



US 20240213049A1

(19) **United States**(12) **Patent Application Publication**
Kim et al.(10) **Pub. No.: US 2024/0213049 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **SUBSTRATE PROCESSING APPARATUS AND
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Chungcheongnam-do (KR)(21) Appl. No.: **18/395,173**(22) Filed: **Dec. 22, 2023**(30) **Foreign Application Priority Data**

Dec. 27, 2022 (KR) 10-2022-0185899

Publication Classification(51) **Int. Cl.**
H01L 21/67 (2006.01)(52) **U.S. Cl.**CPC .. **H01L 21/67051** (2013.01); **H01L 21/67034**
(2013.01); **H01L 21/67098** (2013.01); **H01L**
21/6719 (2013.01); **H01L 21/67253** (2013.01)

(57)

ABSTRACT

Provided is a substrate processing apparatus including a chamber including an inner space, a fluid supply unit configured to supply a supercritical fluid to the inner space, a fluid exhaust unit configured to exhaust the supercritical fluid from the inner space, and a controller configured to control the fluid supply unit and the fluid exhaust unit, wherein the fluid supply unit includes a fluid supply source, a supply line connecting the fluid supply source and the chamber to each other, a flow rate control valve installed in the supply line, and a flow rate measuring member installed in the supply line and positioned between the fluid supply source and the flow rate control valve, and the controller is further configured to control the flow rate control valve to supply the supercritical fluid, based on a flow rate of the supercritical fluid measured by the flow rate measuring member.

