



Minimising risk of

PATENT INFRINGEMENT

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 **Origin IP Solutions** *LLP*
your innovation is our passion

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of
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Minimising Patent Infringement Risk

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Chapter 1

Introduction to Patents

Patent is one of the most important forms of Intellectual Property (IP). It is a set of exclusive rights granted by the Government to an inventor or its assignee for a limited period of time in exchange for a public disclosure of the



invention. The term of a patent is typically 20 years from the date of priority¹, meaning that the patent holder has right to prevent all third parties from making, using selling, offering for sale and even importing the patented product or the product made by using patented process in the jurisdiction, where there is patent protection. “Patent Infringement” in simple words means intrusion or encroachment upon the patent rights of patent holder or patentee, where the patent is valid and legally enforceable in a given jurisdiction.

It is very important to understand that patent rights are territorial and a patent granted in a specific jurisdiction is valid and

¹ It is also called as priority date which is the date of filing of the first patent application.

enforceable only in that jurisdiction. For example, a US patent is valid and enforceable only in the US. Use of such a patent in the jurisdictions, other than US, may not infringe patent rights of the patent holder. Most of the times, the inventions are complex and working of a single patented invention might require usage of additional patents. However, opinion of an experienced attorney is very important in such sensitive matters because there may be several pending patent applications for which patent is not yet granted. Additionally, there may be international applications that might enter national phase at later point of time and calculating term of a patent in case of PCT national phase application might be different from ordinary applications.

Let's take up an example. Suppose there is a company "X" working in the area of display screen for electronic devices and has several patents related to this subject matter in India. Application of its patents might be substantially wide that may include mobile phones, television, laptop etc. By having patents for multiple features of display screen, the company 'X' is not free to manufacture the products like mobile phone, television, laptop because there are several components in these devices for which the third parties might have patents in India. In other words, we can say that the company "X" may or may not have "Freedom To Operate" in the territory of India and manufacturing or launching the product without assessing existing patents might infringe patent rights of third party (ies).

In November 2012, Apple Inc. was ordered to pay US\$368.2 million in damages to a company called VirnetX, a small internet security software and technology company, for infringing four patents (U.S. Patent Nos. 6,502,135, 7,418,504, 7,921,211 and 7,490,151) used in its FaceTime™ video calling service. VirnetX patented the technology for secure communications including 4G LTE security and its patent portfolio included 20 US and 26 international patents and over 100 pending applications, out of which four patents related to its FaceTime™ video calling service. However, Apple argued that it was using different technologies in its FaceTime™ services and tried to invalidate Virnetx patents and denied any infringement. This is in fact an excellent case to understand the need of due diligence before product launch, strength of protection and enforcement of patent as a tool to obtain competitive edge in market as well as use it for revenue generation.

Therefore, if you are planning to develop and launch a new product, it is extremely important for you to first of all identify the territories where the product is going to be manufactured, marketed and sold. Apart from this, extracting and analysing the legally valid patents in those territories that might claim the features of your product, followed by assessment of likelihood of such patents for patent infringement by you, is an essential step that saves you from huge trouble later on. Failure to do this, might lead to a patent dispute, affecting your business and reputation in the market.

Patent litigation can be an extremely expensive and a risky affair and hence prevention is always better than cure and since it is possible to assess chances of patent infringement, it is worth doing this exercise in advance, right at the stage of starting the new project. However, in extreme scenarios, there may be "essential patents" that cannot be avoided for developing certain types of products or for meeting certain technical standards. In such cases, one has to proceed very carefully and strategically by exploring option of seeking permission to use such essential patents from the patent holder (s) or bypassing the patent claims or even waiting for expiration of such patents, as the case may be.

In this book, we will discuss the importance in assessing patent infringement risk, precaution to be taken, how to do it and some related critical issues.

Chapter 2

Rights of a patent holder

Before we proceed further, it is necessary to understand the kind of rights extended to a patent holder upon the grant of a patent so that we can understand patent



infringement in a better manner. A patent is granted to a new product or process, which is inventive and has industrial application and the subject matter does not fall under category of non-patentable inventions.

Rights of a patent holder or patentee, according to Section 48 of the Patents Act, 1970 are as below:

(1) *Where the subject matter of the patent is a **product**, the patentee has exclusive right to prevent third parties, without his consent, from acts of:*

- a. *Making;*
- b. *Using;*
- c. *Offering for sale;*
- d. *Selling; or*
- e. *Importing that product to India for the abovementioned purposes.*

(2) *Where the subject matter of the patent is a **process or method**, the patentee has exclusive right to prevent third parties, who do not have his consent, from the act of:*

- a. *Using that process;*
- b. *Offering for sale;*
- c. *Selling; or*
- d. *Importing a product obtained directly by that process to India for the abovementioned purposes.*

Violation of any of these rights is called as “Patent Infringement”. As mentioned before, where the subject matter of the patent is a product, infringement takes place when someone makes, uses, offers for sale, sells or imports the patented product in India without the

consent of patentee and where the subject matter of the patent is a process, the infringement takes place when someone uses that process, offers for sale, sells or imports the product obtained directly by that process to India.

Therefore, it is evident that patent does not give any positive rights but a set of negative rights to the patentee over his invention. Whether a patentee is free to use his own invention may be limited by legislation, regulations or by the existence of other patents in a specific jurisdiction. Patentee has no right to make, use, sell or import the product, for which he has a patent but has **exclusive right to prevent third parties** from making, using, selling, offering for sale and importing the patented products, if the patented invention relates to that product.

