WHAT IS CLAIMED IS:

1. A gas transmission adapting device for an ion implanter, comprising:

a metal chamber coupled to a high voltage power source with high electrical potential, wherein multiple insulators are mounted a bottom of the metal chamber and are coupled to the high voltage power source with low electrical potential;

an electrically-insulated box mounted on the floor and located below the bottom of the metal chamber, wherein a product of a length of the electrically-insulated box and an internal pressure of the electrically-insulated box is larger than the maximum electrical potential difference for gas ionization between the first end and the second end of the electrically-insulated hard tube;

an electrically-insulated hard tube perpendicularly mounted in the electrically-insulated box and having a first end and a second end, wherein a product of a length of the electrically-insulated hard tube and an internal pressure in the electrically-insulated hard tube is larger than a maximum electrical potential difference for gas ionization between the first end and the second end of the electrically-insulated hard tube; ~~and~~

a first flexible pipe having a third end and a fourth end, wherein the third end is airtightly mounted through the electrically-insulated box and is connected to and communicates with the first end of the electrically-insulated hard tube, wherein the third end is connected to the first end of the electrically-insulated hard tube through a first pneumatic valve and a first metal pipe; and

a second flexible pipe having a fifth end and sixed end, wherein the fifth end is airtightly mounted through the electrically-insulated box and is connected to and communicates with the second end of the

electrically-insulated tube, wherein the fifth end of the first flexible tube is connected to the second end of the electrically-insulated hard tube through a second pneumatic valve and a second metal pipe.

~~2. The gas transmission adapting device as claimed in claim 1, wherein a product of a length of the electrically-insulated hard tube and an internal pressure in the electrically-insulated hard tube is larger than a maximum electrical potential difference for gas ionization between the first end and the second end of the electrically-insulated hard tube.~~

~~3. The gas transmission adapting device as claimed in claim 2, wherein a product of a length of the electrically-insulated box and an internal pressure of the electrically-insulated box is larger than the maximum electrical potential difference for gas ionization between the first end and the second end of the electrically-insulated hard tube.~~

~~4. The gas transmission adapting device as claimed in claim 1, 2 or 3, further comprising a second flexible pipe having a fifth end and sixed end, wherein the fifth end is airtightly mounted through the electrically-insulated box and is connected to and communicates with the second end of the electrically-insulated tube.~~

~~5~~2. The gas transmission adapting device as claimed in claim 41, wherein the fourth end of the first flexible pipe is used to connect to an external doping gas tube.

~~6~~3. The gas transmission adapting device as claimed in claim 41, wherein ~~the third end of the first flexible tube is connected to the first end of the electrically-insulated hard tube through a first pneumatic valve and a first metal pipe, wherein~~ the first pneumatic valve has a first air tube, and the first air tube is used to connect to a high-pressure air source.

~~7~~4. The gas transmission adapting device as claimed in claim ~~6~~3, wherein ~~the fifth end of the first flexible tube is connected to the second end of the electrically-insulated hard tube through a second pneumatic valve and a second metal pipe, wherein~~ the second pneumatic valve has a second air tube, and the second air tube is used to connect to the high-pressure air source.

~~8~~5. The gas transmission adapting device as claimed in claim 3~~6~~, further comprising an inert gas pipe airtightly mounted through the electrically-insulated box and is used to connect to an inert gas source.

~~9~~6. The gas transmission adapting device as claimed in claim ~~8~~5, further comprising an exhaust pipe airtightly mounted through the electrically-insulated box to exhaust a gas in the electrically-insulated box.

~~10~~7. The gas transmission adapting device as claimed in claim ~~7~~4, wherein the exhaust pipe is further connected to a toxic gas detector, wherein the toxic gas detector detects a concentration of doping gas and outputs a detected value.

~~11~~8. The gas transmission adapting device as claimed in claim ~~10~~7, further comprising a controller is electrically connected to the high pressure air source and the toxic gas detector, wherein the controller controls the high pressure air source to turn on or turn off according to the detected value.

~~12~~9. The gas transmission adapting device as claimed in claim 4~~1~~, wherein:

the first flexible pipe is airtightly mounted through a bottom of the electrically-insulated box; and

the second flexible pipe is airtightly mounted through a top of the electrically-insulated box.

1~~0~~3. The gas transmission adapting device as claimed in claim 4~~1~~,

wherein:

the first flexible pipe is airtightly mounted through a sidewall of the electrically-insulated box; and

the second flexible pipe is airtightly mounted through the sidewall of the electrically-insulated box.

114. The gas transmission adapting device as claimed in claim 103, further comprising an electrical insulation material mounted between the first flexible pipe and the second flexible pipe.

125. The gas transmission adapting device as claimed in claim 41, wherein:

a top recess is formed on a top of the electrically-insulated box;

a bottom recess is formed on a bottom of the electrically-insulated box;

the first flexible pipe is airtightly mounted through an inner wall of the bottom recess; and

the second flexible pipe is airtightly mounted through an inner wall of the top recess.

136. The gas transmission adapting device as claimed in claim 512, wherein:

an electrical insulation material is mounted between the first flexible pipe and the second flexible pipe; and

an electrical insulation board is laterally mounted in the electrically-insulated box.

147. The gas transmission adapting device as claimed in claim 1, 2 or 3, wherein the electrically-insulated hard tube is made of sapphire glass, ceramic or plastic material, wherein the plastic material is selected from one of ethylene polymers, phenyl ester polymers and thioether polymers.

158. The gas transmission adapting device as claimed in claim 41, wherein the first flexible pipe and the second flexible pipe are made of stainless steel.

169. The gas transmission adapting device as claimed in claim 1~~, 2 or 3~~, wherein each outside of the electrically-insulated box has a fin-shaped surface.

1720. The gas transmission adapting device as claimed in claim 36, further comprising:

a vacuum pipe airtightly mounted through the electrically-insulated box; and

an air pump connected to the vacuum pipe to decrease an air pressure inside the electrically-insulated box to a vacuum level.

~~21~~18. The gas transmission adapting device as claimed in claim 1720, further comprising:

a toxic gas detector connected to the vacuum pipe to detect a concentration of doping gas and output a detected value; and

a controller electrically connected to the high-pressure air source and the toxic gas detector, wherein the controller controls the high-pressure air source to turn on or turn off according to the detected value.