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THE PERSON HAVING ORDINARY SKILL IN THE ARTS IN ASSESSING OBVIOUSNESS STANDARD IN THE UNITED STATES AND TAIWAN AFTER *KSR*—IMPLICATIONS FOR TAIWAN PATENT LAW AND PRACTICE

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Introduction

The Person Having Ordinary Skill in the Arts (PHOSITA) is a critical standard in determining whether an invention satisfies the “obviousness” and “inventive step” requirements of the U.S. and Taiwan respectively. The concept of the PHOSITA first originated from the 1850 Supreme Court ruling in *Hotchkiss v. Greenwood*¹ and later was codified into the U.S. Patent Act of 1952². Often a recipient of U.S. patent jurisprudence, Taiwan has incorporated the PHOSITA concept in its 1979 Patent Act amendment.³ However, in practice, the application of the PHOSITA has been largely ignored in both the U.S. and Taiwan. Not only was the PHOSITA concept largely ignored in Taiwan, in practice the satisfaction of the “inventive step” requirement could be obtained simply on a showing of “unexpected efficacy.”⁴ In this regard, Taiwan has relied on the Taiwan Intellectual Property Office (TIPO) Invention Patent Examination Guideline (2009) to support the abdication of the “inventive step” requirement.

In the recent U.S. Supreme Court ruling, *KSR v. Teleflex*, the Supreme Court affirmed the important role played by the PHOSITA and stated that this hypothetical person should be more than an “automaton.”⁵ Despite the differences in assessing the “obviousness”/“inventive step” requirements between the two countries, the need for clarification of the PHOSITA standard was also raised in the recent *Taiwan Intellectual Property Court Ruling 97 Min Chuan Su 17 (2008)*.⁶ This

¹ 52 U.S. 248 (1851).

² 35 U.S.C. § 103 (2006).

³ Legislative Yuan, *Legislative Progress on Patent Law*, Legislative Yuan (2010), [http://lis.ly.gov.tw/lgcgi/lglaw?@7:1804289383:f:NO%3DE01924*%20OR%20NO%3DB01924\\$\\$\\$10\\$\\$\\$NO-PD/](http://lis.ly.gov.tw/lgcgi/lglaw?@7:1804289383:f:NO%3DE01924*%20OR%20NO%3DB01924$$$10$$$NO-PD/). (Mandarin only)

⁴ TIPO Invention Patent Examination Guideline (2009) p.2-3-21 to p.2-3-28.

⁵ *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 420-21 (2007).

⁶ *Taiwan Intellectual Property Court 97 Min Chuan Su 17 (2008)*.

article concludes that both TIPO and the courts have erred in neglecting the role of the PHOSITA concept in the patent system by relying solely on the TIPO administrative guidelines to support findings of an “inventive step.” This is a serious misapplication of law and should be corrected. Like the U.S., Taiwan should realize the importance of the PHOSITA standard in assessing the “inventive step” requirement and should correct the erroneous practice of using “unexpected efficacy” as the sole standard for satisfying the inventive step requirement.

I. Evolution of the PHOSITA Concept

In the sphere of patent law, Taiwan has been the recipient of U.S. law instead of the innovator; hence, the history of “obviousness” has had significant implications for Taiwan’s view of how law develops. The concept of the PHOSITA is closely connected to the doctrine of “obviousness.”⁷ Prior to the introduction of the “obviousness” doctrine, the modern-day standard of patentability, assessing patentability was based on “novelty and utility” alone.⁸ The authority of Congress to enact laws for the issuance of patents is rooted in the Constitution;⁹ it is a question of law and the final authority on such constitutional issues is the U.S. Supreme Court.¹⁰ The “obviousness” doctrine did not develop until the rapid technological and social changes in the 19th Century demanded.¹¹ It was felt that trivial advances in science and useful arts should not be patentable,¹² hence in *Hotchkiss v. Greenwood*;¹³ the Supreme Court held that an invention needs to require more ingenuity or skill than would be possessed by an ordinarily mechanic acquainted with the business.¹⁴ The “obviousness” doctrine was codified in the U.S. Patent Act of 1952, but the legislature failed to give proper meaning to the concept, leaving the task of interpretation to the judiciary.¹⁵

In 1966, the Supreme Court laid its first decision on “obviousness” in *Graham v. John Deere*,¹⁶ holding that the measure of “invention” must be considered in light of the level of all knowledge available to those skilled in the art; the consideration requires that this level of knowledge be exceeded in order for a device to be an “invention”.¹⁷ Hence, the hypothetical PHOSITA must possess the whole body of existing knowledge prior to invention.¹⁸ If the skill of the PHOSITA is held below the level presented by all existing knowledge, it would be possible for one to make a patentable device exclusively from existing knowledge and exclude others from the same knowledge. An invention fails this standard if already known, therefore, the rationale for the Supreme Court in demanding an “obviousness” test is to prevent the enclosure of public domain and allow a limited-

⁷ Ron A. Bouchard, *Living Separate and Apart is Never Easy: Inventive Capacity of the PHOSITA as the Tie that Binds Obviousness and Inventiveness in Pharmaceutical Litigation*, 4 U. OTTAWA L. & TECH. 1, 5 (2007).

⁸ Act of Feb. 21, 1973, C.11, 1 Stat.318; Act of July 4, 1836, C.357, 5 Stat.117; Act of July 8, 1870, C.230, 16 Stat.198; Rev.Stat. (1874) sect.4886.

⁹ U.S. CONST. art. I, § 8, cl. 8

¹⁰ Joel Rosenblatt, *The Constitutional Standard for “Ordinary Skill in the Art,”* 54 J. PAT. OFF. SOC’Y 435, 439 (1972).

¹¹ John F. Duffy, *Inventing Invention: A Case Study of Legal Innovation*, 86 TEX. L. REV. 1,3 (2007).

¹² P.J. Federico, *Operation of the Patent Act of 1790*, 18 J.PAT. OFF. SOC’Y 237,238-239 (1936).

¹³ 52 U.S. 248 (1850).

¹⁴ *Id.* at 266.

¹⁵ 35 U.S.C. § 102. If the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

¹⁶ 383 U.S. 1, 17-18 (1965).

¹⁷ *David & David v. Myerson* 388 F.2d 292 (2d Cir. 1968).

