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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MICHAEL JOHN ERNEST FRYE, SOREN INGEMANN JENSEN, and PHILIP MCINTYRE

Appeal 2011-012377
Application 11/569,302
Technology Center 1700

Before BRADLEY R. GARRIS, RICHARD E. SCHAFER, and TERRY J. OWENS, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1, 2, 4, 6-16, 20-23, and 25-32. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM-IN-PART.

Appellants claim a filter 200 comprising a distensible member 212 and a plurality of fibers 211, whereby when the distensible member is distended the fibers are compressed against the filter housing to create a graduated filter matrix, "and in which recesses or ridges are provided on the surface of the distensible member" (claim 1; Figs. 2-4). Appellants also claim a method of operating a filter having a distensible member and a plurality of fibers secured at a first end of the filter housing which comprises passing a fluid to be filtered so as to remove solid material from the fluid by passing the fluid from the first end to the second end of the filter housing (claim 23).

Representative claims 1 and 23, the only independent claims on appeal, read as follows:

> 1. A filter comprising a filter housing having an inlet end and an outlet end, a distensible member extending longitudinally of the housing, and a plurality of fibers extending longitudinally of the housing and being secured at the inlet end, whereby when the distensible member is distended the fibers are compressed against the housing to create a graduated filter matrix between the inlet end and a pinch area between the distensible member and an inner surface of the housing, and in which recesses or ridges are provided on the surface of the distensible member.
>
> 23. A method of operating a filter having a filter housing with a first end and a second end, a distensible member extending longitudinally of the housing, and a plurality of fibers

> extending longitudinally of the housing and being secured at the first end; the method comprising distending the distensible member to compress the fibers against the housing to create a graduated filter matrix between the first end and a pinch area between the distensible member and an inner surface of the housing; and passing a fluid to be filtered from the first end to the second end; wherein passing the fluid includes passing the fluid to remove solid material from the fluid by passing the fluid from the first end to the second end.

Under 35 U.S.C. § 103(a), the Examiner rejects:

claims 1, 2, 4, 6-11, 13-16, 20, 21, and 23 as unpatentable over Fanqing (US 4,851,136, issued Jul. 25, 1989) in view of Higgins (US 6,180,001 B2, issued Jan. 30, 2001);

claims 12, 20, 21, and 25-31 as unpatentable over Fanqing, Higgins, and Boye (US 7,104,530 B2, issued Sep. 12, 2006); and

claims 22 and 32 as unpatentable over Fanqing, Higgins, Inacio [US 4,917,797, issued Apr. 17, 1990), and Muller (US 4,219,420, issued Aug. 26, 1980).

The Examiner concedes that the distensible member of Fanqing's filter does not have recesses or ridges as required by independent apparatus claim 1 (Ans. 3) but concludes that it would have been obvious to provide this filter with a distensible member having ridges in view of the ridges or projections 161 on distensible member or diaphragm 153 of the Higgins filter (*id.* at 4).

In contesting this obviousness conclusion, Appellants argue that the filters of Fanqing and Higgins are substantially different and accordingly that the teachings of these references would not have been combined in the manner proposed by the Examiner (Br. 6). In support of this argument, Appellants correctly point out that projections 161 on Higgins' diaphragm

153 are designed for filtering fluid which passes in a direction perpendicular to the diaphragm face as opposed to the parallel filtering flow in Fanqing (*id.*). Appellants also correctly point out that projections 161 are designed for mating with corresponding projections 82 on plate 81 of the Higgins filter whereas the filter of Fanqing contains no such plate or projections (*id.*).

Appellants' argument is well taken and significantly has not been rebutted by the Examiner in the Answer (*see* Ans. 8). Therefore, we find this argument to be persuasive and reverse each of the Examiner's § 103 rejections of independent apparatus claim 1 and apparatus claims 2, 4, 6-16, and 20-22 which ultimately depend from claim 1.

Concerning the rejection of independent method claim 23, Appellants' sole argument is that Fanqing, even if combined with Higgins, fails to disclose the claim 23 requirement of removing solid material from fluid by passing the fluid from a first housing end, at which a plurality of fibers are secured, to a second housing end (Br. 8-9).