In simpler terms, patent **does not** give the patent holder rights to sell, make or use anything. It only gives him or her rights to **prevent** others from infringing upon the granted rights. However, if the patent is for a process, patentee has exclusive right to prevent third

parties to make, use, sell, offer for sale or import any product made using the patented process, meaning that the patentee can only prevent third parties from using or exploiting the invention, even if such third party develops the same invention independently.

Chapter 3

What is Patent infringement?

As mentioned before, patents are exclusive rights granted to a patent holder to prevent third parties from making, using, selling, offer for sale and



importing a product or a product manufactured by a patented process. When these rights of the patent holder or the claims in the patent are violated by a third party, without the consent or license of the patent holder, such third party is said to have infringed the patent rights of patent holder. While doing a patent infringement risk analysis, it is necessary to understand the types of patent infringement to ensure that the invention is not likely to infringe any of the existing patent rights.

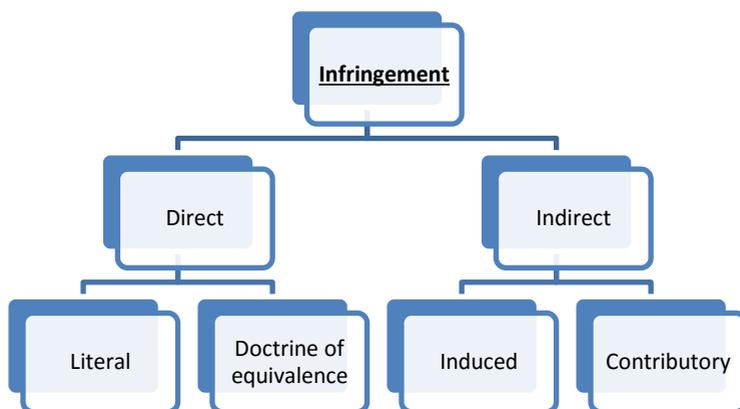
In a patent specification, “Claims” define scope of the legal protection extended to the invention. Therefore, in case of infringement analysis, careful analysis of claims is extremely critical. Claims are usually very crisp and a precise language is used to write them. Each and every word of the claim shall be very carefully understood and interpreted. In case of patent infringement, extent of infringement is directly proportional to the extent of infringed subject matter claimed in the patent. Interpretation of claims can never be done in isolation but shall always be done with respect to the patent specification disclosed by the patent holder.

Though there are various types of claims, there are two main types of claims i.e. independent claims and dependent claims. Independent claim is usually the first claim and rest of them are the claims that are dependent upon the independent claim, and hence, called as dependent claim. The dependent claim cannot be infringed without infringement of the independent claim. For example, if independent claim of the patent relates to a product and dependent claims primarily

claim the process to make the product, infringement of patent cannot restrict to infringement of process without infringing the independent claim that claims the product itself. Please note that though most of the patents have one independent claim, a patent specification may have more than one independent claim as well.

Types of patent infringement

Patent infringement can be broadly divided into two types:



i) Direct Infringement

- Literal Infringement
- Doctrine of Equivalence

ii) Indirect Infringement

- Induced Infringement
- Contributory Infringement

1. Direct Infringement

Direct patent infringement is the most apparent and common type of patent infringement. Most of the patent infringement cases involve direct patent infringement. Generally speaking, direct patent infringement means the marketing, sale, or commercial use of an exact patented item or invention that performs substantially the identical function. Direct infringement may be literal or non-literal.

a) Literal Infringement

Literal infringement, as the name suggests, occurs when each and every component claimed in patent specification has been used in alleged infringing product/device or process. Accused product or process

falls directly within the scope of patent claims. In case of direct infringement, comparison of the alleged infringing product features with the claims of the patent could be the first step to know the extent of patent infringement. The landmark case of patent infringement is *Polaroid Corp v. Eastman Kodak Co.* where patent infringement by *Eastman Kodak* of Polaroid's "Instant camera technology" was a case of literal infringement.

In case of literal infringement, all the elements of the patent claim must be proven to have been infringed. This was established in *Lemelson v. United States*¹ when the Federal Circuit Court held that it was "*well settled that each element of a claim is material and essential, and that in order for a court to find infringement, the plaintiff must show the presence of every element or its substantial equivalent in the accused device*".

¹ 752 F.2d 1538

Accordingly, in *Larami Corporation v. Alan Amron and Talk to Me Products, Inc.*², **the court applied this principle.** This case is related to *Larami's* patented toy water guns with the brand name 'SUPER SOAKERS'. For this product, defendant had obtained a declaration that the product is not infringing *Amron's* United States Patent No. 4,239,129 (hereinafter "the '129 patent"). During the proceedings, one of the claims was considered by the court for infringement under literal infringement. According the patent claim, the toy must contain a tank inside the housing of the gun, which contained the water³. *Larami's* guns did not have the tank inside the gun but was detachable and situated outside the body of the toy. Housing of the tank was one of the important features of the product. Here, this element of the claim was missing even though the other elements were all valid. Therefore, the Court held that there was no literal infringement of the claim.