¹⁸ Cryil A. Soans, *Some Absurd Presumptions in Patent Cases*, 10 PAT. TRADEMARK & COPY. J. OF RES. & ED. 433, 438 (1966).

time monopoly for real contributions. The Supreme Court then attempted to bring coherence to the “obviousness” standard. In *Graham v. John Deere*, the Court announced the conceptual framework for “obviousness” and held that courts should ascertain: (1) the scope and content of the prior art; (2) the difference between prior art and the claim at issue; and, (3) the level of ordinary skill in the pertinent art.¹⁹ In addition, the Supreme Court introduced a series of factors called “secondary considerations” which the Court considered to have some relevance in the determination of “obviousness.”²⁰

However, after *Graham v. John Deere*, there has yet to be direct Supreme Court authority on the issue of what constitutes the PHOSITA.²¹ This has made it difficult for attorneys to determine which course to follow in supporting arguments before or after a final rejection of a patent.²² Despite the high skill level attributed to a PHOSITA by the Supreme Court, in practice the ability attributed to this fictional person has been significantly decreased by the lower courts into what the Supreme Court described in *KSR v. Teleflex*, as an automaton.²³ However, post *KSR*, the skill level of these hypothetical persons has been raised to a new height.

II. Establishing the PHOSITA Standard in the U.S. and Taiwan Patent Law

a. The U.S. approach

Since patent law has territorial limitations, differences in the PHOSITA standards vary across countries, significantly impacting innovation policy of a particular country. Accordingly it is important to define who the PHOSITA is under U.S. Patent Law.

When assessing “obviousness” in the context of a new device, it is necessary to avoid hindsight bias²⁴ and evaluate the invention through the perspective of the PHOSITA in order to remain objective.²⁵ Hence, two major issues arise in forming of the PHOSITA: first, the time frame

¹⁹ *John Deere*, 383 U.S. at 17-18. The concept of the PHOSITA is also available in two other major patent jurisdictions, namely the European and Japanese patent laws. In Europe, according to the Guidelines for Examination in the European Patent Office (EPO) (Full Version available at <http://www.epo.org/patents/law/legal-texts/guidelines.html>) (last visited July 30, 2010), Rule 11.3 Person Skilled in the Art, a PHOSITA is presumed to be an ordinary practitioner in a field of technology aware of what was common general knowledge in the art at the relevant date. He should also be presumed to have had access to everything in the state of the art, in particular the documents cited in the search report, and to have had at his disposal the normal means and capacity for routine work and experimentation. If the problem prompts the PHOSITA to solve the problem in another technical field, the specialist in that field is the person qualified to solve the problem. In Japan’s patent examination guideline, the PHOSITA is a legal fiction found in the patent laws across the world. This fictional person is considered to have the normal skills and knowledge in a given field, without being a genius. He or she mainly serves as a reference for determining, or at least evaluating whether an invention is non-obvious or not, or does involve an inventive step. If it would have been obvious for this fictional person to come up with the invention while studying the prior art, then the particular invention is considered as not patentable.

²⁰ *John Deere*, 383 U.S. at 17-18.

²¹ Andrew B. Dzequze, *The Devil in the Details: A Critique of KSR’s Unwarranted Reinterpretation of “Person Having Ordinary Skill*, 10 COLUM. SCI. & TECH L. REV. 1, 31 (2009).

²² Jon Harrow Leorad, *The Man Skilled in the Art-or-Goddess Gracious, A Ghost!*, 56 J. PAT. OFF. SOC’Y 599, 603 (1974).

²³ *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420-21 (2007).

²⁴ Hindsight bias causes people to believe that others should have been able to anticipate events much better than was actually the case.

²⁵ *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991).

for avoiding hindsight bias; and, second, how to gain access to the perspective of the PHOSITA in the field of inventions.²⁶

Prior to the establishment of the U.S. Federal Circuit, Cryil A. Soans colorfully portrayed the Supreme Court's PHOSITA interpretation in a 1966 article as a Frankenstein monster created by the Supreme Court. This mythical character with supernatural power enabling him to know all of the tools and practices known to any and all persons working in his field anywhere in the U.S. and having all of the printed publications (in his field) in all libraries of the world. He can read all languages and can understand all that he reads and never forgets. In addition, he tests the claim of inventors when they apply for patents and when they try to enforce them.²⁷ These characteristics did not originate with Soans, but derived from the Supreme Court's ruling in *Mast-Foos & Co. v. Stover*.²⁸

On the other hand, the U.S. Federal Circuit Court of Appeals has, in its various rulings, portrayed the PHOSITA as the designer or problem solver in the art and not the user of the invention;²⁹ one who thinks along lines of conventional wisdom in the art and is not innovation oriented;³⁰ one who is possessed only of ordinary skill and presumed to be aware of all the pertinent art.³¹ In *Environmental Designs v. Union Oil*,³² the court stated that the examiner must ascertain what would have been obvious to the PHOSITA at the time the invention was made, and not to the inventor, a judge, those skilled in remote arts, or to geniuses in the art at hand.³³ The court also stated the following factors were relevant to the determination of the PHOSITA: 1) educational level of the inventor; 2) types of problems encountered in the art; 3) prior art solutions to those problems; 4) rapidity with which inventions are made; 5) sophistication of the technology; and 6) educational level of active workers in the field.³⁴

However, despite these guidelines, courts in the U.S. will rarely consider these factors when construing the PHOSITA in their decision making; normally a resume-like description of the skill level is produced and is often controversial. For example, in *Sud-Chemie v. CSP Techs. Inc.*,³⁵ the court concluded that the PHOSITA was a Ph.D. level scientist, based on testimony that the technology described in the patents in suit had not been contained in the scientific literature prior to the patents' issuance and thus it would have required a Ph.D. level scientist to address the concepts contained in the patents.³⁶ Due to these uncertainties, the Federal Circuit court declined to investigate the nature of the PHOSITA and what the PHOSITA would know at the time of invention, instead identifying a "teaching, suggestion, motivation" (TSM) standard that would lead the PHOSITA to bridge between the prior art and the invention.³⁷ The Federal Circuit's version of the PHOSITA looks only

²⁶ Rebecca S. Eisenberg, *Obvious to Whom? Evaluating Inventions From the Perspective of PHOSITA*, 19 BERKELEY TECH. L.J. 885, 887 (2004).

²⁷ See Soans, *supra* note 19 at 438-439.

²⁸ *Mast-Foos & Co. v. Stover*, 177 U.S. 485, 493 (1900).

²⁹ *Orthopedic Equip.Co. v. United States*, 702 F.2d 1005, 217 U.S.P.Q. 192 (Fed. Cir. 1983).

³⁰ *Standard Oil Co. v. American Cynamid Co.*, 774 F.2d 448, 227 U.S.P.Q. 292 (Fed. Cir. 1985).

³¹ *Id.*

³² *Environmental Designs v. Union Oil Co. of Cal.*, 713 F.2d 693, 696, 218 USPQ 865, 868 (Fed. Cir. 1983).

³³ *Id.*

³⁴ *Id.*

³⁵ *Sud-Chemie v. CSP Techs. Inc.*, Civ. No. 04-2728, 2006 U.S. Dist. LEXIS 54837 (S.D. Ind. Aug. 7, 2006).

³⁶ *Id.*

³⁷ See *KSR*, 550 U.S. at 407.

to the problem the patentee was trying to solve and will be led only to those elements of prior art designated to solve the problem.³⁸

Post *KSR*, the importance of the PHOSITA was reestablished; further, the Supreme Court empowered the PHOSITA with “creativity” and the ability to solve the puzzles from multiple pieces of prior art using “common sense”.³⁹ In other words, the PHOSITA is no longer an automaton.⁴⁰ Furthermore, the Supreme Court reversed the standard for the PHOSITA’s skill level set by the Federal Circuit, stating that: (1) the identified problem and solution of a claim is not necessarily held as the only problem addressed by the inventors without observing that the motivation of the patentee to solve a problem may have been only one of many addressed by his or her claims;⁴¹ and, (2) there is no restriction to consider only the prior art element designed to solve the same problem.⁴²

b. Taiwan Approach

Taiwan first incorporated the concept of the PHOSITA in its 1979 Patent Act amendment, but the legislative history did not explain the standard to define the skill level of the PHOSITA. The basis for the PHOSITA standard is found in Taiwan Patent Act, Article 22, Paragraph 3: “. . . notwithstanding the absence of the conditions set forth in Paragraph 1 of this Article, if the proposed invention can be easily accomplished by a person having ordinary knowledge in the arts based on prior art before the application for patent is filed, no invention patent should be granted for such invention under this Act.” According to 3.2.1 of the TIPO Invention Patent Examination Guideline (2009), a PHOSITA is defined as one with ordinary skill in the pertinent field; it is a hypothetical person having the ordinary skill to do routine work and experiment in the pertinent field and is able to understand and utilize prior arts before the date of application.⁴³ Literally speaking, Taiwan’s PHOSITA does not possess the creative ability of the U.S. post *KSR* PHOSITA.

The ability of Taiwan’s PHOSITA is also quite different from the pre-*KSR* U.S. standard in the following ways: (1) when assessing prior art, the prior art does not have to be analogous, all relevant fields can be seen as prior art;⁴⁴ (2) the clues do not have to be explicitly written down as long as the PHOSITA could infer from the prior arts;⁴⁵ and, (3) the PHOSITA can use common sense to determine whether the invention involves inventive steps by assessing the specification and drawing.⁴⁶ In addition to the need for indications to prompt and motivate the PHOSITA to combine the prior arts, the PHOSITA can also use common sense and inference to find that the invention lacks an inventive step.⁴⁷ In other words, the PHOSITA level is set to be higher than the U.S. pre-*KSR* standard, but lower than post-*KSR* standard. However, objectively establishing the characteristics of this PHOSITA is unclear. For example, in *Taiwan Supreme Administrative Court 94*

³⁸ See *In re Rouffet*, 149 F.3d 1350, 1357 (Fed.Cir.1998).

³⁹ *KSR*, 550 U.S. at 420.

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.* at 417-18.

⁴³ TIPO Invention Patent Examination Guideline (2009) p.2-3-18 to 2-3-19.

⁴⁴ TIPO Invention Patent Examination Guideline (2009) p.2-3-19.

⁴⁵ Taiwan Intellectual Property Court 97 Sin Juan Su 49 (2008).

⁴⁶ TIPO Invention Patent Examination Guideline (2009) p.2-3-19.

⁴⁷ TIPO Invention Patent Examination Guideline (2009) p.2-3-21 to 22.

Pan 308,⁴⁸ the court seemed to indicate that objective evidence is not needed to prove the PHOSITA's level of sophistication and skill.⁴⁹ However, objective evidence is required to avoid the issue of hindsight bias.⁵⁰ The position of Taiwanese courts differs from the U.S. practice where, unless objective evidence is shown, the evidence from the expert witness is not accepted.⁵¹

Therefore, the PHOSITA standard is still uncertain in Taiwan and it is also rarely applied by the courts or raised by the litigated parties. This uncertainty is evident in the recent *Taiwan Intellectual Property Court Ruling 97 Min Chuan Su 17(2008)* which concerned the validity of a wireless mouse patent and whether the PHOSITA can be applied to combine the prior arts to lead to the claimed invention. The plaintiff patentee challenged the skill level applied to the PHOSITA, and questioned whether this hypothetical person has a bachelor's degree, master's degree, Ph.D., or any kind of professional certification or academic publication. It is a rare case in Taiwan where a party actually argues over the capability of the PHOSITA. Regrettably, the newly established Intellectual Property Court (IPC)⁵² failed to set a precedent in clarifying this standard. Typically, Taiwanese courts do not classify the PHOSITA's characteristics in their decision-making; rather, the decision is often simply divided into two results: either the invention fails to meet the inventive step because it is easily accomplished by the PHOSITA⁵³ and fails to show any unexpected efficacy,⁵⁴ or the invention satisfies the inventive step requirement because it is not easily accomplished by the PHOSITA through a showing of unexpected efficacy. However, in either case, the courts rarely provide any evidence to support these conclusions.

III. Using the PHOSITA to Assess the Obviousness/Inventive Step in the U.S. and Taiwan

a. The U.S. Approach

Post *KSR*, the PHOSITA standard in the U.S. became higher than in Taiwan. However, whether an invention would be granted a patent under either jurisdiction is not consistent due to different standards in judging the "obviousness"/"inventive step" requirements. The U.S. Federal Circuit Court of Appeals has long neglected and questioned the role of the PHOSITA in assessing "obviousness". The PHOSITA's characteristics are a fact-specific question that must be decided anew in each case; courts should spend time and effort fleshing out the PHOSITA.⁵⁵

⁴⁸ Taiwan Supreme Administrative Court 94 Pan 308 (2005).

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ *Upjohn Co. v Mova Pharma. Corp.*, 225 F.3d 1306, 1311 (Fed. Cir. 2000).

⁵² IPC was established having the similar role and mission of the U.S. Court of Appeals for the Federal Circuit. Taiwan has passed the Intellectual Property Organization Act in 2007 and Intellectual Property Case Adjudication Act to establish the IPC on 1 July 2008 after taking in consideration of experiences of the German Federal Patent Court, Japan's Intellectual Property High Court, Patent Court of Korea, Thailand's Central Intellectual Property and International Trade Court. However, the IPC differs in the broad scope of cases under its jurisdiction. The fields include patent, trademark, copyright, trade secret, integrated circuit and plant variety rights regardless of the technicality. In regard to the different categories of cases, it oversees the first and second instance in civil cases, appeals from criminal cases and the first instance in administrative cases such as the invalidation of patent and trademarks.

