## THE JOHN MARSHALL REVIEW OF INTELLECTUAL PROPERTY LAW



# KNOWLEDGE/SKILL STANDARDS OF A "PERSON SKILLED IN ART": A CONCERN LESS VISITED

## NAINA & JASMEET GULATI

### ABSTRACT

The law is differential across jurisdictions when it comes to the skill standard required for the PSITA/PHOSITA in Patent Law. This article will analyze the various levels of skill addressed throughout European, Indian, and U.S. Patent Law. Whether the level of skill be 'ordinary', 'extraordinary' or otherwise, discrepencies exist throughout the court systems, manuals of examination and the like. Much hinges on the determination of patentability when the expertise or level of skill of the PSITA/PHOSITA is often vague and indeterminative. It is submitted that since the advancement in technology is taking place at a very rapid scale and every minute a new step towards innovation is taken, the need to keep patentability standards strict is high. The analysis of this article shows that the use of the word 'ordinarily' while defining PSITA/PHOSITA may lead to differential patenting standards across jurisdictions.

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Cite as Naina & Jasmeet Gulati, Knowledge/Skill Standards of a "Person Skilled in Art": A Concern Less Visited, 17 J. MARSHALL REV. INTELL. PROP. L. 588 (2018).

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## KNOWLEDGE/SKILL STANDARDS OF A "PERSON SKILLED IN ART": A CONCERN LESS VISITED

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#### I. INTRODUCTION: PATENTABILITY AND PSITA

Whenever there is a failure to find some person in real life who can objectively assess the facts of a given situation, law does not hesitate to create and define fictitious persons. The Law of Torts defines a 'reasonable man'<sup>1</sup> to test the standards of care during negligence, and for contract law a metaphorical figure, 'officious bystander,' was developed to assist in determining when a term should be implied into an agreement.<sup>2</sup> Interestingly, one realizes that the sole purpose behind creation of these legal fictitious characters was to actually get the correct level of rational and unbiased intellect for an accurate assessment of the case at hand. Likewise, creation of such a hypothetical person as a legal requirement under Intellectual Property Law, was equally important and interesting where such a person was created to get the correct level of intellect either to create or test infringement of such intellectual property. Some examples are an 'Average Consumer' under Trademark Law, an 'Informed User' for Design Law and a 'Person Skilled in the Art' (PSITA) for Patent Law. This paper seeks to analyze the fiction of the 'person skilled in the art' under patent law, and attempts to identify who that person is. How much he knows. What is his job as a "person skilled in the art"? And what importance does he hold under the current patent regimes? The crux of the study lies in making a comparative analysis between a 'person skilled in the art' and 'a person having ordinary skill in the art' (PHOSITA) (from U.S. law) and thereby critically analyzing the concepts.

<sup>\* ©</sup> Naina & Jasmeet Gulati 2018. Naina would like to thank Mr. Rohan Cherian Thomas, Assistant Professor, National Law University, Jodhpur (India) for his valuable comments on the first draft of the article. Dr. Jasmeet Gulati is an Associate Dean (Examinations), Associate Professor (Law) and Executive Director - Centre for Public International Law, Jindal Global Law School, O.P. Jindal Global University (Sonipat), Haryana, NCR of Delhi, India. Naina is an Early Stage Researcher (ESR) at the European IP Institutes Network Innovation Society (EIPIN-Innovation Society) - A Horizon 2020 Marie Skłodowska Curie Action ITN-EJD, enrolled as a Ph.D. candidate at Maastricht University, the Netherlands. For more information visit, https://linkprotect.cudasvc.com/url?a=http%3a%2f%2fwww.eipin-

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aQhMV3Q9o5RppGmej6TQu0guQadPV75pk4TTtjg,,&typo=1. The views and opinions expressed in this article are those of the authors.

<sup>&</sup>lt;sup>1</sup> First appearance in *Vaughan v. Menlove*, 132 ER 490 (CP 1837). This was a case of tort of negligence wherein the defendant's hayrick was built in such a manner that it caught fire and destroyed plaintiff's cottages on the adjacent land. Liability was decided taking into consideration caution as a man of ordinary prudence would observe.

<sup>&</sup>lt;sup>2</sup> Invented by MacKinnon, L.J. in Southern Foundries (1926); Ltd v. Shirlaw, AC 701 (1940).

#### A. Importance of the Role of PSITA

Bainbridge considers the 'person skilled in the art' as an extension of the 'reasonable man' requirement as patents involve technicalities and many technical publications are incomprehensible to the layperson.<sup>3</sup>

Laddie, J. discussed the nature of the skilled (but non-inventive) man in the art in the case of Pfizer Ltd's Patent.<sup>4</sup> He suggested that this notional skilled worker has more extensive knowledge of the prior art. He made an attempt to elaborate upon some of the general characteristics of this skilled man as follows:<sup>5</sup>

This is not a real person. He is a legal creation. He is supposed to offer an objective test . . . He is deemed to have looked at and read publicly available documents and to know of public uses in the prior art. He understands all languages and dialects. He never misses the obvious nor stumbles on the inventive. He has no private idiosyncratic preferences or dislikes. He never thinks laterally. He differs from all real people in one or more of these characteristics. A real worker in the field may never look at the piece of prior art- for example he may never look at the contents of a particular public library- or he may be put off because it is in a language he does not know. But the notional addressee is taken to have done so.<sup>6</sup>

However, before any discussion can be made on 'person skilled in the art' (PSITA), it becomes imperative to understand what a patent is and why it requires a hypothetical PSITA. Simply put, a patent is an exclusive right granted for an invention wherein the patentee gets the right to exclude others from enjoyment of the invention.<sup>7</sup> The importance of a patent right is that the invention cannot be commercially made, used, distributed, imported, or sold by others without the patent owner's consent.<sup>8</sup> Since patents are granted for inventions, it makes sense to say that the more technologically advanced a country is, the more sophisticated patent laws it provides, which further reflects on the fact that the assessement and interpretation of laws vary from country to country. However, the central benchmarks for granting a patent protection is the same wherein an invention has to pass the 'triple test' of patentability i.e. novelty (newness), non-obviousness (or inventive step) and industrial application (utility).<sup>9</sup> Also, under most jurisdictions, another key condition is that the invention

<sup>&</sup>lt;sup>3</sup> DAVID I. BAINBRIDGE, INTELLECTUAL PROPERTY 426 (8th ed., 2010).

<sup>&</sup>lt;sup>4</sup> The Asia File Products Sdn Bhd v. Brilliant Achievent Sdn Bhd & 2 Ors, MTKL GS No. 05 (IP)-22-47 (2010), citing [2001] FSR 201. The patent application in the present case related to a drug Viagra, used to treat impotence in men. The alleged invention was held to lack inventive step (nonobviousness) on the ground that it was obvious to attempt to administer a known inhibitor used to treat male impotence in a more desirable way i.e. orally.

