WHAT IS CLAIMED IS:

1. A conveying mechanism for conveying a wafer unit having a wafer disposed inside of and supported on an annular frame by a holding tape, comprising:

a housing tray housing the wafer unit therein; and

a transport unit supporting and transporting the housing tray between wafer treating apparatus,

wherein the housing tray includes a ceiling plate, a bottom plate, a pair of side walls facing each other across at least one~~an~~ opening through which the wafer unit can be taken into and out of the housing tray, for supporting the annular frame inserted into the housing tray through the at least one opening and holding the inserted wafer unit in the housing tray, wherein the side walls are configured and arranged to connect the ceiling plate to the bottom plate while the at least one opening is defined therebetween, and an air flow generator disposed on the ceiling plate, for introducing a gas from an upper end of the housing tray to produce downflows in the housing tray that are directed from the ceiling plate into the at least one opening, and

the transport unit conveys wafers, one by one, between the wafer treating apparatus.

2. The conveying mechanism according to claim 1,

wherein the air flow generator includes a fan mechanism.

3. The conveying mechanism according to claim 2, wherein the air flow generator includes a filter mechanism.

4. The conveying mechanism according to claim 3, wherein the filter mechanism includes a high efficiency particulate air filter or an ultra low penetration air filter.

5. The conveying mechanism according to claim 1, wherein the air flow generator includes a fan mechanism and a filter mechanism for trapping contaminants included in the air and delivering clean air into the housing tray.

6. The conveying mechanism according to claim 5, wherein the fan mechanism and filter mechanism function as an air cleaner that trap contaminants in a clean room where the housing trays are conveyed by the conveying mechanism.

7. The conveying mechanism according to claim 1, wherein the at least one opening consists of two openings disposed opposite each other.

8. The conveying mechanism according to claim 1, wherein the transport unit includes:

a conveyor that conveys the housing trays; and

a pair of transport guides disposed respectively on both sides of the conveyor for guiding the housing tray to travel along the conveyor.

9. The conveying mechanism according to claim 8, wherein the housing tray includes a seat disposed on the bottom plate;

wherein the seat has a width corresponding to a distance between the pair of transport guides disposed respectively on both sides of the conveyor.