ABSTRACT

A wafer reaction device, comprising: a reaction mechanism and a pipeline integration mechanism. The reaction mechanism is formed with a reaction cavity, at least a portion of an inner wall of the reaction cavity is inclined, and a wafer placement position for carrying a wafer is disposed within the reaction cavity. The pipeline integration mechanism comprises a first gas inlet pipe, a plurality of second gas inlet pipes, and a gas outlet member. The first gas inlet pipe and the plurality of second gas inlet pipes are configured to respectively deliver different reaction gases into the reaction cavity. A gas outlet end of the first gas inlet pipe and gas outlet ends of the plurality of second gas inlet pipes are all in communication with a gas inlet end of the gas outlet member. A gas outlet end of the gas outlet member is arranged to correspond to a gas inlet end of the reaction cavity. The gas outlet end of the gas outlet member is provided with a plurality of gas outlet holes to allow the reaction gases to diffuse along the inner wall of the reaction cavity to the wafer placement position. The wafer reaction device enables uniform gas distribution on the wafer surface and improves the film coating quality of the wafer.