However, Fanqing's Figure 3 filter method, which is explicitly cited by the Examiner (Ans. 3, 8), removes solid material from fluid by passing the fluid from a first housing end 4 to a second housing end 3 wherein fiber bundles 11 are secured at the first end via ring 20 and screws 21 (Fig. 3, col. 5, ll. 30-61). For this reason, we find no convincing merit in Appellants' argued distinction of claim 23 over Fanqing.

We also find no persuasive merit in Appellants' unembellished argument that Fanqing, even if combined with Higgins and Boye, fails to disclose a step of releasing the distensible member as required by dependent method claims 25 and 26 (Br. para. bridging 10-11). The Examiner explicitly finds that the claimed releasing step is disclosed by Fanqing in

claim 3 (Ans. 6). Appellants do not specifically address and therefore fail to reveal error in this finding.

Under the circumstances recounted above, we sustain the Examiner's § 103 rejections of method claims 23, 25, and 26.

In rejecting method claims 27-31 as unpatentable over Fanqing, Higgins, and Boye, the Examiner concludes that it would have been obvious to provide the filtering method of Fanqing with the features required by these claims (Ans. 7). Appellants argue that these claims are patentable over the applied references (Br. 11-12, 14), and we agree. In the rejection of these claims, the Examiner has failed to specifically identify any disclosure of the claimed features in the applied references to Fanqing, Higgins, and Boye[1]. It follows that the Examiner's obviousness conclusions regarding these features are mere conclusory statements.

Because "[r]ejections on obviousness grounds cannot be sustained by mere conclusory statements" (*In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), quoted with approval in *KSR Int'l. Co. v. Teleflex Inc.* 550 U.S. 398,

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[1] In the Response to Argument section of the Answer, the Examiner relies on the non-applied reference to Muller as disclosing at least some of the features required by claims 27-31 (Ans. 10-11). We will not consider Muller in assessing the rejection of these claims because it is not included in the statement (or body) of this rejection. *See In re Hoch*, 428 F.2d 1341, 1342 n.3 (CCPA 1970). Similarly, in the Response to Argument section of the Answer, the Examiner states that Boye "teaches filtering the [sic] while providing a gas and gas bubbles formation and adapting the fil[t]er inlet in connection with a source of gas (column 8, lines 21-38, element 412)" (Ans. 10). Significantly, the Examiner has not cited this teaching in the rejection itself and has not explained in either the rejection or the Response to Argument how this teaching supports an obviousness conclusion for any of claims 27-31. For these reasons, the belatedly-identified teaching of Boye fails to support the obviousness rejection under review.

417-18 (2007)), we will not sustain the Examiner's § 103 rejection of method claims 27-31 as unpatentable over Fanqing, Higgins, and Boye.

Finally, we also will not sustain the Examiner's § 103 rejection of method claim 32 as unpatentable over Fanqing, Higgins, Inacio, and Muller. The Examiner concludes that it would have been obvious to provide the filter of Fanqing's method with the claimed feature of at least two serially arranged distensible members in view of Inacio[2] (Ans. 7-8). Appellants reasonably argue that the Examiner's obviousness conclusion is improper because Inacio's teaching relates to fluid flowing perpendicular to the longitudinal axis of the fibers and therefore is inapplicable to Fanqing's method wherein fluid flows parallel not perpendicular to the longitudinal axis (Br. para. bridging 13-14). Based on the record before us, this argument is persuasive especially since it has not been rebutted by the Examiner in the Answer (*see* Ans. 11).

For the above stated reasons, we have sustained the rejections of claims 23, 25, and 26 but not the rejections of remaining claims 1, 2, 4, 6-16, 20-22, and 27-32.

The decision of the Examiner is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a).

AFFIRMED-IN-PART

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[2] In the rejection of claim 32, the Examiner identifies certain features said to be taught by the Muller reference (Ans. para. bridging 7-8). However, these features are unrelated to the serially-arranged feature of the rejected claim.

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