<sup>&</sup>lt;sup>5</sup> However these characteristics are to be read keeping in mind that these relate to a skilled person in Europe only, this being a decision of UK Case.

<sup>&</sup>lt;sup>6</sup> Id. at ¶ 64.

<sup>&</sup>lt;sup>7</sup> WIPO, PATENTS, http://www.wipo.int/patents/en/ (last visited Apr. 29, 2018); See TRADE REALATED ASPECTS OF INTELLECTUAL PROPERTY RIGHTS (TRIPS), art. 28 (1994).

<sup>&</sup>lt;sup>8</sup> See id. at Frequently asked Questions: Patents; see also TRIPS, at art. 28.

<sup>&</sup>lt;sup>9</sup> At least the World Trade Organisation (WTO) member countries have to follow these requirements of patentability as given under Art. 27 of TRIPS.

must not be explicitly declared as non-patentable subject matter under the law.<sup>10</sup> Lastly, the invention must be sufficiently disclosed in the application with the requisite amount of clarity and precision.<sup>11</sup>

The role of PSITA assumes great relevance while dealing with the novelty, nonobviousness and disclosure criterions. Novelty requires that the invention must be totally new, meaning thereby its absence from prior art.<sup>12</sup> Therefore, novelty is really a question of whether the invention has been 'anticipated' for example, by a previous patent or by publication or use.<sup>13</sup> Furthermore, anticipation requires an 'enabling disclosure'<sup>14</sup> such that the prior art enables a PSITA to put the invention into effect.<sup>15</sup> So, it's none other than PSITA who would analyze the prior art before reaching the result of whether the prior art disclosure is enough to destroy novelty of the invention.

Secondly, an invention may seem non-obvious to one and obvious to another. This will largely depend upon the skill standard, the knowledge and intellect of the person examining such an invention, and such skill or knowledge may vary substantially in society as an average person's intellect ought not to be able to realize what a person skilled in art might. The fact that patent law involves invention which has to have a relation with technology and science, calls for a technical brain to examine the subject matter rather than a common man's knowledge. Hence, the invention must be non-obvious to PSITA, who is a hypothetical 'person skilled in the art' created to avoid subjective assessment by the examiners. The concept of the PSITA standard can therefore be viewed as a collar on the obviousness standard that both:

- i. Prevent the patentability of trivial inventions and
- ii. Preserve the patentability of meritorious ones.<sup>16</sup>

Also, the disclosure of the invention in the application should be such as to allow PSITA to carry out the invention. When the question of interpretation of claims comes before a court of law, it's this PSITA who uses his common knowledge to perform the task. It is through the eyes of PSITA (in light of his common general knowledge) that the claims are read and interpreted, and the correct scope and extent of monopoly or patent right is determined.

The concept of PSITA is hence a very fundamental concept in patent law and the fate of a patent; from determining its validity, the scope of protection covered and assessing infringement claims which would largely, if not solely, depend upon correct identification of PSITA. Therefore, the requirement of utmost care and importance is

<sup>&</sup>lt;sup>10</sup> In many countries, scientific theories, aesthetic creations, mathematical methods, plant or animal varieties, discoveries of natural substances, commercial methods, and methods for medical treatment or computer programs are generally not patentable. For example, § 3 of the Patent Act, 1970 (India) provides the list of non-patentable subject matter.

<sup>&</sup>lt;sup>11</sup> See e.g., PATENT ACT (INDIA), § 10 (1970).

<sup>&</sup>lt;sup>12</sup> PATENT ACT (U.K.), § 2(1) (1977) states that an invention is new if it "does not form part of the state of the art." Further clause 2 of this section elaborates upon 'state of art' as comprising all matter made available to the public before the priority date of the invention whether by written or oral description, by use or in any other way.

<sup>&</sup>lt;sup>13</sup> Supra n. 3, at 419.

<sup>&</sup>lt;sup>14</sup> See PATENT ACT (INDIA), at § 64(1)(h).

<sup>&</sup>lt;sup>15</sup> Supra n. 3, at 419.

<sup>&</sup>lt;sup>16</sup> Jonathan J. Darrow, *The Neglected Dimensions of Patent Law's PHOSITA Standards*, HARVARD LAW JOURNAL OF LAW AND TECHNOLOGY, 23, 227, 234 (2009).

attached in defining the PSITA involved in a particular case and defining boundaries and the extent of his knowledge.

Mueller interestingly notes that the proponent of validity usually will attempt to establish as low a level of skill standard as possible, such that the invention would have been considered non-obvious by the largest possible number of persons, while the challenger of validity typically will seek to raise that level.<sup>17</sup> It is to be noted that both higher and lower skill standards could be problematic to use. A balanced approach may be a desirable goal. If a particular PSITA standard is set too low in a given case (Layperson Standard), then a trivial invention will become patentable; and if set too high (Researcher Standard), then an innovative invention may become unpatentable.<sup>18</sup>

Owing to its virtual nature, PSITA has always remained in the limelight in the judicial encounter on patent law. PSITA standards ensure the achievement of a correct bar or threshold for patentability. Most legislatures do not clearly define PSITA or provide for an exhaustive guide to determine who he could be. But, judicial pronouncements do leave clues here and there to lead us to who PSITA is or could be. The upcoming sections will analyze international and national approaches in determining skill standards of this skilled person and thereby critically analyzing these approaches.

#### II. 'PERSONS SKILLED IN THE ART' UNDER THE TRIPS AGREEMENT

It becomes imperative to study what the TRIPS agreement lays down regarding PSITA for the reason that the TRIPS agreement lays down the minimum standards a member country has to follow. But, one observes that drafters of TRIPS have not elaborated upon this concept of PSITA and hence a passing reference<sup>19</sup> is made under Art. 29.1 that lays down Conditions of Patent Application (Enabling Disclosure requirement) as follows:

Members shall require that an applicant for a patent shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by **a person skilled in the art** and may require the applicant to indicate the best mode for carrying out the invention known to the inventor at the filing date or, where priority is claimed, at the priority date of the application.<sup>20</sup>

According to TRIPS, it is only while analyzing disclosure of the invention in the application that a PSITA role comes into play. This is, however, unlike what the domestic laws of most of the countries generally lay down. PSITA also plays the role of an analyst of prior art during non-obviousness examination along with analyzing disclosures in applications.<sup>21</sup>

<sup>&</sup>lt;sup>17</sup> JANICE M. MUELLER, PATENT LAW, 198 (3rd ed., 2009).

 $<sup>^{18}</sup>$  Id.

<sup>&</sup>lt;sup>19</sup> It is discretion of the member states to define PSITA and the skill required in PSITA depending on the level and extent of technological development of a particular state.

<sup>&</sup>lt;sup>20</sup> TRIPS, at art. 29.

 $<sup>^{21}</sup>$  This is discussed in detail in relation to the laws in the US.A., Europe (mostly the U.K.) and India in Section III.

