

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEFAN GEISLER, KARL H. SCHWEITZER, HELMUT BEYKIRCH,
GERT LANGER and UDO WERNER

Appeal No. 1999-0046
Application No. 08/442,103

ON BRIEF

Before FRANKFORT, STAAB, and NASE, Administrative Patent Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 34-72, all the claims currently pending in the application. An amendment filed subsequent to the final rejection on December 11, 1997 (Paper No. 10) has been refused entry. See the advisory letter mailed January 14, 1998 (Paper No. 11).

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Appellants' invention pertains to a heat exchanger, and in particular to a heat exchanger having distribution canals of equal length and similar cross-section and heat exchanger tubes of equal length and similar cross-section to ensure even distribution and flow of the medium to be heated. Claim 34, the sole independent claim on appeal, is illustrative of the claimed subject matter. A copy thereof can be found in an appendix to appellants' main brief.

The references relied upon by the examiner in support of the rejections are:¹

Jenkins	2,181,486	Nov. 28, 1939
Singh	3,513,908	May 26, 1970
Plaschkes	4,924,938	May 15, 1990
Cox et al. (Cox)	4,999,102	Mar. 12, 1991
Hagemeister	5,058,663	Oct. 22, 1991
Meijburg	5,246,062	Sep. 21, 1993
Trage et al. (Trage)	5,301,746	Apr. 12, 1994
Thunes(Norway)	28,388	Nov. 05, 1917
Austrian Patent (AP)	211,796	Nov. 10, 1960

¹Our understanding of the Norwegian and Austrian patents cited by the examiner against the claims is derived from translations thereof prepared in the PTO, copies of which are enclosed with this opinion for appellants' convenience.

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The following rejections under 35 U.S.C. § 103 are before us for review:²

(a) claims 34-43, 48, 49, 51, 52, 54 and 64-67, unpatentable over Meijburg in view of Austrian Patent 211,796 (hereinafter, AP);

²The final rejection (pages 9-10) also included a rejection of claims 55 and 57 under 35 U.S.C. § 112, second paragraph. On pages 1-2 of the main brief, appellants refer to an amendment being filed concurrently with the main brief to overcome this rejection. In addition, the appendix to the main brief includes copies of claims 55, 57 and 61 as they would appear had the amendment filed subsequent to the final rejection on December 11, 1997 (Paper No. 10) been entered. We have searched the record in vain for a separate amendment filed concurrently with the main brief. Notwithstanding this circumstance, the examiner's answer states that (1) "[t]he appellant's [sic] statement of the status of the amendments after final rejection contained in the brief is correct" (answer, page 2), (2) "[t]he copy of the appealed claims contained in the Appendix to the brief is correct" (answer, page 2), and (3) "[e]ntry of the amendments to claims 55 and 57 have been entered to overcome the rejection under 35 U.S.C. § 112" (answer, page 10). Since the rejection of claims 55 and 57 under 35 U.S.C. § 112, second paragraph, contained in the final rejection has not been repeated in the answer, it is presumed to have been withdrawn. *Ex parte Emm*, 118 USPQ 180 (Bd. App. 1957). Furthermore, in light of the circumstances recounted above, the versions of claims 55, 57 and 61 contained in the appendix to appellants' main brief are presumed to be the correct version thereof. However, upon return of this application to the examiner's jurisdiction, steps should be taken to confirm the changes to claims 55, 57 and 61 effected by appellants' main brief by placing in the record a separate paper formalizing these changes.

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(b) claims 44, 47, 58 and 60, unpatentable over Meijburg in view of AP, and further in view of Hagemeister;

(c) claims 45, 46, 58 and 59, unpatentable over Meijburg in view of AP, and further in view of Singh;

(d) claims 50 and 68-72, unpatentable over Meijburg in view of AP, and further in view of Cox;

(e) claims 53 and 55, unpatentable over Meijburg in view of AP, and further in view of Jenkins;

(f) claims 56 and 57, unpatentable over Meijburg in view of AP, and further in view of Thunes;

(g) claim 61, unpatentable over Meijburg in view of AP, and further in view of Trage; and

(h) claims 62 and 63, unpatentable over Meijburg in view of AP, and further in view of Plaschkes.

