Claims

Claim 1

A sample separating instrument, for use in emission transfer, which includes a separation medium and a holding section,

the separation medium, in which a sample is electrophoresed, having an end part from which the sample is emitted and transferred to a transfer membrane that is moved in a state where the transfer membrane is in contact with the end part of the separation medium and wherein the transfer membrane is under a tensile force,

the holding section, which holds the separation medium, having an opening on an end part side,

the separation medium having an exposed part which is exposed outside the holding section through the opening,

the exposed part having an extending part which extends on an edge part of the holding section which edge part is located on a side of the opening, the sample separating instrument further comprising a fixing section for fixing the separation medium to the holding section, the fixing section being provided so as to be located between the edge part and the extending part.

Claim 2

The sample separating instrument as set forth in claim 1, wherein the fixing section includes an adhesive layer.

Claim 3

The sample separating instrument as set forth in claim 1, wherein the fixing section includes an uneven part formed on a surface of the holding section.

Claim 4

The sample separating instrument as set forth in claim 1, wherein the fixing section includes a porous layer formed on a surface of the holding section.

Claim 5

The sample separating instrument as set forth in claim 1, wherein the fixing section includes a film whose one surface adheres to a surface of the holding section and whose other surface adheres to the separation medium.

Claim 6

The sample separating instrument as set forth in claim 1, wherein the fixing section is provided so as to be further located between an inner surface of the holding section and the separation medium which is held in the holding section.

Claim 7

The sample separating instrument as set forth in claim 1, wherein:

the fixing section includes a porous membrane which is adhered to the holding section so as to cover the opening;

the porous membrane includes therein the separation medium; and

the separation medium which is included in the porous membrane is integrated with (i) the separation medium which is held in the holding section and (ii) the exposed part.

Claim 8

The sample separating instrument as set forth in claim 1, wherein:

the fixing section includes a depression formed in the edge part; and

part of the extending part which part is located on a holding section side is buried in the depression.

Claim 9

The sample separating instrument as set forth in claim 1, wherein the separation medium which is held in the holding section is tapered toward the opening.

Claim 10

The sample separating instrument as set forth in claim 9, wherein a width, in a lateral direction, of part of the separation medium which part is located in the opening is not more than 500 μm.

Claim 11

The sample separating instrument as set forth in claim 1, wherein an end part of the holding section which end part is located on an opening side has a notch.

Claim 12

The sample separating instrument as set forth in claim 11, wherein the notch is rounded.

Claim 13

The sample separating instrument as set forth in claim 11, wherein an end part of the extending part which end part is located on a notch side is rounded.

Claim 14

The sample separating instrument as set forth in claim 1, wherein:

the extending part extends, from the opening, on the edge part in a movement direction in which the transfer membrane is moved or in a direction opposite to the movement direction; and

a width by which the extending part extends from the opening is equal to or greater than a width, in a direction in which the extending part extends, of the opening.

Claim 15

A sample analyzing device comprising:

a sample separating instrument recited in claim 1;

an electrode via which an electric current is applied to the separation medium;

the transfer membrane; and

a moving section which moves the transfer membrane in a state where the transfer membrane is in contact with the end part of the separation medium.

Claim 16

A sample separating instrument, for use in emission transfer, which includes a separation medium and a holding section, the separation medium, in which a sample is electrophoresed, having an end part from which the sample is emitted and transferred to a transfer membrane that is moved in a state where the transfer membrane is in contact with the end part of the separation medium and wherein the transfer membrane is under a tensile force, the holding section, which holds the separation medium, having an opening on an end part side, the separation medium having an exposed part which is exposed outside the holding section through the opening, the exposed part having an extending part which extends on an edge part of the holding section which edge part is located on a side of the opening, wherein an end part of the holding section which end part is located on an opening side has a notch.

Claim 17

The sample separating instrument as set forth in claim 16, comprising a fixing section for fixing the separation

medium to the holding section, the fixing section being provided so as to be located between the edge part and the extending part.

Claim 18

The sample separating instrument as set forth in claim 17, wherein the fixing section includes an adhesive layer.

Claim 19

The sample separating instrument as set forth in claim 17, wherein the fixing section includes an uneven part formed on a surface of the holding section.

Claim 20

The sample separating instrument as set forth in claim 17, wherein the fixing section includes a porous layer formed on a surface of the holding section.

Claim 21

The sample separating instrument as set forth in claim 17, wherein the fixing section includes a film whose one surface adheres to a surface of the holding section and whose other surface adheres to the separation medium.

Claim 22

The sample separating instrument as set forth in claim 17, wherein the fixing section is provided so as to be further located between an inner surface of the holding section and the separation medium which is held in the holding section.

Claim 23

The sample separating instrument as set forth in claim 17, wherein the fixing section includes a porous membrane which is adhered to the holding section so as to cover the opening;

the porous membrane includes therein the separation medium; and

the separation medium which is included in the porous membrane is integrated with (i) the separation medium which is held in the holding section and (ii) the exposed part.

Claim 24

The sample separating instrument as set forth in claim 17, wherein the fixing section includes a depression formed in the edge part; and

part of the extending part which part is located on a holding section side is buried in the depression.

Claim 25

The sample separating instrument as set forth in claim 16, wherein the separation medium which is held in the holding section is tapered toward the opening.

Claim 26

The sample separating instrument as set forth in claim 25, wherein a width, in a lateral direction, of part of the

separation medium which part is located in the opening is not more than 500 μm.

Claim 27

The sample separating instrument as set forth in claim 16, wherein the notch is rounded.

Claim 28

The sample separating instrument as set forth in claim 16, wherein an end part of the extending part which end part is located on a notch side is rounded.

Claim 29

The sample separating instrument as set forth in claim 16, wherein the extending part extends, from the opening, on the edge part in a movement direction in which the transfer membrane is moved or in a direction opposite to the movement direction; and

a width by which the extending part extends from the opening is equal to or greater than a width, in a direction in which the extending part extends, of the opening.

Claim 30

A sample analyzing device comprising:

a sample separating instrument recited in claim 16;

an electrode via which an electric current is applied to the separation medium;

the transfer membrane; and

a moving section which moves the transfer membrane in a state where the transfer membrane is in contact with the end part of the separation medium.