn had licensed the patented technology from Ericsson.[87] Consequently, Xiaomi argued, its products did not infringe Ericsson's patents.[88] Ericsson argued that the terms of its licence with Qualcomm were confidential.[89] As a *temporary* measure, a division bench of the Delhi High Court allowed Xiaomi to import and sell only the devices that contained the chipsets sold to Xiaomi by Qualcomm and simultaneously to deposit INR 100 per device imported with the Registrar General of the Delhi High Court.[90] As of May 2015, the Delhi High Court had not determined any royalty rates for Xiaomi to pay Ericsson, unlike the cases against Intex and Micromax.

iBall's complaint Against Ericsson with the CCI

In May 2015, Best IT World (India) Private Limited (known as iBall) filed a complaint against Ericsson with the CCI.[91] According to iBall, Ericsson wanted iBall to execute a patent-licensing agreement and an NDA to license the use of Ericsson's patents in GSM-compliant and WCDMA-compliant products.[92] iBall alleged that, although it was 'willing to enter into a license agreement with Ericsson as per FRAND (fair, reasonable, and non-discriminatory) terms', Ericsson presented strict and onerous terms through the NDA, including settling all disputes through arbitration in Stockholm, ten years' confidentiality in the disclosure agreement, and covering past as well as future sales within the ambit of the licence agreement.[93] iBall alleged that Ericsson's conduct–including an alleged threat of patent infringement proceedings, demanding 'unreasonably high royalties' calculated as a percentage of the price of the standard-compliant products, and bundling 'patents irrelevant to [iBall's] products' in the licence agreement–violates section 4 of the Competition Act.[94]

Similar to its orders in *Micromax* and *Intex*, the CCI observed that, because there is no alternate technology available for Ericsson's patents in the 2G, 3G, and 4G standards, 'Ericsson enjoys a complete dominance over its present and prospective licensees in the relevant market'.[95] The CCI also said that Ericsson's licensing practices appear to be 'discriminatory as well as contrary

80 Judgment, *Telefonaktiebolaget LM Ericsson v Mercury Electronics & Another,* Interim Application No. 3825 of 2013 and Interim Application No. 4694 of 2013 in Civil Suit (Original Side) No. 442 of 2013, High Ct of Delhi (12 November 2014), http://lobis.nic.in/dhc/GSS/judgement/17-11-2014/GSS12112014S4422013.pdf.

81 *Ericsson v Intex*, Interim Application No. 6735 of 2014, ¶ 162, at 256.

82 Judgment, *Telefonaktiebolaget LM Ericsson v Xiaomi Technology and Others*, Interim Application No. 24580 of 2014 in Civil Suit (Original Side) No. 3775 of 2014, ¶¶ 1–2, High Ct of Delhi (8 December 2014), http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=250092&yr=2014.

83 Ibid ¶ 3.

84 Ibid.

85 Ibid ¶ 4.

86 Ibid ¶ 8.

87 Judgment, *Xiaomi Technology and Another v Telefonaktiebolaget LM Ericsson and Another*, First Appeal Against Order (Original Side) No. 522 of 2014, ¶ 6, High Ct of Delhi (16 December 2014), http://delhihighcourt.nic.in/dhcqrydisp_o.asp?pn=265674&yr=2014.

88 Ibid.

89 Ibid ¶ 7.

90 Ibid ¶ 13.

91 *Best IT World (India) Private Ltd. v Telefonaktiebolaget LM Ericsson*, Case No. 4 of 2015, Competition Comm'n of India (12 May 2015), http://www.cci.gov.in/May2011/OrderOfCommission/261/042015.pdf.

92 Ibid. ¶ 4, at 3.

93 Ibid. ¶ 5, at 3–4.

94 Ibid. ¶ 6, at 4.

95 Ibid. ¶ 13, at 6.

to FRAND terms'.[96] The CCI opined 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'.[97] The CCI directed the DG to investigate further Ericsson's licensing practices and highlighted that iBall's allegations were similar to the allegations made in *Micromax* and *Intex*.[98] The CCI also directed the DG that the CCI's observations in the order not impede or affect the DG's investigation.[99]

The Delhi High Court's decisions on FRAND licensing

The Delhi High Court's decisions on FRAND licensing comport with current judicial and regulatory trends across the world. In particular, the court's approval of (1) using the net sales price of the downstream product as the royalty base and (2) relying on comparable licences to derive a FRAND royalty rest on sound economic reasoning.