² 27 USPQ2d 1280 (E.D. Pa 1993)

³ "toy comprising an elongated housing [case] having a chamber therein for a liquid [tank]." – Claim 1, '129 Patent

In India, however, this rule is not exactly followed. The Indian Courts look into not just the literal sense of the claims but apply the doctrine of pith and substance. That is, the overall sense of the claims is analysed and it is not limited to the exact wordings of the patent claims. Madras High Court in *TVS Motor Company Limited Vs. Bajaj Auto Limited* held:

“In construing an allegation of infringement, what is to be seen is whether the alleged infringement has taken the substance of the invention ignoring the fact as to omission of certain parts or addition of certain parts.”

b) Non-literal infringement [Doctrine of equivalence]

In case of non-literal infringement, patent infringement is not literally directed to what is claimed in the patent specification but the infringing device or process may be similar or equivalent to the claimed invention. For example, if the patented process uses ethanol and the infringer is using butanol to avoid infringement of patent, it will be still considered as infringement under

doctrine of equivalence because both ethanol and butanol belongs to the same family of alcohols and both forms of alcohols might perform the same function to obtain similar or same results. In such a case, even if there is no literal infringement, a claim may be infringed under the doctrine of equivalents, if some other element of the accused device or process:

- performs substantially the same function,
 - in substantially the same way,
 - to achieve substantially the same result
- (Triple Identity Test).

The goal of the doctrine of equivalents is to provide patent owners with added and fair protection for their patents. The doctrine was established in the case of *Graver Tank & Manufacturing Co. v. Linde Air Products Co.*⁴ where *Linde* sued *Graver* for infringing their patented welding process. *Linde's* technology used Calcium and Magnesium whereas *Graver* used Calcium and Manganese. Manganese and Magnesium are two elements with substantially similar properties and

⁴ 339 U.S. 605 (1950)

hence mere replacement of Manganese with Magnesium to achieve the same result might infringe patent rights. The Supreme Court held that it was an infringement under doctrine of equivalence and declared that *Graver's* product was a result of an obvious alternative to the materials used in the granted patent which anyone working in the field could have deciphered.

In another Australian case, *Beecham Group Limited V. Bristol Laboratories Pty. Limited*⁵ where the defendants were sued for patent infringement for using obvious substitutions to the ingredients of the patented product. The plaintiffs⁶ had a patent on a novel type of semi-synthetic penicillin, known as Ampicillin and on certain processes for its production. The defendant entered the market with “new” product, Hetacillin with the same starting material used in manufacture of Ampicillin, 6-APA. The plaintiff was able to prove that Hetacillin, upon entering the human body had same properties and it functioned in the manner similar to

⁵ 1967 (16) R.P.C. 406 (12)

⁶ A party that initiates the lawsuit

Ampicillin. The court held that the defendant was actually infringing patent rights of the plaintiff by marketing, advertising, selling and offering for sale the product to the public (it was manufactured outside the country and hence out of jurisdiction of the Court), which was an evident variation of the patented drug.

An Indian case, where a reference to the doctrine of equivalence was made is *Raj Prakash v. Mangat Ram Choudhary*⁷. Here, the plaintiffs had patent over a film strip viewer, marketed mainly as a toy for children. It was later found that the defendants were also manufacturing and selling a toy which functioned in the same method. The defendants plead that the film strip viewers manufactured and sold by them were different from that of the patented one sold by the plaintiffs. The plaintiff's case was that the defendants were manufacturing and selling similar products which functioned in the same manner to that of theirs. The court on observing the viewers found that they were

⁷ AIR 1978 Del 1

both similar and concluded that the defendant's product was a pirated version of the patented viewer.

However, the recent Indian case of *Ravi Kamal Bali v. Kala Tech*⁸ is where the doctrine was adopted into the Indian legal system. Here, it was alleged that the defendants infringed a patent on a tamper proof lock/seal for containers. The defence was that the product differed in material particulars from the patented product but the Court found the changes to be inconsequential and thereby applied the doctrine.

2. Indirect Infringement

Indirect infringement, as evident from the name, happens when infringement does happen but the direct infringement is facilitated by someone else. This means that even though it is indirect infringement, it cannot exist in the absence of direct infringement. In case of indirect infringement, third party might actively induce, encourage or materially contribute to the infringing activity. Such third party might be direct infringer. For any business, especially, service providers, vendors,

⁸ 2008 (110) Bom.L.R.2167

importers/exporter, it is important to understand indirect infringement because even though they must be making and supplying the product as per specifications of the client, there is a likelihood of indirect infringement. Appropriate and timely due diligence at initial phase is very helpful.

Indirect patent infringement is of two types, induced and contributory.

a) Induced Infringement

In case of Induced infringement, one actively and knowingly induces the other person to infringe a patent by encouraging, assisting, aiding, inducing him/her to do so. A potential inducer of infringement is aware of existence of the patent as well as intend for their actions to result in a third party infringing that patent. It is interesting to note that patent infringement by inducement can also include licensing/assigning an invention for which there has been a patent. Patent infringement by inducement typically means that the inducer willingly and knowingly aided in the

infringement but may or may not have specifically intended to violate a patent infringement.

Let's understand indirect infringement with help of a case law, *SEB S.A. v. Montgomery Ward & Co. Inc* ⁹. Here, SEB, a French company specializing in cooking appliances sued defendants *Montgomaery Ward, Global-Tech Appliances Inc., and Pentalpha Enterprises Ltd* for infringing their patent on a deep fryer, which has an outer shell that was less expensive compared to the others in the market. *Pentalpha*, a Hong Kong based Company, bought SEB's deep fryers, copied every aspect of it except certain aesthetic features. *Pentalpha* had even appointed an attorney to analyse the patent infringement risks of their patent but did not communicate the fact that their product was copied from SEB. They then sold these products in the U.S. but later became aware of litigation between SEB and Sunbeam (a company which sold *Pentalpha*'s infringing products in the U.S.) and also about the other patents owned by SEB. *Pentalpha* still continued the

⁹ 594 F.3d 1360 (Fed. Cir. 2010)

infringing act and in the Court argued that they had no actual knowledge of the patent for a portion of the time it was selling the accused deep fryers to third parties. However, the very fact that they copied their device from a SEB product shows “deliberate indifference” on their part. So basically, ignorance of the existence of patent is not a defence when proper care has not been taken to see if such patents exist.

