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20 August 2018

Mail Stop Comments – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
Attention: Carolyn Kosowski, Senior Legal Advisor, Office of Patent Legal Administration

Via email: Eligibility2018@uspto.gov

Re: Comments on the USPTO's *Berkheimer* Memorandum

Dear Ms. Kosowski:

Intellectual Property Owners Association (IPO) appreciates the opportunity to respond to the request for comments on the USPTO's examination guidance on patent subject matter eligibility as set forth in 83 Fed. Reg. 77 (Apr. 30, 2018) and implemented in the *Berkheimer* memorandum, dated 19 April 2018.

IPO is an international trade association representing companies and individuals in all industries and fields of technology who own, or are interested in, intellectual property rights. IPO's membership includes about 200 companies and close to 12,000 individuals who are involved in the association either through their companies or as inventor, author, law firm, or attorney members. IPO membership spans over 30 countries.

IPO advocates for effective and affordable IP ownership rights and offers a wide array of services, including supporting member interests relating to legislative and international issues; analyzing current IP issues; providing information and educational services; and disseminating information to the public on the importance of IP rights.

IPO generally supports the USPTO's interpretation of *Berkheimer* and agrees that it provides the correct analytic framework for evaluating patent claims under step two of the *Alice* test. Specifically, the *Berkheimer* memorandum correctly acknowledges that, as the Federal Circuit has expressly stated, the determination of whether activities are well-understood, routine, and conventional is a factual determination. This grounds the determination of whether an element provides an "inventive step" or "significantly more" in facts relevant to the technology and the invention consistent with traditional aspects of patent examination.

In its discussion of *Berkheimer*, the USPTO properly emphasizes the Federal Circuit's statement that "the mere fact that something is disclosed in a piece of prior art does not mean it was a well-understood, routine, conventional activity or element." This point is significant because it emphasizes the distinction between a lack of novelty (i.e., a single anticipating reference) and "well understood, routine, conventional."

The *Berkheimer* memorandum also correctly focuses on the Federal Circuit’s holding that statements in the patent specification raised a genuine issue of fact concerning whether the purported improvements were more than well-understood, routine, and conventional activity. Applicants and examiners can rely on the Federal Circuit’s guidance as a starting point for identifying and evaluating which aspects of the invention are identified as improvements.

IPO commends the USPTO for providing guidance for appropriate and consistent application of the relevant principles. However, we believe the *Berkheimer* memorandum departs from the guidance set forth by the Federal Circuit in some aspects that might lead to inconsistent and unpredictable application by examiners. Our recommendations to address those aspects follow.

I. The *Berkheimer* Memorandum Should Consistently Use the Phrase “Well-Understood, Routine, and Conventional.”

To fail step two of the *Alice* test, a claim element (or combination thereof) must be “well understood, routine, and conventional.” *Berkheimer v. HP Inc.*, 881F.3d1360, 1369 (Fed. Cir. 2018) (emphasis added). This is a conjunctive requirement, meaning that all three conditions must be met. The *Berkheimer* memorandum frequently states the requirement as “well understood, routine, conventional,” and in some instances states the requirement in the disjunctive as “well-understood, routine or conventional.” This small discrepancy allows the examiner to fail a claim element under step two by showing just one of the three conditions. The guidance should consistently use the phrase “well understood, routine, and conventional” to be consistent with the Federal Circuit’s statement of the law.

II. The *Berkheimer* Memorandum Should Focus on Whether a Claim Element Is “Well-Understood, Routine, and Conventional,” Rather Than “Widely Prevalent” or “In Common Use.”

The memorandum suggests that a conclusion that a claim element is either “widely prevalent” or “in common use” is sufficient to establish that the claim element is well-understood, routine, and conventional. It is unclear how these new terms shed new light on the inquiry. Replacing terms used in the caselaw with new, undefined terms will add complexity and create inconsistency between analysis performed by examiners versus analysis performed by the courts. Examiners should determine whether an element (or combination of elements) is (are) well-understood, routine, and conventional without substituting new terms or concepts.

III. The USPTO Should Provide Definitions of “Well-understood,” “Routine,” and “Conventional” That Consider the Overall Context of the Invention Rather Than Individual Words.