I have previously explained that using the price of downstream product as a royalty base to calculate a FRAND royalty is economically sound.[100] Real-world licences typically use the retail value of the downstream product as a royalty base when calculating the royalty for a multi-component product.[101] Multi-component products include numerous complementary components. The combinatorial interaction of those components generates complementarity effects and enhances the value of the product, such that the value of the product transcends a simple arithmetic sum of the value of the components.[102] That consideration is particularly relevant for SEPs, for which the complementarity effects and network effects arising from the interaction of the technologies implemented in the standard typically are universally believed to be significant.[103] Using the retail value of the multi-component downstream product as a royalty base allows the patent holder to obtain adequate compensation for the contribution that its technology made to the value of the downstream product.[104] For example, upgrading the baseband chip in a mobile phone from 3G to LTE will enhance the user's ability to use data-intensive apps. The complementarity effects of a patented technology may enhance existing network effects—the benefit to society that accrues as the size of the network grows.[105] For example, a smartphone user might share pictures with other users and, in turn, receive messages or pictures from the recipients. In this way, the complementarity effects from bringing components together to create additional uses might enhance the network effects already present among users of smartphones. In contrast, using the price of the smallest saleable patent-practising component (SSPPC) as a royalty base (the method that the CCI seems to favour) is unmindful of the pertinent economic analysis of the consequences of such a rule.[106] The market price of the individual patented components may not account for the value of the complementarity effects and the network effects that the component generates.[107] In the long run, this failure of complete compensation would reduce the supply of the patented components for downstream products, all other factors remaining constant.[108] It is also industry practice that voluntary licences negotiated for SEPs implemented in multi-component products use the entire market value of the downstream product as the royalty base.[109] Leading technology companies in the United States, Europe and Asia routinely use the retail price of the downstream product as the royalty base for calculating royalties on a multi-component product.[110] Therefore, in litigation involving infringement of a component for a multi-component product, if a court seeks to approximate faithfully the practices and outcomes of real-world transactions when calculating a reasonable royalty, it should use the retail price of the downstream product as the royalty base.[111] Moreover, the Delhi High Court agreed that Ericsson's 'practice of charging [r]oyalty on the device price is [n]on-[d]iscriminatory', following decisions in the United States and China.[112]

96 Ibid. ¶ 14, at 7.

97 Ibid.

98 Ibid. ¶ 15, at 7.

99 Ibid. ¶ 17, at 8.

100 J. Gregory Sidak, 'The Proper Royalty Base for Patent Damages', 10 *J. Competition L. & Econ*. 989, 990 (2014).

101 Ibid at 993.

102 Ibid at 994.

103 Ibid at 996.

104 Ibid at 994.

105 *See,* eg, J. Gregory Sidak & Daniel F. Spulber, *Deregulatory Takings and the Regulatory Contract: The Competitive Transformation of Network Industries in the United States 547* (Cambridge University Press 1998).

106 Sidak, '*The Proper Royalty Base for Patent Damages*', supra note 100, at 991.

107 Ibid at 994.

108 Ibid at 995.

109 Ibid; see also Research in Motion, Response Concerning Call for Evidence by the Independent Review of Intellectual Property and Growth 6 (2011).

110 Brief for Nokia Corp. and Nokia Inc as Amici Curiae in Support of Reversal and in Support of Neither Party at 8, *Apple Inc. v Motorola Inc,* No. 11-cv-08540 (Fed. Cir. 2013); Press Release, ZTE, *The Licensing Policy on LTE Essential Patents of ZTE* (22 December 2008), http://wwwen.zte.com.cn/en/press_center/news/200810/t20081008_350799.html; *Nortel Strengthens the Case for Deployment of LTE by Publishing Competitive Patent Royalty Rates*, Bloomberg (5 May 2008), http://www.bloomberg.com/apps/news?pid=newsarchive&sid=%20aWGOAy0V7QO4.

111 Sidak, 'The Proper Royalty Base for Patent Damages', supra note 100, at 996–97.

112 *Telefonaktiebolaget LM Ericsson v Intex Techs*. ¶ 158, at 250.