In 2015, a question of induced infringement was remanded back to the Federal Circuit court by the U.S. Supreme Court. The case in question was *Akamai Technologies, Inc. v. Limelight Networks, Inc.*¹⁰ where the Court held that induced infringement cannot be said to have occurred without the existence of a single direct infringer. Akamai had sued Limelight for infringing their patent on web development stating that the defendants had copied all the steps in the patent except one, a “tagging” step, which Limelight had asked the customers themselves to do. The Federal Circuit court had earlier said that the act constituted infringement

¹⁰ Fed. Cir. Aug. 13, 2015

because all but one steps are done by Limelight and it knowingly induced its customers to do the missing step. However, on remand, the Court reversed its decision on the grounds that Limelight only suggested the missing step and was not responsible for the actions of its customers. The infringers must have directed or controlled a third party to infringe the patent for it to be considered as an induced infringement.

b) Contributory Infringement

Contributory infringement happens when there is an intentional participation or assistance by one party in an act of infringement to the other party making them vicariously liable for the acts of the infringer. Contributory infringement is a type of indirect infringement, where a person or corporation is held liable for infringement even if they have not actively participated in infringing activities. Therefore, it happens when a party sells a product which they know is used in the infringing product. In usual cases, this product will have no commercial standing out of its use in the infringing product.

Contributory infringement is triggered when a seller provides a part or component that, while not itself infringing any patent, has a particular use as part of some other machine or composition that is covered by a patent. Contributory patent infringement is very similar to induced patent infringement, the basic difference between the two involving the specific intent.

In *Bristol Myers case*¹¹, *Faulding*, a pharmaceutical company distributed *Anzatax*, a drug for breast and ovarian cancer. The product information guide, which contained administration and dosage specifications, mentioned the use of the active ingredient of the drug, *Taxol*. It was ultimately held by the Federal Courts that *Faulding*, by supplying a drug containing *Taxol* and mentioning it in their product guide had infringed *Myers* patent. Here, the company hadn't directly infringed the patent of another company. But the mere fact that they mentioned a patented ingredient as guide, was enough to constitute contributory infringement

¹¹*Bristol-Myers Squibb Co v FH Faulding* (2000) 46 IPR 533

because by following the direction in the information guide, a doctor would infringe Myers patents.

Chapter 4

Certain acts not to be considered as infringement

A patent is said to be infringed when the exclusive rights granted to the patent holder by the sovereign is utilized by a third, unauthorized party. That is,



if a party, without the consent of the patent holder manufactures, sells, imports, markets or offers to sell a patented product, it is said to be an infringement. The Indian Patent Act does not define or lay down acts that amount to infringement. However, it clearly lays down certain acts which will not result in infringement. Such acts are as follows:

“Any act of making, constructing, using, selling or importing a patented invention solely for uses reasonably related to the development and submission of information required under any

law for the time being in force, in India, or in a country other than India, that regulates the manufacture, construction, use, sale or import of any product¹”.

That is, once the patent specifications are made available to public by publication, third parties are permitted to use such information to conduct experiments for the purposes of doing further developments on the patent. This provision is more or less applicable to drug manufacturers who can make use of this provision to conduct extensive research on a patented product. This will enable them to produce and market their new product at the expiry of the original patent.

Section 107A of Indian Patents Act includes one such exception called as Bolar Exemption. It was introduced in the year 2002 following India’s accession to the TRIPS agreement which provides for exemptions to the rights provided to patentees².

¹ Section 107A(a), Patents Act, 1970

² Article 30, Trade Related Aspects of Intellectual Property Rights.

The name ‘Bolar’ comes from the celebrated case of *Roche Products v. Bolar Pharmaceutical*³ in the United States. Roche and Bolar were tied up in an infringement suit, the result of which was a change of legislation in the United States. Roche had a patent over the drug Flurazepam which is a benzodiazepine similar to Valium. In order to manufacture the product, Valium, the active ingredient of which was patented by Roche, was to be available in the market as soon as the patent expired, Bolar started experimenting on the patented product a year before the patent was to expire. They then submitted their work to the FDA (The Food and Drug Administration) for approval. Roche initiated an infringement suit against Bolar for experimenting on their patented product. Bolar, however, argued that they had no commercial intentions with respect to the drug prior to the expiry of Roche’s patent. The Trial Court decided in favour of Bolar but on appeal the Appellate Court reversed the judgement stating that Bolar’s experimentation was for commercial

³ 733 F.2d 858 (Fed. Cir. 1984)

exploitation of the drug and not for “*amusement, to satisfy idle curiosity, or for philosophical inquiry*”⁴.

Bolar was not to be subdued and argued that the long terms required for FDA approvals would give Roche unfair advantage of indirectly extended patent. This finally lead to the U.S. Congress passing an Act which recognised Bolar’s concerns and allowed them to experiment with patented products so as to apply for FDA approval well before the expiry date of patent.

Bolar Provision is a great relief to generic drug makers and the government to make sure that their drugs get to the market as soon as the original patent expires. It also acts as a check on the monopoly a drug maker acquires on being granted a patent. Bolar provision, therefore, balances the two very important aspects of business monopolies and public welfare.

