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* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

Reserved on: 10th May, 2019
Date of Decision: 12th July, 2019

\+ **CS (COMM) 1222/2018**

COMMUNICATION COMPONENTS ANTENNA INC. ..... Plaintiff

Through: Mr. C. S. Vaidyanathan, Senior Advocate with Mr. Sidhant Goel, Mr. Mohit Goel, Mr. Samik Mukherjee, Mr. Deepankar Mishra, Mr. Aditya Goel and Mr. Anirudh Gupta, Advocates. (M:7585965845)

versus

ACE TECHNOLOGIES CORP. AND ORS. ..... Defendants

Through: Mr. Arun Kathpalia, Sr. Adv., Mr. Shantanu Tyagi, Mr. Dev Robinson, Ms. Apoorva Murali and Ms. Surabhi Bhandari, Advocates for D-1 to 4. (M:9971161282)

CORAM:
JUSTICE PRATHIBA M. SINGH

JUDGMENT

Prathiba M. Singh, J.

I.A. 15222/2018, 1044/2019 & 1046/2019 (all stay applications)

1. The Plaintiff has filed the present suit seeking permanent injunction restraining infringement of Indian Patent No. 240893 (*hereinafter, 'IN'893'*). The patent is titled *"Asymmetrical Beams for Spectrum Efficiency"*. The Plaintiff is a Canadian company, manufacturing and selling, cellular base station products, and services relating to the telecommunication industry. It manufactures and sells various products such as Antennae, Amplifiers, Low Loss Combiners, Tower Mounted Amplifiers

(TMA) & Diplexers, Distributed Antenna System (PAS) Components and Portable Passive Intermodulation (PIM) Testers. The Plaintiff also supplies a variety of antennae such as Specialty Antennae, Multi-Beam Antennae, Bi-Sector Array Antennae, Small Cell Antenna and Multi-Port Antennae.

2. The suit patent was originally filed as a PCT application on 19th March, 2007. The domestic phase application in India was filed on 5th August, 2008, claiming priority from a Canadian application. IN'893 was granted on 9th June, 2010 and the term of the patent ends on 18th March, 2027. The suit patent is not a standard essential patent ('SEP'). However, the Plaintiff has licensed the patent to various parties.

3. The case of the Plaintiff is that the suit patent discloses a novel sector-antenna used by the telecommunication industry, which has an asymmetrical beam pattern and other features as detailed in the specification. The Plaintiff has filed an expert report of Mr. Mark Cosgrove, who is an independent expert, to establish infringement by the Defendants.

4. Defendant No.1 – M/s Ace Technology Corporation is a South Korean Company, which is also in the business of manufacturing and selling antennae for the telecommunication industry. Defendant No.2 – M/s Shin Ah Ltd. is a Hong Kong based company, which the Plaintiff contends is part of the *"overseas network"* of Defendant No.1. Defendant Nos.3 and 4 are the Indian subsidiaries of Defendant No.1. For the sake of brevity and convenience, they shall collectively be referred to as `Defendants'.

5. The Plaintiff claims that it acquired knowledge of the Defendants' infringing antennae sometime in 2017, and it was able to procure an image of the beam pattern of the dual-beam fixed beam antenna of the Defendants, during a presentation being made by a cellular operator in India. The

Plaintiff then compared the beam pattern of the Defendants' antenna and realised that the same was infringing the suit patent. According to the Plaintiff, two models of antennae of the Defendants were found to be infringing, i.e., -

i) XXDW-18-33i-IVT-DB8P (*hereinafter, 'first model'*);

ii) XXDH-20-33ie-VT-DB (*hereinafter, 'second model'*).

6. Upon learning about the Defendants' antennae, the Plaintiff entered into correspondence with the Defendants. A letter dated 18th January, 2017 was issued to Defendant No.1 calling upon it to obtain a license from the Plaintiff. On 25th January, 2017, the Plaintiff issued the same letter to the Indian subsidiaries of Defendant No.1. On 22nd February, 2017, Defendant No.3, replied to the notice issued by the Plaintiff, whereby its General Manager stated that intimation of the Plaintiff's notice was given to the Defendant No.1, and the Indian office of the Defendants agreed to revert soon. However, since no response was received, further letters were issued on 18th November, 2017 and 23rd November, 2017. Despite the said letters, the Defendants failed to respond. Accordingly, the Plaintiff has filed the present suit seeking permanent injunction against the Defendants from infringing the Plaintiff's suit patent.

7. On 2nd November, 2018, after hearing counsels for the Plaintiff, the following order was passed.

> "*14. Patent rights being limited in life, despite being notified, the Defendants have taken no steps to either correspond with the Plaintiff, challenge the patent or obtain a licence. It is clear from the averments made, that the Defendants have complete knowledge of the Plaintiff's patent and are violating the same. The Plaintiff has made a prima facie case.*

> *Considering that the market for Antennas is extremely limited, the Defendants, by competing with the Plaintiff and not obtaining a license, severely impinge upon the Plaintiff's statutory rights.*
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> *15. Accordingly, the Defendants are directed till the next date of hearing not to offer for sell any Antennae, the models of which are mentioned hereinabove to any cellular operators in India. However, if the Defendants have placed orders for imports, the same are allowed to be imported subject to the accounts relating to the same being filed in this Court."*

8. The Defendants thereafter entered appearance and submitted that the second model is not manufactured or sold any more by the Defendants and they did not intend to import the same into India. Insofar as the first model is concerned, the Defendants already had various orders for supply of the same. It was further submitted by the Defendants, that the validity of the suit patent was challenged in ***Ten XC Wireless Inc & Anr v. Mobi Antenna Technologies (Shenzhen) Co. Ltd. [CS(OS) 1989/2010]*** *(hereinafter, 'Ten XC v. Mobi Antenna')* and ***Ten XC Wireless Inc & Anr. v. Andrew Comm Scope Inc [CS(OS) 1993/2010] (****hereinafter, 'Ten XC v. Andrew Comm Scope'****)*** (which were later re-numbered as CS(COMM) 977/2016 and CS(COMM) 1072/2016, respectively) and vide order dated 4th November, 2011 in the interim applications therein, the Court had expressed a *prima facie* opinion that there is a credible challenge to the validity of the patent IN'893, raised by the Defendants in the said suits, which does not warrant grant of injunction. According to the Defendants, this order was concealed by the Plaintiff at the time of making submissions on the first date of hearing, and, accordingly, the injunction order dated 2nd November, 2018, is

liable to be vacated. It is the Defendants' further case that the Plaintiff's patent is invalid and is liable to be revoked.

9. The Defendants have, thereafter, filed their written statement raising defences of invalidity under Section 64 of the Patents Act, 1970 (*hereinafter, 'Patents Act'*). It is further averred by the Defendants that in view of the various statements made by the Plaintiff in prosecution of the corresponding patent in the USA, and the fact, that the corresponding EU patent has still not been granted, shows that the validity of the suit patent is in severe doubt. The Defendants' further case is that the suit patent is not a patentable invention, in view of Section 3, sub-sections (a) (c) (d) and (f), of the Patents Act.

10. The Plaintiff had reserved the right to include within the suit any other model of antennae of the Defendants that infringed IN'893. Accordingly, during the course of hearing, the Plaintiff filed two applications being I.A. Nos.1044/2019 & 1046/2019, whereby the Plaintiff avers that the following models of the Defendants' are also infringing IN'893, in addition to abovementioned antennae models:

i. XXDGL-15-33i-iVT-DB-4P;

ii. XXDW-18-33I-IVT-DB8P-V2.

11. During the course of completion of pleadings and hearing in the injunction application, various exports have been made of the impugned antennae by the Defendants to India, which were permitted by the Court, under specific applications, subject to conditions that may be fixed by the Court in the application for interim injunction. Whenever an export is to be made to India, the Defendants have moved an application and placed on record in a sealed cover the invoice, purchase order and other relevant

documents. Accordingly, till date there has been no interdiction of the supplies by the Defendants to India, though the ad interim order continues to operate.