Should the USPTO determine that defining the terms “well-understood,” “routine,” and “conventional” is necessary, the definitions should emphasize that the determination should be made with respect to claim elements (or combinations of claim elements) as part of an overall invention, rather than with respect to individual words related to steps (e.g., “storing”) or components (e.g., “memory”) in a claim element.

The “relevant field” requirement is extremely important and can be overlooked by examiners. The use of materials and methods from one field in an unrelated field can lead to important inventions. That materials and methods might be “well understood” in one field does not mean that they are “well-understood” in another. For example, “well-understood” might connote that specific ways of implementing a method step in the context of an invention are thoroughly described in publications of the “relevant field.” Similarly, for a claim element corresponding to a physical component, “well-understood” might connote that the specific theory of operation or manner of construction of the component is described in the literature for the relevant field. In the context of a claim, the term “routine” might refer to operations or components that are regularly or habitually used to perform the desired function, as described in the literature of the relevant field.

In the *Alice* framework, “conventional” might connote that the use of a claim element for a particular purpose conforms to the standards and requirements agreed upon in the relevant field. This is different from being “routine.” Something that is routine might not be accepted as conventional within a given field, for example where a practice is considered substandard, unorthodox, or even dangerous.

IV. Analysis of Well-Understood, Routine, and Conventional Should Not Be Conducted Under § 112.

Equating the factual determination of whether something is well-known, routine, and conventional with “the analysis under 35 U.S.C. § 112(a) as to whether an element is so well-known that it need not be described in detail in the patent specification” is contrary to the Supreme Court’s guidance that each statutory requirement is distinct and not an appropriate proxy for the others. *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1304 (2012). By conflating the distinct statutory requirements, the *Berkheimer* memorandum risks focusing examiners on the wrong considerations and facts.

Section 112(a) sets forth requirements for both enablement and written description. The *Berkheimer* memorandum does not specify which of these § 112(a) requirements is to be used by examiners. This could lead to inconsistent and unpredictable analysis of patent eligibility that will cause examiners to reach the wrong results.

Whether a claim satisfies the requirements of § 112(a) and whether an element or combination of elements comprise well-understood, routine, and conventional activity are not the same inquiry. Whereas the enablement inquiry considers only whether “undue experimentation” is required by the skilled artisan to obtain an element, based on the entirety of the patentee’s disclosure, the determination of whether an element is well-understood, routine, and conventional must be made without reference to the teachings of the specification. Further, that an element could be arrived at by routine experimentation using the teachings of the specification says nothing about whether that element was well-understood, routine, and conventional in combination with the other elements of the claim prior to the filing date of the application without the teachings of the specification. Indeed, it might be entirely within the capability of one of skill in the art to make the claimed invention using “routine experimentation” and using existing “conventional” parts, without the combination of claim

elements being routine—this is what one would expect to happen with a well-drafted patent specification. Using the same reasoning, a claim element might be adequately described under the written description requirement without its combination with the other elements of a claim being well-understood, routine, and conventional.

Use of the enablement prong of § 112(a) is also inconsistent with other guidance in the *Berkheimer* memorandum that “[a] finding that an element is well-understood, routine, or conventional cannot be based only on the fact that the specification is silent with respect to describing such element.” Enablement is typically only considered when the specification is silent regarding a particular claim element. If the specification fully describes the operation and construction of a claim element, analysis of “undue experimentation” under *Wands*¹ is unnecessary. If the specification is silent, the examiner cannot use that silence to decide that the element is well-understood, routine, and conventional.

With regard to the written description requirement under § 112(a), facts relevant to that inquiry are distinct from those that pertain to the well-understood, routine, and conventional status of a claim element. For instance, a written description inquiry requires evaluating “the existing knowledge in the particular field, the extent and content of the prior art, the maturity of the science or technology, [and] the predictability of the aspect at issue.” *Ariad v. Eli Lilly*, 598 F. 3d 1336, 1351 (Fed. Cir. 2010) (*en banc*) (quoting *Capon v. Eshhar*, 418 F. 3d 1349, 1359 (Fed. Cir. 2005)). Introducing a different standard creates the opportunity for deviations from the core questions of the step two analysis and a greater likelihood of examiner error.

