



US 20240213061A1

(19) **United States**(12) **Patent Application Publication**  
**FUJIMOTO et al.**(10) **Pub. No.: US 2024/0213061 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **SEMICONDUCTOR WAFER DETECTION  
DEVICE AND DROPLET GUIDE MEMBER**(52) **U.S. Cl.**CPC ..... **H01L 21/67259** (2013.01)(71) Applicant: **EBARA CORPORATION**, Tokyo (JP)(72) Inventors: **TOMOAKI FUJIMOTO**, Tokyo (JP);  
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**ABSTRACT**(73) Assignee: **EBARA CORPORATION**, Tokyo (JP)(21) Appl. No.: **18/389,669**(22) Filed: **Dec. 19, 2023**(30) **Foreign Application Priority Data**

Dec. 21, 2022 (JP) ..... 2022-203853

**Publication Classification**(51) **Int. Cl.****H01L 21/67** (2006.01)

A semiconductor wafer detection device detects a semiconductor wafer. The semiconductor wafer detection device includes a light sensor, a detector, and a droplet guide member. The light sensor includes a light emitter having a light emitting surface that emits light, and a light receiver having a light receiving surface that receives the light from the light emitter. The detector detects the semiconductor wafer based on the light received by the light receiver. The droplet guide member causes a droplet adhering to the light emitting surface to flow down. The droplet guide member includes a liquid guide part of a plate shape. The liquid guide part is arranged with a tip facing the center of the light emitting surface when viewed in a direction of an optical axis of the light emitting surface.