Reference is made to appellants' main and reply briefs (Paper Nos. 12 and 15) and to the examiner's answer (Paper No. 14) for the respective positions of appellants and the examiner regarding the merits of these rejections.³

³On pages 9 and 10 of the main brief, appellants attempt to raise as an issue in this appeal the requirement of the

As a preliminary matter, we observe that independent claim 34 calls for at least one bundle of plural tubes, "the at least one bundle [of plural tubes] being of equal length and of similar cross-section," and plural distribution canals connected to the at least one bundle of tubes, "the distribution canals being of equal length and of similar cross-section as *the plural tubes*" (emphasis added). Consistent with appellants' disclosure, we interpret this claim language as meaning that the plural tubes of the at least one bundle have the characteristic of being of equal length and similar cross-section, and that the distribution canals likewise have the characteristic of being of equal length and similar cross-section.⁴

examiner to amend the drawings to illustrate features called for in claims 56 and 57. Matters within the examiner's discretion, such as objections to the drawings, are not subject to our review. Rather, such matters may be resolved by petition to the Commissioner under 37 CFR § 1.181.

⁴ Appellants' statement that claim 34, points out that "the distribution canals *and* the plural tubes *all* have equal lengths and similar cross-sections" (main brief, page 13; emphasis added) is noted. To the extent this statement represents appellants' opinion that claim 34 requires that the plural tubes and distribution canals are all of equal length and similar cross-section, we simply do not agree.

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Considering first the examiner's rejection of claims 34-43, 48, 49, 51, 52, 54 and 64-67 as being unpatentable over Meijburg in view of AP, the essence of the rejection is the examiner's determination that it would have been obvious to one of ordinary skill in the art "to employ in Meijburg a central inlet feeding distribution canals [sic] for the purpose of providing uniform heat exchange as recognized by AP" (answer, page 4). Precisely how or why distribution canals of the type recognized by AP are to be "employed" in Meijburg is not spelled out by the examiner, although we are informed by the examiner on page 4 of the answer that "[s]ince Meijburg and AP are both from the same field of endeavor, the purpose disclosed by AP would have been recognized in the pertinent art of Meijburg."

We shall not sustain this rejection. At the outset, we observe that the manner in which Meijburg and AP operate is fundamentally different in that in Meijburg the medium to be heated flows back and forth through the heat exchanger in a number of passes, whereas in AP the medium flowing through the heat exchanger flows in a single pass therethrough. Accordingly, employing AP's distribution canals in Meijburg

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would appear to fundamentally alter the way in which Meijburg's heat exchanger operates for no apparent reason other than to meet the terms of the claims. In this regard, the examiner's observation that Meijburg and AP are both from the same field of endeavor (presumably, heat exchangers) does not suffice as a reason for indiscriminately "employing" features of one in the other without regard for the consequences that would result. Further, an objective of Meijburg is to provide a heat exchanger that may be operated at a lower capacity at certain times (column 1, lines 36-55). To this end, Meijburg's heat exchanger is provided with a valve arrangement in the inlet manifold that bypasses certain of the tubes 8 to shorten the heat exchange flow path of the medium to be heated (column 2, lines 54-60). It appears to us that providing a network of distribution canals of the type disclosed by AP in Meijburg would render Meijburg's bypass arrangement, at best, unsuitable for its intended function, thus presenting a strong *disincentive* to the sort of modification proposed by the examiner. Under these circumstances, it cannot be said that the proposed modification of Meijburg in view of AP would have been obvious

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to one of ordinary skill in the art. *Ex parte Rosenfeld*, 130 USPQ 113, 115 (Bd. App. 1961).

One of the strongest reasons for non-combinability of references exists when the teachings of one of the proposed references flies in the face of the teachings of the other and would be in contradiction thereof. Such is the case with respect to Meijburg and AP as discussed above. As stated by our court of review in *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir. 1988), "it is impermissible to use the claims as a frame and the prior art references as a mosaic to piece together a facsimile of the claimed invention." In our opinion, this is exactly what the examiner has done in arriving at the subject matter of claim 34. We are therefore unable to agree with the examiner that one of ordinary skill in the art would have arrived at the subject matter of claim 34, or claims 35-43, 48, 49, 51, 52, 54 and 64-67 that depend therefrom, based on the teachings of Meijburg and AP.

With respect to the remainder of the standing rejections under § 103 (rejections (b) through (h)), each of these

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rejections is built upon the examiner's foundation Meijburg/AP combination. We have carefully reviewed each of the additional references relied upon by the examiner in these rejections but find nothing therein which overcomes the fundamental deficiencies of Meijburg and AP discussed above. Accordingly, we also shall not sustain any of rejections (b) through (h).

The decision of the examiner is reversed.

REVERSED

CHARLES E. FRANKFORT)
Administrative Patent Judge)

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APJ STAAB

APJ FRANKFORT

APJ NASE

DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s):
Prepared: July 16, 2001

Draft Final

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PALM / ACTS 2 / BOOK
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