Also, TRIPS does not describe who this PSITA is, how to determine his characteristics, and elaborates nothing further upon the concept. This may be interpreted as being left to be interpreted entirely by members in accordance with Art. 1 of TRIPS<sup>22</sup> to phrase and decide upon qualifications possessed by PSITA.

The WIPO Intellectual Property Handbook,<sup>23</sup> however, makes many references to PSITA and elaborates on his work which is mostly akin to what domestic legislations of various countries provide for the role of PSITA in analyzing Novelty, Inventive Step and Disclosure requirements.<sup>24</sup> But this handbook uses the phrase 'person having ordinary skill in the art' in place of 'person skilled in the art' and justifies it by stating:

The expression "ordinary skill" is intended to exclude the "best" expert that can be found. It is intended that the person be limited to one having the average level of skill reached in the field in the country concerned.<sup>25</sup>

The question is, knowing that TRIPS provides for minimum mandatory standards, is WIPO allowed to replace 'person skilled' by 'a person having ordinary skill'?

However, TRIPS is not the first international document having reference to PSITA. Before it, PSITA found reference in the Patent Cooperation Treaty of 1970 (PCT, 1970) under Art. 5 (Enabling Disclosure requirement) which provides:

Article 5: The Description: The description shall disclose the invention in a manner sufficiently clear and complete for the invention to be carried out by a person skilled in the art.<sup>26</sup>

Further, under Art. 33.3, PSITA should determine the inventive step for the purpose of Preliminary Examination as follows:

**Article 33: The International Preliminary Examination:** (3) For the purposes of the international preliminary examination, a claimed invention shall be considered to involve an inventive step if, having regard to the prior art as defined in the Regulations, it is not, at the prescribed relevant date, obvious to a **person skilled in the art.**<sup>27</sup>

The PCT requires PSITA for disclosure as well as non-obviousness examination, and TRIPS refers to him only in relation to disclosure in an application. But the problem is still the same, even the PCT did not further elaborate upon PSITA skill standards. Therefore, we have to take resort to domestic patent laws and judicial pronouncements in order to understand PSITA. The Next Section elaborates upon the evolution of the definition and skill standards of PSITA (or PHOSITA) in the U.S.A.,

<sup>27</sup> Id. at art. 33.

<sup>&</sup>lt;sup>22</sup> TRIPS, at art. 1. "Members shall be free to determine the appropriate method of implementing the provisions of this Agreement within their own legal system and practice.".

<sup>&</sup>lt;sup>23</sup> WIPO INTELLECTUAL PROPERTY HANDBOOK, No. 489(E) (2nd ed., 2008), available at http://www.wipo.int/edocs/pubdocs/en/intproperty/489/wipo\_pub\_489.pdf (last visited Oct. 19, 2017).

<sup>&</sup>lt;sup>24</sup> *Id.*; see ¶¶ 2.22, 2.24, 2.25, 2.26, 2.29, 2.31, 2.33.

 $<sup>^{25}</sup>$  Id. at ¶ 2.26.

<sup>&</sup>lt;sup>26</sup> PATENT COOPERATION TREATY (PCT), art. 5 (1970).

Europe (mostly the U.K.), and India, leading our way to make a comprehensive analysis of the skill standard of PSITA and also comparing these laws and TRIPS.

III. SKILL STANDARD OF PSITA: ANALYZING THE SITUATION IN EUROPE, USA AND INDIA

#### A. PSITA under European Law (particularly the U.K.)

This section will analyze the skill standards of 'person skilled in art' under domestic laws of the U.S.A, Europe (mostly the U.K.), and India; thereafter comparing the standards under these jurisdictions. The crux is to compare the skill standards of these two countries to the standard as prevailing in India. The choice of these two jurisdictions to compare the prevailing standards in India is based on reason. First, the U.S.A. is very liberal in the granting of patents and is the hub of technology. The evolution of the skill standard of this skilled person remains incomplete, without studying the U.S. law, as many of the important interpretations of the skill standard of PHOSITA have come from the U.S. courts. Secondly, for India, English and European Courts hold a serious persuasive value; therefore, their decisions can also not be ignored.

A 'Person skilled in the art' is referred to under the European Patent Convention (EPC) of 1973. Article 56<sup>28</sup> and 83 of the EPC relate to Inventive Step and Disclosure of the Invention.

These provisions are somehow a reproduction of Art. 5 and 33 of the PCT. Further, EPO Guidelines<sup>29</sup> elaborate upon PSITA stating that:

The **"person skilled in the art"** should be presumed to be a skilled practitioner in the relevant field of technology, who is possessed of average knowledge and ability and is aware of what was common general knowledge<sup>30</sup> in the art at the relevant date.<sup>31</sup>

<sup>&</sup>lt;sup>28</sup> EUROPEAN PATENT CONVENTION (EPC), art. 56 (1973).

**Art. 56: Inventive Step:** An invention shall be considered as involving an inventive step if, having regard to the state of the art, it is not obvious to **a person skilled in the art**. If the state of the art also includes documents within the meaning of Article 54, paragraph 3, these documents shall not be considered in deciding whether there has been an inventive step.

<sup>&</sup>lt;sup>29</sup> *Id.* at art. 83. **"Art. 83: Disclosure of the Invention:** The European patent application shall disclose the invention in a manner sufficiently clear and complete for it to be carried out by a **person skilled in the art**."

<sup>&</sup>lt;sup>30</sup> **Common general knowledge** can come from various sources and does not necessarily depend on the publication of a specific document on a specific date. An assertion that something is common general knowledge need only be backed by documentary evidence (for example, a textbook) if this is contested. *See* GUIDELINES FOR EXAMINATION, EPO, *Common General Knowledge of a Skilled Person*, available at http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g\_vii\_3\_1.htm.

<sup>&</sup>lt;sup>31</sup> See GUIDELINES FOR EXAMINATION, EPO, Person Skilled in the Art, available at http://www.epo.org/law-practice/legal-texts/html/guidelines/e/g\_vii\_3.htm; see also EPO, Case Laws of

Specifically discussing Section 3<sup>32</sup> of the U.K. Patent Act of 1977 which provides for a definition of Inventive Step, this is where PSITA finds its mention.