Gathering and applying evidence as to whether claim elements are (1) well-understood, (2) routine, and (3) conventional would not be a foreign undertaking for examiners. Finding such facts is a core competency of patent examination. Although we understand the desire to simplify this factual evaluation, we fear that complicating the analysis by reference to § 112(a) is unlikely to achieve that goal.²

¹ (A) The breadth of the claims; (B) The nature of the invention; (C) The state of the prior art; (D) The level of one of ordinary skill; (E) The level of predictability in the art; (F) The amount of direction provided by the inventor; (G) The existence of working examples; and (H) The quantity of experimentation needed to make or use the invention based on the content of the disclosure. *In re Wands*, 858 F.2d 731, 737 (Fed. Cir. 1988). It seems that little work is saved by the examiner having to consider each of these factors, rather than more directly considering facts directly bearing on whether a claim element is well-understood, routine, and conventional.

² The *Berkheimer* memorandum referenced *Genetic Techs. Ltd. v. Merial LLC*, 818 F.3d 1369, 1377 n.2 (Fed. Cir. 2016) to support equating the § 112(a) analysis and the analysis of whether an element is well-understood, routine, and conventional. However, the *Genetic Techs.* court was not equating the § 112(a) standard with the determination of whether subject matter was well-understood, routine, and conventional. Rather, the *Genetic Techs.* court was relying on the patentee’s admission that the subject matter at issue was “readily practiced,” which happened to be made in the context of overcoming a § 112, first paragraph, rejection. Had the patentee not made any such admission, there would have been no basis for the district court or the Federal Circuit to come to the above conclusion. The other cases cited by the USPTO, *Lindemann Maschnefabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F. 2d 1452 (Fed. Cir. 1984) and *In re Myers*, 410 F. 2d 420 (CCPA 1969), were decided decades before the Supreme Court introduced the “well-understood, routine, and conventional” framework, and both merely addressed the need for disclosure of “what is well known in the art” without any connection to patent eligibility. The

V. Applicant Admissions Regarding Whether a Claim Element Is Well-Understood, Routine, or Conventional Must Be Express, Not Inferred.

Section III.A.1 of the *Berkheimer* memorandum states that an examiner may conclude that an additional element or combination of elements is well-understood, routine, and conventional by citing to an “express statement” in the specification or the prosecution history “that demonstrates the well-understood, routine, conventional nature of the additional element(s).” With respect to core factual findings in a determination of patentability, the USPTO “must point to some concrete evidence in the record in support of these findings.” *In re Zurko*, 258 F. 3d 1379, 1386 (Fed. Cir. 2001). Some aspects of the guidance under Section III.A.1, however, are unlikely to satisfy this requirement.

The *Berkheimer* memorandum lists three types of statements that an examiner may use to infer that a claim element is well-understood, routine, and conventional. IPO has concerns with how the *Berkheimer* memorandum allows examiners to use these categories of statements from the specification, each of which is discussed below.

Category (1): The statement that “A specification demonstrates the well-understood, routine, conventional nature of additional elements when it describes the additional elements as well-understood or routine or conventional (or an equivalent term)” is a tautology, equating “express statement” with “describes.” Perhaps a more precise instruction would be specific about what is meant by “describing” the additional elements in this way, or what constitutes “equivalent terms.” The USPTO should also provide examiners with examples of the kinds of statements that would suffice, such as noting in the specification that “The use of <additional element to provide claimed function> is well known to those of skill in the art and is not further described herein” or a statement during prosecution that “<additional element> was a technique routinely practiced by those in skill at the time the application was filed <to obtain the claimed result>.”

The USPTO should clarify the impact of statements made by the applicant in the specification or prosecution history identifying prior art documents as providing the details of one or more implementations of a claim element. This approach is common, benefits the public, and should not be used against the applicant where the underlying documents do not disclose the claim element in the same context as the overall claimed invention. The Federal Circuit has held that whether an element was described prior to the effective filing date of a patent application is not enough to establish that the element is well understood, routine, and conventional in the context of a particular claim. *BASCOM Global*, 827 F. 3d at 1350 (“The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.”). Instead, consistent with the example statements set forth above, an admission in the specification or prosecution history must speak to use of the element in the context of a claim under evaluation, i.e., in combination with the other elements of that claim. *See, e.g., Two-Way Media v. Comcast Cable Commc’ns*, 874 F. 3d 1329, 1339 (Fed. Cir. 2017) (evaluating the existence of an “inventive concept in the ordered combination of these limitations”). The guidance should be modified to state that a mere admission that a claim element is prior art does not constitute an

Federal Circuit's decision in *Exergen Corp. v. Kaz USA*, Appeal Nos. 2016-2315, 2016-2341 (Fed. Cir. Mar. 8, 2018) provides no specific elaboration of how § 112(a) is to be used in this context.

admission that it is well-understood, routine, or conventional in the context of the claim (nor that it is well-understood, routine, *and* conventional).

