

ABSTRACT

REACTION TUBE STRUCTURE AND SUBSTRATE PROCESSING APPARATUS

Described herein is a technique capable of increasing the flow velocity of a gas at the surface of the wafer. According to the technique described herein, there is provided a substrate processing apparatus including: a reaction tube structure, wherein the reaction tube structure includes: a reaction tube defining a process chamber where a plurality of substrate is processed; a gas inlet provided at a lower portion of the reaction tube and configured to supply a process gas; a first buffer unit where the process gas is temporarily retained, wherein the first buffer unit is disposed at a first side of an inner surface of the reaction tube and includes a plurality of gas supply holes configured to supply the process gas into the process chamber; a connecting pipe disposed between the gas inlet and the first buffer unit to connect the gas inlet to the first buffer unit; and a gas outlet provided at a lower portion of a second side of the inner surface of the reaction tube opposite to the first side, wherein the gas outlet is configured to exhaust the process gas from the process chamber, wherein the plurality of gas supply holes are provided from an upper end portion of the first buffer unit to a lower end portion of the first buffer unit facing the gas outlet, and the process gas is supplied through the plurality of gas supply holes into the process chamber, passes through the process chamber, and exhausted through the gas outlet.

FIG. 1