

# A CRITICAL ANALYSIS OF DEVELOPMENT OF “INVENTIVE STEP” WITH RESPECT TO INDIAN PATENT ACT, 1970 AND 2005 AMENDMENT

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*Abstract : The inventive step is an important characteristic to determine what will be the benefits acquired by the inventor and what would be the cost of such invention. Any patent application cannot afford to have a lack of inventive step or non-obvious creation. Once the patent application fulfils newness, the next step is to prove inventiveness in the invention. It has been recognised by the Indian Patent regime that any invention which does technological advancement and has economic significance is said to have inventive step. India has witnessed increase in patent fillings and as a result the criteria for inventive step are tested to accept any invention as having an inventive step. This research paper would dwell into more refined tests to determine inventiveness or inventive step in any invention.*

*IndexTerms - Inventive step, non-obviousness, novelty, original, patent.*

## **INTRODUCTION**

The concept of novelty in the intellectual property lays down that whatever is new at the time of filing of the application of patent is patentable. The patented subject matter which is eligible according to it gets patent if it is novel, non-obvious and capable of industrial application.<sup>1</sup> Of the aforesaid requirement, novelty holds the primary value in getting a patent. This is further emphasized in the Act by the definition of novelty given under section 2(j). It states that an invention means a new product of process involving inventive step and capable of industrial application.<sup>2</sup>

A new invention may consist of a new combination of all the existing things to create or to produce a new or important result or new integers.<sup>3</sup> Patent systems don't accept the patents which have been disclosed to the public prior to the time when application of patent is filed in the patent office. One of the conditions of granting a patent by the patent office is that the patent must be new or novel.

Patent law accepts the discovery and disclosure of inventions that are new, useful and non-obvious,<sup>4</sup> Patent rights are not available for the inventions which are merely obvious extensions or modifications of prior designs that could be anticipated without the need of patent rights.<sup>5</sup> In addition to the test of novelty, patentability also depends on the factor that the invention claimed is non-obvious to the person ordinarily skilled in the pertinent art.<sup>6</sup>

One of the most complex aspects of patent law is the determining the inventive step or the non-obviousness of a particular invention. The inventive step is judged on the basis of the person skilled in art which lacks inventive genius. Novelty and anticipation are determined by referring to the claims given mentioned under the patent application. According to Section 64 of the Indian Patent Act, 1970, a patent is subjected to be revoked if it is not novel.<sup>7</sup> The Patent (Amendment) Act, 2005 also mentions that after the patent application has been published by the patent office and before the grant of patent, the application can be challenged on the ground of novelty.<sup>8</sup> Indian patent system is continuously evolving in relation with the assessment of obviousness.

The Controller General of Patents, Designs and Trade Marks of India, has recently issued a Circular titled “Examination of Patent Applications and consideration of Report of Examiner by the

<sup>1</sup>Kotaro Kageyama, Determining Inventive Step or Nonobviousness for a Patent Requirement in View of the Formation Process of an Invention, available at [http://file.scirp.org/Html/6-3300454\\_70416.htm](http://file.scirp.org/Html/6-3300454_70416.htm), last visited on 15<sup>th</sup> July, 2021.

<sup>2</sup> Indian Patent Act, 1970, Section 2 (j).

<sup>3</sup>Kalyan C. Kankanala, Arun K. Narasani, Vinita Radhakrishnan, Indian Patent Law and Practice, 32 (1<sup>st</sup> Edition 2010).

<sup>4</sup>P.Narayanan, Patent Law, 7 (4<sup>th</sup> Edition 2006).

<sup>5</sup>Elizabeth Verkey, Intellectual Property, 330 (1<sup>st</sup> Edition 2015).

<sup>6</sup> Indian Patent Act, 1970, Section 25(i).

<sup>7</sup> Indian Patent Act, 1970, Section 64.

<sup>8</sup>Jeremy, "Inventive step" in India: getting a better understanding, available at: <http://ipkitten.blogspot.com/2014/03/inventive-step-in-india-getting-better.html>, last visited on 15<sup>th</sup> July, 2021.

Controller”<sup>9</sup>to streamline the patent examination procedure. The circular outlines various practices adopted by Examiners and Controllers of the Indian Patent Office (IPO) and the manner in which they are to further develop and improve their practices in order to provide the best possible patent protection with due diligence. With regard to grounds for rejection, the circular states The Examiner has to raise objections on novelty and/or inventive step with reasons only.<sup>10</sup> Frivolous objections without any reason/explanation cause delay in prosecution of an application. Further, raising an objection without justifying the same in the report is violative of the principles of natural justice.

