

05.01.2024

AMENDMENT

(Amendment under Article 11 of the Law)

To: Examiner of the Patent Office

1. Identification of the International Application

PCT/JP2023/021153

2. Applicant

Name: AMANO Co., Ltd.

Address: 1381-11, Ikeda, Iwata-city,
Shizuoka 4380805 Japan

Country of nationality: JAPAN

Country of residence: JAPAN

3. Agent

Name: OSHINO Hiroshi

Address: 3F, Toranomom Toyo Kyodo Bldg.,
13-3, Toranomom 1-chome,
Minato-ku, Tokyo 1050001 Japan

4. Item to be Amended: Claims

5. Subject Matter of Amendment

See the attached sheet. An amendment was made to amend claim 14 and add claim 15. The basis of the amendment of claim 14 is the description "the housing portion 21 has a substantially rectangular shape in horizontal cross-section" in the specification (para. 0025) and Fig. 5(d) in the drawings. The basis of added claim 15 is the description "the projection 24 of the optical cell 2 is formed along the housing portion 21 from the top portion to the bottom portion thereof (i.e., a plate or wing-shaped member)" in the specification (para. 0045) and Fig. 5(d) in the drawings.

6. List of Attached Documents

Replacement sheets: page 19 and 20 of the claims

CLAIMS

[Claim 1]

[Claim 2]

[Claim 3]

[Claim 4]

[Claim 5]

[Claim 6]

[Claim 7]

A concentration measuring apparatus for measuring concentration of a sample by absorptiometry, comprising an optical cell, the optical cell comprising a housing portion having a longitudinal direction and a short direction in horizontal cross-section, and a projection extending outward from a side along a longitudinal direction of the housing portion along a short direction, wherein the sample is housed in the optical cell, wherein the concentration measuring apparatus comprises a receiving portion for receiving the optical cell and including a recess for receiving the projection only in a predetermined direction.

[Claim 8]

The concentration measuring apparatus of claim 7 comprising a light emitting portion and a light receiving portion disposed at a position facing a side along a short direction of the housing portion, so as to be configured to irradiate light onto a sample along a longitudinal direction of the housing portion and to receive light transmitted through the sample.

[Claim 9]

The concentration measuring apparatus of claim 8 comprising a sample temperature sensor at a position facing a side along a longitudinal direction of the housing portion.

[Claim 10]

The concentration measuring apparatus of claim 9 disposed so that a height of a light path from the light emitting portion to the light receiving portion is positioned within a height range of a measurement target range of the sample temperature sensor.

[Claim 11]

The concentration measuring apparatus of claim 9, wherein the sample temperature sensor is provided to face a side opposite to a side on which the projection is formed.

[Claim 12]

The concentration measuring apparatus of claim 8 comprising a cell insertion sensor provided below the light emitting portion and the light receiving portion and disposed at a position facing the housing portion,

wherein, after insertion of the optical cell is detected by the cell insertion sensor, the light emitting portion and the light receiving portion execute a process to acquire transmittance or absorbance information of the optical cell itself as a reference.

[Claim 13]

The concentration measuring apparatus of claim 9 comprising a sample detection sensor provided above the light emitting portion and the light receiving portion and disposed at a position facing the housing portion,

wherein, after lapse of a predetermined time period after the sample detection sensor detects injection of a sample into the optical cell, an acquisition process of temperature information by the sample temperature sensor, and an acquisition process of transmittance or absorbance information of a sample by the light emitting portion and the light receiving portion is executed.

[Claim 14] (Amended)

An optical cell for housing a sample in a concentration measuring apparatus for measuring concentration of the sample by absorptiometry, the optical cell comprising:

a housing portion having a longitudinal direction and a short direction in horizontal cross-section and having a substantially rectangular shape,

a projection extending outward from a side along a longitudinal direction of the housing portion along a short direction,

an injection inlet portion formed at an upper end of the optical cell with a cross-sectional area of horizontal cross-section formed larger than the housing portion, and

an introducing portion positioned between the injection inlet portion and the housing portion with a cross-sectional area of horizontal cross-section formed larger than the housing portion,

wherein a side of the housing portion and the introducing portion opposite to a side on which the projection is formed is formed as a continuous plane.

[Claim 15] (New)

The optical cell of claim 14, wherein the projection is a plate or wing-shaped member.