⁴ Id. Page 2, III. B. (available at http://ocw.mit.edu/courses/sloan-school-of-management/15-628j-patents-copyrights-and-the-law-of-intellectual-property-spring-2013/readings/MIT15_628JS13_read35.pdf)

Another defence for patent infringement is given under Section 107A (b) of Indian Patents Act, which reads thus:

“Importation of patented products by any person from a person, who is duly authorized under the law to produce and sell or distribute the product, shall not be considered as an infringement of patent rights”⁵.

It is not considered as infringement if a patented product is imported into a country by a party from another, who is authorised to do such act. Therefore, the original patent holder need not be made aware of such importation and the products thus imported, will be considered as non-counterfeit. This provision is known as Parallel imports, which is sometimes referred to as “grey market” imports and usually occurs when products have different prices in different markets. For example, a certain brand may sell their mobile phones at \$100 in one country but sell the same at \$50 in another country due to manufacturing costs, competitor

⁵ Section 107A(b), Patents Act, 1970

pricing, market regulations etc., in such occasions parallel importation is not an unusual occurrence.

One more important point to be mentioned here is that Parallel Importation cannot be challenged in the WTO (World Trade Organisation) dispute settlement system as it has been mentioned in the TRIPS Agreement⁶.

Tokyo High Court, in March, 1995 decided on a case⁷ which dealt with parallel importation. A German company, BBS Kraftfahrzeug Technik A.G. (hereinafter “BBS”) held patents for certain automobile caps made of aluminium. They were purchased in Germany by a Japanese company which then exported them to Japan to another company which sold these goods. The two companies were under the same management. The goods were sold at a lower price in Japan by the Japanese company when compared to the pricing of BBS dealerships. A patent infringement suit was filed,

⁶ Article 6, Trade Related Aspects of Intellectual Property Rights

⁷ B. Jap Auto Products, K. K. and Another v. BBS Kraftfahrzeug Technik A.G., 1995(o)No.1988

which on first instance was decided in favour of BBS. On appeal, the High Court held that BBS did not have any rights on the product since the rights were exhausted when the goods were sold to a legal purchaser, the Japanese company in Germany who exported the products.

This had created a furore in Japan since parallel importation of patented products was considered infringement before in the country.

Patents are a very strong tool for companies to establish themselves in the market. A granted patent provides the patent holder with the authority to prevent any unauthorised third party from manufacturing, selling, offering to sale, import or export their product. This has the capability to bring about a very compelling monopoly in the market. While sovereigns have to allow such monopolies to exist, their prime function remains as public welfare. That is, the monopoly must not engulf the market in such a way that the patent holder gains benefits even after the expiry of the patent. It should also not lead to a stage where the patented product

doesn't reach the public or is unaffordable to the majority mass. That is the basis for the two provisions under Section 107A of the Patents Act which legalise certain acts, which otherwise would have been considered to be an infringement of patent rights.

The provisions aim at further development of a patent and providing the best priced goods to the public. The Bolar provision has made numerous advances in the pharmaceutical field. Drug makers and the Government are allowed to conduct research on patented drugs, which can result in huge advances to the medical field. Parallel importation allows the possibility of lesser priced, non-counterfeit goods in the market. It needn't always be advantageous or beneficial to the companies, but the bigger picture certainly appears favourable to the public with these provisions in place.

Chapter 5

Why to bother about infringement?

Patent filing is increasing globally as well as in India as indicated by the data provided in the annual reports of Indian Patent Office¹. In the year 2008-2009, 36,812 patent



applications were filed in Indian Patent Office, which is 5% higher as compared to the year 2007-2008. According to World Patent Report 2008 Edition of WIPO², approximately 6.1 million patents were in force worldwide in 2006. Patent filings grew by 9 percent worldwide in 2013. Therefore, while competing in a global market, one cannot ignore the existing patents in that particular country or jurisdiction and under such circumstances, assessment of chances of patent infringement becomes a key to enter any new market.

¹http://ipindia.gov.in/main_text1.htm

²http://www.wipo.int/ipstats/en/statistics/patents/wipo_pub_931.html#a41

Additionally, the information regarding relevant existing patents is important to avoid future litigation or disputes as well.

Two companies, namely, *Anant Electronics* and *Futuristic Concepts Media Ltd* were using “Digital Transmission System” technology to manufacture VCDs using MPEG 1 coding audio compression/expansion system in India. Philips had a patent protection (Patent no 175971) on this technology in India, of which these two companies were unaware. Therefore, these two companies were infringing the patent granted to Philips. Delhi High Court ordered both the companies to stop manufacturing the VCDs that infringed Philip’s “digital transmission system” patent. Had they done infringement risk analysis before manufacturing and launching the product, they would have saved huge time and money lost in the litigation. Therefore, using technology protected by another company can drive one out of business and prior risk assessment is essential to prevent such disputes.

This big vulnerability of using another's patented technology was further demonstrated in the celebrated case of *Polaroid v. Kodak*³ which has been discussed in the later section of this book.

In another recent case in the year 2014, The Delhi High Court banned imports and sales of Xiaomi mobile devices in India as the company's devices sold in India were found to infringe on a number of telecommunications-related patents (regarding 3G, EDGE and AMR) that belonged to Ericsson. The Delhi High Court imposed the ban on Xiaomi and its local partner, e-commerce firm Flipkart. Ericsson had also sued Intex Technologies India, Micromax Infomatics Ltd. and Gionee Communication Equipment Co. Ltd. for their telecommunications patents. The Courts granted interim remedies to Ericsson in all the suits and the companies were asked to pay royalties for using the patented technologies, which ensured high profits for Ericsson.