With the rapid technological advancement in different field assessment and interpretation by the patent office is also changing. This paper analysis as to how the Indian statute law and the patent office treats of the most important concept, “inventive step”.

### STATEMENT OF PROBLEM

The act does not define technical advance or economic significance, and does not provide guidelines for determining non- obviousness of an invention from the point of view of a person with ordinary skill in the art. It is one of the most complex part of the patent law to determine the inventive step or non-obviousness of an invention.

### RATIONALE

One of the most complex aspects of patent law is the determination of inventive step or non-obviousness of an invention. It helps in finding out if the invention is in fact new item or just an obvious improvement by the person skilled in art. Inventive step make sure that patent aren’t awarded to existing inventions with mere improvements. The inventive step criteria lets the inventor continue coming up with new ideas without worrying about running into a patent law. Instead of stopping natural progress and creating a monopoly for the company that has the idea first, this criteria allows companies to continue updating their systems to save money and resources. The standards for meeting patentability criteria under the Patents Act 1970 are emphasised to reward the contributors of an invention. Among these criteria, novelty is a vital and absolute condition for patentability. An invention is considered 'novel' if it is not in the public domain anywhere in the world, and is analysed using existing expertise in the relevant field of technology.

### OBJECTIVES

1. To know the patentability criteria.
2. To know the concept of inventive step.
3. To find out the criteria of person skilled in art.
4. To identify the case laws of inventive step in India
5. To find out the recent developments in this field.
6. To analyse the inventive step criteria of patentability in India.

### RESEARCH QUESTIONS

- (i) What is the prior art?
- (ii) What are the differences between claimed invention and the prior art?
- (iii) Would the invention be obvious to a person with ordinary skill in the art?
- (iii) How to judge non- obviousness of the claimed invention?
- (iv) What is the test of inventive step? How is it assessed?
- (v) What are the relevant case laws?

### RESEARCH METHODOLOGY

The methodology which would be resorted for the purpose of this research is “Doctrinal”

In this research the sources of data are books available in the HNLU E-source library and PIMR library including books and research journals and various online resources. An attempt would be made to understand the inventive step and the Indian patent law. It will include analysis of the development of inventive step in the patent law regime.

<sup>9</sup>Circular No. 4 of 2011 (No. CG/PG/Circular(Patents)/2011/468), Intellectual Property Office, India.

<sup>10</sup> Ranjan Matthew, Patentability Requirements in India, available at

[https://www.lakshmisri.com/Uploads/MediaTypes/Documents/L&SWebsite\\_IPR\\_Featured\\_Ranjan.pdf](https://www.lakshmisri.com/Uploads/MediaTypes/Documents/L&SWebsite_IPR_Featured_Ranjan.pdf), last visited on 15<sup>th</sup> July, 2021.

**CONCEPT OF NOVELTY IN INDIA**

There are various tests for assessing inventive step taken into consideration the nature of invention, current state of art and that the invention would be obvious to the person skilled in the same art as of the applicant. In the Indian Patent Act, Section 2 (1)(ja) deals with the criteria for patentability of an invention and defines inventive step as the feature of "an invention that involves technical advancement as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to the person skilled in the art"<sup>11</sup>

The major factors that are considered while examining the patent application are:

1. Defining the person skilled in the art;
2. Assessing inventive step; and
3. Evaluating the commercial use of the invention.<sup>12</sup>

The act does not define technical advance or economic significance, and does not provide guidelines for determining non-obviousness of an invention from the point of view of a person with ordinary skill in the art.<sup>13</sup> The patent office interprets the terms technical advancement and economic significance individually. Also, the courts have, through various judgements, laid down guidelines to be followed for determining non-obviousness of an invention.

The legislative intent of this section is to make the standard of inventive step required for an invention to be patented higher than the existing art. To determine this, the prior art may be seen from the point of view of the person skilled in the art. If the person can combine prior art references to make that invention without the help of any inventive technique or idea then the invention would be obvious. Further, if the invention is a mere workshop improvement within the course of work, then also, the invention would be obvious.

Still, it is also important to consider that small structural and functional changes in relation to a product, composition or process may yield significant changes in results, so the invention should thus be assessed as a whole.<sup>14</sup> It is also necessary to assess whether the skilled person would arrive at a similar invention under similar conditions without being provided with the solution.

Another approach in assessing inventive step involves an analysis of hindsight, whereby the skilled person would examine the prior art to arrive at a solution to the identified problem. In assessing inventive step, certain logic or hypothetical assumptions should apply when considering the possible changes, modification and adjustments<sup>15</sup>. That said, the invention should not be analysed exclusively according to theoretical principles and anticipation of the facts as to how the inventor has arrived at the invention.

The Patents Act includes no formal definitions of terms such as 'technical advancement', 'economic significance' and 'person skilled in the art'<sup>16</sup>. Moreover, few cases have dealt extensively with the determination of inventive step.<sup>17</sup> The Patents Act further does not envisage a skilled artisan as someone who works in a laboratory in a pre-defined working environment.

The Patent Office appears to follow guidelines set out by the Supreme Court concerning the importance of documents in proving the existence of inventive step: Had the document been placed in the hands of a competent craftsman or engineer as distinguished from a mere artisan), endowed with the common general knowledge at the 'priority date', who was faced with the problem solved by a patentee but without knowledge of the patented invention, would have arrived at the invention.<sup>18</sup>

A similar interpretation the same person ordinarily skilled in the art cannot be read to mean that there has to exist other qualities in the said person like un-imaginary nature of the person or any other kind of person having distinct qualities was made in another high court case.

Obviousness is the issue most commonly raised in both prosecution and litigation. Thus, assessing inventive step, understanding the state of the art, defining the person skilled in the art and

<sup>11</sup> Indian Patent Act, 1970, Section 2 (ja).

<sup>12</sup> Elizabeth Verkey, Intellectual Property, 339, 1<sup>st</sup> Edition 2015.

<sup>13</sup> Ibid.

<sup>14</sup> Manoj Pillai, The Patents (Amendment) Act, 2005 and TRIPS Compliance—A Critique, available at <http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/May%202005/JIPR-vol%2010-May%202005-pp%20232-238.htm>, last visited on 17<sup>th</sup> July, 2021.

<sup>15</sup> R S Praveen Raj, Inventive Step or Non-Obviousness of an Invention, available at <http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/jipr/Fulltextsearch/2005/May%202005/JIPR-vol%2010-May%202005-pp%20232-238.htm>, last visited on 17<sup>th</sup> July, 2021.

<sup>16</sup> Supra note 10.

<sup>17</sup> Supra note 11.

<sup>18</sup> Ibid.

determining how the invention may be distinguished from the prior art are key concerns for both advocates and examiners and issues which are still open to wide interpretation.

As a leading patent case from the common law world *Windsurfer vs Tabur Marine* demonstrates so devastatingly, newness only lies in the fact that we're yet to uncover it. While it the prior art may well exist in some remote corner of the world.<sup>19</sup>

The patentees behind the Windsurfer board assumed they had invented a cool contraption by combining the best of surfing and sailing. And yet during an infringement action, a rather deft defendant discovered a rough sketch by a 12 year old boy from a remote island that outlined the very same idea. The court set out the four steps required to be taken when ascertaining the validity of a patent<sup>20</sup>: The first is to identify the inventive concept embodied in the patent in suit. Thereafter, the court has to assume the mantle of the normally skilled but unimaginative addressee in the art at the priority date and to impute to him what was, at that date, common general knowledge in the art in question. The third step is to identify what, if any, differences exist between the matter cited as being 'known or used' and the alleged invention. Finally, the court has to ask itself whether, viewed without any knowledge of the alleged invention, those differences constitute steps which would have been obvious to the skilled man or whether they require any degree of invention.<sup>21</sup> This test has been approved and applied on various occasions ever since. It does not, alter or supplement the statutory provision, it merely is a structured way of assessing whether the requirement of inventive step is satisfied.

## **CASE LAW INTERPRETATION OF INVENTIVE STEP IN INDIA**

Judicial interpretations of obviousness and inventive step in India may be considered to be at a relative stage of infancy. Except certain cases, such as *Bishwanath Prasad RadheyShyam v Hindustan Metal Industries*<sup>22</sup>, and ratio from case laws of other jurisdictions, the interpretation of obviousness and inventive step is open for debate in India.