⁵³ *See* Taiwan Intellectual Property Court Ruling 97 Min Chuan Su 17 "easily accomplished" does not put into consideration of the difference between prior art and the claimed invention or whether it enhances efficacy, rather, whether the PHOSITA with the available information can be motivated to combine the prior arts to lead to the predictable outcome, if so, the claimed invention does not satisfy the inventive step.

⁵⁴ The showing of improved or unexpected result is an issue that will be discussed in the later sections.

⁵⁵ Dan L. Burk & Mark A. Lemley, *Is Patent Law Technology-Specific?*, 17 BERKELEY TECH. L. J. 1155, 1202 (2002).

However, courts seem to mention the PHOSITA only perfunctorily; primarily because creating the PHOSITA is one of the most difficult tasks in examining the “obviousness” of a new invention. Judge Learned Hand once famously lamented that the “obviousness” requirement was as “fugitive, impalpable, wayward and vague a phantom as exists in the whole paraphernalia of legal concepts.”⁵⁶ Unlike the Supreme Court, the Federal Circuit court assumed that the PHOSITA is incapable of innovation by treating determinations of “non-obviousness” as conclusions of law.⁵⁷ Rebecca Eisenberg has stated that the Federal Circuit court “all but ignored” the perspective of the PHOSITA before *KSR*.⁵⁸ The Federal Circuit court diminished the PHOSITA standard from one possessing active awareness of the entire prior art and being fully capable of considering references collectively to a more restrictive TSM test for determining when references may be combined to establish obviousness.⁵⁹ The TSM test emphasizes printed documentation and is skeptical of common sense unsupported by documentary evidences.⁶⁰

The problem with this approach is that it ignores the problem-solving ability of the PHOSITA by focusing entirely on what is already known.⁶¹ In addition, this shift has obscured the Supreme Court standard where the PHOSITA is aware of all prior arts anywhere in the world. Under the TSM test, an invention consisting of multiple elements, each of which is disclosed in different prior references, is presumed to be “non-obvious” absent a showing of “objective evidence of record” of some TSM in the prior art to make the specific combination that was made by the applicant.⁶² In *In re Dembiczak*,⁶³ the Federal Circuit court stipulated that “. . . combining prior art references without evidence of such a suggestion, teaching and motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art the essence of hindsight.” This meant that the PHOSITA generally has a low level of skill and only an explicit hint in the prior art publications can motivate the PHOSITA for even trivial improvement. Hence, under the Federal Circuit standard, the U.S. “obviousness” requirement has been easy to meet, even though it contradicts the ruling of the Supreme Court in *Dann v Johnston*,⁶⁴ where the Court stated that a PHOSITA has sufficient imagination to consider collectively the teaching of the relevant art, even if the references do not suggest that they be considered together.

Post-*KSR*, the importance of the PHOSITA has been revived and it is interesting to consider how the obviousness standard will be changed. Inventiveness exists if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would not have been “obvious”.⁶⁵ The United States Patent and Trademark Office (USPTO) has

⁵⁶ *Harries v. Air King Prods. Co.*, 183 F.2d 158, 163 (2d Cir. 1950).

⁵⁷ *Aktiebolaget Karlstads Mekaniska Werkstad v. U.S. Int’l Trade Comm’n*, 705 F.2d 1565, 1575 (Fed. Cir. 1983).

⁵⁸ Eisenberg, *supra* note 26, at 888.

⁵⁹ See *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351 (Fed. Cir. 2001) (holding that in order to prevent hindsight bias, the law requires some teaching, suggestion, and motivation to combine cited references).

⁶⁰ Justin Lee, *How KSR Broadens (Without Lowering) the Evidentiary Standard of Nonobviousness*, 23 BERKELEY TECH. L.J. 15, 25 (2008).

⁶¹ PENNumbra, *Debate between Professor R.P. Wagner and Professor K.J. Strandburg on the Obviousness Requirement in Patent Law*, 155 U. PA. L. REV. 96, 101 (2006).

⁶² *In re Rouffet*, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998).

⁶³ *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999).

⁶⁴ 425 U.S. 219 (1976).

⁶⁵ 35 U.S.C. 103 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having

responded to the *KSR* ruling by amending its examination guidelines on obviousness by having seven potential rationales for finding obviousness.⁶⁶ The new guidelines also revived the “obvious to try” rule,⁶⁷ whereas under pre-*KSR*, the Federal Circuit court repeatedly held that “obvious to try” was not the standard in determining obviousness.⁶⁸ One thing to note is that the USPTO guidelines added the characteristic of “creativity” PHOSITA. However, this is an attribute that finds no precedent in either the Supreme Court or the Federal Circuit. There is no support that the PHOSITA will be able to fit the teachings of multiple patents together like pieces of a puzzle⁶⁹ or would routinely create puzzles from multiple patents with no external motivation to do so.⁷⁰ By implanting the characteristic of creativity, the PHOSITA transformed from one with ordinary skill into a researcher. In this regard, the long believed justification of a patent as an incentive to invent becomes questionable.⁷¹

In summary, it is obvious to see that the courts have used the PHOSITA to show their attitude toward patenting activity. It can be stated that the Federal Circuit court’s low standard for “obviousness” is a reflection of a “simply property” view of patents.⁷² Prior to the establishment of the Federal Circuit, it was not easy to satisfy the “obviousness” requirement because the standard of the PHOSITA prohibited the creation of minor advances. However, since the creation of the Federal Circuit, the court has used the TSM test to restrict the ability of the PHOSITA by making it easy to satisfy the “obviousness” inquiry. TSM might lessen the ambiguity of construing a hypothetical PHOSITA and ease the evidentiary burden of the parties; however, the Federal Circuit has used TSM as a formalism test and failed to reflect the true value of inventions. Post *KSR*, the Supreme Court has reversed this stance by limiting the formalism application of the TSM test, however, granting creativity to the PHOSITA might risk the possibility of over-empowering its skill level and setting the bar too high to satisfy the “obviousness” requirement.

b. Taiwan Approach

ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

⁶⁶ See Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*, 72 FR 57526 (Oct. 10, 2007), 1324 Off. Gaz. Pat. Office 23 (Nov. 6, 2007) (2007 *KSR* Guidelines): “1) combining prior art elements according to known methods to yield predictable results; 2) simple substitution of one known element for another to obtain predictable results; 3) use of known technique to improve similar devices, methods, or products in the same way 4) applying a known technique to a known device, method, or product ready for improvement to yield predictable results; 5) “obvious to try”-choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success; 6) known work in one field of endeavor may prompt variations of its ruse in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the arts; and 7) some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference teachings to arrive at the claimed invention.”

⁶⁷ *KSR*, 550 U.S. at 421 (“when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a person of ordinary skill has good reason to pursue the options within his or her technical grasp. If this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense. In that instance the fact that a combination was obvious to try might show that it was obvious under § 103.”).

