

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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 ANDREAS MANZ
and
ELISABETH VERPOORTE

Appeal No. 94-2227
Application 07/797,500¹

HEARD: June 4, 1996

Before CALVERT and LYDDANE, Administrative Patent Judges and
CRAWFORD, Acting Administrative Patent Judge.

CRAWFORD, Acting Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the examiner's final rejection of claims 2, 3, 5 through 9, 11 through 15 and 17 through 22. Claim 10 has been canceled.

Appellants' invention is a detector cell for measuring the absorption of ultraviolet and/or visible radiation in substantially liquid samples. Claim 19 is representative of the subject matter on appeal:

¹ Application for patent filed November 22, 1991.

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19. A detector cell for measuring the absorption of ultraviolet and/or visible radiation in substantially liquid samples, comprising:

a) base part with a groove channel system including a channel piece which is defined by a base region surface and a top face surface, both of which surfaces reflect the measuring radiation, and

b) a lid part, including an inlet opening and outlet opening for the introduction and removal of a sample, and an entry opening and exit opening for ultraviolet and/or visible measuring radiation,

wherein said lid part and base part are cooperatively aligned to define an interaction region wherein the sample may be introduced from the inlet opening, pass through the groove channel system and exit the outlet opening, and also wherein the measuring radiation may be introduced from the entry opening, pass through the channel piece of said groove channel system and exit the exit opening.

All the claims stand or fall together. (Appeal Brief at page 2).

THE REFERENCES

The following references were relied on by the examiner:

Pace	4,908,112	Mar. 13, 1990 (filed on Jun. 16, 1988)
Japanese reference	JP1-97841	Apr. 17, 1989
Watanabe et al. (Watanabe) ²		

THE REJECTIONS

Claims 2 through 3, 5 through 9, 11 through 15 and 17 through 22 stand rejected under 35 U.S.C. § 103 as being

² Translation attached.

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unpatentable over Watanabe in view of Pace. The examiner has withdrawn the rejection of claims 2, 11 and 21 under 35 U.S.C. § 112, second paragraph in view of an amendment filed by the appellants on May 25, 1995. (Supplemental Examiner's Answer, page 2).

OPINION

In reaching our conclusions on the issues raised in this appeal, we have carefully considered appellants' specification and claims, the applicable law, the applied references and the respective viewpoints advanced by the appellants and the examiner. As a consequence of our review, we have made the determination that the examiner's rejection should not be sustained. Our reasons for this determination follow.

Watanabe describes an absorptiometer or detector cell for measuring the absorption of radiation in liquids. (Page 1, lines 8-9). The detector cell includes a base part 4 with a groove channel system 6 which includes a channel piece. The channel piece is defined by a base region surface and a top surface (Fig. 2). Both the base region surface and the top face surface reflect radiation (Page 6, lines 16-17). A lid part 5 has an inlet opening 1 and outlet opening 9 for the introduction and removal of a sample. A semiconductor laser 3 is provided which emits radiation which passes through channel 6 to a detector 8. The lid part 5 and the base part 4 are cooperatively

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aligned to define an interaction region 6 wherein the sample may be introduced from the inlet opening 1, pass through the groove channel system and exit the outlet opening 9. Watanabe does not disclose "an entry opening and exit opening for ultraviolet and/or visible measuring radiation," as recited in claim 19.

The examiner has cited Pace for teaching an entry opening and exit opening for ultraviolet and/or visible measuring radiation. Pace discloses a cell as depicted in Fig. 5 wherein an incident laser beam passes through a glass cover to a channel to cause labeled molecules disposed in the channel to fluoresce (col. 8, lines 16-23). Pace also discloses that the laser beam can be directed to the channel by an optical fiber positioned above the glass cover (col. 8, lines 45-54). The examiner stated:

Pace discloses the introduction of measuring radiation through a lid part into a channel system (col. 8, lines 16-21, 45-54). Pace further discloses openings in the lid part (col. 7, lines 49-50). It would have been obvious to one of ordinary skill in the art that Pace would have radiation openings in the lid part to ensure that the radiation is effectively directed to the desired region within the channel system to allow for the most effective measuring. It would have [sic, have] been obvious to one of ordinary skill in the art to provide the openings and lid radiation of Pace in JP1-97841 to allow for use with different radiation sources and for different placement of the radiation source to allow for the most effective measuring dependent on the reaction to be measured. (Examiner's Answer, page 4).

Appellants argue:

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Pace also does not disclose any entry and exit ports for the measuring radiation. The lid of Pace is made of transparent glass, and the excitation radiation is introduced into the channel system directly through the glass lid, just as emitted radiation of the excited labeled molecules is emitted directly through the glass lid. While Pace discloses optical fibers or light guides that are glued to the glass lid, there is no mention of any entry or exit ports in the glass lid for the measuring radiation. Again, there is no need for such ports because a glass lid is transparent. Therefore, contrary to the Examiner's assertion, Pace would not have provided any motivation to one of ordinary skill in the art to provide the absorptiometer of Pace with entry and exit openings for the measuring radiation. (Reply Brief, pages 2-3).

We will not sustain this rejection.

The examiner has failed to set forth a prima facie case of obviousness. It is the burden of the examiner to establish why one having ordinary skill in the art would have been led to the claimed invention by the expressed or implied suggestions found in the prior art. See In re Sernaker, 702 F.2d 989, 994, 217 USPQ 1, 5 (Fed. Cir 1983).

We agree with the appellants that there is no teaching in Pace of forming inlet and outlet openings in a lid for the entry and exit of radiation. Further, we find that there is no suggestion in Pace to include said exit and entry openings because the glass lid in Pace is transparent and no exit or entry

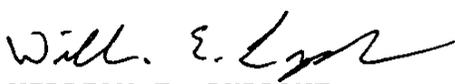
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openings are necessary. As such we do not find that Pace would have suggested modifying the Watanabe cell to include entry and exit openings in the lid for radiation.

The remaining claims on appeal are dependent upon claim 19 and therefore include the limitation that the lid has entry and exit openings for radiation and thus, we will not sustain the rejection as to these claims.

The examiner's rejection of claims 2, 3, 5 through 9, 11 through 15 and 17 through 22 under 35 U.S.C. § 103 as unpatentable over Watanabe in view of Pace is reversed.

REVERSED


IAN A. CALVERT)
Administrative Patent Judge)

WILLIAM E. LYDDANE)
Administrative Patent Judge)

MURRIEL E. CRAWFORD, Acting)
Administrative Patent Judge)

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