In *Bishwanath Prasad RadheyShyam*<sup>23</sup>, the Supreme Court (SC) addressed improvements and combination patents, where the importance of assessing inventive step in these cases was outlined. The SC held that in order for subject matter to constitute an inventive step, the alleged invention should be more than a mere workshop improvement. Furthermore, in the case of an improvement patent, the improvement must itself constitute an inventive step. If the alleged invention constitutes known elements or a combination of known elements, the result must be new, or result in an article substantially cheaper or better than what existed.<sup>24</sup> It is to be noted that the considerations of cost or economic significance, which are usually secondary considerations in other jurisdictions, are in-built as primary considerations both in the Act under the definition of inventive step and in the above mentioned case.

In another landmark case *Bajaj v. TVS*<sup>25</sup>, the case was related to the use of twin spark plugs for efficient combustion of lean air fuel mixture in small bore. The patentability was challenged on the ground of lack of novelty and inventive step based on the fact that US patent held by Honda. The High Court leaned towards understanding the technology entailed in the concerned patents with respect to the closest prior arts to judge whether or not the inventions possessed a technical advance. Furthermore, the prior arts cited in the International Search Report (ISR) for Bajaj's application was used by the court in understanding the invention as well as judging the inventive step. The court stated that if a prior art reference gave directions on making an invention, it would be novelty negating as opposed to a prior art reference, which just provided the elements of the invention.<sup>26</sup>

Further, in the case of *LallubhaiChakubhai Jariwala v. ChimanlalChunilal and Co.* the court observed that the two features which are necessary to validate the patent are novelty and utility, but the main focus is on the novelty of the invention. Novelty acts as a mandatory requirement, otherwise there will be no utility, i.e. the general public will not be benefitted from the invention and therefore, the patentee will not get any consideration from that invention. The court further dealt with the issue whether the invention has been anticipated by prior public use, and has it been used by the plaintiff before applying for patent?

<sup>19</sup>[1985] RPC 59

<sup>20</sup>Shamnad Basheer, Obsessing on Newness: The Death of Patents?, available at <https://spicyip.com/2018/01/obsessing-on-newness-the-death-of-patents.html>, last visited on 19<sup>th</sup> July, 2021.

<sup>21</sup>Supra note 8.

<sup>22</sup>AIR 1982 SC 1444.

<sup>23</sup>Ibid.

<sup>24</sup>Kalyan C. Kankanala, Arun K. Narasani, Vinita Radhakrishnan, Indian Patent Law and Practice, 38, 1<sup>st</sup> Edition 2010.

<sup>25</sup>Manupatra MIPR 2009 (2) 139.

<sup>26</sup>Kalyan C. Kankanala, Arun K. Narasani, Vinita Radhakrishnan, Indian Patent Law and Practice, 33, 1<sup>st</sup> Edition 2010.

If the invention has been put into public use then it will negatively affect in the grant of patent.<sup>27</sup> Use of invention for the purpose of trade may also constitute a prior use which will invalidate the patent and it will be treated a strong evidence against the invention as prior public sale of goods or articles was for commercial benefit and was not any experiment.

In India, a patent application is considered to be anticipated if the invention is disclosed by the patentee in any document which is published before the date of priority.<sup>28</sup> However, if the applicant claim that the published material was published without his consent or fraudulently, then it will not be considered as an anticipated invention. The IPAB then went on to define the inventive step analyses as: would a non-inventive mind have thought of the alleged invention? If the answer is 'no', then the invention is nonobvious.<sup>29</sup> If the patent claimed merely includes the development of some existing trade, in the sense that it is a development as would suggest itself to an ordinary person skilled in the art, it would fail the test of non-obviousness.

## CONCLUSION

With reduced examination times and other improvements at the Patent Office, the Indian patent system is continually evolving, in relation to both prosecution and enforcement. However, assessments of obviousness remain subjective: rapid technological advancements in different fields mean that the assessment of inventive step and its interpretation by the Patent Office are also constantly changing. For clarity, the applicant's analysis of the prior art should be considered and interpreted in light of earlier analysis established under the law. Ultimately, however, this will remain a subjective issue.

With regard to grounds for rejection, the circular states "The Examiner shall raise objections on novelty and/or inventive step with reasons only. Frivolous objections without any reason/explanation cause delay in prosecution of an application. Further, raising an objection without justifying the same in the report is violative of the principles of natural justice." It would be interesting to see if future office actions from the IPO adhere to the guidelines proposed in the latest circular.

