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To: Patent Examining Corps
Technology Center Directors

From: Stephen G. Kunin
Deputy Commissioner for Patent Examination Policy

Subject: Procedures for Relying on Facts Which are Not of Record as
Common Knowledge or for Taking Official Notice

This memorandum clarifies the circumstances in which it is appropriate to
take official notice of facts not in the record or to rely on "common knowledge"
in making a rejection.

Recent court decisions have affected the Office’s practice of taking official
notice of facts by relying on common knowledge in the art without a reference.
Specifically, the Supreme Court recently changed the standard of review applied
to decisions of the Board of Patent Appeals and Interferences and the Trademark
Trial and Appeal Board on appeal to the U.S. Court of Appeals for the Federal
result, the Federal Circuit now reviews findings of fact under the "substantial
evidence" standard under the Administrative Procedure Act (APA), rather than
the former "clearly erroneous" standard. In re Gartsied, 203 F.3d 1305, 1315, 53
USPQ2d 1769, 1775 (Fed. Cir. 2000). This change in the review standard has
affected the Federal Circuit’s view of when the court or the USPTO may take
notice of facts without specific documentary evidence support.  

On remand from the Supreme Court, the Federal Circuit in In re Zarko, 258
F.3d 1379, 59 USPQ2d 1693 (Fed. Cir. 2001), reversed the Board’s decision
upholding a rejection under 35 U.S.C. 103 for lack of substantial evidence.
Specifically, in Zarko and other recent decisions, the court criticized the
USPTO’s reliance on “basic knowledge” or “common sense” to support an
obviousness rejection, where there was no evidentiary support in the record for
such a finding. In light of the recent Federal Circuit decisions and the
substantial evidence standard of review now applied to USPTO Board decisions,
the following guidance is provided in order to assist the examiners in
determining when it is appropriate to take official notice of facts without
supporting documentary evidence or to rely on common knowledge in the art in making a rejection, and if such official notice is taken, what evidence is necessary to support the examiner’s conclusion of common knowledge in the art.

(1) Determine when it is appropriate to take official notice without documentary evidence to support the examiner’s conclusion.

Official notice without documentary evidence to support an examiner’s conclusion is permissible only in some circumstances. While “official notice” may be relied on, as noted in MPEP § 2144.03, these circumstances should be rare when an application is under final rejection or action under 37 CFR 1.113. Official notice unsupported by documentary evidence should only be taken by the examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. In appropriate circumstances, it might not be unreasonable to take official notice of the fact that it is desirable to make something faster, cheaper, better, or stronger without the specific support of documentary evidence. Furthermore, it might not be unreasonable for the examiner in a first Office action to take official notice of facts by asserting that certain limitations in a dependent claim are old and well known expedients in the art without the support of documentary evidence provided the facts so noticed are of notorious character and serve only to “fill in the gaps” which might exist in the evidentiary showing made by the examiner to support a particular ground of rejection.

It would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known. For example, assertions of technical facts in the areas of esoteric technology or specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art.

It is never appropriate to rely solely on “common knowledge” in the art without evidentiary support in the record, as the principal evidence upon which a rejection was based. As the court held in Zarko, an assessment of basic knowledge and common sense that is not based on any evidence in the record lacks substantial evidence support.

(2) If official notice is taken of a fact, unsupported by documentary evidence, the technical line of reasoning underlying a decision to take such notice must be clear and unmistakable.

Ordinarily, there must be some form of evidence in the record to support an assertion of common knowledge. In certain older cases, official notice has been taken of a fact that is asserted to be “common knowledge” without specific reliance on documentary evidence where the fact noticed was readily verifiable, such as when other references of record supported the noticed fact, or where there
was nothing of record to contradict it. If such notices is taken, the basis for such reasoning must be set forth explicitly. The examiner must provide specific factual findings predicated on sound technical and scientific reasoning to support his or her conclusion of common knowledge. The applicant should be presented with the explicit basis on which the examiner regards the matter as subject to official notice and be allowed to challenge the assertion in the next reply after the Office action in which the common knowledge statement was made.

(3) If applicant challenges a factual assertion as not properly officially noticed or not properly based upon common knowledge, the examiner must support the finding with adequate evidence.