Submissions of the Plaintiff

12. On behalf of the Plaintiff, submissions have been made by Mr. C. S. Vaidyanathan, ld. Senior Counsel. It is submitted that the novelty in the suit patent resides in the fact that by changing the beam pattern, greater efficiency in the usage of the spectrum is achieved. Spectrum being a scarce commodity, continuous research is done by companies like the Plaintiff to achieve greater efficiency within the same spectrum. The purpose always is to achieve greater efficiency without compromising on quality i.e., it has to be ensured that while allowing for greater number of subscribers being connected, using the same spectrum, the quality of the calls is also to be maintained.

13. The prior art, that existed at the time of filing of the suit patent, was to the effect that there were fixed beam antennae, which emitted signals in a single plane in all directions. The beam pattern of the said antennae was in the nature of a ripple, however, these antennae had various problems i.e., for users located closest to the location of the antennae, the coverage quality was good, however, as a user proceeded from the centre to the outward region of the signal, the quality of the same was considerably compromised at the fringes.

14. Under such circumstances, instead of omni-directional antennae, sectoral antennae were introduced. A sectoral antenna was able to produce better quality of coverage, while ensuring that the geographical area that was covered was not reduced. These sectoral antennae emitted symmetrical

beams, covering a 360-degree area. Such sectoral antennae also had some drawbacks, as several overlaps between sectors were being created leading to enormous interference. The signals were compromised due to this overlap in the coverage area. Thus, there was a need to reduce the areas of overlap. It was under these circumstances that the Plaintiff's patent in respect of a sectoral antenna, with at least one asymmetrical beam shape, was invented by the Plaintiff's predecessor i.e., Ten XC Wireless Inc..

15. The suit patent is, thus, a validly granted patent, which introduced asymmetrical beam patters in split-sector fixed beam antennae. Thus, according to the Plaintiff any antennae that emit asymmetrical beam(s) that result in asymmetrical sub-sector coverage area(s) such that the summation/total critical coverage area (i.e. the total dominant coverage area), of the sub-sector coverage areas of the split-sector antenna is substantially equivalent to the critical coverage area (i.e. the dominant coverage area) of the earlier sector antenna, is covered within the scope of IN'893.

16. The suit patent was filed as a convention application, under the PCT system. It is granted in Canada under Canadian Patent No. 2,645,720 and in the US under US Patent No.8,311,582 (*hereinafter, 'US'582'*), and is more than 12 years old, and is a valid patent.

17. US'582, after grant, was opposed vehemently by another competitor M/s CommScope Technologies LLC, which had filed invalidation proceedings before the US Patent Trial and Appeal Board (*hereinafter, 'US PTAB'*). The US PTAB, vide its judgment dated 3rd November, 2016 upheld the validity of US'582. Even in the Request for Reconsideration filed by CommScope Technologies, LLC, the US PTAB vide order dated 15th

March, 2017 upheld the validity of US'582. The company – CommScope Technologies LLC, which had sought invalidation of the Plaintiff's patent in the US, then took a global license for the patent.

18. It is the case of the Plaintiff that the patented technology has received commendation in various technical journals. The commercial value of the patent can be gauged from the fact that the Plaintiff's antenna is described as a *"smart antenna"*. It is stated that the Plaintiff gave a number of presentations to Indian Service Providers and a large number of antennae were supplied by the Plaintiff's predecessor in India. However, in recent times, it was noticed that several third parties had started supplies of infringing antennae in India, leading to erosion of the Plaintiff's market.

19. The Plaintiff then filed two suits being ***Ten XC v. Mobi Antenna (supra)*** and ***Ten XC v. Andrew Comm Scope (supra)***. One was filed against Mobi Antenna Technology, a Chinese company and the second was against Andrew LLC. It was in these cases that the judgment of the Ld. Single Judge dated 4th November, 2011 was rendered. However, insofar as Andrew LLC is concerned, this company was a subsidiary of CommScope Technologies LLC, which was the entity, which had sought invalidation of the Plaintiff's patent in the US i.e., US'582. After the decision of the US PTAB on 3rd November, 2016 and 15th March, 2017, a global license was entered into between the Plaintiff and Comm Scope Technologies LLC, and hence one of the suits i.e., CS(COMM) 1072/2016 had been disposed of in terms of the said settlement. The second suit, i.e., CS(COMM) 977/2016, against Mobi Antenna Technology (Shenzhen) Co. Ltd. has been heard by a Ld. Single Judge of this Court finally, after trial, and the judgment is reserved. Accordingly, it is submitted that the earlier judgment, wherein

doubts were expressed on the validity of the patent, would not disentitle the Plaintiff for an injunction in the present suit.

20. It is further submitted by Mr. Vaidyanathan, Ld. Senior Counsel, that the Defendants have adopted a unique *modus operandi* to camouflage their infringing activities. It is a practice in the antenna industry to disclose the beam patterns of an antenna in the publicity material and other technical brochures etc. Even the Defendants themselves, in respect of other antennae, have disclosed the beam patterns. However, insofar as the infringing antennae are concerned, the Defendants have failed to disclose the beam patterns. Thus, the Plaintiff had to obtain the beam pattern of the Defendants' antenna, from third party sources. The same has been disclosed in paragraph 73 of the plaint.

21. He further submits that the slight difference in the language of the claims in US'582 and in India does not make any difference insofar as the scope of the exclusivity is concerned. It is submitted that even the variation in language of claims in IN'893 and the claims US'582, is clarificatory in nature and nothing more. The asymmetry in the main beam in the manner as disclosed in IN'893, is the novel feature, which has not been prior published. It is submitted that unless the prior art precisely discloses the novel feature of the patented invention, the patent cannot be held to be invalid.

22. It is further submitted that insofar as the earlier judgment by the Ld. Single Judge of this Court is concerned, there are various developments, which have taken place post the said judgment dated 4th November, 2011 in ***Ten XC v. Mobi Antenna (supra)***, which shows that the Plaintiff is entitled to an interim injunction. The said factors are:

a) That at the time, when the earlier order was passed on 4th

November, 2011, the suit patent was a recent patent.

b) The corresponding US patent had been rejected by the US PTO at that stage, but now the US PTAB has upheld the validity of US'582.

c) One of the Defendants, who was also opposing US'582, has now obtained a global licence for the Plaintiff's patent.

d) In the other suit, i.e., CS(COMM) 977/2016 evidence has been concluded, and the evidence points to the validity of the patent, though judgment is reserved.

e) Since the earlier order dated 4th November, 2011 is one under Order XXXIX Rules 1 & 2 CPC and is only a *prima facie* opinion, depending on the circumstances that existed at that time, it cannot be treated as a binding precedent to hold that the patent itself is invalid.

f) Since only 8 more years of the suit patent IN'893 are left, the Plaintiff is entitled for protection of its statutory rights, failing which the purpose of grant of the patent itself may be defeated.

23. Finally, it is submitted that the Defendants have not raised any new plea in respect of invalidity, which was not considered by the US PTAB. Further, the mere raising of a plea does not mean that IN'893 is invalid. The Defendants lacked *bonafides* in their conduct, as they have not disclosed their beam patterns, in the entire proceedings. Thus, relying upon Sections 104 and 114 of the Indian Evidence Act, 1872 it is submitted that the non-production of a document would raise a presumption that the said document, if produced, would be detrimental to the party which is resisting the production. Reliance is placed by the Plaintiff on the following judgments,

in support of its arguments:

- ***F.Hoffman-La Roche Ltd. v. Cipla Ltd. (2015) 225 DLT 391*** *(hereinafter, 'Roche v. Cipla');*
- ***Gopal Krishnaji Ketkar v. Mahomed Haji Latif (1968) 3 SCR 862;***
- ***Farbewerke Heochst v. Unichem Laboratories AIR 1969 Bom 225;***
- ***Catnic Components Ltd. v. Hill & Smith 1982 RPC 183*** *(hereinafter, 'Catnic Components Ltd.');*
- ***Actavis UK Ltd. & ors. v. Eli Lily & Co. [2017] UKSC 48.***

Submissions of the Defendants

24. On behalf of the Defendants, Mr. Arun Kathpalia, Ld. Senior Advocate has made his submissions. The case of the Defendants is that the Plaintiff is guilty of suppression, as the earlier judgment in ***Ten XC v. Mobi Antenna (supra)*** was not disclosed to the Court. It is submitted that under Section 13(4) of the Patents Act, there is no presumption of validity of a patent. It is false for the Plaintiff to contend that the patent enjoys worldwide protection. Though it has been granted in some jurisdictions, US'582 has additional limitations on the claims, and thus, the scope of US'582 and IN'893 are considerably different. The Defendants rely on the US prosecution history of US'582 to support their contention that the patent is invalid.