Category (2): That an element is commercially available may have evidentiary value in determining whether the element is well-understood, routine, and conventional. The mere identification of a commercially available product, however, does not resolve whether the commercially available product equates to a claim element that is well understood, routine, and conventional and should not result in a dispositive inference by the examiner. IPO recommends that this category be removed from the *Berkheimer* guidance.

Identification of an element as a commercially available product is not an admission that the element is “well understood” for the particular use or function claimed. A product might be commercially available but not routinely or conventionally used, either generally or in the context of the claimed invention. This is the lesson of *BASCOM Global*, in which conventional computer servers (i.e., commercially available servers) were used in an unconventional arrangement. The nature of “unconventional arrangement” inventions is to use conventional (e.g., commercially available) components in unconventional ways. Similarly, a commercially available product might be used in the claimed invention in a manner different from its commercially intended design. Identification of the source of the product is therefore not an admission that the product or the particular manner of its use in a claimed combination is well understood, routine, and conventional. Just as a single instance of a claim element in the prior art does not satisfy the requirement for well-known, routine, and conventional, neither should the identification of a single product suffice in this manner.

Category (3): Without defining how one might “indicate” that additional elements are sufficiently well-known such that the specification does not need to describe them, while also stating that silence is not to be held against an applicant, Category (3) introduces confusion into the evaluation of what statements— or lack thereof—are to be viewed as admissions. If the specification's silence with respect to a claim element is not to be held against an applicant, what else could “indicate” that the additional elements are sufficiently well-known that the specification does not need to describe them? Express admissions are covered in Category (1). IPO recommends removing this statement because it is subsumed within Category (1).

VI. Citation to Judicial Opinions Is Not Appropriate for Answering Factual Inquiries as to Whether a Claim Element Is Well-Understood, Routine, and Conventional.

The *Berkheimer* memorandum states that examiners may rely on citations to court decisions discussed in MPEP § 2106.05(d)(1I), which provides a list of Federal Circuit decisions that have identified certain activities as well-understood, routine, and conventional. IPO recommends strictly limiting the list of Federal Circuit (or district court) cases to those where 1) the claim elements involved in the case are substantially the same as claim elements before the examiner, and 2) the prior cases were decided based on factual findings (e.g., summary judgment or post-trial) and not on motions to dismiss or motions on pleadings. Further, to avoid improper reliance on court cases based on patents that post-date the application before the examiner, we suggest instructing examiners that for a case may only be cited for its factual precedent when evaluating claims having effective filing dates on or after the effective filing dates of the patents

(or patent applications) at issue in the cited court case. The USPTO should also give applicants the opportunity to present rebuttal evidence.

The descriptions in the MPEP are very broad in scope as to the nature of well-understood, routine, and conventional activity. For example, citations include “Receiving or transmitting data over a network,” “Performing repetitive calculations,” “Electronic recordkeeping,” and “Storing and retrieving information in memory.” These activities are described so broadly as to cover entire fields of technology, arguably rendering all inventions within those fields well understood, routine, and conventional, completely detached from the claims. This approach—which is already in use by examiners—ignores the Federal Circuit’s teaching that the entire claim element (or combination of elements) must be considered, rather than the general category of the claim.

The Federal Circuit has been finding ineligible subject matter in 90% of the § 101 cases it decides, so the list of conventional activities it identifies will likely continue to grow quickly. Consequently, examiners will have an easier time mapping a claim element to one of these categories simply because they have access to long lists of putatively conventional elements. This will undermine the goal of the *Berkheimer* memorandum, to rest the finding that a claim element is well-understood, routine, and conventional on factual bases that are specific to the application before the examiner, rather than on generic circumstances.