To adequately traverse such a finding, an applicant must specifically point out the supposed errors in the examiner’s action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. A general allegation that the claims define a patentable invention without any reference to the examiner’s assertion of official notice would be inadequate. If applicant adequately traverses the examiner’s assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2).

If applicant does not traverse the examiner’s assertion of official notice or applicant’s traverse is not adequate, the examiner should clearly indicate in the next Office action that the common knowledge or well-known in the art statement is taken to be admitted prior art because applicant either failed to traverse the examiner’s assertion of official notice or that the traverse was inadequate. If the traverse was inadequate, the examiner should include an explanation as to why it was inadequate.

(4) Determine whether the next Office action should be made final.

If the examiner adds a reference in the next Office action after applicant’s rebuttal, and the newly cited reference is added only as directly corresponding evidence to support the prior common knowledge finding, and it does not result in a new issue or constitute a new ground of rejection, the Office action may be made final. If no amendments are made to the claims, the examiner must not rely on any other teachings in the reference if the rejection is made final. If the newly cited reference is added for reasons other than to support the prior common knowledge statement and a new ground of rejection is introduced by the examiner that is not necessitated by applicant’s amendment of the claims, the rejection may not be made final. See MPEP § 706.07(a).

(5) Summary.
Any rejection based on assertions that a fact is well-known or is common knowledge in the art without documentary evidence to support the examiner’s conclusion should be judiciously applied. Furthermore, as noted by the court in Ahrert, any facts so noticed should be of notorious character and serve only to “fill in the gaps” in an insubstantial manner which might exist in the evidentiary showing made by the examiner to support a particular ground for rejection. It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based.1

1 MPEP § 2144.03 will be revised accordingly in the upcoming revision to be consistent with this memo.

Cc: Nicholas Godici
    Esther Keppinger
    Kay Kim
    David Lacey

1 The Supreme Court has described substantial evidence review in the following manner:

Substantial evidence is more than a merescintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. More uncorroborated hearsay or rumor does not constitute substantial evidence.

Consolidated Edison Co. v. NRAB, 305 U.S. 197, 229-30 (1938) (quoted in Garstick, 203 F.3d at 1312, 53 USPQ2d at 1773). “Substantial evidence” review involves examination of the record as a whole, taking into account evidence that both justifies and detracts from an agency’s decision.” Garstick, 203 F.3d at 1312, 53 USPQ2d at 1773 (citing Universal Camera Corp. v. NLRB, 340 U.S. 474, 487-88 (1951)). Furthermore, the Supreme Court has also recognized that “the possibility of drawing two inconsistent conclusions from the evidence does not prevent an administrative agency’s finding from being supported by substantial evidence.” Consolo v. Federal Maritime Comm’n, 365 U.S. 607, 620 (1966) (quoted in Garstick, 203 F.3d at 1312, 53 USPQ2d at 1773).

2 See Packard Press, Inc v. Hewlett-Packard Co., 227 F.3d 1352, 1360, 56 USPQ2d 1351, 1356 (Fed. Cir. 2000) (questioning authority to take judicial notice for the first time on appeal in light of the APA standard of review established by Dickinson v. Zurko, 527 U.S. at 165, 50 USPQ2d at 1937). Although the substantial evidence standard is deferential to the agency’s decision, it imposes certain evidentiary requirements that must be met by the agency in formulating a decision. The Federal Circuit explained that “[i]n appeals from the Board, we have before us a comprehensive record that contains the arguments and evidence presented by the parties, including all of the relevant information upon which the board relied in rendering its decision.” Garstick, 203 F.3d at 1314, 53 USPQ2d at 1774. Furthermore, the record is “closed, in that the Board’s decision must be justified within the four corners of that record.” Id. Thus, the record before the USPTO “dictates the parameters of review” available to the court. Id. Accordingly, “the Board’s opinion must explicate its factual conclusions, enabling [the court] to verify readily whether those conclusions are indeed supported by ‘substantial evidence’ contained within the record.” Id (citing Cochran v. Davidson, 116 F.3d 1454, 1460, 43 USPQ2d 1030, 1035 (Fed. Cir. 1997)).