⁶⁸ *In re Deuel*, 51 F.3d 1552, 1559 (Fed. Cir.1995).

⁶⁹ *KSR*, 550 U.S. at 421.

⁷⁰ See Dzequze, *supra* note 21, at 48.

⁷¹ Jonathan J. Darrow, *The Neglected Dimension of Patent Law’s PHOSITA Standard*, 23 HARV. J. OF L. AND TECH. 227, 228 (2009).

⁷² Glynn S. Lunney Jr., *E-Obviousness*, 7 MICH. TELECOMM. & TECH. L. REV. 363, 389 (2001).

On the other hand, Taiwan has a different PHOSITA standard than the pre-KSR Federal Circuit. Recalling TIPO's Invention Patent Examination Guideline (2009), a reasonable motivation should exist to prompt the PHOSITA to combine the prior arts.⁷³ Motivation distinguishes inventions that can be easily accomplished by the PHOSITA or that satisfy the inventive step requirement.⁷⁴ If there is a reasonable motivation for the PHOSITA to combine the prior arts, the invention is deemed "obvious."⁷⁵ Hence, the Taiwanese PHOSITA is someone who theoretically has common sense and ordinary skill to combine the prior arts to solve the technical problem but still needs that extra motivation. Motivation involves the claimed invention and its relationship to the functional characteristics of the prior art and the level of reasonable prediction of the claimed invention from prior arts.⁷⁶

The PHOSITA standard supposedly plays a crucial role in determining the inventive step, since it is assessed on whether or not the prior art prompts the PHOSITA to combine and to solve the problems indicated in the patent application.⁷⁷ Similar to the U.S. *Graham* test, the TIPO Invention Patent Examination Guideline (2009) indicates several steps which are essential to assess whether the invention consists of the "inventive step." Those steps are to: (1) ascertain the invention's scope; (2) ascertain the scope of prior arts; (3) ascertain the PHOSITA skill level; (4) ascertain the difference of the invention and prior arts; and (5) ascertain whether the PHOSITA can easily make the invention using available prior arts.⁷⁸ However, unlike the U.S., there is no standard or guideline on how to construe the PHOSITA.

Reviewing Taiwan's patent jurisprudence, it is also difficult to observe how the courts construe the PHOSITA standard. Judges in Taiwan first examine whether the invention and prior art are in the same International Patent Classification. Second, they examine whether they have the same issue to solve. Third, they examine whether they use the same approach to solve the same problem.⁷⁹ It seems like Taiwanese courts are using the "Problem and Solution" approach similar to the EPO,⁸⁰ however, applying the PHOSITA standard to examine the "inventive step" is not a prerequisite for decision making. Further, such an application is often ignored for other options. Traditionally, Taiwanese courts do not utilize the PHOSITA standard, instead applying the skill level and prior arts expertise opined by an expert witness such as a university professor. The expert usually produces a report which shows his/her opinion of the dispute and this report is heavily relied upon by the courts. However, as stated earlier, objective evidence is not required to support these findings. This practice raises the issues of hindsight bias and conflict of interest. As warned by Dan Burk and Mark Lemley, the courts walk a thin line between taking the skill of an examiner or other artisan as probative evidence of the PHOSITA and equating the skill of such person with the characteristics of the hypothetical PHOSITA.⁸¹

⁷³ TIPO Invention Patent Examination Guideline (2009) p.2-3-20.

⁷⁴ Taiwan Intellectual Property Court Ruling 97 Min Chuan Su 32 (2009).

⁷⁵ TIPO Invention Patent Examination Guideline (2009) p.2-3-20 to p.2-3-21.

⁷⁶ TIPO Invention Patent Examination Guideline (2009) p.2-3-22.

⁷⁷ TIPO Invention Patent Examination Guideline (2009) p.2-3-18.

⁷⁸ TIPO Invention Patent Examination Guideline (2009) p.2-3-21.

⁷⁹ Interview with Judge Huei-Ju Tsai and Judge Song-Mei Hsiung of the Intellectual Property Court (Feb. 3, 2010).

⁸⁰ *Id.* The Problem and Solution approach considers the following: 1) Establishing the closest prior art; 2) establishing the objective technical problem to be solved; and 3) considering whether or not the claimed invention started from the closest prior art then the objective problem would have been obvious to the PHOSITA. *Id.*

⁸¹ See Burk & Lemley, *supra* note 55, at 1188.

In addition to expert witnesses, the newly established IPC has the assistance of the Technical Examination Officer⁸² to clarify technical issues for the judges.⁸³ Though their main role is to compensate for the judge's lack of technical expertise, reliance on the Technical Examination Officer, presents three issues: 1) whether they can provide unbiased and objective technical expertise to the judge; 2) whether the technical expertise provided is accurate and avoids hindsight bias; and 3) the evidentiary value of their statement since the examination report is not open to public inspection.⁸⁴ These issues arise from the defects in the system. The use of Technical Examination Officers stems from the TIPO on secondment to the IPC. Although Technical Examination Officers are compensated by the IPC, they are still personnel of the TIPO; thus, a conflict of interest arises whenever TIPO is acting as the defendant. Furthermore, although the role of the Technical Examination Officer is not to serve as a proxy of the PHOSITA, the continuing disregard of the PHOSITA standard, as demonstrated in *Taiwan Intellectual Property Court Ruling 97 Min Chuan Su 17*, renders its proper application of the standard doubtful.

In summary, the approach taken by Taiwanese courts toward the construction of the PHOSITA for the purpose of assessing the “inventive step” is relatively nonexistent. It is also astounding that neither the legislative history nor the court rulings have explicitly stated how to construe the PHOSITA. Relying on expert witness can help to resolve these issues and establish the skill level at the time of invention. However, this construction must be objective and supported by evidence. Furthermore, even if the invention is easily accomplished, the conclusion is doubtful without first determining the appropriate skill level of the PHOSITA. The establishment of the IPC does not seem to have solved this problem either and the inherent risk of judges simply utilizing Technical Examination Officers as proxies for the PHOSITA is an issue to be further examined. After thirty years of having the PHOSITA standard in the Taiwan Patent Act for assessing the “inventive step”, its application remains a rare phenomenon.