However, this does not mean that PSITA has no relevance in determining novelty and disclosure requirements. The case law regarding the skill standards and role of PSITA has evolved on the following lines:

Pill, L.J. in the case of *Technograph Printed Circuits Ltd. v. Mills & Rockley* (*Electronics*) *Ltd.*<sup>33</sup> remarked:

a **skilled technician** who is well acquainted with workshop technique and who has carefully read the relevant literature. He is supposed to have an unlimited capacity to assimilate the contents of... scores of specifications but to be incapable of a scintilla of invention. When dealing with obviousness, unlike novelty, it is permissible to make a 'mosaic' out of the relevant documents, but it must be a mosaic which can be put together by an **unimaginative man with no inventive capacity**.<sup>34</sup>

Pill, L.J. observed that the skilled worker must be taken to read documents assiduously, however boring, with reference to both novelty and inventive step. He may well be boring, but he is never bored.<sup>35</sup>

In *Rockwater Ltd. v. Technip France SA's Patent*,<sup>36</sup> Jacob, L.J. describes the notional skilled worker as a **nerd** and further tries to elaborate his description in a modern colorable form. According to him, the skilled worker would be very **boring** and also **forgetful**, for after he has read one piece of prior art, unless it forms part of his background technical knowledge, he would instantly forget it before reading the next piece of prior art, unless it forms part of an uninventive mosaic or there is sufficient cross-reference between the items of prior art.<sup>37</sup> However, he did say that the notional skilled worker was not a complete android, and will share the prevailing prejudices or conservatism in the art.<sup>38</sup>

Where it is appropriate to consider a **team of skilled workers**, Jacob, L.J. described these as an assembly of nerds with different basic skills, all unimaginative. Hence, it might be a matter of a team of persons skilled in the art.<sup>39</sup>

In Halliburton Energy Services, Inc. v. Smith International (North Sea) Ltd. & ors,<sup>40</sup> Justice Pumfrey held that:

Boards of Appeal for Definition of Person Skilled in Art, available at http://www.epo.org/law-practice/legal-texts/html/caselaw/2013/e/clr\_i\_d\_8\_1\_1.htm (for further explanations).

<sup>&</sup>lt;sup>32</sup> PATENT ACT (U.K.), at § 3. "An invention shall be taken to involve an inventive step if it is not obvious to a **person skilled in the art**, having regard to any matter which forms part of the state of the art by virtue only of section 2(2) above (and disregarding section 2(3)).".

<sup>&</sup>lt;sup>33</sup> The General Tire & Rubber Company v. The Firestone Tyre and Rubber Company Ltd. and others, [1972] RPC 346.

 $<sup>^{34}</sup>$  Id.

<sup>&</sup>lt;sup>35</sup> Supra n. 3, at 431.

<sup>&</sup>lt;sup>36</sup> Rockwater Ltd. v. Technip France SA's Patent, [2004] RPC 919.

<sup>&</sup>lt;sup>37</sup> Id.

<sup>&</sup>lt;sup>38</sup> Supra n. 3, at 431.

<sup>&</sup>lt;sup>39</sup> Id. at 426; See General Tire & Rubber Co., at 457.

<sup>&</sup>lt;sup>40</sup> Halliburton Energy Services, Inc. v. Smith Int'l (North Sea) Ltd., [2005] EWHC 1623.

The skilled person is essentially a legal construct, and **not a mere lowest common denominator** of all the persons engaged in the [field] at a particular time. In some cases, it is clear that the specification is addressed to sets of skills that in the real world would be possessed by more than one person, and such a specification can be said to be addressed to a team.<sup>41</sup>

This PSITA would have wide **knowledge of the technology** within which the invention lies.<sup>42</sup> He does not represent some sort of lowest common denominator of persons actually engaged in the field, possessed by the knowledges and prejudices all of them can be said to possess.<sup>43</sup>

It is also unlikely that an expert witness can be truly representative of the notional skilled person as he may be too well qualified and be subject to personal prejudices and preferences.<sup>44</sup> This is because an expert witness is not an imaginative person, but a real one, who lacks objectiveness in decision making.

Persons newly entering the relevant technical field cannot be taken into account in determining the skilled addressee who must represent the attainments of those already in the field, particularly, those most closely associated with the field.<sup>45</sup>

It is manifestly evident that the notional skilled worker cannot be endowed with inventive faculties himself, however technical the art, otherwise all inventions could be considered to be obvious. The PSITA is simply someone with a wide knowledge of technology within the field the invention lies.<sup>46</sup>

The challenge of obviousness goes with the common general knowledge/background of PSITA. Though the PSITA does not possess inventive ability, he does have common general knowledge particular to that art. So, the basis for determining inventive step is whether using this common general knowledge of an invention is obvious. Common general knowledge does not include every published patent specification<sup>47</sup> in a particular art, but is restricted to those which are generally known to those who engage in that particular art.<sup>48</sup> Hence, PSITA is not supposed to know everything. It is sufficient what is known by a larger proportion of people working in the relevant field.

Worth mentioning here is the case of *Bourns Inc. v. Raychem Corp.*,<sup>49</sup> in which Justice Laddie explained:

The common general knowledge is the technical background of the notional [skilled person] . . . This is not limited to material he has memorised and has at the front of his mind. It includes all that material in the field he is working in which he knows exists, which he would refer to as a matter of course if he

 $<sup>^{41}</sup>$  Id.

 $<sup>^{\</sup>rm 42}$  Supra n. 3, at 431.

<sup>&</sup>lt;sup>43</sup> Glaxo Group Ltd's Patent, [2004] RPC 843.

<sup>&</sup>lt;sup>44</sup> Id.

<sup>&</sup>lt;sup>45</sup> Mayne Pharma Ltd. v. Debiopharm SA, [2006] EWHC 1123.

<sup>&</sup>lt;sup>46</sup> *Supra* n. 3, at 431.

<sup>&</sup>lt;sup>47</sup> One thing to be noted here is that unlike the case of enablement for the purposes of anticipation, knowledge of patent specification is included in the common general knowledge when it comes to considering inventive step.

<sup>&</sup>lt;sup>48</sup> British Acoustic Films Ltd. v. Nettlefold Productions Ltd., 53 RPC 221, 250 (1936).

<sup>&</sup>lt;sup>49</sup> Bourns Inc. v. Raychem Corp., [1999] All ER (D) 35.

cannot remember it and which he understands is generally regarded as sufficiently reliable to use as a foundation for further work or to help him understand the prior art. $^{50}$ 

That means not every minute detail needs to be given, gaps can be filled by PSITA. To realize the importance of a PSITA, the test as developed by Windsurfing's Case<sup>51</sup> is important. It bases the whole determination of inventive step on the shoulders of a PSITA. The case of *Pozzoli SA v. BDMO SA*,<sup>52</sup> suggested restating the Windsurfing Test<sup>53</sup> as follows:

- 1. (a) Identify the notional 'person skilled in the art';
- (b) Identify the relevant common general knowledge of that person;
- 2. Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
- 3. Identify what, if any differences exist between the matter cited as forming part of the 'state of art' and the inventive concept of the claim as construed;
- 4. Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require a degree of invention?<sup>54</sup>

Lord Justice Jacob in the recent case of Schlumberger Holdings Ltd. v. Electromagnetic Geo Services AS, observed:<sup>55</sup>

in considering the skills of the notional "person skilled in the art" for the purposes of obviousness [the Court] will have regard to the reality of the position at the time... the combined skills (and mind-sets) of real research teams . . . [are] what matters when one is constructing the notional research team.<sup>56</sup>

Schlumberger's Case further provides that there can't be a common PSITA, each case would have its own PSITA and standard to judge the same.

On the question of enablement, this must be viewed from the perspective of the ordinary skilled person, not someone of exceptional skill and knowledge or, as Justice Jacob describes, a world champion.<sup>57</sup>

<sup>56</sup> Id.

