Claims

1. A substrate storage container comprising:

a container body that stores substrates,

a lid that closes an opening of the container body, and

a valve body that controls gas flow to the container body,

wherein the valve body comprises:

a first cylindrical portion having a first end communicating with an outside of the container body,

a second cylindrical portion having a first end communicating with an interior of the container body and spaced apart from a second end of the first cylindrical portion,

a plug member positioned between the second end of the first cylindrical portion and a second end of the second cylindrical portion, and

an elastic body that covers at least the plug member and has an inner diameter equal to or smaller than an outer diameter of an entirety of the plug member,

wherein gas flow to the container body is controlled by close contact between the plug member and the elastic body.

2. The substrate storage container according to claim 1, wherein the elastic body has a substantially tubular shape having an internal passage, and the elastic body creates a seal between the first cylindrical portion and the plug member and between the plug member and the second cylindrical portion so that gas only flows through an internal passage of the first cylindrical portion, the internal passage of the elastic body, and an internal passage of the second cylindrical portion.

3. The substrate storage container according to claim 2, wherein when a positive pressure is applied to either the first cylindrical portion or the second cylindrical portion, the elastic body expands to form a gap with the plug member which allows gas to flow to the container body, and when a positive pressure is not applied to the

first cylindrical portion or the second cylindrical portion, the elastic body is in close contact with the plug member and gas flow to the container body is blocked.

4. The substrate storage container according to claim 2, wherein the first cylindrical portion is formed in a fixing cylinder fitted in a through hole formed in the container body,

wherein the second cylindrical portion is formed in a holding cylinder combined with the fixing cylinder, and

wherein the plug member is provided on either the fixing cylinder or the holding cylinder.

5. The substrate storage container according to claim 2, wherein the first cylindrical portion is formed in a fixing cylinder fitted in a through hole formed in the container body,

wherein the second cylindrical portion is formed in an inner lid cylinder connected to a holding cylinder combined with the fixing cylinder, and

wherein the plug member is provided on any one of the fixing cylinder, the holding cylinder, or the inner lid cylinder.

6. The substrate storage container according to claim 2, wherein the valve body has at least one filter that filters gas.

7. The substrate storage container according to claim 2, wherein the valve body is attached in a path of a gas flow path provided in the container body.

8. The substrate storage container according to claim 1, wherein when a positive pressure is applied to either the first cylindrical portion or the second cylindrical portion, the elastic body expands to form a gap with the

plug member which allows gas to flow to the container body, and when a positive pressure is not applied to the first cylindrical portion or the second cylindrical portion, the elastic body is in close contact with the plug member and gas flow to the container body is blocked.

9. The substrate storage container according to claim 8, wherein the first cylindrical portion is formed in a fixing cylinder fitted in a through hole formed in the container body,

wherein the second cylindrical portion is formed in a holding cylinder combined with the fixing cylinder, and

wherein the plug member is provided on either the fixing cylinder or the holding cylinder.

10. The substrate storage container according to claim 8, wherein the first cylindrical portion is formed in a fixing cylinder fitted in a through hole formed in the container body,

wherein the second cylindrical portion is formed in an inner lid cylinder connected to a holding cylinder combined with the fixing cylinder, and

wherein the plug member is provided on any one of the fixing cylinder, the holding cylinder, or the inner lid cylinder.

11. The substrate storage container according to claim 8, wherein the valve body has at least one filter that filters gas.

12. The substrate storage container according to claim 8, wherein the valve body is attached in a path of a gas flow path provided in the container body.

13. The substrate storage container according to claim 1, wherein the first cylindrical portion is formed in a

fixing cylinder fitted in a through hole formed in the container body,

wherein the second cylindrical portion is formed in a holding cylinder combined with the fixing cylinder, and

wherein the plug member is provided on either the fixing cylinder or the holding cylinder.

14. The substrate storage container according to claim 13, wherein the valve body has at least one filter that filters gas.

15. The substrate storage container according to claim 1, wherein the first cylindrical portion is formed in a fixing cylinder fitted in a through hole formed in the container body,

wherein the second cylindrical portion is formed in an inner lid cylinder connected to a holding cylinder combined with the fixing cylinder, and

wherein the plug member is provided on any one of the fixing cylinder, the holding cylinder, or the inner lid cylinder.

16. The substrate storage container according to claim 15, wherein the valve body has at least one filter that filters gas.

17. The substrate storage container according to claim 1, wherein the valve body has at least one filter that filters gas.

18. The substrate storage container according to claim 1, wherein the valve body is attached in a path of a gas flow path provided in the container body.