25. Vehement reliance is placed on the earlier order of this Court dated 4th November, 2011 in ***Ten XC v. Mobi Antenna (supra)*** and since in the present suit, an application for interim injunction is being considered in respect of the same patent, the said order would be binding. The Defendants also rely on the pendency of the EU application, and a limitation entered in

the same to further substantiate their claim that the patent IN'893 is invalid.

26. On merits, the substantive challenge by the Defendants is that the claims use the word *'replacing'*, which means that the infringement of the patent would happen only when an existing antenna is replaced with the patented antenna and not if a new antenna is being used or installed. The Defendants seek to distinguish between *brownfield infringement* and *greenfield infringement* and averred that only a brownfield use would be infringing and not a greenfield usage.

27. It is further averred that the Defendants do not infringe IN'893, as the evidence filed by the Plaintiff is unreliable. The Plaintiff has failed to compare the Defendants' antennae with the Plaintiff's patent claims. It is the Defendants' submission that a product to product comparison cannot be made to establish infringement. The Defendants rely upon beam patterns of their antennae, as simulated by the Plaintiff by using power and phase weightings to argue that the beam patterns are different. Various grounds have also been relied upon to argue that under Section 64, the patent lacks novelty and inventive step. The Defendants also aver that the patent is hit by Section 3, sub-sections (a), (c), (d) & (f) of the Patents Act. It is also claimed that the expert evidence filed by the Plaintiff is unreliable.

28. Mr. Kathpalia, Ld. Senior Counsel, further, submits that since there is a credible challenge to the validity of the patent, no interim orders are liable to be passed. He further submits that asymmetric beam patterns were in the public domain as on the date of priority of patent IN'893. He submits that Claim Nos. 1 and 10 are the claims being invoked by the Plaintiff. Since, Claim No.1 is a method claim, the Defendants do not infringe the said claim. The main plank of the Defendants' submission is that since claim 10 uses

the term *'replacement'*, there has to be physical replacement of the antenna. In the absence of physical replacement, which can only be done by a network operator, the Defendants cannot be held to be infringing. Since, as per the Plaintiff's own statement before the European Patent Office, the replacement is physical, it can apply only to a brownfield project. The use of terms such as replacement/upgradation and comparison with the original, clearly, shows that the claims are addressed qua service providers/operators and not manufacturers or sellers of antennae, like the Defendants. According to Mr. Kathpalia, Ld. Senior Counsel, the following was known to the Plaintiff on the date of priority:

- Dual beam sub sectoral antennae
- Base stations
- Asymmetrical beams
- Overlapping of beams
- The object of replacing an antenna with the same coverage area.

29. The fact that the Plaintiff had to add a limitation in the claims of US'582, shows that without the limitation the patent would have been obvious. It is further submitted that there is no requirement for the Defendants to disclose their beam patterns in the present matter, as the Plaintiff had failed to discharge its own onus.

30. The Defendants have relied on certain graphics filed with the list of documents dated 5th March, 2019 to argue that the total coverage area is not comparable. This is based on some simulations that the Defendants have purportedly undertaken. The Defendants also rely on a technical opinion of a Mr. Lee to submit that the beam patterns as shown in paragraph 28 of the plaint do not truly reflect the beam patterns of IN'893. Reliance is placed on

Merck & Co. Inc. v. Generics (UK) Ltd. [2003] EWHC 2342 (Pat) *(hereinafter, 'Merck & Co. Inc')* and ***Sandeep Jaidka v. Mukesh Mittal & Anr. (2014) 5 HCC (Del) 715*** *(hereinafter, 'Sandeep Jaidka').*

31. The Defendants, filed their written submissions on 16th May, 2019, wherein various additional submissions have been placed beyond what was orally argued. The Defendants' submissions, to the extent they were orally argued are being considered for the purposes of the decision in the application under Order XXXIX Rules 1 & 2 CPC.

32. The Defendants also rely on various prior art documents to submit that the suit patent is invalid. The main document is an article published on 1st March, 2006, in *"Mobile DevDesign"* titled *"Wireless solution boosts network capacity" (hereinafter, 'Article of 1st March, 2006')* which discusses asymmetric beam patterns generated by dual sector panel antennae, which could be used for replacement of existing antennae or in greenfield capacity deployments. Apart from this publication, the Defendants also relied upon the prior arts – US Patent No. 5,933,787 (*hereinafter, 'Gilhousen'*), US Patent No. 2,281,260 (*hereinafter, 'Newman'*) as also US 566655 (*hereinafter, 'Ishikawa'*) and WO/2006/004463 A1 (*hereinafter, 'Hagerman'*) mentioned by the Ld. Single Judge in judgment dated 4th November, 2011 in ***Tex XC v. Mobi Antenna***. Reliance is also placed on the International Search Report issued by the WIPO qua IN'893, at the PCT stage. In conclusion, the submissions of the Defendants are -

a. That IN'893 does not disclose any invention which is patentable;
b. The Plaintiff is guilty of non-disclosure;
c. Asymmetrical beam patterns were known in prior art at the time of

grant of the patent IN'893;

d. The critical coverage area of the antennae is not the same;
e. Claim 1 of the Patent Specification of IN'893 does not apply to the Defendants;
f. The EPO patent application is still pending and patent has not been granted;
g. In USA, additional limitations to the Patent claims have been added in US'582;
h. The word *"replacing"* in the Patent Specification claims shows that the patent would be infringed only if there is a replacement of the older antenna with a newer one, and that too only by telecom operators/service providers, and not by manufacturers/sellers of the antenna.

Analysis and Findings

A. <u>Concealment of material facts</u>

33. The allegation of concealment arises due to the fact that at the time of the first hearing on 2nd November, 2018, the Court was not shown the earlier judgment of the Ld. Single Judge in ***Ten XC v. Mobi Antenna (supra)*** relating to the same very patent. A perusal of the plaint, however, shows that the earlier proceedings are fully pleaded and the judgment is also annexed. The plaint is quite detailed and the suits filed against the other companies were mentioned in paragraph 59 of the plaint. While, there was a necessity to point out the same during oral arguments, the fact that the Plaintiff has pleaded it and filed the judgment on record shows that there is no concealment by the Plaintiff. Thus, this is not a case for disentitling the Plaintiff to relief on the ground of suppression.

B. Prosecution History of the Corresponding US and EU Patents as also statements made therein.

34. In order to appreciate the effect of statements made during prosecution of patents internationally and in India, it is necessary to state the prevalent patent prosecution practices.

35. It is a matter of common knowledge that whenever applications are filed through the PCT route, the international filing office for PCT applications, which is run and managed by the WIPO, issues an *'International Search Report'* (*hereinafter, 'ISR'*). Along with the ISR, the WIPO also issues an International Preliminary Examination Report (*'IPER'*), if a request in this behalf is made by the applicant. If no request is made by the applicant, then the WIPO issues a report called International Preliminary Report on Patentability (*'IPRP'*). The details contained in the IPER are the same as those in the IPRP. This ISR, along with the IPER or the IPRP, as the case may be, primarily gives a direction, on the basis of the initial search done by the WIPO, as to whether the invention disclosed is novel and inventive and whether a patent is likely to be granted or not. Depending on the opinion in the ISR and IPER/IPRP, the applicant chooses to move the patent application from the international phase into the domestic phase of countries where the applicant feels that it is likely to get a patent.

36. Prosecution of patents is an expensive exercise and thus, the facility of ISR with IPER/IPRP, enables an applicant to take a considered decision on the likely grant of the patent in a particular jurisdiction. This eliminates unnecessary expenses incurred by applicants in prosecuting applications in various countries, across the world. The ISR, along with its supporting documents, is based on an initial search conducted on major patent

databases, by the international filing office. Thus, the search reports issued by the PCT office are to be treated like a first filter rather than a conclusive opinion on patentability.

