

CLAIMS

1. An apparatus for supplying a gas for a wafer container, which injects a purge gas into a wafer container (100) accommodating and transferring a wafer, the apparatus comprising:

a stage part (10) on which the wafer container (100) is seated;

a gas entrance part (20) disposed in correspondence to a position of each of a gas inlet and a gas outlet, which are defined in the wafer container (100), and comprising a housing (21) coupled to the stage part (10) and a nozzle (22) inserted into the housing (21) to ascend and descend in the housing (21) and in which a flow path, through which a purge gas flows, is defined;

a driving part (30) installed on one side of the nozzle (22) and providing an ascending driving force to the nozzle (22); and

an elastic part (40) elastically supporting the first driving part (30) to provide an elastic force in a direction in which the first driving part (30) ascends,

wherein the nozzle (22) descends by the weight of the wafer container (100) and supplies the purge gas when the wafer container (100) is seated on the stage part (10), and ascends by the ascending driving force of the driving part (30) and elastic force of the elastic part (40) and stops to supply the purge gas when the wafer container (100) is separated from the stage part (10).

2. The apparatus of claim 1, wherein the driving part (30) comprises:

a cylinder (31) fixed to a lower portion of the stage part (10);

a piston (32) ascending and descending in the cylinder (31);

a connecting part (33) connecting the piston (31) to the nozzle (22) so that the piston (31) and the nozzle (22) ascend and descend at the same time; and

a fluid entrance part (34) allowing a fluid to be introduced to and discharged from an inner space (35) between the cylinder (31) and the piston (32) in order to lift the piston (32) by an inner pressure of the cylinder (31).

3. The apparatus of claim 2, wherein the elastic part (40) comprises:
 a fixing member (41) fixed to the lower portion of the stage part (10);
 a moving member (42) inserted into the fixing member (41) in a slidable manner
 and transmitting an elastic force so that the piston (32) ascends; and
 an elastic member (43) installed in the fixing member (41) and elastically
 supporting the moving member (42) to provide an elastic force to the piston (32).

4. The apparatus of claim 2, wherein the elastic part (40) comprises
 an elastic member (44) disposed in an inner space (35) between the cylinder (31)
 and the piston (32) and elastically supporting the piston (32) to provide an elastic force to
 the piston (32).

5. The apparatus of claim 4, wherein the first driving part (30) comprises:
 a plurality of cylinders (31); and
 a plurality of pistons (32) inserted into the plurality of cylinders (31), respectively,
 to define a plurality of inner spaces (35) and ascending and descending at the same time.

6. The apparatus of claim 5, wherein the plurality of cylinders (31) comprise
 first, second, and third cylinders (31a, 31b, 31c), which are provided in a row,
 the plurality of pistons (32) comprise first, second, and third pistons (32a, 32b,
 32c) inserted into the first, second, and third cylinders (31a, 31b, 31c), respectively, to
 define first, second, and third inner spaces (35a, 35b, 35c), and
 each of the first and third inner spaces (35a, 35c) or the second inner space (35b)

comprises the elastic member (44) and has a height greater than that of each of other inner spaces.