³ Polaroid Corp. v. Eastman Kodak Co. (DC Mass) 16 USPQ2d 1481

Recently, in January, 2015 the Delhi High Court granted temporary injunction against Cipla for infringing Novartis's patent on 'Onbrez', a drug for pulmonary patients. Cipla had launched low cost, locally made product, which they argued was necessary for public good and welfare since Novartis did not provide enough of the drug in the country at affordable costs. The validity of the patent was in question before the Courts (Cipla had filed for revocation of Novartis's patents) when Cipla had started manufacturing the drug. The Court disagreed with the defendant's contentions that their production of the cheaper drug was for public welfare, pointing out that they had not even applied for a compulsory license, which would have been a more favourable route, in contrast with blatant infringement of existing patents, had affordability and product reach were their intentions. The ban on producing its drug was a great setback to Cipla at that point of time. On May, 2015, Cipla had offered to pay Novartis a reasonable amount as royalty so as to be able to continue manufacturing their product. No further comments have been received from

either of the companies in this regard amidst speculations that Novartis may give distribution rights of the drug to Cipla. It is a misconception that if one has been granted a patent for a product or design of the product, it is safe to make, use and sell the patented product and there is no risk of infringement if the product is meant for public welfare. Initial due diligence is needed in both circumstances, whether you have or don't have a patent.

Chapter 6

What is “Freedom To Operate” search?

"Freedom To Operate", abbreviated as "FTO", also termed as “clearance search” is a kind of patent search that is performed to determine whether or not a particular action, such as



manufacturing, testing or commercialising a product can be done by a company without infringing valid intellectual property rights of others. Or in other words, whether such company is “Free To Operate” without any risk of patent infringement or not. Broadly defined, FTO means the ability to proceed with the research, development and/or commercial production, marketing

or use of a new product or process with a minimal risk of infringing the unlicensed IP rights of others¹.

The process of performing FTO analysis starts with the careful identification, separation and classification of the invention or the process into its basic components. Listing out conventionally used nomenclature is very critical in FTO searches, as it helps to formulate right kinds of key words, without which, the search will not pull the relevant patent documents. In the next step, using various search strategies, relevant patents are pulled and listed out. Claims of such patents are then mapped with the product features and at the end, claims are interpreted and opinion on patent infringement is formulated as per national laws of the given jurisdiction.

It is critical to clarify that when an FTO analysis is conducted, it only reduces or minimises the risk of

¹ Anonymous. 2004. Freedom to Operate. WIPO Magazine, September–October, Issue 5

infringement of an existing patent. It is not a guarantee or representation of complete or unconditional freedom to operate but is only assessment or likelihood of infringement risk. FTO is therefore a careful observation of existing patents in the field of the new invention, in the given jurisdiction, within a certain time limit, which gives an estimation of infringement liability. An FTO research usually divides existing third-party intellectual property into three classes:

1. Patents that have a high likelihood of being infringed and therefore require a license from patent holder; or
2. Patents that may be infringed, depending upon how claims are interpreted; or
3. Patents that are clearly outside the field of the product and require no license.

Despite the fact that most companies have employed analysts, researchers and attorneys to avoid patent infringement, the incident rate of patent infringement is still on the rise.

A very famous case which has become important to reiterate the significance of a thorough FTO search is that of *Polaroid Vs Kodak*² wherein, Eastman Kodak on 12th October 1990 was held liable for infringing the 7 patents belonging to Polaroid on instant camera technology. This is probably the most painful case-law in the history of IPR. Kodak had to pay US\$ 909,457,567 to Polaroid and also had to withdraw all the instant cameras and films it had sold previously from the market thereby having to compensate the customers, which almost bankrupted the photography giant of that time. Kodak was also forced to shut down its US\$ 1.5 billion manufacturing plant, lay off 700 workers and spent nearly US\$ 500 million buying back the 16 million cameras it had sold between 1976 and 1985. US\$ 873 million damages were paid to Polaroid, at the end of a prolonged 14-year litigation process, which finally ended in 1990. Unfortunately, Kodak was out of instant picture business for 15 years.

² Polaroid Corp. v. Eastman Kodak Co. (DC Mass) 16 USPQ2d 1481

When a case for patent infringement comes before the Courts, one of the factors that is considered by the judges is whether the infringer had conducted a risk analysis or FTO search in advance or not. Wilful/deliberate infringement plays a vital role in determining the kind of damages that the Court decides to pay to the patent holder. If a detailed FTO has been conducted, the damages may be reduced by the court³. However, simply obtaining an opinion of counsel is not sufficient to protect the infringer. Additionally, in order to recover damages, the patentee must prove wilful infringement by clear and convincing evidence.

According to Polaroid, no skilled attorney would have advised Kodak that the patents in suit were invalid or not likely to be infringed by Kodak's instant film and cameras. Kodak then stated that, as it developed its integral instant photography system, it repeatedly obtained validity and infringement opinions from Francis T. Carr, an expert in patent clearance. Mr. Carr reviewed over 250 Polaroid and non-Polaroid patents

(containing literally hundreds of claims) and rendered countless oral and 67 written opinions on the entire range of products Kodak developed as part of its instant photography program. In the end, it was held by the Court that Kodak's infringement of Polaroid patents was not wilful or deliberate.