37. Once the patent application enters the domestic phase, various national patent offices examine the application in terms of the substantive and procedural laws of the respective country. Patent rights are territorial in nature, and are limited to the country of grant. Broadly speaking, in order for grant of a patent, the three tests of novelty, inventive step and industrial applicability have to be satisfied. However, there are several nuanced and intricate dimensions to these three tests, in each and every jurisdiction. Apart from the substantive law of a country, the patent prosecution practices of various patent offices are also different. Finally, the subjective satisfaction of each patent examiner in a jurisdiction would also be different. Thus, there is a four-step analysis/processing of an international patent application filed through the PCT route viz.,

(i) International Search Report stage (ISR/IPER/IPRP);

(ii) Examination as per substantive laws in the domestic phase in each country;

(iii) Examination as per guidelines, patent prosecution practices and other procedural laws and

(iv) Subjective satisfaction of the examiner during the examination process.

38. While patent applicants ought to be held bound by the broad statements made during prosecution of their patents in various jurisdictions, there is bound to be differences in the wording of claims which may happen. When a patent application undergoes issuance of examination reports and

replies being filed thereto, the applicant makes various statements in order to overcome objections raised during examination. These statements are sometimes substantive in nature, and sometimes are merely clarificatory in nature. Deletion of a claim, for e.g., to overcome the objection of a prior art, would be a substantive change. Adding or deleting language within a claim may also be clarificatory in nature. Sometimes examiners are convinced with one type of wording rather than the other and it is usual for patent agents and applicants to defer to the examiner's viewpoint. The culture of patent offices in wording of claims varies from country to country. In each and every case therefore, the statements made during prosecution of either the subject patent, or corresponding patents internationally, need to be seen in order to arrive at a conclusion as to what is the effect of the said statement on the extent of monopoly enjoyed, which is governed by the claims of the patent.

39. A complete specification of a patent contains a title; a brief description of the invention; discussion on the prior art; the method of performing the invention; data generated to establish the effect of the invention - along with suitable tables, graphs, diagrams, etc. The specification ends with the claims which determines the extent of monopoly, followed by the abstract of the invention. The specification has to be read as a whole, even though it is the claims that define the monopoly. The specification has to contain an enabling disclosure i.e., it should enable a skilled addressee to perform the invention. It is in return for the enabling disclosure that the monopoly is granted as a *quid pro quo.*

40. The claims have to be read to determine infringement, but in case of any ambiguity in interpretation of the claims, reference can be made to the

complete specification for the true purport and meaning, as also the purpose behind the invention.

41. The language of the claims in different jurisdictions of the same convention application after it is granted in the various domestic jurisdictions, would usually never be identical. This is due to the subjectivity that exists in the prosecution process of the application, as discussed above. While determining infringement in India, the variation in the language of the claims in different jurisdictions, cannot be examined in a minute fashion. For the purposes of ascertaining infringement of a patent granted in India, the claims of the patent granted in India, need to be seen along with the complete specification. The language of the claims in corresponding foreign patents can be looked at to ensure that broadly the invention is the same and no substantive claims have been either deleted or withdrawn. International patents relating to the same patent can also be referred to in order to establish *`evergreening'* of an invention. However, the granted claims in foreign jurisdictions cannot be read as though they are etched in stone. Insofar as an Indian Court are concerned, while determining the question of validity of a patent, it would be concerned primarily with the claims that have been granted in India. The unique nature of grant of patents in various jurisdictions or the wording of claims in various jurisdictions would only have a broad impact on the Indian claims, and not more.

42. The US prosecution history of the corresponding US patent shows that during the prosecution of the US patent, Claims 1 and 30, of US'582, which are corresponding to Claims 1 and 10 of IN'893, were amended to add language at the end. The difference in the language is illustrated from the table relied upon by the defendant which is extracted below:

IN240893	*US No. 8,311,582*
Claim 1. A method for increasing subscriber capacity in a sectorized cellular communications network having a plurality of subscribers and a base station supporting at least one sector, the at least one sector having an associated sector antenna at the base station having a critical coverage area extending therefrom and overlapping neighbouring sectors thereof in a sector handover zone, the method comprising the step of:	*Claim 1. A method for increasing subscriber capacity in a sectorized cellular communications network having a plurality of subscribers and a base station supporting at least One sector, each of the at least one sector having one or more associated sector antennae at the base station having a critical coverage area extending therefrom and overlapping neighbouring sectors thereof in a sector handover zone, the method comprising a step of:*
replacing the at least one sector antenna with a split-sector antenna having a plurality of sub-sector coverage areas extending therefrom, at least one of which is asymmetrical' each corresponding to a sub-sector and overlapping a neighbouring sub-sector coverage area in a sub-sector handover zone,	*replacing the associated one or more sector antennae for a given sector with a split-sector antenna having a plurality of sub-sector coverage areas extending therefrom, at least one of which is asymmetrical, each corresponding to a sub-sector and overlapping a neighbouring sub-sector coverage area in a sub-sector handover zone,*
whereby a total critical coverage area of the plurality of sub-sector coverage areas is substantially equivalent to the critical coverage area of the at least one sector	*whereby a total critical coverage area provided by the plurality of sub-sector coverage areas is substantially equivalent to a critical coverage area of the replaced one or more associated*

antenna.	*sector antennae,* ***wherein said at least one asymmetrical sub-sector coverage area reduces overlap with said neighbouring sub-sector coverage area comparing to overlap of the; replaced antennae while maintaining the critical coverage area of the replaced antenna.***
Claim 10. A sub-sector antenna for use in a sectorized cellular communications network having a plurality of subscribers and a base station supporting at least one sector, the at least one sector having an associated sector antenna having a critical coverage area extending from the base station and overlapping neighbouring sectors in a sector handover zone, *the sub-sector antenna being constructed and arranged for replacing the at least one sector antenna and having a plurality of sub-sector coverage areas extending therefrom, at least one of which is asymmetrical, each corresponding to a sub-sector*	*Claim 30. A split-sector antenna for use in a sectorized cellular communications network having a plurality of subscribers and a base station supporting at least one sector, each of the at least one sector having one or more associated sector antennae at the base station having a critical coverage area extending therefrom and overlapping neighbouring sectors in a sector handover zone* *the split-sector antenna being constructed and arranged for replacing the one or more associated sector antennae and having a plurality of subsector coverage areas extending therefrom, at least one of which is asymmetrical, each corresponding to a sub-sector*

and overlapping a neighbouring sub-sector coverage area in a sub-sector handover zone,	*and overlapping a neighbouring sub-sector coverage area in a sub-sector handover zone,*
whereby a total critical coverage area of the at least one asymmetrical subsector coverage area is substantially equivalent to the critical coverage area of the at least one sector antenna being replaced.	*whereby a total critical coverage area provided by the plurality of sub-sector coverage areas is substantially equivalent to a critical coverage area of the replaced one or more associated sector antennae* ***wherein said at least one asymmetrical sub-sector coverage area reduces overlap with said neighbouring sub-sector coverage area comparing to overlap of the replaced antennae while maintaining the critical coverage area of the replaced antenna.***

43. A perusal of the additional language in the claims of US‘582, which is shown in bold in the above table, shows that the added language seeks to explain in further detail the manner in which the overlaps are reduced in the patented invention, as compared to the replaced antenna - while maintaining the critical coverage area. This language, does not in any manner, restrict the claims of IN’893, but in fact adds an additional feature of *“reduction of overlap”*. The reduction of overlap in fact makes the patent claim more focused. A reading of the Indian patent specification, also shows that the entire purpose of the replacement of the existing antenna with the novel

patented antenna is to increase the efficiency and quality, while not reducing critical coverage area, and ensuring that there is no degradation. The adding of this language, brings more focus on the difference between the prior art in ***Gilhousen (supra)***, the ***Article dated 1st March, 2006 (supra)***, and ***Newman (supra)*** and is a fact which goes in favour of the Plaintiff, rather than the Defendants, as it sufficiently distinguishes the prior art in the claims itself.

44. This addition of language does not render the suit patent invalid, but in fact strengthens yet another novel feature of the suit patent.