This will prove to be beneficial for understanding how the patent office and examiners deal with the issue of inventive step. Specific reasoning, if given, will also be useful during litigation, as courts can be then asked to clarify the principles to be followed for assessment of inventive step. At present, due to the lack of Indian cases dealing with obviousness and inventive step in Indian Jurisprudence, the Indian Patent Office and the courts have relied on case laws of other major patent jurisdictions. Ambiguities with respect to the aspect of identification of prior art, determination of prior art, its combination, determination of ordinary skilled involved, and differences between claimed invention and prior art, to identify obviousness makes the inventive step difficult and subjective.

Differences, if any, between the statute and practice would only be resolved by active intervention and interpretation of the statutory requirements by the Indian courts. Going forward, one can expect clarity and gradual solidarity on the assessment of inventive step, as the number of cases filed and decided in this regard increase.

## BIBLIOGRAPHY

### **BOOKS:**

- Kalyan C. Kankanala, Arun K. Narasani, Vinita Radhakrishnan, Indian Patent Law and Practice, 32 (1<sup>st</sup> Edition 2010).
- P. Narayanan, Patent Law, 7 (4<sup>th</sup> Edition 2006).
- Elizabeth Verkey, Intellectual Property, 330 (1<sup>st</sup> Edition 2015).

### **CASE LAWS:**

- Bishwanath Prasad Radhey Shyam v Hindustan Metal Industries AIR 1982 SC 1444.
- Bajaj v. TVS Manupatra MIPR 2009 (2) 139.
- Lallubhai Chakubhai Jariwala v. Chimanlal Chunilal and Co. (1935) 37 BOMLR 665.
- Windsurfer vs Tabur Marine [1985] RPC 59.

### **STATUTE:**

- Indian Patent Act, 1970

<sup>27</sup> Pankaj Musyuni, India: Novelty: An Indian Perspective, Available at:

<http://www.mondaq.com/india/x/655226/Patent/Experimentation+Research+Exemption+In+Indian+Patent+Law+Scope+And+Ambit+Of+Section+473+Remains+Uncertain>, last visited on 20<sup>th</sup> July, 2021.

<sup>28</sup> Jeremy, Inventive step in India: getting a better understanding, available at: [http://file.scirp.org/Html/6-3300454\\_70416.htm](http://file.scirp.org/Html/6-3300454_70416.htm), last visited on 20<sup>th</sup> July, 2021.

<sup>29</sup> Supra note 13.

**WEBLIOGRAPHY**

- Formation Process of an Invention, available at [http://file.scirp.org/Html/6-3300454\\_70416.htm](http://file.scirp.org/Html/6-3300454_70416.htm), last visited on 15<sup>th</sup> July, 2021.
- Jeremy, "Inventive step" in India: getting a better understanding, available at: <http://ipkitten.blogspot.com/2014/03/inventive-step-in-india-getting-better.html>, last visited on 15<sup>th</sup> July, 2021.
- Ranjan Matthew, Patentability Requirements in India, available at [https://www.lakshmisri.com/Uploads/MediaTypes/Documents/L&SWebsite\\_IPR\\_Featured\\_Ranjan.pdf](https://www.lakshmisri.com/Uploads/MediaTypes/Documents/L&SWebsite_IPR_Featured_Ranjan.pdf), last visited on 15<sup>th</sup> July, 2021.
- Manoj Pillai, The Patents (Amendment) Act, 2005 and TRIPS Compliance—A Critique, available at <http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/May%202005/JIPR-vol%2010-May%202005-pp%20232-238.htm>, last visited on 15<sup>th</sup> July, 2021.
- R S Praveen Raj, Inventive Step or Non-Obviousness of an Invention, available at <http://www.niscair.res.in/sciencecommunication/researchjournals/rejour/jipr/Fulltextsearch/2005/May%202005/JIPR-vol%2010-May%202005-pp%20232-238.htm>, last visited on 17<sup>th</sup> July, 2021.
- Shamnad Basheer, Obsessing on Newness: The Death of Patents?, available at <https://spicyip.com/2018/01/obsessing-on-newness-the-death-of-patents.html>, last visited on 17<sup>th</sup> July, 2021.
- Pankaj Musyuni, India:Novelty: An Indian Perspective, Available at: <http://www.mondaq.com/india/x/655226/Patent/Experimentation+Research+Exemption+In+Indian+Patent+Law+Scope+And+Ambit+Of+Section+473+Remains+Uncertain>, last visited on 20<sup>th</sup> July, 2021.
- Jeremy, Inventive step in India: getting a better understanding, available at: <http://file.scirp.org/Html/6-3300454>.