IV. Application of Secondary Consideration-Unexpected Results in the U.S and Taiwan

a. The U.S. Approach

In the post-*KSR* world, the bright-line rules of the TSM test in fighting hindsight bias have been trimmed back. Hence, courts will spend more time and energy in finding the real-world knowledge in invalidating patents and the patentee will want to rely more on secondary consideration as indicia

⁸² See Intellectual Property Court Organization Act art.16 (2007). A Technical Examination Officer should satisfy one of the criteria set below: 1. Has served as a Patent Examiner or Trademark Examiner for over three years in total with good track record; or has graduated with a Master's Degree or above from a graduate school of a public or private university or an independent college, or a foreign college or independent institute recognized by the Ministry of Education, and served as a Patent Examiner or Trademark Examiner or Assistant Examiner for over six years in total with good track record; or has graduated with a diploma in a relevant field from a public or private college or a foreign college recognized by the Ministry of Education, and served as a Patent Examiner or Trademark Examiner or Assistant Examiner for over eight years in total with good track record; or 2. Is or was a lecturer in a relevant program of a public or private university or independent college for over six years in total, or an assistant professor, associate professor, or professor for over three years in total, or a research fellow at a public or a private professional research institute for over six years, and has specialized publications on intellectual properties with proof. *Id.*

⁸³ See Intellectual Property Court Organization Act art.15 (2007) (“... pursuant to the Judge's instruction, Technical Examination Officers shall collect technical information as well as provide evaluation, advice and analysis on technologies.”).

⁸⁴ Implementation Rules of Intellectual Property Case Adjudication Act art. 16 (2007).

to the “non-obviousness” of the invention.⁸⁵ Secondary consideration was introduced in *Graham v. John Deere*, where the Supreme Court stated that secondary consideration as indicia of “obviousness” or “non-obviousness” inquiries might have relevancy.⁸⁶ In order to rely on evidence of these secondary considerations, there must be a nexus between the factor and the patented invention.⁸⁷ The Federal Circuit court transformed *Graham*’s secondary consideration into primary factors by increasing the value of secondary consideration in its analysis.⁸⁸ The secondary considerations are important because they are “real world facts”.⁸⁹ Hence, the Federal Circuit referred to them as objective instead of secondary considerations.⁹⁰ In *W.L. Gore v Gaullock*,⁹¹ the Federal Circuit reversed the district court’s ruling that no commercial success can save the patent.⁹² The Federal Circuit court found this was an error and heightened the importance of *Graham*’s secondary consideration.⁹³ However, the value of secondary consideration is not consistent in the Federal Circuit; sometimes the Federal Circuit will not rebut the finding of obviousness via secondary consideration if there is strong evidence in primary consideration.⁹⁴

Particular attention should be paid to unexpected results and their ability to overcome the *prima facie* finding of obviousness. The USPTO MPEP 716.02(a) lists several examples of unexpected results that are able to overcome “obviousness,” such as greater than expected results, superiority of a property shared with the prior art, presence of unexpected property and absence of expected property. Unexpected property is a factual inquiry and should be compared with the prior art.⁹⁵ After *KSR*, the Supreme Court rebutted the rigid application of the TSM test and raised the secondary considerations as the fourth step that both courts and the USPTO should consider alongside the original *Graham* test.⁹⁶ By raising the objective evidence, the court is avoiding the subjective judgment from “common sense” and “creativity” and easing the evidentiary burden. However, an unexpected result is not the only secondary consideration; others such as long felt needs, commercial success and failure of the others are all indicators of non-obviousness. When the PHOSITA finds the claimed invention *prima facie* obvious, secondary consideration might assist in finding it “nonobvious.”

b. Taiwan Approach

Secondary consideration was introduced by TIPO in its examination guidelines. Since the Taiwan PHOSITA standard is not an automaton according to 3.4.1 of the TIPO Invention Patent Examination Guideline (2009), an invention lacks the “inventive step” if the PHOSITA is able to

⁸⁵ Daralyn J. Durie and Mark A. Lemley, *A Realist Approach to the Obviousness of Inventions*, Stanford Law School Research Paper No. 1133169 (2008), available at <http://ssrn.com/abstract=1133169>. (last visited on June 5, 2010)).

⁸⁶ The Supreme Court approved that secondary consideration evidence on the ground that it may also serve to guard against slipping into hindsight the temptation to read into prior art teachings of the invention in issue.

⁸⁷ *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1130 (Fed. Cir. 2001).

⁸⁸ Robert Desmond, *Nothing Seems “Obvious” to the Court of Appeals for the Federal Circuit: The Federal Circuit Unchecked by the Supreme Court, Transform the Standard of Obviousness under the Patent Law*, 26 LOY. L. A. L. REV. 455, 476 (1993).

⁸⁹ Timothy R. DeWitt, *Use of Objective Evidence of Non-Obviousness in the Federal Courts*, 79 J. PAT. & TRADEMARK OFF. SOC’Y 823, 826 (1997).

⁹⁰ *Apple Computer, Inc. v. Articulate Sys., Inc.*, 234 F.3d 14, 26 (Fed. Cir. 2000).

⁹¹ *W.L. Gore & Associates v. Garlock Inc.*, 721 F.2d 1540, 220 USPQ303 (Fed. Cir 1983).

⁹² *Id.* at 1555

⁹³ See e.g. *Simmons Fastener Corp. v. Illinois Tool Works* 739 F.2d 1573, 1575, 222 USPQ 744, 746 (Fed. Cir. 1984).

⁹⁴ *Riverwood Int’l Corp. v. Mead Corp.*, 212 F.3d 1365, 1367 (Fed. Cir. 2000).

⁹⁵ *In re Regel*, 526 F.2d 1399, 188 USPQ 136 (CCPA 1975)

⁹⁶ *KSR*, 550 U.S. 415.

use prior arts to switch, replace, change, choose or combine the content of prior art to reach predictable outcomes. However, according to the TIPO Invention Patent Examination Guideline (2009), inventions can satisfy the inventive step if they are able to show “unexpected efficacy.”⁹⁷ For example, the inventive step might be satisfied if new efficacy can be produced, or a whole combination of prior art elements is greater than the sum of its parts for a combination invention.⁹⁸ This is the synergy test in practice, as described in *United States v. Adams*,⁹⁹ which held that combination patents must do more than yield a predictable result in order to be eligible for patentability.¹⁰⁰

Prior to the “unexpected efficacy” requirement, an invention could overcome the lack of the “inventive step” through “exceptional technical character” and “obvious improvement.”¹⁰¹ “Exceptional technical character” means that the claimed invention is not able to be inferred or logically deduced through experiment by the PHOSITA.¹⁰² “Obvious improvement” means overcoming the problem or difficulties in the prior art, often shown in the function.¹⁰³ The requirement for improvement in function has been deleted from the 1994 Patent Act amendment. However, in practice, improvement in function is still the core test to prove the inventive step as suggested in the TIPO Invention Patent Examination Guideline (2009).¹⁰⁴

