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(71) Applicant: **SEMICONDUCTOR COMPONENTS INDUSTRIES, LLC** [US/US]; 5701 N. Pima Road, Scottsdale, Arizona 85250 (US).

(72) Inventors: **YUN, Changsun**; Mokdongseo-ro 340, 928/906, Seoul, Seoul 08089 (KR). **JEON, Oseob**; Raemi-

an shinbanpo palace, 103-dong, 502-ho, 35, Jamwon-ro 8-gil, Seocho-gu, Seoul, Seoul 06518 (KR).

(74) Agent: **LEIJA, Javier M.**; onsemi, 5701 N. Pima Road, Scottsdale, Arizona 85250 (US).

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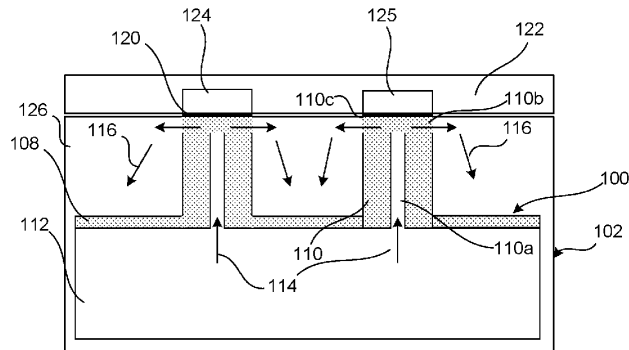


FIG. 1

(57) Abstract: A jet impingement cooling assembly (102) for semiconductor devices (124, 125) may include a heat exchange base (102) having an inlet chamber (112) and an outlet chamber (126), an inlet connection (1704, 1804, 2004) in fluid connection with the inlet chamber (112), and an outlet connection (1706, 1806, 2106) in fluid connection with the outlet chamber (126). A plurality of jet nozzles (110) may be attached to a semiconductor module (122), with the plurality of jet nozzles (110) including corresponding openings (110) positioned to cause jet impingement of fluid flow (114) from the inlet chamber (112) onto the semiconductor module (122) and then into the outlet chamber (126).

[Continued on next page]

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