 $<sup>^{50}</sup>$  Id.

<sup>&</sup>lt;sup>51</sup> Windsurfing International v. Tabur Marine (Great Britain), [1985] RPC 59, 73.

<sup>&</sup>lt;sup>52</sup> Pozzoli SA v. BDMO SA, [2007] FSR 872.

<sup>&</sup>lt;sup>53</sup> Id. Steps of Windsurfing Test: i) Identify the inventive concept embodied in the patent in suit; ii) The court then assumes the mantle of the normally skilled but unimaginative addressee in the art at the priority date, imputing to him what was, at the date, common general knowledge in the art in question; iii) Identify what, if any, difference exist between the matter cited as being 'known and used' and the alleged invention; iv) The court then asked itself the question 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>54</sup> Id.

 $<sup>^{55}</sup>$  Schlumberger Holdings Ltd. v. Electromagnetic Geo Services AS, [2010] EWCA Civ 819.

 $<sup>^{57}</sup>$  Synthon BV v. Smithkline Beecham plc, [2003] RPC 607,  $\P$  57.

In determining whether an invention is enabled, it is reasonable to read the specification from the perspective of addressee of the specification, that is, a person skilled in the art, who has common general knowledge which he may use to get the invention to work; and even to recognise and rectify errors in the description of the invention. However, in applying this test, the skilled person does not make undue efforts in experimentation and certainly does not have inventive skills, nor does he have an awareness of the whole state of the art.<sup>58</sup>

Further, if the prior disclosure enables the skilled person to perform the patented invention, it does not matter if he does not know that he is working it.<sup>59</sup> So, basically it is not necessary for PSITA to know what he is working on.

What the courts probably are trying to give is a general understanding that PSITA is akin to a boring technician who holds a good clarity of his basics, but is not so clever to come up with anything on his own.

#### B. PHOSITA under U.S. Law

Even before the legislation could contain any reference to a skilled person, the case of *Hotchkiss v. Greenwood*<sup>60</sup> mentioned that the invention was too simple for "an ordinary mechanic acquainted with the business."<sup>61</sup> The court found that there was an absence of a degree of skill and ingenuity which constitute essential elements of every invention.<sup>62</sup> However, this was the end of it; no further elaboration on the scope and standards of skills of this aforesaid 'ordinary mechanic' was made by this court. But in the words of Mueller, this 'ordinary mechanic' could be regarded as a historic ancestor of the PHOSITA i.e. 'person having ordinary skill in the art.'<sup>63</sup>

The phrase 'person having ordinary skill in the art' found its place in the Patent Act of 1952 which provides for a requirement of non-obviousness as a condition for patentability and a brief history of this provision is worth mentioning. However, since the first federal Patent law was enacted in 1790, various changes have been made to the statute and the law. As it stands now, the law provides for standards of patentability, that novel, useful, non-obvious, and fully enabled inventions are

<sup>&</sup>lt;sup>58</sup> T206/83 ICI/Pyridine Herbicides, [1986] EPOR 232. The technical Board of appeal also made it clear that, normally, patent specification is not part of common general knowledge for the purpose of anticipation.

<sup>&</sup>lt;sup>59</sup> Supra n. 3, at 420. See Merrell Dow Pharmaceuticals Inc. v. HN Norton & Co. Ltd., [1996] RPC 76 (wherein the House of Lords invalidated the patent for want of novelty and held that the invention has been made available to public by virtue of the specification for the terfenadine patent which included in the description of the invention the phrase "a part of the chemical reaction in the human body produced by the ingestion of terfenadine and having an anti-histamine effect." (emphasis added) The invention was being worked before the priority date because the public were able to take terfenadine which can be seen to mean working of the invention disclosed in the second patent. The chemical reaction describes was already taking place in the liver although not specifically they didn't know).

 $<sup>^{60}</sup>$  Hotchkiss v. Greenwood, 52 U.S. 248 (1851). The issue in this case relates to validity of patent claiming invention that is a door knob which is made of clay or porcelain and not of metal or wood.

<sup>&</sup>lt;sup>61</sup> *Id.* 

<sup>&</sup>lt;sup>62</sup> *Id.* at 267.

 $<sup>^{\</sup>rm 63}$  Supra n. 17, at 185.

patentable.<sup>64</sup> Under the Patent Act of 1790, only those inventions which are "sufficiently useful and important"<sup>65</sup> were patentable. Even after Hotchkiss' case, that marked the starting point for a requirement of non-obviousness by enumerating that "to be patentable, an invention has to involve invention" i.e. to say that patentability requires something more than novelty. The concept was laid; even then it took a century to codify the requirement and under the current Act, 1952, Section 103 provides for the modern-counterpart to the Hotchkiss requirement i.e. 'Non-Obviousness' which provides:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a **person having ordinary skill in the art (PHOSITA)** to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.<sup>66</sup>

Further, Section 112<sup>67</sup> requires that the patent specification "contain a written description of the invention" sufficient "to enable any **person skilled in the art**"<sup>68</sup> to make and use the invention. In the U.S., the PHOSITA standard is also relevant to claim construction, where it is applied to how PHOSITA would have understood the claims. Finally, it plays a role in infringement determinations, helping to examine whether an accused device contains an element that would have been understood as an equivalent to a claimed element.<sup>69</sup> The PHOSITA is supposed to possess some knowledge relating to the invention when it was invented, mainly to prohibit hindsight.<sup>70</sup>

However, the judicial inclinations are observed by the authors in favor of PHOSITA being close to an "ordinary inventor" than its original meaning of "ordinary mechanic." Since the first American patent statute, the PHOSITA has evolved from an ordinary mechanic to an ordinary designer and finally to an ordinary researcher.<sup>71</sup> It is explained with a flow-chart hereunder:

<sup>68</sup> And not 'person having ordinary skill in the art.' (emphasis added).

<sup>69</sup> Supra n. 16, at 236.

<sup>&</sup>lt;sup>64</sup> 35 U.S.C. §§ 101–03, 112 (2018). Inventions, to be patentable, must also comprise appropriate subject matter.

<sup>&</sup>lt;sup>65</sup> PATENT ACT (U.S.A.), Ch. 7, § 1(1) (1790).

<sup>66 35</sup> U.S.C. § 103.

<sup>&</sup>lt;sup>67</sup> 35 U.S.C. § 112. Specification-

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

<sup>&</sup>lt;sup>70</sup> Panduit Corp. v. Dennison Manufacturing Co., 810 F.2d 1561, 1566 (Fed. Cir. 1987). "The decision maker must step backward in time and into the shoes worn by that 'person' when the invention was unknown and just before it was made."; *See also* MANUAL OF PATENT EXAMINING PROCEDURE (MPEP) § 2141.03.

<sup>&</sup>lt;sup>71</sup> Supra n. 16, at 239.