45. The submission of the Defendants, that this is, in fact, a further limitation would not be correct while viewed in the context of the present invention, wherein the Patent specification has sufficiently established how there are several additional benefits with IN'893. One benefit would also be the reduction of overlap. It is the well-settled position in law, that a patent specification and the claims have to be interpreted not literally, but purposively. In ***Catnic Components Ltd. (supra)***, the House of Lords held as under:

> *"My Lords, a patent specification is a unilateral statement by the patentee, in words of his own choosing, addressed to those likely to have a practical interest in the subject matter of his invention (i.e. "skilled in the art"), by which he informs them what he claims to be the essential features of the new product or process for which the letters patent grant him a monopoly. It is those novel features only that he claims to be essential that constitute the so-called "pith and marrow" of the claim.* ***A patent specification should be given a purposive construction rather than a purely literal one derived from applying to it the kind of meticulous verbal analysis in which lawyers are too often tempted by their training to indulge****. The*

> *question in each case is: whether persons with practical knowledge and experience of the kind of work in which the invention was intended to be used, would understand that strict compliance with a particular descriptive word or phrase of the invention so that any variant would fall outside the monopoly claimed, even though it could have no material effect upon the way the invention worked."*

46. Even in the case of ***Roche v. Cipla (supra),*** the Ld. Division Bench held as under:

> *"114……. The Learned Single Judge has correctly applied the principle in the decision reported as AIR 1969 Bom 255 F.H & B v. Unichem, in stating that in case of any ambiguity of the Claim of the suit patent then resort can be taken to the specification of the said suit patent and nothing else.* ***He correctly recognized that a Purposive Construction of the claims is necessary in order to not construe claims too narrowly."***

47. It is also now a settled position in law that, statements made after the grant of a patent, would not be relevant in interpreting grant of a patent. The Ld. Division Bench in ***Roche v. Cipla (supra)***, relying on the judgment of the US Court in ***Pfizer v. Ranbaxy 457 F.3d 1284,*** held as under:

> *"66……. In case of any doubt as to what a claim means, resort can be had to the specification which will aid in solving or ascertaining the true intent and meaning of the language employed in the claims and for which the court can consider patent prosecution history in order to understand as to how the inventor or the patent examiner understood the invention. The Court recognized that since prosecution is an ongoing process, it often lacks clarity of the specification and thus is less useful for claim*

construction. The Court also recognizes that having regard to extrinsic evidence such as inventor testimony, dictionaries and treaties would be permissible but has to be resorted to with caution because essentially extrinsic evidence is always treated as of lesser significance in comparison with intrinsic evidence. In the decision reported as 457 F.3. 1284 (United States) Pfizer v. Ranbaxy the Court held that the statements made during prosecution of foreign applications are irrelevant as they are in response to unique patentability requirements overseas. The Court also held that the statement made in later unrelated applications cannot be used to interpret claims of prior patent. In the decision reported as 1995 RPC 255 (UK) Glaverbel SA v. British Coal Corp the Court held that a patent is construed objectively, through the eyes of a skilled addressee. The Court also held that the whole document must be read together, the body of specification with the claims. ***But if claim is clear then monopoly sought by patentee cannot be extended or cut down by reference to the rest of the specification and the subsequent conduct is not available to aid the interpretation of a written document****."*

48. Thus, the additional language in the claims of US'582 cannot be read as a limitation but is merely highlighting another aspect of the patented invention. A perusal of the Indian specification shows that in the description of the invention, it is clearly stated as under:

> *"Where, as with the present invention, the new antenna may product a plurality of separate beams, each defining a new sub-sector,* ***with only a small overlapping area between them*** *and which together provide substantially identical coverage to the sector supported by the original antenna, a single sector may be upgraded to become a plurality of sub-sectors without significantly affecting neighbouring sites."*
>
> **(At Page 10 of the Patent Specification)**

49. Thus, the feature of *`reduction of overlap'* contained in the additional language of the US claims is also a part of the Indian patent itself. There is no external limitation that has been added in the US claims. Thus, the Defendant's contention that IN'893 is invalid, as there is an admission in US'582 that without the additional language the patent is obvious, is liable to be rejected. From the above it is clear that the additional language in US'582 claims do not affect the scope of the Indian patent in any manner.

C. <u>Construction of claims of the suit patent and infringement.</u>

50. The claims of the suit patent being relied upon by the Plaintiff, for the purposes of infringement are claims 1 and 10. The same read as under:

> *"**Claim No.1** – A method for increasing subscriber capacity in a sectorized cellular communications network having a plurality of subscribers and a base station supporting at least one sector, the at least one sector having an associated sector antenna at the base station having a critical coverage area extending therefrom and overlapping neighbouring sectors thereof in a sector handover zone, the method comprising the step of:*
>
> *replacing the at least one sector antenna with a split-sector antenna having a plurality of sub-sector coverage areas extending therefrom, at least one of which is asymmetrical, each corresponding to a sub-sector and overlapping a neighbouring sub-sector coverage area in a sub-sector handover zone,*
>
> *whereby a total critical coverage area of the plurality of sub-sector coverage areas is substantially equivalent to the critical coverage area of the at least one sector antenna.*
>
> ***Claim No.10** – A sub-sector antenna <u>for use in a</u>*

sectorized cellular communications network having a plurality of subscribers and a base station supporting at least one sector, the at least one sector having an associated sector antenna having a critical coverage area extending from the base station and overlapping neighbouring sectors in a sector handover zone,

the sub-sector antenna being constructed and arranged for replacing the at least one sector antenna and have a plurality of sub-sector coverage areas extending therefrom, at least one of which is asymmetrical, each corresponding to a sub-sector and overlapping a neighbouring sub-sector coverage area in a sub-sector handover zone,

whereby a total critical coverage area of the at least one asymmetrical sub-sector coverage area is substantially equivalent to the critical coverage area of the at least one sector antenna being replaced."

51. The suit patent is titled *"Asymmetrical Beams for Spectrum Efficiency"*. The background of the invention sets out how spectrum is a scarce resource and how various access techniques have been introduced such as FDMA, TDMA, CDMA, etc. These access techniques had been developed with the purpose of increasing the number of subscribers, within the available resource of the spectrum. The background further sets out the loss during transmission of signals, which shows that the communication range is a finite range. It was in order to overcome these shortcomings that cellular telecommunication was introduced. The greater number of cells in a network meant that increased number of subscribers could use the cell. While maximising the number of cells, the existing disadvantage was that there could be too many overlaps between the cells, thereby decreasing the

quality of the service. Continuous research, has been undertaken on how to maximise the number of cells, while maintaining quality, reducing overlaps and maximising subscribers.

52. The background clearly sets out the manner in which this quality increase has been attempted in CDMA technology, FDMA technology, and TDMA technology. Thereafter, IN'893 sets out how to improve efficiency of cellular systems. The concept of sectorisation was then introduced. Under this concept, one omni- directional antenna is placed in the centre of the cell, which would replace N-directional multiple antennae. This single antenna would work for the same coverage area, same number of cells and number of subscribers. While use of these omni-directional antennae reduced the network interference because of the symmetrical shape, the load that could be taken by them was limited.

53. Thus, in the background of the patent specification, the progression from CDMA, FDMA, TDMA technologies which created cells, to use of N-directional antennae with a symmetrical coverage area is clearly laid out. The purpose of the invention, is out below:

> "*Accordingly, it is desirable to provide an antenna with beam patterns that are tailored for specific sector coverage.*
>
> *It is further desirable to provide an antenna that can permit load balancing through the addition of capacity only where needed.*"

54. The patent specification also sets out as to what the patented invention accomplishes –

> "*The present invention accomplishes these aims by replacing a single sector coverage area with at least one coverage area, at least one of which is*

asymmetrical. The use of asymmetrical coverage areas permits the total coverage area to closely approximate the symmetrical sector coverage area being replaced, without creating excessively large sub-sector handover zones or introducing severe degradation in the network performance."