Many of the Federal Circuit’s decisions are affirmances of motions to dismiss, where there was no factual discovery and no finding of fact by the court. Such decisions were made on the pleadings and most specifically on defendants’ arguments that claim elements were well understood, routine, and conventional. See, e.g., *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 613–14 (Fed. Cir. 2016); *Content Extraction and Transmission, LLC v. Wells Fargo Bank*, 776 F.3d 1343, 1347, 113 USPQ2d 1354, 1357 (Fed. Cir. 2014); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015). The problem with relying on the legal conclusions of prior cases for specific factual conclusions is made more apparent when we consider obviousness. An examiner cannot rely on a prior court decision regarding an unrelated patent that a particular claim was obvious in rejecting a claim because the underlying facts in the prior case are not before the examiner. Allowing examiners to use prior holdings of what constitutes well-understood, routine, and conventional elements in place of specific factual findings based on the present application turns the *Berkheimer* analysis on its head.

Even if an examiner relies on Federal Circuit cases where there were underlying factual findings based on evidence, there are further problems. First, a statement by a district court, repeated by the Federal Circuit, that a particular claim element or category of technology is “well understood, routine, and conventional” is hearsay (or double hearsay). That is, the examiner would be relying on a statement in a court decision for the truth of the matter asserted, which in turn would at best be based on the underlying statements of an expert witness. The applicant cannot cross-examine the underlying source of the statement. A prior art publication cited by an examiner can be challenged for what it allegedly discloses (e.g., an applicant can provide a declaration of an expert or another reference which refutes the one cited by an examiner). On the other hand, Federal Circuit conclusions concerning those facts carry a legal imprimatur that cannot be challenged merely on factual grounds in the same manner. The factual inquiry is thereby improperly infused with legal standards.

Reliance on a district court finding, affirmed by the Federal Circuit, is in effect a form of issue preclusion where the underlying factual conclusion—concerning a particular claim element in the context of a particular claim—is converted into a legal conclusion and applied to a different claim before the examiner. This raises due process concerns, because a patent applicant will be bound by the outcome of a dispute in which she was not involved and that concerned a different invention. This is different from an examiner's reliance on court holdings' regarding rationales for obviousness, enablement, and so forth, because the reliance is not on the facts themselves, but on the legal principles that an examiner applies to the facts before her.

VII. The Use of Publications in the Well-Understood, Routine, and Conventional Activity Factual Inquiry Should Be Limited to Authoritative, Peer-Reviewed Publications.

According to the *Berkheimer* memorandum, a citation to a publication might demonstrate the well-understood, routine, and conventional nature of one or more additional elements. Although the training slides appear to establish a requirement that the publication be dated on or before the effective filing date of a patent application,³ the *Berkheimer* memorandum does not address this issue. IPO suggests clarifying that any publication relied on to assert that a claim element is well-understood, routine, and conventional must either (1) be published before the effective filing date of the patent application or (2) clearly indicate the well-understood, routine, and conventional nature of the activity at a time before the effective filing date of the patent application.

The *Berkheimer* memorandum correctly recognizes that even if a publication predates the effective filing date of the patent application, it might still be inappropriate to rely on the publication to establish that a claim element is well-understood, routine, and conventional. In particular, the type of publication may disqualify it from establishing that a claim element is well-understood, routine, and conventional. The *Berkheimer* memorandum provides a single example of a publication that is insufficient. We suggest providing additional examples.

We suggest instructing examiners to evaluate the reliability of the evidence when relying on “other sources” or, indeed, when relying on any form of evidence. The *Berkheimer* memorandum should clarify when sources that are not peer- or publisher- reviewed might be probative of what is well-understood, routine, and conventional in a given technology setting. For instance, examiners might construe the term “other source” to encompass Internet sources such as blog posts, anonymous comments, or other statements that do not reflect the views of those of skill in the art, and which are often not reviewed in any capacity (let alone through peer- or publisher- review). Reliance on such sources risks turning the inquiry into one of novelty, in which the source of the disclosure is unimportant. Credibly addressing the factual question of whether an activity is well-understood, routine, and conventional requires informed expertise in the relevant field. The reliability of uninformed “other sources” is unlikely to be probative.

³ See Training Slides at 13 (posted May 7, 2018).

INTELLECTUAL PROPERTY OWNERS ASSOCIATION

Thank you for considering IPO's comments. We welcome further dialogue or opportunity to provide additional information to assist you in developing guidance on patent subject matter eligibility.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Lauroesch". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Mark Lauroesch
Executive Director