## Figure 1: PHOSITA Standard as a Collar on the Obviousness Standard

Source: Jonathan J. Darrow, *The Neglected Dimensions of Patent Law's PHOSITA Standards*, Harvard Law Journal of Law and Technology<sup>72</sup>

In the case of *Graham v. John Deere*,<sup>73</sup> the Supreme Court of the U.S. obtained from 35 U.S.C § 103, four factors that formed an essential test to determine nonobviousness, the foremost of which was the 'level of ordinary skill in the art.'<sup>74</sup> However, the role of Secondary Factors in determining non-obviousness acquired great importance after Graham's Case, diminishing the role of PHOSITA till the advent of K.S.R Judgment which revived the importance of PHOSITA.

The case of *Environment Designs*, *Ltd. v. Union Oil Co.*,<sup>75</sup> provided a list of nonexhaustive factors which may be considered in determining the level of ordinary skill in the art of the person, which are:

- a. The educational level of the inventor;
- b. Type of problems encountered in the art;
- c. Prior art solutions to those problems;
- d. Rapidly with which inventions are made;
- e. Sophistication of the technology
- f. Education level of active workers in the field.

<sup>&</sup>lt;sup>72</sup> Supra n. 16, at 235.

<sup>&</sup>lt;sup>73</sup> Graham v. John Deere, 383 U.S. 1 (1966).

<sup>&</sup>lt;sup>74</sup> *Id.* The four Graham factors are: a) Level of ordinary skill in the art; b) Scope and content of the prior art; c) Difference e between the claimed invention and the prior art and d) Secondary considerations (i.e. objective indicia of non-obviousness).

<sup>&</sup>lt;sup>75</sup> Environment Designs, Ltd. v. Union Oil Co., 713 F.2d 693, 696 (Fed. Cir. 1983).

It was further elaborated that it was not necessary to meet all the factors in every case, but even a single factor can predominate in a case.<sup>76</sup> The court held that PHOSITA is not a judge, nor a nonprofessional, nor people who are skilled in the relevant arts, nor geniuses in the art.<sup>77</sup>

The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.<sup>78</sup>

In theory, the PHOSITA's skill level in the claimed art should be higher when the invention is more complex than usual.<sup>79</sup>

It is to be noted that the education level or expertise of the inventor might or might not be equated to that of PHOSITA because it may be possible that the inventor is a person of extraordinary skill. However, it is not possible to define fixed standards for PHOSITA as its nature is flexible and will usually change with the type of invention.<sup>80</sup>

KSR Int'l Co. v. Teleflex Inc.,<sup>81</sup> however, made PHOSITA more intelligent by stating; "A person of ordinary skill in the art is also a person of ordinary creativity, not an automaton . . . In many cases, a person of ordinary skill will be able to fit the teachings of multiple patents together like pieces of a puzzle." Office personnel may also take into account "the inferences and creative steps that a person of ordinary skill in the art would employ."<sup>82</sup> The Judgment placed importance on the common sense possessed by PHOSITA thus reviving its role in patent examination.

Another question which has sprung up in courts is whether PHOSITA's education level is equal to that of an inventor or an active worker in the field. In the case of *Kimberly-Clark Corp.*,<sup>83</sup> the court found that the PHOSITA was not the inventor.<sup>84</sup> Notwithstanding, the educational level of inventors can serve as an indicative reference.

The current version of the Manual of Patent Examining Procedure (MPEP) of the USPTO excludes the factor of educational level of inventors, but includes the factor of the educational level of active workers.<sup>85</sup> Moreover, the educational level does not mean that it is necessary for a PHOSITA to have a formal academic degree.<sup>86</sup> The PHOSITA standard thus ensures that the bar to patentability remains high by

<sup>84</sup> *Id.* at 1454. "Hypothetical person is not the inventor, but an imaginary being possessing 'ordinary skill in the art' created by Congress to provide a standard of patentability."

<sup>85</sup> MPEP § 2141.03.

<sup>&</sup>lt;sup>76</sup> Id.

<sup>&</sup>lt;sup>77</sup> Id. at 697.

<sup>&</sup>lt;sup>78</sup> Ryko Mfg. Co. v. Nu-Star, Inc., 950 F.2d 714, 718 (Fed. Cir. 1991).

<sup>&</sup>lt;sup>79</sup> In re GPAC, 57 F.3d 1573 (C.A. Fed. 1995).

<sup>&</sup>lt;sup>80</sup> Hung-San Kuo, *Who is PHOSITA*, 4 NATIONAL TAIPEI UNIVERSITY OF TECHNOLOGY JOURNAL OF INTELLECTUAL PROPERTY LAW AND MANAGEMENT, 1, 10 (2015).

<sup>&</sup>lt;sup>81</sup> KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 421 (2007).

<sup>82</sup> Id. at 418.

<sup>&</sup>lt;sup>83</sup> Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437 (Fed. Cir. 1984).

<sup>&</sup>lt;sup>86</sup> Penda Corp. v. United States, 29 Fed. Cl. 533, 573 (1993) (considering the reference to the criterion "education" not only limited to formal education, but also to informal education and practical experience).

reminding judges that what might not seem obvious to them, may nevertheless be obvious to an ordinarily skilled artisan.<sup>87</sup>

#### C. PSITA under Indian Law

In India, PSITA finds reference in Section 2 (ja), incorporated after Amendment of 2005 which defines Inventive Step as follows:

(ja) "inventive step" means a feature of an invention that involves technical advance as compared to the existing knowledge or having economic significance or both and that makes the invention not obvious to **a person skilled in the art**;<sup>88</sup>

Then, Section 64 (1)(h),<sup>89</sup> provides grounds for revocation of a patents wherein one of the grounds could be that disclosure is not "sufficient to enable a person in India **possessing average skill** in, and average knowledge of, the art" to carry out the invention.

Also, the Draft Patent Manual<sup>90</sup> provides for a discussion on the person skilled in the art under Section 3.15<sup>91</sup> wherein it has been observed that mostly the idea is picked from the results from European Case law, as we have discussed earlier. The person of ordinary skill in the art must be given the problem and asked whether he can solve it. This is what is referred to as the 'Hindsight Element'.<sup>92</sup> The question regarding skill standard has surfaced time and again in Indian Courts as well. For determination of the question, English and European case law possesses very strong persuasive value in India.

In the case of *Sankalp Rehabilitation Trust v. Hoffmann–Roche*, while defining the person skilled in the art, the Intellectual Property Appellate Board (of India) (IPAB) stated that such a person has read the prior art and knows how to proceed in the normal course of research on the basis of what he knows of the state of the art. He does not need to be guided step-by-step, and can work his way through. He reads the

<sup>91</sup> Id. at 40.

<sup>92</sup> Determination Of Obviousness/Inventive Step - Indian Approach, MONDAQ (Oct. 10, 2014), available at

<sup>&</sup>lt;sup>87</sup> Rebecca S. Eisenberg, Obvious to Whom? Evaluating Inventions from the Perspective of PHOSITA, 19 BERKELEY TECHNOLOGY & LAW JOURNAL. 885, 887–88 (2004).

