The low-volatility liquid in the present invention is a substance that has a boiling point of 95°C or higher and is in a liquid state at normal temperature (20°C ± 15°C). Examples of such a low-volatility liquid include, for example, water, dimethylsulfoxide, glycerol, and phenol.

[0014]

The volatile liquid in the present invention is a substance that has a boiling point in the range of 50 to 95°C and is in a liquid state at normal temperature (20°C. ± 15°C), or a liquid that contains 10% or more of such substance. Examples of the substance that has a boiling point in the range of 50 to 95°C and is in a liquid state at normal temperature (20°C. ± 15°C) include acetonitrile, methanol, ethanol, acetone, toluene, isopropanol, hexane, butanol, cyclohexane, ethylene glycol, benzene, chloroform, acetaldehyde, triethylamine, phenol, naphthalene, formaldehyde, tetrahydrofuran, and ethyl acetate.

EFFECTS OF THE INVENTION

[0015]

In the processing method for volatile liquid according to the present invention, since a volatile liquid is sucked after sucking a low-volatility liquid less volatile than the volatile liquid and air (hereinafter referred to as pre-suction), the volume of an air layer above the volatile

low-volatility liquids are provided at positions lower than the pipettes 2 in correspondence with the respective pipettes 2.

[0024]

Examples of the volatile liquids accommodated in the volatile liquid containers 16 include liquids such as acetonitrile, methanol, ethanol, acetone, toluene, isopropanol, hexane, butanol, cyclohexane, ethylene glycol, benzene, chloroform, acetaldehyde, triethylamine, phenol, naphthalene, formaldehyde, tetrahydrofuran, and ethyl acetate, and liquids containing 10% or more of such liquids.

[0025]

Examples of the low-volatility liquids accommodated in the low-volatility liquid containers 18 include water, dimethylsulfoxide, glycerol, and phenol. The low-volatility liquids contained in the low-volatility liquid containers 18 are used when measuring off the above-mentioned volatile liquids, while sucking them out by the pipettes 2.

[0026]

The Control part 14 is configured to control the driving mechanism 12 so that the following operation is performed when the liquid is sucked. A series of operations for sucking liquid will be described with reference to the flowchart of Fig. 2 with Fig. 1

CLAIMS

1. A processing method for a volatile liquid using a pipette including a cylinder, a piston that slides in the cylinder, and a tip attached to a tip end of the cylinder, the tip including a suction/ejection port, the pipette performing suction and ejection of a liquid through the suction/ejection port of the tip in accordance with movement of the piston, the processing method comprising:

a low-volatility liquid suction step of sucking a low-volatility liquid that is less volatile than the volatile liquid through the suction/ejection port;

an air suction step of sucking air through the suction/ejection port after the low-volatility liquid suction step; and

a volatile liquid suction step of sucking the volatile liquid through the suction/ejection port after the air suction step.

2. The processing method according to claim 1, wherein the low-volatility liquid is any one of water, dimethyl sulfoxide, glycerol, and phenol.

3. The processing method according to claim 1 or 2, wherein the volatile liquid is any one of acetonitrile, methanol, ethanol, acetone, toluene, isopropanol, hexane, butanol,

of air through the suction/ejection port after the low-volatility liquid suction operation, and a volatile liquid suction operation of sucking a predetermined amount of the volatile liquid from the volatile liquid container after the air suction operation are performed in a course of sucking the volatile liquid by the pipette.

5. The liquid processing apparatus according to claim 4, wherein the low-volatility liquid is any one of water, dimethyl sulfoxide, glycerol, and phenol.

6. The liquid processing apparatus according to claim 4 or 5, wherein the volatile liquid is any one of acetonitrile, methanol, ethanol, acetone, toluene, isopropanol, hexane, butanol, cyclohexane, ethylene glycol, benzene, chloroform, acetaldehyde, triethylamine, phenol, naphthalene, formaldehyde, tetrahydrofuran, and ethyl acetate, or a liquid containing 10% or more of these.