CLAIMS

1. A resist liquid storage container configured to store a resist liquid to be used for photolithography, comprising:

a flexible bag portion including a receptacle portion configured to store the resist liquid;

an injection tube configured to communicate to the receptacle portion and configured to inject the resist liquid into the receptacle portion; and

a discharge tube configured to communicate to the receptacle portion and configured to discharge the resist liquid stored in the receptacle portion to an outside of the resist liquid storage container; and

a holding member configured to hold the injection tube and the discharge tube;

wherein the holding member is mounted on the bag portion under a state in which the injection tube and the discharge tube communicate to the receptacle portion; and

wherein the bag portion is provided with an engaging and holding portion configured to mount the holding member on the bag portion through engagement with the holding member.

2. A resist liquid storage container configured to store a resist liquid to be used for photolithography, comprising:

a flexible bag portion including a receptacle portion configured to store the resist liquid;

an injection tube configured to communicate to the receptacle portion and configured to inject the resist liquid into the receptacle portion; and

a discharge tube configured to communicate to the receptacle portion and configured to discharge the resist liquid stored in the receptacle portion to an outside of the resist liquid storage container; and

a holding member configured to hold the injection tube and the discharge tube;

wherein the holding member is mounted on the bag portion under a state in which the injection tube and the discharge tube communicate to the receptacle portion; and

wherein the holding member has a cylindrical shape including an upper surface portion and a side surface portion,

wherein the injection tube is held by the upper surface portion, and

wherein the discharge tube is held by the side surface portion.

3. A resist liquid storage container configured to store a resist liquid to be used for photolithography, comprising:

a flexible bag portion including a receptacle portion configured to store the resist liquid;

an injection tube configured to communicate to the receptacle portion and configured to inject the resist liquid into the receptacle portion; and

a discharge tube configured to communicate to the receptacle portion and configured to discharge the resist liquid stored in the receptacle portion to an outside of the resist liquid storage container; and

a holding member configured to hold the injection tube and the discharge tube;

wherein the holding member is mounted on the bag portion under a state in which the injection tube and the discharge tube communicate to the receptacle portion; and

wherein the injection tube in the receptacle portion has a distal end arranged so as to be positioned on the holding member side from a distal end of the discharge tube.

4. A resist liquid storage container configured to store a resist liquid to be used for photolithography, comprising:

a flexible bag portion including a receptacle portion configured to store the resist liquid;

an injection tube configured to communicate to the receptacle portion and configured to inject the resist liquid into the receptacle portion; and

a discharge tube configured to communicate to the receptacle portion and configured to discharge the resist liquid stored in the receptacle portion to an outside of the resist liquid storage container;

wherein the injection tube and the discharge tube are arranged so that a center axis of the injection tube and a center axis of the discharge tube are matched with each other, and

wherein the injection tube has a diameter larger than that of the discharge tube.

5. A resist liquid supply device, comprising:

a resist liquid storage container according to any one of claims 1 to 4;

a liquid bath configured to immerse the resist liquid storage container with a temperature regulating liquid to be filled into the liquid bath;

temperature regulating liquid circulating means for circulating the temperature regulating liquid filled into the liquid bath;

temperature control means for controlling a temperature of the filled temperature regulating liquid; and

supply means for supplying the resist liquid in the resist liquid storage container to a resist liquid application device.

6. A resist liquid application device, comprising:

a resist liquid storage container according to any one of claims 1 to 4;

a liquid bath configured to immerse the resist liquid storage container with a temperature regulating liquid to be filled into the liquid bath;

temperature regulating liquid circulating means for circulating the temperature regulating liquid filled into the liquid bath;

temperature control means for controlling a temperature of the filled temperature regulating liquid;

supply means for supplying the resist liquid in the resist liquid storage container to the resist liquid application device; and

a dropping nozzle configured to drop the resist liquid, which is supplied by the

supply means, onto a surface of a substrate.

7. A resist liquid preservation device, comprising:

a resist liquid storage container according to any one of claims 1 to 4;

a liquid bath configured to immerse the resist liquid storage container with a temperature regulating liquid to be filled into the liquid bath;

temperature regulating liquid circulating means for circulating the temperature regulating liquid filled into the liquid bath; and

temperature control means for controlling a temperature of the filled temperature regulating liquid.

8. A method of manufacturing a mask blank, comprising the steps of:

forming a thin film for pattern formation over a surface of a substrate; and

applying and fixing a resist liquid onto a surface of the thin film through use of a resist liquid application device,

wherein the method comprising the steps of:

circulating the resist liquid in a resist liquid storage container according to any one of claims 1 to 4 in which the resist liquid is stored through use of a discharge tube and an injection tube;

circulating a temperature regulating liquid in a liquid bath in which the resist liquid storage container is immersed;

controlling a temperature of the temperature regulating liquid in the liquid bath to a temperature suitable for application of the resist liquid; and

supplying the resist liquid at the temperature suitable for application of the resist liquid to the resist liquid application device.