<sup>&</sup>lt;sup>88</sup> INDIAN PATENT ACT, at § 2(ja).

<sup>&</sup>lt;sup>89</sup> Id. at § 64

<sup>(</sup>h) that the complete specification does not sufficiently and fairly describe the invention and the method by which it is to be performed, that is to say, that the description of the method or the instructions for the working of the invention as contained in the complete specification are not by themselves sufficient to enable a person in India possessing average skill in, and average knowledge of, the art to which the invention relates, to work the invention, or that it does not disclose the best method of performing it which was known to the applicant for the patent and for which he was entitled to claim protection.

<sup>&</sup>lt;sup>90</sup> Draft Manual of Patent Practice and Procedure, THE PATENT OFFICE, INDIA (2008), available at https://www.indiaoppi.com/sites/default/files/PDF%20files/DraftPatent\_Manual\_2008.pdf (last visited Nov. 1, 2017).

http://www.mondaq.com/india/x/345598/Patent/Determination+Of+ObviousnessInventive+Step+Indi an+Approach (last visited Nov. 1, 2017).

prior art as a whole and allows himself to be taught by what is contained in it. He neither picks out the 'teaching towards passages', as does the challenger, nor does he seek out the 'teaching away passages', as does the defendant.

Enercon (India) Limited (Enercon) v. Alloys Wobben,<sup>93</sup> is another recent case in which the decisive issue for the judge was whether the alleged independent claim was obvious to a PSITA due to lack of inventive step. The arguments regarding a PSITA from both sides differed. The applicant said that the person skilled in the art is an electronic engineer or an academic researcher in the same field. But the respondent disagreed and said a PSITA should belong to an industry in India and the knowledge such person would possess should be a cumulative result of various factors, such as publications, know-how, planning, manufacturing and marketing. The IPAB referred to the Delhi High Court's landmark decision in F. Hoffmann-La Roche Ltd. & another v. Cipla Ltd.<sup>94</sup> in which the Court observed:

Therefore the same 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 and...Was it for practical purposes obvious to a skilled worker in the field concerned, in the state of knowledge existing at the date of the patent to be found in the literature then available to him, that he would or should make the invention the subject of the claim concerned.<sup>95</sup>

The IPAB refused to read into the definition of person skilled in the art words that are absent from the statute.<sup>96</sup> The major finding of the court in this case regarding PSITA could be summed up as:

- a. The PSITA to determine non-obviousness has no territorial limits and may not be an Indian person.
- b. The PSITA is not described as either 'ordinary' or 'average' for the purpose of non-obviousness. He is not a dullard and has a certain modicum of creativity.<sup>97</sup>
- c. Unlike Europe, the Indian Patent Act requires a PSITA to judge nonobviousness; and in the context of enablement, the person should be one 'who has average skill and average knowledge.' Hence there exists a clear difference in the PSITA (the obviousness person) and the person who has average skill (enablement man).<sup>98</sup>

<sup>&</sup>lt;sup>93</sup> Enercon (India) Limited (Enercon) v. Alloys Wobben, Intellectual Property Appellate Board, India, order no. 174 (2013). In this case the patent relates to 'A wind power installation and process for the operation of the same' granted to Aloys Wobben. Enercon filed a revocation petition on the grounds that the invention claimed in the patent was anticipated and would have been obvious to a person skilled in the art.

<sup>&</sup>lt;sup>94</sup> F. Hoffmann-La Roche Ltd. & another v. Cipla Ltd., 52 PTC 1 DEL (2012).

<sup>&</sup>lt;sup>95</sup> Id.

<sup>&</sup>lt;sup>96</sup> Someshwar Bannerjee, *Ms. PSITA: Nothing Ordinary About Her*, 8 JOURNAL OF INTELLECTUAL PROPERTY LAW & PRACTICE, OXFORD JOURNALS 12, 898, 899 (2013).

 <sup>&</sup>lt;sup>97</sup> See Sankalp Rehabilitation Trust v. Hoffman–Roche, (OA/8/2009/PT/CH) Oder No. 250/2012.
<sup>98</sup> See Enercon India Ltd. v. Aloys Wobben, ORA 08 of 2009/PT/CH, ¶ 30 (IPAB 2013).

In fact it is clear that in the context of enablement, the person to whom the complete specifications are addressed is a person "who has average skill and average knowledge." Neither of these attributes has been assigned by the Act to the person to whom the

d. Lastly, the IPAB concluded that Indian law tests inventive step through the eyes of PSITA and not US PHOSITA or European POSITA, who are both 'ordinary' by definition.

#### IV. ANALYSIS: PSITA V. PHOSITA

For every patent application, an external reference is needed for an objective understanding of it and it is for this purpose that the law invented a hypothetical 'person skilled in the art' to analyze the application in a rational and unbiased manner and with the requisite level of knowledge and skill in the field of art. From the discussions above, we deduce that the role and importance of the skilled person is not limited to one phase of a patent application, but holds relevance throughout the lifetime of a patent. This skilled person is basically a filtered lens worn by the examiner of a patent application, or the courts, to objectify the findings reached by them. The importance of a PSITA (or PHOSITA) in the determination of novelty, non-obviousness and enablement is made out in the earlier sections and need not be restated here. This part is however dedicated to understanding and comparing the domestic approach towards evolving PSITA skill standards and critically discussing some of its neglected dimensions.

One thing is clear: because of the use of the word 'skilled', this person has to have some higher level of knowledge of the technology and subject matter at hand than a layman would have. This aspect goes undoubted that he is not any common man.

In Europe, EPC and other related Guidelines portray that PSITA is having average knowledge and possesses common general knowledge about the prior art. Phrases and adjectives like 'unimaginative man with no inventive capacity'; 'skilled technician'; 'Nerd'; 'Boring'; 'Forgetful' etc. are used by the European Courts to elaborate upon his characteristics. But he is not dumb, he can mosaic (while dealing with non-obviousness) if he finds sufficient cross-referencing between various texts. Still, he could not be taken to possess inventive factuality in general; however, common general knowledge is a permitted quality of PSITA which he uses is determining nonobviousness. In all, PSITA in Europe through judicial decisions has evolved to have only ordinary or average skills. European Courts interestingly have also considered replacing this PSITA with a team of skilled workers, if the situation required.

In conclusion, European evolution on skill standards of a PSITA is that the EPC Guidelines and even the U.K Patent Act of 1977, make reference to 'person skilled in the art' and these enactments have not used words like 'average' or 'ordinary' anywhere to dilute the skill standards of a PSITA. Probably, the courts are following the U.S. (PHOSITA) footsteps in characterising PSITA as ordinarily skilled; without realizing that in the U.S., the statutes explicitly use the phrase 'person having ordinary skill in

invention should be non-obvious. We are not called upon in this case to decide the person who is enabled. We are only pointing out to the difference in the words used in the Act. We do not intend to visualize a person who has super skills, but we do not think we should make this person skilled in the art to be incapable of carrying out anything but basic instructions. The Act makes a distinction between the person skilled in the art (the obviousness person) and the person who has average skill (enablement man).

the art.' In Europe, no such guidelines or strict standards exist to determine the relevant PSITA for a patent application.