Unlike the U.S., there is currently no court mandated requirement for the “inventive step” or secondary consideration in Taiwan. After *KSR*, the importance of secondary consideration was revoked. However, secondary consideration is only relevant if the primary inquiry for “obviousness” is not clearly met. In Taiwan, the situation seems to be the opposite. According to the TIPO Patent Examination Guideline (2009), unless the invention is truly pioneering without the need to combine any prior arts, all other types of inventions that involve the combination, switching, changing, replacing or choosing from the prior arts will need to show unexpected efficacy to prove the inventive step.¹⁰⁵ Since relatively few inventions will be considered pioneering and the TIPO Patent Examination Guideline (2009) requires the showing of “unexpected efficacy” for most inventions, implementation of this standard tilts the importance of factors in assessing the inventive step.¹⁰⁶ The rationale is that if the efficacy is not the type expected by the PHOSITA, such a lack of expectation is direct evidence that the invention possesses the “inventive step.”¹⁰⁷

Taiwan’s reliance on unexpected efficacy to show the inventive step disregards the importance of assessing the feasibility for the PHOSITA to accomplish the invention and the need for motivation. In this case, using “unexpected efficacy” to determine the “inventive step” renders the

⁹⁷ TIPO Invention Patent Examination Guideline (2009) p.2-3-24 to p.2-3-28, unexpected efficacy includes substantial changes in the quantity or the production of new property.

⁹⁸ TIPO Invention Patent Examination Guideline (2009) p.2-3-26.

⁹⁹ *United States v. Adams*, 383 U.S. 39 (1966).

¹⁰⁰ *Id.* at 50-52

¹⁰¹ See Taiwan Intellectual Property Office, *Previous Patent Examination Guideline: Inventive Step*, (Oct. 3, 2008), http://www.tipo.gov.tw/ch/ArtHtml_Show.aspx?ID=6c47f377-4e7f-43a3-a4e0-b10dbd5ca620&path=1661#4 (Mandarin Only) (last visited Jan 11, 2011).

¹⁰² See Taiwan Intellectual Property Office, Invention Patent Examination Guideline Archive, available at: <http://www.tipo.gov.tw/ch/NodeTree.aspx?path=623> (Mandarin only) (last visited Jan 11, 2011).

¹⁰³ *Id.*

¹⁰⁴ TIPO Invention Patent Examination Guideline (2009) p.2-3-21 to p.2-3-28.

¹⁰⁵ TIPO Invention Patent Examination Guideline (2009) p.2-3-24 to p.2-3-28

¹⁰⁶ TIPO Invention Patent Examination Guideline (2009) p.2-3-21 to p.2-3-28.

¹⁰⁷ TIPO Invention Patent Examination Guideline (2009) p.2-3-23.

role of the PHOSITA redundant. It seems that in Taiwan, inventive step inquiry is to ascertain the scope of prior art and the difference between invention and the prior art to assess unexpected efficacy.¹⁰⁸ Like the TSM test, Taiwan has diminished the role of the PHOSITA based on a formalism test through the showing of unexpected efficacy.¹⁰⁹ What TIPO and Taiwanese courts require is the factual determination of whether the invention shows unexpected efficacy regardless of its relevance and real contribution.

This practice not only reverses the primary inquiry for the inventive step with secondary consideration, it also raises the issue of misapplication of law. The “inventive step” standard should be assessed on whether it is easy for PHOSITA to accomplish the invention through combination of prior arts, not whether the invention necessary produces “unexpected efficacy.” In addition, the inventive step requirement is a doctrine passed by the legislative body, while the examination guideline is an administrative rule issued by TIPO and does not have the status or force of law.¹¹⁰ As stated in a court ruling prior to the establishment of IPC, one cannot rely solely on secondary consideration to achieve the “inventive step.”¹¹¹ This ruling suggests that one can infer that, as its name indicates, secondary consideration is acting as support and the inventive step will still need to be assessed under the primary inventive step inquiry. However, if secondary consideration is available, the evidences can be submitted together.

V. Summary of Issues Inherent in Taiwan Practice

Thus far, it is evident that the practice of using the PHOSITA in assessing the inventive step in Taiwan is rare and the practice is far from clear. Several ambiguities arise due to the lack of clarification from either the courts or TIPO. These ambiguities generally relate to: (1) the level of the PHOSITA standards; (2) the lack of standards in comparing prior art and claimed inventions; (3) the lack of justification for why unexpected efficacy prevailed over other secondary considerations;¹¹² and, (4) the use of administrative guidelines to delineate statutes.

Regarding the first area of ambiguity, Taiwanese courts tend to not apply the PHOSITA, but rely on the examination report given by a university professor. This type of expert testimony, similar to its use in the U.S., is utilized for the purpose of understanding the skill level of the PHOSITA. However, experts in a given field are not the hypothetical PHOSITA, who is a proxy for all arts that have ever existed before the date of the invention. If an examination report or the expert witness is a proxy for the PHOSITA, how does the report cure the hindsight bias that might be inherent in the report? Particularly, since the skill level of Taiwan’s PHOSITA is higher than the pre-*KSR* standard, it is even more necessary to assess whether the PHOSITA can easily combine the prior arts. Only by following this approach can one tell whether the invention is easily accomplished.

The second and third issues can be considered together, as they both lack a standard for comparing prior art and the claimed invention. What is the rationale for the idea that unexpected efficacy can overcome a finding of obviousness, even if it is trivial? Is it not that the result will be

¹⁰⁸ *Id.* at p.2-3-21 to 28.

¹⁰⁹ *Id.*

¹¹⁰ Taiwan Administrative Procedure Act Art 159.

¹¹¹ Taiwan Supreme Administrative Court Ruling 91 Pan 2074 (2002).

¹¹² TIPO Invention Patent Examination Guideline (2009). Other secondary considerations include solving long felt needs, overcoming technical bias, and commercial success. *Id.*

similar to the pre-*KSR* Federal Circuit court rulings, resulting in many trivial and *prima facie* unpatentable inventions? It is likely that TIPO raised “unexpected efficacy” over other secondary considerations because it is the one most related to technical issue, rather than economical (commercial success)¹¹³ or motivational issues (solving long felt needs).¹¹⁴ Thus, it is able to avoid the question of low barriers to patentability, but this does not explain why overcoming technical bias¹¹⁵ is not also considered most important.

The TIPO Invention Patent Examination Guideline (2009) seems to adopt a single mechanical formulation; no matter how simple or trivial the claimed invention is, the inventive step is met if it is able to show unexpected efficacy. However, aside from the ignorance of construing the PHOSITA in assessing the inventive step, Taiwanese courts also do not seem to rely on objective evidence to assess unexpected efficacy, as well. In a recent case, *Supreme Administrative Court 98 Pan 643*, regarding the inventive step inquiry over an invention on the electric conductivity of semi-conductor chips, the plaintiff appealed the ruling in *Taipei Administrative Court of Appeal 95 Suzi 3440 (2006)*. The plaintiff argued that the court of appeal erred as a matter of law by comparing the invention with the prior arts to assess whether an unexpected efficacy exists; essentially failing to follow the steps as set out in the TIPO Invention Patent Examination Guidelines (2004). However, the Supreme Administrative Court concurred with the ruling, indicating that the method in comparing the claimed “unexpected efficacy” with the prior art is at the judge’s discretion.¹¹⁶ In Taiwan court rulings, it is often questionable whether the PHOSITA could easily make the invention and whether the unexpected efficacy is really unexpected.

