

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SCOTT M. HAMEL

Appeal No. 2004-0951
Application 09/498,309

ON BRIEF

Before PAK, WARREN and OWENS, *Administrative Patent Judges*.

WARREN, *Administrative Patent Judge*.

Decision on Appeal and Opinion

We have carefully considered the record in this appeal under 35 U.S.C. § 134, including the opposing views of the examiner, in the answer, and appellant, in the brief and reply brief, and based on our review, find that we cannot sustain the rejection of appealed claims 1 through 5 and 22 under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in the specification at page 1, line 15, through page 3, line 6, and **FIGs. 1A** and **1B** of the specification, in view of Suzuki et al. (Suzuki '743); and of appealed claims 6 through 9 under 35 U.S.C. § 103(a) as being unpatentable over the admitted prior art in the specification at page 1, line 15, through page 3, line 6, and **FIGs. 1A** and **1B** of the specification, in view of Suzuki '743 and further in view of

Suzuki.^{1,2,3}

It is well settled that in order to establish a *prima facie* case of obviousness under § 103(a), the examiner must show that some objective teaching, suggestion or motivation in the applied prior art taken as a whole and/or knowledge generally available to one of ordinary skill in this art would have led that person to the claimed invention as a whole, including each and every limitation of the claims arranged as required by the claims, without recourse to the teachings in appellant's disclosure. *See generally, In re Rouffet*, 149 F.3d 1350, 1358, 47 USPQ2d 1453, 1458 (Fed. Cir. 1998); *Pro-Mold and Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1629-30 (Fed. Cir. 1996); *In re Fritch*, 972 F.2d 1260, 1265-66, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992); *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992); *In re Laskowski*, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989); *In re Fine*, 837 F.2d 1071, 1074-76, 5 USPQ2d 1596, 1598-1600 (Fed. Cir. 1988). The requirement for objective factual underpinnings for a rejection under § 103(a) extends to the determination of whether the references can be combined. *See In re Lee*, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002), and cases cited therein. It is also well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in this art would have reasonably been expected to draw therefrom, see *In re Fritch*, 972 F.2d 1260, 1264-65, 23 USPQ2d 1780, 1782-83 (Fed. Cir. 1992); *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968), presuming skill on the part of this person. *In re Sovish*, 769 F.2d 738, 743, 226 USPQ 771, 774 (Fed. Cir. 1985).

We find that, when considered in light of the written description in the specification, including the drawings, as interpreted by one of ordinary skill in this art, *see, e.g., In re Morris*,

¹ We refer to the translation of Suzuki, published unexamined Japanese patent application JP 2-251012, prepared for the USPTO by FLS, Inc (October 2003).

² Answer, pages 4-5; references cited at answer, page 3. A copy of the appealed claims is in the appendix to the brief. Appealed claims 10 through 21 are also of record and have been withdrawn from consideration by the examiner.

³ We have not considered the other references discussed by the examiner in the answer (pages 7-10) because they have not been cited in the statement of any ground of rejection. *See In re Hoch*, 428 F.2d 1341, 1342 n.3, 166 USPQ 406, 407 n.3 (CCPA 1970); *compare Ex parte Raske*, 28 USPQ2d 1304, 1304-05 (Bd. Pat. App. & Int. 1993).

127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997); *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989), the plain language of the appealed claims specifies that the tubular shield of the claimed igniter “includes a plurality of openings therethrough” which form an “oriented spiral passageway,” that is, the tubular shield has, *inter alia*, holes and/or slots arranged in the specified manner, including the arrangements disclosed at pages 17-20 and depicted in the figures of the specification. The so arranged opening through the tubular shield admit gases to the interior of the claimed igniter.

Contrary to the arguments advanced by the examiner and by appellant, we find that Suzuki ‘743 would have disclosed to one of ordinary skill in this art an igniter plug **1** having a plurality of grooves **6** around the firing tip **16** of center electrode **8** in the spark gap region **S.G.** at the lower end of annular ground electrode **2**, as depicted in Suzuki ‘743 **Figs. 1** through **4** (*see* cols. 2-3). Indeed, we find that this reference would have disclosed to this person that grooves **6** are of “semi-circular shape in section” and that “the air flow . . . is admitted into the grooves to pass therealong,” as seen from arrows **13 b** (col. 2, lines 4-5 and 56-60, and col. 3, lines 5-8). Thus, the air flow is along the *surface* of grooves, not through the grooves. In other words, the grooves of Suzuki ‘743 are not slotted “openings” which admit gas inside annular ground electrode **2**.

Accordingly, on this record, we are of the opinion that one of ordinary skill in this art would not have been motivated to modify the igniter with “openings” known in the prior art as acknowledged by appellant in the specification, by replacing the “openings” thereof with the closed grooves of the igniter plug of Suzuki ‘743 because of the difference in manner of operation as appellant argues in the brief. Furthermore, we determine that even if one of ordinary skill in this art would have combined the acknowledged prior art igniter with the igniter plug by Suzuki ‘743, the result would have been the use of grooves instead of “openings” in the tubular shield of the prior art igniter, which is not the claimed igniter encompassed by the appealed claims. *See Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1050-54, 5 USPQ2d 1434, 1438-41 (Fed. Cir. 1988). Therefore, we determine that the examiner has not established a *prima facie* case of obviousness of the claimed igniter encompassed by the appealed claims over the combined teachings of the applied prior art, and thus, we reverse the grounds of rejection which are both based on this combination of references.

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