Under the provisions of U.S. laws, the PSITA is known by PHOSITA wherein he is supposed to possess ordinary skills in the art concerned for analyzing inventive step. But Section 112 makes a departure from this requirement and mentions that for enablement it is a 'person skilled in the art' who is required. However, there is a doubt that these two phrases (in spite of the fact that the use of the word 'ordinary' can actually make a huge difference in judging both the criterions) have never been considered to have meanings separate from each other. However, the use of two phrases has to be for a reason. That being, a person determining enablement of an invention has to be of a higher skill than that of an 'ordinary' skilled person to whom the invention is non-obvious in terms of patentability.

Judicial pronouncements have said to change the boundaries of PHOSITA from that of an ordinary mechanic to an ordinary researcher, meaning thereby, that a PHOSITA is much smarter now. Probably with the rapid advancement in technology, the judges want the PHOSITA to eventually dilute (if not loose) its 'ordinary' character.

Courts have tried to provide some factors that could be considered in determining the skill level of a PHOSITA. For example, the *Environmental Designs* case provides a list of six determinants, but the problem is, first, these are non-exhaustive and there could be factors outside the list too. Second, how to further determine and fix these factors is another problem. So, effectively, U.S Courts have also been beating around the bush and can not come up with fixed precise skill standards for a PHOSITA.

Another issue that needs to be highlighted, even after TRIPS, is whether it should be at all permissible to prefix 'ordinary' to the phrase 'person skilled in the art.' Since the TRIPS agreement provides mandatory minimum standards for members to follow, and use of the phrase 'person skilled in the art', can a 'person having ordinary skill in the art' be used without violating or further degrading the minimum standards? A person having 'ordinary skill' will obviously be lower in skill standard than a 'skilled person.' For the enablement requirement, the U.S provides for PHOSITA in its law. However, in practice, the U.S. uses PHOSITA standards only while fixing skills in a given case while analyzing 'non-obviousness'. Also, since the PCT provides for PSITA to be a requirement for both Inventive Step and Enablement analysis, this means PHOSITA stands as being used in 35 U.S.C. § 102, and has to be replaced by PSITA. Courts in the U.S. have however been unanimously applying the PHOSITA concept whether it be prior art determination, non-obviousness analysis or the enablement requirement. There is a need to strictly interpret PHOSITA and PSITA as two different characters altogether and not to use them interchangeably.

Regarding the Indian position, India relies on most English and European court decisions to fix skill standards for PSITA. Here, there are also two types of fictitious legal persons created, one, a PSITA for inventive step requirement and two, an Indian person possessing average skill and average knowledge in the art to carry out the invention as described in the disclosure. The Draft Patent Manual in India copies most of the PSITA characteristics form European decisions effectively defining it as someone very near to a person of ordinary skill. However, IPAB's decision in the case of *Enercon*, has clarified Indian position as to whether India applies the concept of PSITA or PHOSITA. First, Indian PSITA is not equivalent to the U.S. PHOSITA of 'ordinary' skill for questions of inventive step. This significantly raises the bar of patentability in India as, in India a PSITA is more intelligent and possesses some modicum of creativity

than a U.S. PHOSITA. Secondly, the judgment clearly distinguishes a PSITA as the 'obviousness person' and an 'averaged skilled person' as an 'enablement man'.

IPAB has to be appreciated here for the fact that at least they successfully interpreted the statutory language and understood the inherent differences between skill standards of PSITA and a person of average skill. But, again, a serious doubt engulfs its compliance with TRIPS. TRIPS is clear that the enablement man has to be a PSITA and not someone of ordinary or average skill. However, Indian statute affirmed by the court's decision provides for the enablement man as someone of average skill. The moment the word 'average' is used, the skill level comes down to a lower level. And as discussed previously, since TRIPS sets the minimum standards, how is it that India can even lower the skill standard of enablement man to 'average'?

Another side to this could be that since TRIPS is silent about the skill standards of the skilled person (i.e. whether it be high, low or average), it is probably for members to determine what skill standard they want to fix; as they are allowed to do so in accordance with Art. 1.1 of TRIPS. It is submitted that the use of the word 'ordinary' for skills of a skilled person in patent is clearly a neglected aspect and needs a serious analysis and clarification as to what impact it is having on determining the skill standard of PSITA; and in a larger prospect in determining patentability.

#### V. CONCLUSION

The law is found in a great state of chaos when it comes to fixing the skill standard for PSITA/PHOSITA. It is submitted that since inventions could take place in varied fields, it would not be judicious to fix water tight compartment standards for PSITA. However, determinants could be laid down which can lead courts in fixing skill standards of PSITA in every case. But the fixing of standards cannot be generalized and then applied to each and every case in a harmonized manner.

Before all this can be done, another important issue has to be addressed, i.e. for whom to fix skill standards for? Whether it's PSITA or PHOSITA? First, we have to fix who our skilled person would be, the one with ordinary skill, or the one with above average skills? This issue has to be of great relevance as a low level, dumb-skilled person may see even trivial improvements as non-obvious and a much higher level skilled person may not see an inventive step involved in any innovation. PHOSITA standards as compared to PSITA are deliberately trying to exclude extraordinary skill.

To solve this problem, the basic reasoning behind creation of this fictitious skilled person has to be seen. For inventive step, it is a test of patentability, an additional layer that needs to be passed after novelty. Therefore, here the level of skill has to be somewhat higher than ordinary. Otherwise, every frivolous invention can find a place in patent law. This could be highly detrimental to the growth of industry and competition. Whereas, when it comes to the question of interpreting claims or carrying out the disclosure, the person cannot be burdened with undue experimentation and should be able to translate the written specification into a working invention. But to do so, he needs to be educated about the state of art from the teachings of the specification in the interest of transfer of technology. In this sense, IPAB's approach seems correct, but whether it passes the touchstone of TRIPS remains a question unanswered. It is submitted that since the advancement in technology is taking place at a very rapid scale and every minute a new step towards innovation is taken, the need of the hour is to keep patentability standards strict and high, for which, PSITA as against PHOSITA, would be an appropriate fiction to maintain. Today, even when a common man's intelligence is on the rise, the ideal skilled person has to be more intelligent than just being ordinarily intelligent. Our analysis shows that the use of the word 'ordinarily' while defining PSITA/PHOSITA may lead to differential patenting standards across jurisdictions. It seems that this issue has not received sufficient attention. To the best of our knowledge, previous literature has analyzed the skill standards of PSITA/PHOSITA, but has largely negelected this one particular dimension. However, even still, the bar cannot be raised to a very high skill standard because then that would result in defeating the very purpose of patentability (i.e. protecting deserved inventions). So, in all, the skill standard should not be counterproductive to innovation.