Comparable licences provide reliable information to calculate a FRAND royalty.[113] Royalties derived from real-world licences inherently reflect the market valuation of the SEPs because they reveal how the market participants have disaggregated the value of the SEPs from the value of the non-infringing components of the final product.[114] The calculation of patent damages based on comparable licences reduces the risk of errors. From an economic perspective, comparable licences reveal what the licensor and licensee consider fair compensation for the use of the patented technology. A voluntary licence agreement is mutually welfare-enhancing[115]—that is, the agreed royalty necessarily ensures that both parties expected to be better situated as a result of the licence than in its absence. If this had not been the case, the parties would never have agreed to the licence. The royalties directly observable in comparable licences for the use of the *same* technology will most accurately depict a licensee's willingness to pay for that technology. US courts have recognized the probative value of comparable licences for the calculation of patent damages.[116] The US Court of Appeals for the Federal Circuit has emphasized that '[a]ctual licenses to the patented technology are highly probative as to what constitutes a reasonable royalty for those patent rights because such actual licenses most clearly reflect the economic value of the patented technology in the marketplace'.[117] The same court has further said that the ability to analyse data from real-world licences 'removes the need to guess at the terms' to which parties would agree in a hypothetical negotiation.[118] The observation of data from real-world licences thus obviates speculative lines of economic analysis and consequently reduces the risk of errors. This judicial insight about the power of empirical observation finds strong support in economic thought.[119] Data from real-world licences reflect what is known as an industry norm. The legitimacy of an industry norm arises from objective knowledge indicating that the norm is superior to other known means of tailoring that specific economic relationship or transaction. The works of Nobel laureates such as Ronald Coase,[120] Douglass North,[121] George Stigler,[122] and Friedrich Hayek[123] reflect this insight about organization of industry. In sum, when available, royalties determined in comparable licences provide the most probative starting point for determining a FRAND royalty rate.

The Delhi High Court's decision also differed from the CCI's order in the case of *Ericsson v Intex* because Intex made contradictory arguments before the CCI and the Delhi High Court. On one hand, Intex argued before the CCI that Ericsson's patents were essential and consequently Ericsson dominated the market, and on the other hand, Intex argued before the Delhi High Court that Ericsson's patents were not essential.[124] The court also noted that Intex did not seek to license Ericsson's SEPs, but Ericsson offered a FRAND licence for its patent portfolio.[125] The European Commission in *Google/Motorola Mobility* highlighted that a potential licensee that is not willing to negotiate a FRAND licence in good faith is 'unwilling'.[126] Similarly, the Delhi High Court found that Intex's conduct and repeated refusal to obtain a FRAND licence makes Intex an unwilling licensee,[127] a concern that the CCI did not seem to share.

Thus, the Delhi High Court's decision to use the price of the downstream product as a royalty base, as well as its decision to rely on comparable licences to determine a FRAND royalty rate, were economically sound and

113 J. Gregory Sidak, 'The Meaning of FRAND, Part I: Royalties', 9 *J. Competition L. & Econ.* 913, 989 (2013); J. Gregory Sidak, 'The Meaning of FRAND, Part II: Injunctions', 11 *J. Competition L. & Econ.* 201, 242 (2015); see also Sidak, 'The Proper Royalty Base for Patent Damages', supra note 100, at 995–96.

114 See, eg, Sidak, 'The Meaning of FRAND, Part I: Royalties', supra note 113, at 1001; Sidak, 'The Proper Base for Patent Damages', supra note 100, at 993–94.

115 See, eg, Joseph E. Stiglitz, *Economics* 54 (W. W. Norton & Co, 1993) (explaining that if one of the parties to an agreement expected to be worse off, that party would not enter into the agreement); Robert S. Pindyck & Daniel L. Rubinfeld, *Microeconomics* 584.

116 *LaserDynamics, Inc. v Quanta Computer, Inc*, 694 F.3d 51, 79–80 (Fed. Cir. 2012); *Ericsson Inc. v D-Link Sys., Inc*, No. 6:10-cv-00473, 2013 WL 4046225, at *16–18 (E.D. Tex. 6 August 2013) (Davis, C.J.).

117 *LaserDynamics*, 694 F.3d at 79.

118 *Monsanto Co. v McFarling*, 488 F.3d 973, 979 (Fed. Cir. 2007).

119 Milton Friedman, 'The Methodology of Positive Economics', *in Essays in Positive Economics* 3, 8 (University of Chicago Press, 1953) ('Viewed as a body of substantive hypotheses, theory is to be judged by its predictive power for the class of phenomena which it is intended to 'explain'. Only factual evidence can show whether it is 'right' or 'wrong' or, better, tentatively 'accepted' as valid or 'rejected'.').