On April 22, 2005 Medtronic, the world's largest medical technology company, paid US\$1.35 billion to settle a patent lawsuit. Medtronic was alleged to have infringed the rights of a Los Angeles based spine surgeon, who had patents on his spinal implant inventions, which helped in speedy recovery for patients. Interestingly, it was Medtronic which had originally sued the doctor for interfering with their business by marketing the inventions to their competitor, which was against a previous licensing agreement entered between the parties. The doctor countersued, claiming that the company breached the agreement by not using the licence and denying him royalties which led to the infringement of his rights.

In patent infringement case between U.S. pharmaceutical company *Merck Sharp and Dohme Corp.* and Indian *Glenmark Pharmaceuticals Ltd.*, Merck had alleged that Glenmark infringed its patent rights. According to Merck, the main ingredient in Glenmark’s drug could not be manufactured without an active molecule, which is invented and patented by the company. Glenmark had contended that since it was using the patented product in combination with another salt there was sufficient distinction of its product from the one patented. This was denied by the Delhi High Court and Glenmark was permanently barred from selling, manufacturing, advertising, exporting or distributing its drug. Interestingly, about 3 months before this case, in January 2015, Glenmark was also barred from manufacturing another drug which was patented by Symed Labs. Needless to say, both the litigations resulted in heavy losses for the Indian company.

As evident from the *Kodak v. Polaroid* and *Bajaj/TVS Motor Company* litigations⁴, the losses related to patent infringement do not necessarily result only from damages granted by courts. In the Bajaj case, Bajaj sued TVS for using its patented “internal combustion engine working on four stroke principle” which was an act of infringement. TVS contented that two spark plugs in the TVS engine was an addition to a patent held by Honda in the U.S. which had expired earlier and pleaded that the patent granted to Bajaj be revoked. The Court ordered temporary injunction against the sale of TVS’s motorbike called ‘Flame’, which used the said patented technology. The court opined that even though the company had done improvements upon Bajaj’s engine, it could still only be considered as improvements on a patented product and not as a new product. TVS had raised objections only in 2007 when Bajaj had started selling motorbikes with their new engine as early as in 2003.

⁴ Bajaj Auto Ltd v. TVS Motor Company Ltd (2008) ILLJ 726 Mad

A single bench of Madras High Court granted interim jurisdiction to plaintiffs, which was reversed by a division bench of the same court. The Supreme Court allowed TVS to sell their motorbike but was ordered to keep track of its international and domestic sale and asked the Madras High Court to appoint a receiver for the same. The loss suffered by TVS during the period when the interlocutory order of the Madras High Court was prevalent only reiterate the fact that a thorough and early FTO must be done by businesses before diversifying into new markets or using new technologies. Even with proper FTO and patent infringement assessment and the assessment can only be considered as a mitigating rather than a preventive measure.

Since patent rights are specific to the jurisdiction, an FTO analysis should be restricted to the country or region where a company wants to operate. FTO study serves as an effective risk assessment tool for assessing commercialization of a given product at a given time, and in a given jurisdiction. In addition to this, the

search shall be restricted to nearly 22-24 years prior to the present patent application because FTO analysis is restricted only to legally valid and enforceable patents. As life of patent is 20 years from date of filing and in case of PCT-national phase application, it is 20 years from the date of filing international application, analysing patents within 22-24 years restriction is recommended. As you know, the patent application is published only after the expiry of 18 months from the date of filing and is not searchable before that. So, it is a good idea to repeat the process of FTO search after 8-10 months or so.

Chapter 7

Scope of FTO Analysis

FTO search is limited only to the patents and not to the non-patent publication or other literature, as there is no legal protection obtained over the publications. For FTO,



assessment of not only issued patents, but also of the pending patent applications is necessary to make sure that the proposed product or process does not infringe any valid patent or patent applications of third party(ies). However, when the patent applications are taken into consideration to perform FTO, it is essential to keep track of such applications as they may or may not be granted and also they may be amended as a result of examination by the examiners. Such prosecution history plays a vital role in preparing the report.

FTO search is limited only to the patents in force because expired patents are in public domain and there is no question of infringing them. FTO requires in-depth analysis of patent claims, as the claims are the only part of a patent to get legal protection and are assessed to check validity or legal status of patent(s). FTO opinion provides risk assessment relating to infringement of granted patents and potential infringement of pending patent applications.

For example, if a company wants to launch a new product in UK, the company shall perform FTO search on in-force patents or unexpired patents (also on the pending patent applications) in UK region to ensure that the company is not infringing patent rights of any third party. FTO analysis has to focus on the patent claims and the report must include the legal status of the identified relevant patents and pending patent applications.

Systematic FTO search and analysis prior to product launch is therefore a way of minimising (but not eliminating) the risk of infringing third party IP rights.

It may also facilitate the identification of business partners and attract investors to support business development plans. A well-executed FTO can also open up business opportunities, as illustrated by the Indian pharmaceutical company Ranbaxy in the United States. Ranbaxy wanted to launch one of their products in the United States but on an FTO search came across another company Apotex holding a patent to the product. However, on a detailed FTO it became clear that even though the process was same, the patent specification of Apotex did not include the word “acetic acid” despite using it in their process. This variation was proven not to be under the doctrine of equivalence and Ranbaxy introduced their product in the new market successfully.

Chapter 8

Burden of proof in case of suits concerning infringement

Burden of proof is the obligation on one party in a dispute to offer sufficient evidence to the Court so as to corroborate their contentions.