55. Thereafter, the various embodiments of the invention are set out along with the drawings. In the detailed description of the preferred embodiments, the manner in which the existing antenna can be replaced is set out in the preferred embodiment. The reduction of overlaps is also described. The invention, thus, sets out the manner in which an asymmetrical antenna can be used firstly to maintain the total coverage area to reduce overlaps and without requiring splitting of cells, and reducing interference. The preferred embodiments are duly illustrated with diagrams. The specification also shows how simulation was done based on the described invention, and how the conclusions of the said simulation are as under:

"*(1) The capacity of the upgraded sector increased by 125% whereas an increase of only 100% was expected;*
(2) The capacity of PQ0130 site increased by 58%;
(3) Handover overhead for the upgraded sector and site PQ0130 improved by 9% and 4.8% respectively;
(4) Coverage of the upgraded sector and site PQ0130 improved by 49% and 27% respectively;
(5) The area of the overall network with signal level greater than – 80dBm increased by 21% (see Table 2 below);
(6) At the cluster level, there is no degradation in terms of key performance metrics;
(7) A degradation of reverse link noise rise occurred at each of sector and site level by 18.9% and 11.5% respectively.

From the above simulation results, it is apparent

that upgradation a single sector by asymmetrical beams may add benefits to surrounding sectors in the network and without any significant degradation to surrounding sectors and sites."

56. At the end of the specification, prior to the claims, it is concluded as under:

"*It will be apparent to those skilled in this art that various modifications and variations may be made to the embodiments disclosed herein, consistent with the present invention, without departing from the spirit and scope of the present invention.*"

57. Out of the prior arts referred to by the Defendants, the Article dated 1st March, 2006 is a publication related to the patented invention itself. The date of filing of the PCT application of the suit patent, is 19th March, 2007. The article is of March, 2006, wherein, the company TenXC Wireless Inc., which was the predecessor of the Plaintiff and was the original patentee, seeks to inform how the use of an asymmetrical antenna could lead to advantages. However, a perusal of the article shows that there are no details whatsoever as to the manner in which the result is to be achieved. For an invention to be prior published, and to be hit by prior art, it has to be viewed from the point of view of a skilled addressee as to whether the document would by itself, without the disclosure in the patent specification, be sufficient to anticipate the invention. ***Terrell on the Law of Patents***[1] observes on the construction of prior art documents as under:

"11-55 Once a particular document or other prior disclosure has been identified, it is necessary to determine what information is conveyed. The prior

[1] *Terrel on the Law of Patents,* Sweet & Maxwell, 18th Edn., 2016, at §11-55 to §11-57.

> *document or disclosure is to be treated as read or understood through the eyes of the relevant skilled person, the notional addressee. In appropriate cases, the skilled person may have to be a team of people with different scientific backgrounds so that the import of the document may be fully understood.*
>
> *11-56 This may involve two separate steps: first, construing the prior disclosure as a matter of law, and secondly determining what the skilled reader would derive from it. Pumfrey J stated in Inpro's Patent* ***(sic. Research in Motion v. Inpro [2006] R.P.C. 20, [111])****, that "The teaching of the specification, once construed, is a question of fact, as is what the skilled man would do with that teaching without the exercise of inventive ingenuity." As noted below, he went on to explain that the relevant teaching may involve both explicit and implicit disclosure.*
>
> *11-57 The general rule for the construction of prior documents is the same as that for any other documents, namely "that the document should be construed as if the court had to construe it at the date of publication, to the exclusion of information subsequently discovered.""*

58. This would require evidence to be shown to the effect that a skilled addressee would be able to know how to make the antenna subject-matter of the suit patent, merely by reading the article, without the disclosure in the suit patent. At this stage, this court is of the opinion that the article per se, could not have by itself, been sufficient to anticipate the disclosure in the invention. The article at best may have given a hint as to what was coming. Nothing more.

59. A perusal of the claims shows that Claim No.1 is a method claim and Claim No.10 is a product claim for sub-sector antenna. The critical words in Claim No.10, which are relevant for the present purpose, are – the sub-sector

antenna is ***"for use in a sectorised cellular communications network".*** The Defendants' antenna clearly, qualifies as a sub-sector antenna, for such a purpose. Every communication network has a plurality of subscribers and a base station supporting it. The next crucial words are, *"at least one of which is asymmetrical"*. This relates to one of the sub-sector coverage areas which is asymmetrical in the antenna. The Defendants seek to argue that the words *"for replacing"* limit the scope of the patent to only those situations where, in existing antenna, one of the sub-sector coverage areas is being replaced. This is based on the EU prosecution documents, where the Plaintiff conceded that the replacement has to be physical.

60. Insofar as the application filed by the Plaintiff in the European Union for grant of the Patent is concerned, the EPO had raised an objection dated 29th June, 2016, wherein it sought the exact meaning of the word *"replacing",* in the method Claim No.1, which corresponds to Claim No.1 of IN'893. In response to the above objection raised, the Plaintiff submitted as under:

> *"Objection 3.2.6 – replacing*
> *Regarding the objection to the term "replacing", the independent claims have been amended to recite "the split-sector antenna being constructed and arranged for replacing the sector antennas…." Hence, it is clear from the amended claim language that the replacement is physical in the sense referred to by the Examiner."*

61. Relying on the above, the Defendants seek to argue that the replacement sought to be made by the Plaintiff's invention is physical in nature, per its own admission before the European Patent Office, and thus, Plaintiff is estopped by statute to contend *'notional replacement'* in India.

Clearly, the manner in which this is being construed by the Defendants is incorrect.

62. A patent claim cannot be read in such a literal manner. The purpose of this sub-sector antenna, is set out in the claim – replacement would be physical, but it does not mean that only existing antennae have to be replaced. The use of a new sector antenna with an asymmetrical sub-sector coverage area would also be covered as it would still be an antenna where one of the sub-sector coverage areas has been replaced, from a symmetrical one to an asymmetrical one. The replacement relates to physical replacement within an antenna, and not the manner in which the Defendants seek to interpret it. Replacement is used in the context of the purpose for which the sector antenna having a sub-sector coverage area which is symmetrical is being replaced with a sector antenna which has sub-sector coverage area which is asymmetrical. Thus, any telecommunication network wherein a sector antenna which has an asymmetrical sub-sector coverage area is used would be clearly attracted. The difference, thus, sought to be urged between *brownfield* and *greenfield* use is based on a misinterpretation of the claims.

63. The question as to whether a particular antenna has a symmetrical or an asymmetrical coverage area can be understood only by looking at the beam patterns of the said antenna. The Plaintiff has produced its own beam patterns which are also part of the specification. Since the Defendant's beam patterns were not available publicly, it has also obtained access to the Defendant's beam patterns as presented by a third-party cellular operator. The comparison of the beam patterns of the Plaintiff and the Defendants is in paragraph 73 of the plaint. The Plaintiff has also produced an expert report to establish infringement. The Defendants could have either admitted

or denied the same and produced their antennae's beam patterns. The Defendants have, however, simply denied infringing the Plaintiff's patent but do not produce their beam patterns. On the other hand, the Defendants have chosen to challenge the Plaintiff's beam patterns alone by producing a technical opinion. The charts filed by the Defendants to show that the coverage area is not the same, is not supported by any technical opinion. However, even taking the technical opinion of the Defendants' expert, which is on a different aspect and the Plaintiff's expert opinion, it is clear that the Defendants have deliberately withheld the beam patterns of their product. The same is neither publicly available, nor has it been produced on record. In response to paragraph 73 of the plaint, where the beam pattern is reproduced by the Plaintiff, the Defendants merely state as under:

> "*73. That the contents of paragraph 73 of the Plaint are denied for being wrong and merely inferential. It is denied that the beam patterns being attributed to Defendants belongs to the Defendants'. It is denied that the snap shot leads to the conclusion that Defendants are offering to sell/selling split-sector antennas which are otherwise infringing of IN240893. The Plaintiff has not disclosed the authorship of the comparative chart and in absence of same this Hon'ble Court should not rely on the same. Defendants, as a responsible and established antenna supplier, deny that the Plaintiff could have obtained the comparative chart in the ordinary course of business. The Plaintiff should be asked to disclose the means and manner by which it came in possession of the comparative chart.*
>
> *It is to be noted that during the ex-parte hearing held on November 2, 2018 the Plaintiff has mislead this Hon'ble Court to believe that this comparative chart was authored by the Defendants. This Plaint should be*

dismissed on this ground alone.