This approach directly contrasts with the U.S. Federal Circuit practice, where the submission of objective evidence of patentability does not mandate a conclusion of patentability itself¹¹⁷ and facts established by rebuttal evidence must be evaluated along with the facts on which the conclusion of a *prima facie* case was reached, not against the conclusion itself.¹¹⁸ Compared to the U.S., Taiwanese cases show the relatively lax attitude in assessing the inventive step.

Addressing the fourth point, discussed *supra*; it is a misapplication of law to use administrative guidelines to explain statutes.

VI. Recommendation and Suggestions

Ambiguous patent standards create uncertainty among patent applicants, patent holders and competitors. Although uncertainty is troublesome, so is the rigid formalism demonstrated in the pre-*KSR* U.S. Federal Circuit cases. Thus, it is essential to find the middle path that can be easily followed while retaining flexibility. Although it is easier said than done, Taiwan can make the first step in clarifying the PHOSITA standard; this is a focal point in patent law which has been neglected long enough by both TIPO and the courts. Despite the frequent misapplication, the U.S. Federal Circuit has always recognized the importance of the PHOSITA and in *KSR*, the role of the PHOSITA was revived. In response to these changes, it is time for Taiwan to get on the right track

¹¹³ TIPO Invention Patent Examination Guideline (2009) 3.4.2.4 Commercial Success.

¹¹⁴ TIPO Invention Patent Examination Guideline (2009) 3.4.2.2 Solving Long Felt-Needs.

¹¹⁵ TIPO Invention Patent Examination Guideline (2009) 3.4.2.3 Overcome Technical Bias.

¹¹⁶ Supreme Administrative Court 98 Pan 643 (2009).

¹¹⁷ *In re Chupp*, 816 F.2d 643 (Fed. Cir. 1987).

¹¹⁸ *In re Eli Lilly*, 902 F.2d 943 (Fed. Cir. 1990).

in assessing the inventive step. Construing the PHOSITA to assess what a PHOSITA would have known at the time of the invention, and what such a person would have reasonably expected to have been able to do in view of that knowledge, whether or not the source of that knowledge and ability was previously documented art, general knowledge in the art, or common sense.

Although the PHOSITA standards exist in the Taiwan patent law, it remains a concept rarely explained by both the courts and TIPO. How TIPO and the courts find the lack of the “inventive step” is still obscure; despite the fact that the TIPO Invention Patent Examination Guideline (2009) explicitly requires reasons for rejecting the invention.¹¹⁹ In order to fulfill the purpose of the Taiwan Patent Act,¹²⁰ the following recommendations are proposed:

1. TIPO should emphasize the role of the PHOSITA by putting heavier fact-finding responsibilities on the patent examiners. The USPTO MPEP 2141 Examination Guideline for Determining Obviousness under 35 U.S.C.103[R-6]-2100 provides a good example of how patent office personnel should fulfill the critical role of the fact-finder. Patent office personnel must ensure that written records include findings of fact that concur with the state of the art and the teachings of the reference applied. In certain circumstances, it may also be important to include explicit findings on how the PHOSITA would have understood prior art teachings, or what the PHOSITA would have known or could have done. TIPO should rely more on objective evidence instead of an expert examination reports or its own unsupported subjective judgments.
2. TIPO and the courts should define how to differentiate between prior art and claimed invention. First, there is the need to ascertain who the PHOSITA is, the claim language, and consider both the invention and the prior art references as a whole. It is also essential to provide objective evidence of the inventive step and the result shown to be unexpected compared with the closest prior art together with the relevance of the unexpected efficacy.¹²¹
3. The Legislature should also enact legislative reform to incorporate the importance of unexpected efficacy into patent statutes instead of relying on administrative guidelines. Justification for why only unexpected efficacy was favored over the others and whether this formalistic approach meets the goal of the patent system should be given. Otherwise, unexpected efficacy should be one test in the secondary consideration and act in a supporting role in assessing the inventive step instead of the determinant test.

VII. Conclusion

The PHOSITA is a standard to assess the obviousness/inventive step in both U.S. and Taiwan patent law, but is rarely applied. The PHOSITA standard, which has been neglected by both the U.S.

¹¹⁹ TIPO Invention Patent Examination Guideline (2009) p.2-3-29.

¹²⁰ Taiwan Patent Act Art 1. The purpose of this act is to “promote, protect and utilize invention and creation so as to promote industry development. *Id.*”

¹²¹ *See In re Soni* 54 F.3d 746 (Fed. Cir. 1995) (Michel, C.J., dissenting) (an applicant must prove objective rebuttal evidence of unexpectedness, meaning that the applicant must “establish either: (1) a baseline of the expected improvement requirement which to measure the observed improvement; or (2) the lack of such baseline expectation in the relevant prior art, as a result of which all degrees of improvement would be unexpected.” “. . . to be objective, the evidence must justify, rather than merely report, the subjective experience or surprise at an observed degree of improvement.”).

Federal Circuit and Taiwanese courts, should be brought into prominence. The Supreme Court's *KSR* ruling should have further implication in Taiwan regarding the importance of the PHOSITA that assessing the inventive step is more than relying on subjective evidence and the mere showing of unexpected efficacy. Rather, it should be based on whether the invention could be easily accomplished by the PHOSITA.

The policy behind the PHOSITA possessing all prior art knowledge is to discourage wasteful or duplicative inventive activity and to reward those that contributed to the existing knowledge. In this light, testimony from an expert or the Technical Examination Officer should not be a proxy for the PHOSITA, who often carries less than perfect knowledge of the prior art. Although expert testimony or the Technical Examination Officer acts as an easy proxy for the PHOSITA, it is not the PHOSITA *per se*. Furthermore, unexpected efficacy should be assessed on its significance and relevance against the prior art, which also should be based on the perspective of the PHOSITA.

Both TIPO and the courts have erred in neglecting how the role of the PHOSITA should played in the patent system by relying on administrative guidelines to rebuke the lack of the inventive step. This is a serious misapplication of law and should be corrected. The U.S. Supreme Court's *KSR* ruling has caused a great stir in the way the PHOSITA was applied and how obviousness was tested in the U.S. Upon this, *KSR* should also have an impact in Taiwan. Taiwan should also revive the importance of the PHOSITA and properly assess the inventive step based on the perspective of these personnel rather than relying on mere unexpected efficacy.