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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte WILLIAM H. WYNN[1]

Appeal 2015-006038
Application 12/926,362
Technology Center 2800

Before BRADLEY R. GARRIS, MARK NAGUMO, and LILAN REN, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 4, 6–17, and 19–26. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM.

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[1] The real party in interest is identified as Endress + Hauser Conducta Gesellschaft fur Mess- und Regeltechnik mbH +Co. KG. App. Br. 2.

Appellant claims an optical sensor utilizing a disposable flow cell 1 (independent claims 4, 13, 20, and 23, Fig. 2). In one embodiment, the optical sensor may include an optical window 10, 11 sealed into central apertures of end walls 6, 7 of housing components 2, 3 wherein the optical window comprises a material that is transparent for the light emitted by a light source 13 of the sensor (claim 4, Fig. 2). In another embodiment, the optical sensor may include a cell body 16 with two openings and two line connectors each comprising an adapter portion 35 comprising a plate with a circumferential shoulder mating with at least one of the openings of the cell body (claim 13, Figs. 4–5).

A copy of representative claims 4 and 13, taken from the Claims Appendix of the Appeal Brief, appears below.

> 4. An optical sensor utilizing a disposable flow cell, comprising:
>
> a first housing component comprising a first end wall, an opposing second end wall and at least one side wall extending between the first and second end wall;
>
> a second housing component comprising a first end wall, an opposing second end wall and at least one side wall extending between the first and second end wall;
>
> the second end walls of said first and second housing components having a central aperture;
>
> a removable light source assembly mounted to the first end wall of said first housing component;
>
> a removable detector assembly mounted to the first end wall of said second housing component; and
>
> the disposable flow cell comprising a cell body, an inlet tube and an outlet tube providing a flow passageway through the cell body extending between the inlet tube and the outlet tube, wherein:

when the second end walls of said first and second housing components are in abutting engagement;

said light source assembly is positioned opposite to and facing the detector assembly and an optical pathway extends along an axis between the light source assembly and the detector assembly passing through the central apertures of the first and second housing components;

said first and second housing components accommodate the cell body and the inlet and outlet tube in a space formed by corresponding recesses in the second end walls of said first and second housing components, wherein the flow passageway runs substantially perpendicular to the optical pathway: and

an optical window is sealed into at least one of the central apertures of the second end walls of said first and second housing components, the optical window comprising a material, that is transparent for light emitted by a light source of said light source assembly.

13. An optical sensor utilizing a disposable flow cell, the optical sensor comprising:

a light source and a detector, wherein the light source emits light along an optical pathway extending between the light source and the detector, the optical pathway passing through the disposable flow cell, the disposable flow cell comprising:

a hollow cell body with two openings at opposite ends of said cell body, and two line connectors each comprising an adapter portion comprising a plate with a circumferential shoulder mating with at least one of the openings of the cell body, the removable adapter portion being connected to said cell body in a fluid-tight manner.

The Examiner rejects claim 4 under 35 U.S.C. § 102(b) as anticipated by Anton et al. (US 4,989,974; Feb. 5, 1991) ("Anton") (Final Action 2–5).

The Examiner rejects claims 6–12, 17, and 19–26 under 35 U.S.C. § 103(a) as unpatentable over Anton alone or in combination with additional prior art (*id.* at 5–11 and 14–17).

Finally, the Examiner rejects claims 13–15 under 35 U.S.C. § 103(a) as unpatentable over Takahashi et al. (US 5,414,508; May 9, 1995) ("Takahashi") in view of Shultz (US 3,418,061; Dec. 24, 1968) (*id.* at 11–12) and rejects claim 16 over these references in combination with an additional prior art reference (*id.* at 13).

Appellant does not present separate arguments specifically directed to the dependent claims under rejection (App. Br. 15–19). Therefore, the dependent claims will stand or fall with their parent independent claims 4, 13, 20, or 23.

<u>The Rejections based on Anton</u>

We sustain these rejections for the reasons expressed in the Final Action, the Answer, and below.

Concerning the § 102 rejection of independent claim 4, Appellant argues that Anton discloses open passages rather than the claimed optical window (App. Br. 15–17).

In response, the Examiner explains that Anton discloses an embodiment having an optical window in the form of an optical fiber

thereby satisfying the optical window limitation of claim 4 (Ans. 2–3 (citing Anton disclosures in col. 6 and claims 19–20)).

Appellant replies by contending that "[p]ersons of ordinary skill in the art would not consider an optical fiber to be a window" (Reply Br. 2) and that "one aim of the invention, titled '***Miniature*** UV Sensor Utilizing a ***Disposable*** Flow Cell' (emphasis added), is make the cell compact and easy to use [whereas] . . . *Anton's* use of an optical fiber is contrary to these aims" (*id.*).

Appellant does not embellish this contention with any explanation why an artisan would not consider an optical fiber to be a window or why an optical fiber would be contrary to the goal of making a cell compact, easy to use, and disposable. Similarly, Appellant fails to identify any disclosure in the Specification that evidences interpreting the claimed optical window to include an optical fiber is not reasonable and consistent with the Specification. For these reasons, Appellant does not show error in the Examiner's finding that the optical fiber of Anton satisfies the optical window limitation of claim 4.

Appellant's sole argument regarding the § 103 rejections of independent claims 20 and 23 is that Anton does not disclose or suggest the optical window limitation discussed above (App. Br. 17–18).

However, independent claims 20 and 23 do not contain any such limitation as correctly observed by the Examiner (Ans. 4–5) and not disputed by Appellant (*see generally* Reply Br.).

The § 103 Rejections based on Takahashi

We also sustain these rejections for the reasons given by the Examiner and below.

In rejecting independent claim 13, the Examiner concludes that it would have been obvious "to provide the plate of Takahashi . . . with a circumferential shoulder [as taught by Shultz], in order to ensure an air tight seal" (Final Action 12).

Appellant argues "there is no need or motivation to replace *Takahashi's* parts 71 and 72 by a cap such as the one used in *Shultz's* flow cell . . . in order to ensure an air tight seal, because a liquid tight seal is all that is needed for *Takahashi's* flow cell and because *Takahashi's* flow cell already fulfills this requirement" (App. Br. 18–19).

The Examiner responds to this argument by explaining that an artisan would have been motivated to provide Takahashi with the air tight seal taught by Shultz because "an air tight seal allows either a pump or a vacuum [to] be used for filling an optical cell . . . [whereby] an air tight seal is an improvement over a liquid tight seal" (Ans. 6). Notwithstanding the submission of a Reply Brief, Appellant does not address, and therefore does not show error in, the Examiner's explanation. Based on the record before us, the Examiner's proposed combination of Takahashi and Shultz appears to be no more than the predictable use of a prior art element (i.e., an air tight seal via a circumferential shoulder) according to its established function (i.e.,

filling an optical cell). *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007).

Conclusion

The decision of the Examiner rejecting claims 4, 6–17, and 19–26 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED