

ABSTRACT

A cooling unit includes a jacket, and the jacket includes a central portion and an outer portion. An opening through which light from a semiconductor device passes is formed in the central portion. The outer
5 portion includes a contact portion that comes into contact with a stage on which the semiconductor device is disposed. A supply flow passage through which a cooling fluid for cooling the semiconductor device flows is formed in the jacket. A groove configured so that the cooling fluid flows down from an upper surface of the central portion is formed
10 between the central portion and the outer portion in the jacket. A discharge flow passage through which the cooling fluid to be discharged to the outside flows is connected to the groove.

FIG. 6