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(54) **SEMICONDUCTOR DEVICE**(52) **U.S. Cl.**(71) Applicant: **FUJI ELECTRIC CO., LTD.**,
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H01L 23/10 (2013.01)(72) Inventor: **Reika UCHIMI**, Matsumoto-city (JP)(57) **ABSTRACT**(73) Assignee: **FUJI ELECTRIC CO., LTD.**,
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An outer frame (outer wall) of a housing of a semiconductor device has a spacer portion that protrudes beyond a bottom surface of a cooling bottom plate in an opposite direction to a semiconductor chip. When the semiconductor device is placed on an arbitrary placement surface for example, the spacer portion produces a gap between a rear surface of a cooling device (that is, a bottom surface of the cooling bottom plate) and the placement surface. This means that the bottom surface of the cooling bottom plate does not directly touch the placement surface and is less likely to be damaged. Favorable sealing is maintained between pipes, which are attached to the cooling device of the semiconductor device, and an inlet and an outlet on the cooling bottom plate.