3 Zurko, 258 F.3d at 1385, 59 USPQ2d 1697 (“the Board cannot simply reach conclusion based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense. Rather, the Board must point to some concrete evidence in the record in support of its findings.”). See also In re Lee, __ F.3d __, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002) (The Board determined that it was not necessary to present a source of a teaching, suggestion, or motivation to combine the references).
because the conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art. The court reversed the Board's decision in sustaining a rejection under 35 U.S.C. 103 and stated that "common knowledge and common sense on which the Board relied in rejecting Lee's application are not the specialized knowledge and expertise contemplated by the Administrative Procedure Act. Conclusory statements such as these here provided do not fulfill the agency's obligation... The board cannot rely on conclusory statements when dealing with particular combinations of prior art and specific claims, but must set forth the rationale on which it relies".

As noted by the court in In re Ahlert, 424 F.2d at 1008, 1097, 165 USPQ 418, 420 (CCPA 1970), the notice of facts beyond the record which may be taken by the examiner must be "sufficient to support the rejection under 35 U.S.C. 103," but it does not have to be "sufficient to support the rejection under 35 U.S.C. 102." In Ahlert, the court held that the Board properly took judicial notice that it was old to adjust intensity of a flame in accordance with the heat requirement. See also, In re Fox, 471 F.2d at 1405, 1407, 176 USPQ 340, 341 (CCPA 1973); the court took "judicial notice of the fact that tape recorders commonly erase tape automatically when new 'audio information' is recorded on a tape which already has a recording on it.

Zarko, 258 F.3d at 1385, 59 USPQ2d at 1697; In re Ahlert, 424 F.2d at 1092, 165 USPQ at 421.

6 In re Ahlert, 424 F.2d at 1091, 165 USPQ at 420-21; see also In re Gross, 392 F.2d at 1151, 1167-68, 201 USPQ 57, 63 (CCPA 1979) ("[W]hen the PTO seeks to rely upon a chemical theory, in establishing a prima facie case of obviousness, it must provide evidence in support for the existence and meaning of that theory."). In re Egudu, 480 F.2d at 1364, 1370, 178 USPQ 470, 474 (CCPA 1973) ("we reject the notion that a rule or administrative notice may be taken of the state of the art. The facts constituting the state of the art are normally subject to the possibility of rational disagreement among reasonable men and are not amenable to the taking of such notice.").

Zarko, 258 F.3d at 1385, 59 USPQ2d at 1697. While the court explained that, "as an administrative tribunal the Board clearly has expertise in the subject matter over which it exercises jurisdiction," it make clear that such "expertise may provide sufficient support for conclusions [only] as to peripheral issues." Id. at 1385-86, 59 USPQ2d at 1697.

In Zarko, 258 F.3d at 1385, 59 USPQ2d at 1697. See also In re Lee, _ F.3d at _, 51 USPQ2d at 1435.

9 See In re Lee, _ F.3d at _, 51 USPQ2d 1434-35; In re Zarko, 258 F.3d at 1386, 59 USPQ2d at 1697 (holding that general conclusions concerning what is "basic knowledge" or "common sense" to one of ordinary skill in the art without specific factual findings and some concrete evidence in the record to support these findings will not support an obviousness rejection).

10 See In re Stott, 317 F.2d 941, 945-46, 137 USPQ 797, 800 (CCPA 1965) (the court accepted the examiner's assertion that the use of a control is standard procedure throughout the entire field of bacteriology" because it was readily verifiable and disclosed in references of record not cited by the Office); In re Chevenard, 139 F.2d 711, 713, 60 USPQ 239, 241 (CCPA 1943) (accepting examiner's finding that a brief heating at a higher temperature was equivalent of a longer heating at a lower temperature where there was nothing in the record to indicate the contrary and where the applicant never demanded that the examiner produce evidence to support his statement).

11 See Sod. 317 F.2d at 946, 37 USPQ at 801; Chevenard, 139 F.2d at 713, 60 USPQ at 241.

12 See 37 CFR 1.111(b). See also Chevenard, 139 F.2d at 713, 60 USPQ at 241; ("[i]n the absence of any demand by applicant for the examiner to produce authority for his statement, we will not consider this contention."); Section 1.111 of Title 37 of the Code of Federal Regulations (CFR) 1.111(c) (2008). See also Zarko, 258 F.3d at 1386, 59 USPQ2d at 1697; Ahlert, 424 F.2d at 1092, 165 USPQ 421.