120 Ronald H. Coase, 'The Nature of the Firm', 4 *Economica* 386 (n.s.) (1937).

121 Douglass C. North, *Institutions, Institutional Change and Economic Performance* (3rd ed. Cambridge University Press 1990).

122 *See* George J. Stigler, 'The Economies of Scale', 1 *J.L. & Econ.* 54 (1958). Stigler argued that the optimum scale of a firm in an industry could be inferred from what he called 'the survivor principle', whose 'fundamental postulate is that the competition of different sizes of firms sifts out the more efficient enterprises'. Ibid. at 55.

123 Friedrich A. Hayek, 'The Use of Knowledge in Society', 35 *Am. Econ. Rev.* 519 (1945). For a summation of Hayek's writings on the evolution of economic and legal institutions, see Friedrich A. Hayek, *The Fatal Conceit: The Errors of Socialism* (W.W. Bartley III ed., Routledge 1988).

124 *Telefonaktiebolaget LM Ericsson v Intex Techs.* ¶ 128–30, at 233–34; see also Kartik Chawla, *Ericsson v Intex, Part 1 – SEPs, Injunctions, and Gathering Clouds for Software Patenting*, SpicyIP (22 March 2015), http://spicyip.com/2015/03/ericsson-v-intex-part-1-seps-and-injunctions-anda-new-era-of-software-patenting.html.

125 *Telefonaktiebolaget LM Ericsson v Intex Techs.* ¶ 136, at 238–39.

126 Commission Decision, Case No. COMP/M.6381, *Google/Motorola Mobility*, 2012 O.J. (C 1068) 1, ¶ 126.

127 *Telefonaktiebolaget LM Ericsson v Intex Techs.* ¶ 136, at 238–39.

comported with the judicial and industry trends in the rest of the world. The court was also mindful of the fact that, if the indigenous manufacturers do negotiate a FRAND licence with SEP holders in good faith and avoid paying royalties, 'it would have impact of [*sic*] other 100 licensors who are well known companies in the world who are paying the royalty'.[128] The Delhi High Court's decisions are interim arrangements and not a final FRAND determination of Ericsson's SEP portfolio in India. However, by keeping in step with the judicial and industry trends in the rest of the world, the decision is likely to improve the confidence of SEP holders who license patents in India.[129]

Responsive to trends, but more clarity needed

As of May 2015, more than one year has passed since the CCI directed the DG to investigate the allegations that Micromax and Intex brought against Ericsson. Although the investigation proceedings are not publicly available, the recent judgments of the Delhi High Court indicate that the judicial view regarding FRAND licensing issues has undergone change between 2013 and 2015. Whereas the CCI's initial orders firmly regarded using the downstream product's sales price as a royalty base as being excessive and having no link to the value of the SEP, the Delhi High Court, relying on judgments from around the world (including the United States and China), approved the use of the net selling price of the downstream product as the royalty base. The court also relied on previous licences that Ericsson signed with other manufacturers in India to determine the FRAND royalty rates that Micromax and Intex must pay Ericsson.

With the world's second-largest telecommunications network, India is an attractive and important market for some of the largest participants in the telecommunications industry. How India chooses to shape its FRAND licensing jurisprudence will therefore be relevant to those participants. The Delhi High Court decisions illustrate that the courts in India are responsive to the judicial and industry trends in the rest of the world. One would expect that the CCI would supply clear and precise opinions when evaluating other similar complaints in the future. However, the CCI's order in *iBall* only increased the ambiguity of FRAND jurisprudence in India. It bears emphasis that, in its May 2015 order, the CCI referred to its previous orders in *Micromax* and *Intex*, but it failed to mention the orders of the Delhi High Court that followed the CCI's orders. The CCI's order in *iBall* is also strikingly similar to the CCI's previous orders, despite the Delhi High Court's having taken the contrary view in its orders, which raises a concern that the CCI is continuing to issue conflicting orders that flout the Delhi High Court's orders. The DG is in the process of investigating complaints against Ericsson to determine whether it has violated the Competition Act. The DG should consider the judgments passed by the Delhi High Court, for it would be counterproductive for the judicial system and the competition authority to take conflicting views of the respective rights of SEP holders and SEP implementers in India.

128 Ibid ¶ 159, at 250.

129 Jack Ellis, 'Indian Court Takes the Lead on FRAND Licensing in Asia', *IAM* (21 November 2014), http://www.iam-media.com/blog/Detail.aspx?g=e3ec52b5-284f-44d0-bdfc-9c2aa09303f6.