Generally, in civil cases, the burden of proof is on the plaintiff and the plaintiff shall prove by means of evidence that his rights have been violated. Sometimes in exceptional cases, the burden of proof shifts from plaintiff to the defendant, a party that is required to answer the complaint of a plaintiff or pursuer in a civil lawsuit before a court. In patent litigation, if the patent in question is on a product, the burden of proof is on the plaintiff and if it is on a process, the burden shift to the defendant mostly because a plaintiff cannot look at the similarity in the

end product and conclude whether the same process has been used.

According to Section 104A of the Indian Patents Act, 1970 [Burden of proof in case of suits concerning infringement], when a law-suit is filed by the plaintiff for infringement of his patent rights, the defendant shall defend himself and prove that he is not infringing the rights of the plaintiff. Common practice is that defendant contests validity of the claims and tries to revoke the patent so that patent fails to be in force and he can escape the infringement charges.

The term “Revocation” is generally used for the act of recall or annulment or reversal of grant of patent. When a patent is revoked, it ceases to be in force from the date of revocation. There is close similarity between post-grant opposition and revocation of a patent as both can take place only after grant of a patent based on certain grounds of opposition. End result of both is same i.e., the patent ceases to be in force or is amended. However, the difference between post-grant opposition and revocation is that post-grant opposition can take place

within 1 year from the grant of patent but revocation takes place after expiry of 1 year from the date of grant of patent till the time the patent is in force. Revocation can be done by the Appellate board on a petition of any person interested¹ or on petition of Central Government or on a counter-claim in a suit for infringement of the patent by the High Court.

¹An interested person is one who has a direct, present and tangible commercial interest which is injured or affected by the continuance of the granted patent.

Chapter 9

Relief in suits for infringement

When patent infringement happens, the patentee may sue the infringer or defendant to get relief in the appropriate court. Relief is a remedy which a Court of Justice may afford in relation to some actual or apprehended wrong or injury (In this section, it means infringement of patent rights). The reliefs which a court may grant in any suit for infringement according to Section 108 [*Reliefs in suit for infringement*] include:



- a) Injunction, which is a Court's order to refrain a person from infringing the patent rights by using the process or product of the patent owner.
- b) At the option of the plaintiff, either damages [award of money] or an account of profits. An account of profits is a type of equitable remedy

most commonly used in cases of infringement. It is an action taken against a defendant to recover the profits obtained by him as a result of infringement and it acts as a check on unjust enrichment.

While conducting an 'Account of Profits', the plaintiff is treated as if they were conducting the business of the defendant, and made those profits which were attributable to the defendant's wrongful actions. The Court may also order that the goods which are found to be infringing and materials and implements, the predominant use of which is in the creation of infringing goods shall be seized, forfeited or destroyed, as the Court deems fit under the circumstances of the case without payment of any compensation¹.

A division bench of the Delhi High Court in *Franz Xaver Huemer vs. New Yash Engineers*² held that a temporary injunction cannot be granted in favour of a party who has registered a patent in India but did not

¹ Section 108, Indian Patents Act

² AIR 1997 Delhi 79

use it. On the same lines, the same Court in yet another case of *Sandeep Jaidka vs Mukesh Mittal & Anr.*³ in 2014 ruled that no interim injunction could be granted against the defendant who was alleged to have infringed the patent of the plaintiff for a “4D Movie Experience”. Since the plaintiff hadn’t commercially exploited his patent and the defendant (even though had copied the patented system) had put in huge capital to produce his system, the balance of convenience was in favour of the defendants.

When companies enter new markets with new products it is important for them to launch the latest technologies or products. However, it is even more important to make sure that their products do not infringe any existing patent(s) in the given jurisdiction. Patent litigations can be tiresome, both finance wise and time wise and hence precaution in the form of FTO



³ CS(OS) No.1900/2010 Delhi High Court

analysis is better than looking for a cure to the litigations. A proper FTO analysis can not only alleviate the chances of having to go through patent infringement litigation, but it might also open up new business prospects.

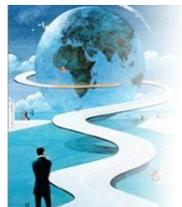
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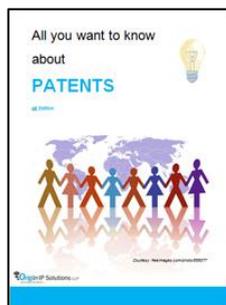
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Our other publications

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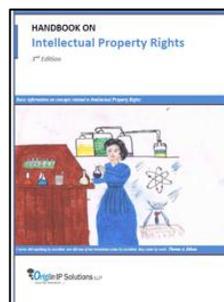
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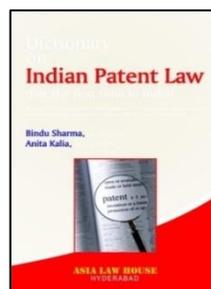


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ABOUT THE BOOK

The objective of this book is to allow readers to comprehend the ways to reduce patent infringement risks in today's competitive backdrop. Freedom to Operate or FTO search is the most effective manner to reduce patent infringement risks and is to be compulsorily done by everybody willing to launch a new product in the market.

The book, through examples and case laws, aims to provide a clear understanding of the importance of patents, rights of patent holders, types of patent infringements, the devastating effects of patent infringement litigations and ways to alleviate the chances of being faced with such litigations. Special care has been made to make the book simple and straightforward so as to be of use to beginners and professionals alike. We hope our efforts have been beneficial to you.

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