The Plaintiff should be put to strict proof with regards to the authorship of the comparative chart. It is surprising that the entire case of infringement is based on this comparative chart of which neither the Plaintiff nor the Defendant are the author. The Plaintiff ought to have disclosed as to how they got into possession of comparative chart in ordinary course of business. Defendants crave leave to rely on the preliminary submission, the same are not being reiterated for sake of brevity."

64. It was quite convenient and easy for the Defendants to produce the beam patterns of their antenna to argue that they do not infringe the patent of the Plaintiff. The bare denial being given shows that the Defendants have deliberately chosen not to produce the beam patterns. In any event, the claims of the invention, and the beam patterns attached in the patent specification, show that the beam patterns need not be identical to the drawings accompanying the specification. Minor variations would not obviate infringement. Equivalence would also apply. The preferred embodiments of an invention are what they say, i.e., they are only the "preferred" embodiments. They are not the only embodiments. The claims are broader than the preferred embodiments and have to be read as such.

65. The technical opinion produced by the Defendants seeks to limit the Plaintiff's patent to the beam patterns contained in paragraph 28 of the plaint, which it cannot do. The Defendants have not produced any documents to show that they have followed any other invention or any other prior art document, in the construction of their antenna. The withholding of beam patterns, by the Defendants, leads this Court to draw an adverse

inference against the Defendants, as the Defendants have withheld and not disclosed the most crucial aspect of this case i.e., the beam patterns of their antennae.

66. In a patent infringement action, once the Plaintiff, *prima facie* establishes infringement, the onus shifts on the Defendants, to disprove the same. The complete silence by the Defendants shows that there is, in fact, withholding of relevant and crucial information from the court. During the course of arguments, since the beam patterns were not produced on record, it was put to the Defendants if the antenna could be made available for inspection by a scientific expert appointed by the Court, to which no positive response was elucidated by the Defendants. A perusal of the claims, complete specification, and the beam patterns read with the two reports by the experts, placed on record by both parties, clearly establishes infringement. The Defendants' expert has not dealt with the issues raised head on in respect of the beam patterns, but has sought to deflect the issue. Thus, at this stage the Court has no option but to draw an adverse inference against the Defendants.

67. In addition to the grounds urged by the Defendants under Section 10 and Section 64 of the Patents Act, the Defendants have raised the following grounds for invalidating IN'893:

a) **Under Section 3(a) of the Patents Act** – The claims in the patent specification of IN'893 are frivolous as they are vague and ambiguous. The claims are over-broad and the boundaries of the invention are not clear from the specification. Thus, the patent is hit by Section 3(a) of the Patents Act. This ground was not argued during oral arguments. There is no clarity as to why the Defendants argue

that the claims are ambiguous. A reading of the claims shows that the same are not vague in any manner. The objection is not tenable.

b) **Under Section 3(c) of the Patents Act** – Since all elements of the invention are known in the prior art to a person ordinarily skilled in the art, thus, the invention is merely an application of a theory and do not even qualify as new discoveries. This objection is based on the prior art documents which have been considered hereinbefore.

c) **Under Section 3(d) of the Patents Act** – The Plaintiff seeks to introduce asymmetry in beam patterns to increase subscriber capacity for a particular area, however, as per the Plaintiff's own admission, a degree of asymmetry was inherent in beams. In light of the same, the Plaintiff cannot not claim that it is increasing subscriber capacity by introducing asymmetry in the beam patterns. The Plaintiff's invention being merely an *"eyewash"*, and qualifies as mere discovery of a new property or new use of a known machine/apparatus and does not result in invention of a new product. The objection under Section 3(d) is applicable when there is a `mere discovery' of a new property or new use. This provision does not apply in cases where on the basis of existing technology, newer technology is developed and better efficiency is achieved.

d) **Under Section 3(f) of the Patents Act** – Since the various elements of the Plaintiff's invention were known in the prior art, the mere arrangement/re-arrangement of the same cannot be considered to be an invention under the Patents Act. This objection contradicts the objection under Section 3(d). The invention in the present case is clearly not a rearrangement but a change in the manner in which

asymmetry is introduced in an antenna leading to greater efficiency which not compromising on quality. This objection is also not tenable.

68. The Defendants have relied on the judgment in ***Merck & Co. Inc (supra),*** to substantiate the difference between the specification and the claims, wherein the court held that the specification is "*what the patentee considers to be his invention*" and the patent claims are *"what monopoly he has chosen to obtain."*. The UK High Court held therein that the exclusive rights of a patentee will not extend to everything he contemplated in the specification and is restricted to the claims. The principle that the claims determine the monopoly is well settled. Further, in view of judgment of the Division Bench of this Court in ***Roche v. Cipla (supra)***, the claims cannot be read in isolation, and a purposive construction has to be given to the specification. However, in the facts of the present case, this Court is of the opinion that the claims are sufficiently precise and monopoly being sought is as per the claims.

D. Judgement of the Ld. Single Judge in *Ten XC v. Mobi Antenna (supra)* dated 4th November, 2011

69. The Ld. Single Judge in ***Ten XC v. Mobi Antenna (supra)*** at the interim stage, in a suit filed for infringement by the predecessor of the Plaintiff, held that since there was a credible challenge to the validity of the patent, an interim injunction could not be granted. This judgment was rendered on 4th November, 2011. The patent in the present suit, was initially rejected by the US patent office, as lacking novelty. At the time when the earlier Ld. Single Judge had considered the validity of the patent at the *prima facie* stage, the rejection of the US patent, was an important factor, in

order to determine whether there was a credible challenge to the Plaintiff. The Ld. Single Judge had also concluded that since the patent was a recent patent, there is a credible challenge. The observations of the Ld. Single Judge are as under:

> *"8.1.9* ***The United States Patent and Trademark Office have issued a final rejection in respect of the plaintiffs' invention*** *on the ground of lack of novelty and inventive step with respect to Hagerman and Ishikawa.*
>
> ……
>
> *8.3.9.* ***The Plaintiffs' patent is a recent one.*** *The patent was granted on 9th June 2010 and the suits were instituted on 22nd September 2010, i.e., within four months....."*

70. However, now there are several changed circumstances, such as:

(a) IN'893 is no longer a new patent. It is more than nine years old.

(b) The term of the patent is calculated from the date of application i.e., in this case since 18th March 2007. So more than three years elapsed in the examination and grant process. Only less than 8 years of the term of IN'893 are left. During this period, the patent has neither been revoked, nor held to be invalid in any jurisdiction;

(c) Conversely, US'582 patent has been granted and upheld in the interregnum in the USA;

(d) One of the Defendants has taken a global license to the patent i.e., the party which had itself raised the challenge in the US has now acknowledged the validity and has taken a licence;

(e) In the suit earlier filed in this court i.e., CS(COMM) 977/2016,

evidence has been led and judgment is stated to be reserved.

(f) The Defendants in the present case, themselves were notified of IN'893 since 2017, however, till date, they did not choose to either file a revocation, or even a counter claim in the present suit, seeking invalidation.

71. It is the settled legal position that a previous order under Order XXXIX Rules 1 and 2 CPC can be varied in the same suit, owing to subsequent circumstances. Such an order does not operate as `res judicata'. In ***Raj Rani Sharma v. Gayatri Kukreja & Ors. [I.A. 9770/2011 in CS(OS) 774/2007]*** a Ld. Single Judge of this Court, relied on the judgment of the Supreme Court ***Karnataka State Financial Corporation v. N. Narasimahaiah, IV (2008) SLT 41*** wherein it observed as under:

> *"13. Rule 4 enables the court to discharge or vary or set aside an order of interlocutory injunction, on finding the same to be necessary by a change in circumstances or if the order is found causing undue hardship to any party. The legislature has thus itself, not intended the principle aforesaid of finality or res judicata in relation to successive stages of the same proceeding to order under Order 39 of the CPC. Though Rule 4 deals only with vacation or modification of an interlocutory injunction granted, but in my view, the purport thereof being interim protection of the property, even if the Court had earlier not found enough reason to grant interim protection, the court on finding a change in the circumstances or undue hardship having been caused to a party who had been declined the interim injunctions earlier, is competent to entertain a second application and to grant such injunction."*

72. In ***Bengal Waterproof Limited Vs. Bombay Waterproof***

Manufacturing Company & Anr. (1997) 1 SCC 99, the Supreme Court held that when there is a continuing wrong, even two different suits for infringement of the same trademark against the same party is maintainable. In the present case, however, the defendants in the first two suits are different though the patent was the same.

73. There are several circumstances that have changed since the interim injunction application in the said two suits were decided. One of the suits has in fact been disposed of as settled. These subsequent facts cannot be ignored by a Court, especially in a patent infringement suit, where the term of the patent is limited and with each passing day, the exclusive monopoly of the patentee is severely dented. The term or life of the patent is not extendible and hence, the changed circumstances would have to be kept in mind. In any event, an order in an interim injunction application is only *prima facie* in nature, and is rendered in the facts and circumstances pleaded in a particular case. The Ld. Single Judge while finding that there is a credible challenge to the patent observes as under:

> *"8.2……..At this stage, this Court is not expected to and has not examined the challenge in detail to arrive at a definite finding on the question of validity of the patent which shall be examined at the time of trial. However, this Court is satisfied that the challenge made by the defendants is substantial, tenable and credible."*

Thus, the opinion in that case was not final. There are several factors which now tilt in favour of the Plaintiff, insofar as the challenge to IN'893 itself is concerned.

74. The Defendants have also relied on the judgment of a Ld. Single Judge of this Court in ***Sandeep Jaidka (supra)***, wherein the guiding factors,

as enumerated in ***Kerr on Law and Practice of Injunction***, 6th Edn, on page.320 for grant of interim injunction were considered, and which are as under:

> *"If one clear instance of infringement or a wrong prima facie case of infringement is made out and the plaintiff has not been guilty of laches, the court will generally grant an interlocutory injunction in following cases: (1) when the validity of the patent has already been established in a previous action; (2) when the patent is of old standing and the enjoyment under it has been uninterrupted; (3) when the validity of the patent is not in issue and notwithstanding that the defendant offers to keep an account."*

75. The Ld. Single Judge, relying on some case on grant of injunctions, held as under:

> *"32. The court in such cases has to weigh the case of the plaintiff vis-à-vis the case of the defendant if the plaintiff is able to satisfy that there is a serious question to be tried and the defence of invalidity of patent raised by the defendant is not credible or weak, then the court can conveniently grant interim injunction in favour of the plaintiff till the pendency of the proceedings.*
>
> *On the other hand, the defendant's defence as to invalidity of patent is found to be credible one and defendant is able to satisfy that the said defence if proved and thrashed out in trial would lead to defendant being successful in the proceedings, then the interim injunction may be refused on the ground of credible and tenable defence. It is, however, a question of fact as to in which case the former proposition will hold good or the latter."*

76. Thus, in ***Sandeep Jaidka (supra)***, the Court concluded that if the patent is of long standing then a case is made out for grant of an injunction.

As on date, the suit patent is one of long standing unlike when it was considered in the earlier round of litigation in two other suits in ***Ten XC v. Mobi Antenna (supra)***. The acknowledgement of the patent by the defendant in the earlier suit, the grant of the patent by the US are factors which change the position considerably. Merely relying on the findings of the Ld. Single Judge in ***Ten XC v. Mobi Antenna (supra)***, the Defendants cannot claim that there is a credible challenge to the validity of the patent. The findings of the Ld. Single Judge were *prima facie* in nature, and did not conclusively decide on the validity of the patent.

Conclusion and Relief

77. The narration and discussion above is *prima facie* in nature in the facts and circumstances of the present case. The following factors emerge from an analysis of the facts and circumstances narrated above:

(a) Substantial change in circumstances has taken place since the first judgment of the Ld. Single Judge dated 4th November, 2011, in ***Ten XC v. Mobi Antenna (supra),*** relating to IN'893;

(b) The Defendants have withheld vital information, by not disclosing the beam patterns of their antennae;

(c) The Plaintiff corresponded with the Defendants since 2017, and notified the Defendants of their patent rights. The Defendants' email in response thereto was merely acknowledging receipt of the Plaintiff's notice. There has been no other response by the Defendants;

(d) When any party is notified of patent rights, there exists an obligation on the said party to either challenge the patent or rebut the allegations made in the notice. It cannot simply choose to wait for the Plaintiff to

file a suit for infringement, and in the said suit, withhold crucial and relevant information and vital data;

(e) Patent rights are limited in nature - especially in the telecommunication industry, technologies are changing rapidly. The Defendants having not responded and having not disclosed crucial information to the Court, are liable to be put to terms;

(f) The fact that the Plaintiff has already licensed its patents, and the present patent not being a standard essential patent, the Plaintiff has a right to insist for an injunction once infringement is established. However, in a case where the Plaintiff was willing to license the patent and the Defendants have merely procrastinated, the Defendants can be put to terms.

78. Defendant No.1 in the present case is a south Korean company, which is exporting to its customers in India. During the pendency of the suit, it has been permitted to supply the antennae to its customers, subject to such terms as may be fixed by the court in the present application. It has been submitted during arguments that it has no assets in India and its financial condition would be affected severely if exports are not permitted. Defendant No.1 has no moveable or immovable assets in India. The relationship between the Defendants is that Defendant No. 2 is an affiliate of Defendant No.1 in Hong Kong, and Defendant Nos. 3 and 4 are the subsidiaries of Defendant No.1 in India. However, insofar as supply of the antennae is concerned, it is submitted by Ld. Counsel for the Defendants that the other three Defendants have no role to play.

79. The Plaintiff has placed on record, in a sealed cover, the licence agreement signed with the licensee, in respect of the suit patent who was one

of the Defendants in the earlier suits. The said license agreement is between Communication Components Antenna Inc., which is the Plaintiff in the present case, and CommScope Technologies, LLC. It relates to US'582 and the family of patents, including IN'893. The said license agreement contemplates an initial lumpsum payment and percentage of net sales as the royalty. The Court has perused the license agreement. Owing to the confidentiality clauses between the said party and the Plaintiff, the said royalty terms are not being reproduced in the judgment.

80. The Defendants have placed on record, the purchase orders for the various models of its antennae. Owing to the fact that the Defendant No.1 which is the manufacturer and seller claims to not have any assets in India, and in view of the discussion above, where the Defendants are clearly infringing the Plaintiff's patent, the Defendants are liable to deposit some amounts in the Court in order to continue the sales of these antennae in India. The total value of the exports made till date, as per the disclosures made by the Defendants, is as follows:

S. No.	Antenna	Quantity	Amount	Date
1.	XXDW-18-33i-iVT-DB8P	67,627 units	$64,405,583	Between October, 2016 and October, 2018
2.	XXDW-18-33i-iVT-DB8P-V2	10,000 units	$8,380,000	18th December, 2018
3.	XXDW-18-33i-iVT-DB8P-V2	5,000 units	$3,930,000	22nd February, 2019
4.	XXDGL-15-33i-iVT-DB-4P	15,000 units	$9,525,000	2nd May, 2019
	Total	**97,627 units**	**$86,240,583**	

81. Insofar as the sales made prior to date of suit to the tune of

$64,405,583, which, at the current rate of exchange (1USD = approx. Rs.68) comes to Rs.437,95,79,644/- the Defendants are directed to give a Bank Guarantee for a sum of Rs.40 crores, which is approximately ten percent of the above amount.

82. Insofar as the sales made during the pendency of the suit are concerned, the total sales are to the tune of $21,835,000, which come to Rs.148,47,80,000/-, ten percent of which is approximately Rs.14.5 crores. The Defendants are directed to deposit the Bank Guarantee and the said sum with the Registrar General of this Court, within one month from date of judgment. If the Defendants do not comply with the above directions within one month, the Defendants shall stand restrained from manufacturing, selling, offering for sale any models of antennae which infringe suit patent number IN 240893.

83. All three I.A.s are disposed of in the above terms.

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84. Parties are permitted to file additional documents if any. Affidavits of admission/denial qua the said documents be filed within 30 days. The sealed covers containing the agreement and invoices have been opened. The same be resealed and kept on record.

85. List on 28th August, 2019 for marking of exhibits before Joint Registrar. List before Court on 17th October, 2019.

PRATHIBA M. SINGH
JUDGE

JULY 12, 2019/*dk*