

ABSTRACT OF THE DISCLOSURE

HEAT SINK FOR PORTABLE ELECTRONIC DEVICES

A heat sink for use in a portable electronic device for disposing of the heat generated by an electronic component of the device, the heat sink

5 comprising in its entirety a metal clad plate composed of two metal sheets and having a nonbonded portion in a required pattern, the nonbonded portion providing a heat pipe portion formed by outwardly inflating at least one of the two metal sheets of

10 the nonbonded portion to make a hollow portion and enclosing a working liquid in the hollow portion, the metal clad plate having on one surface thereof a mount portion for the electronic component at a region thereof where the heat pipe portion is partly

15 present, the heat pipe portion having a heat receiving portion at the region thereof where the mount portion is present. When a heat-generating electronic component is attached to the mount portion, the working liquid in the heat receiving

20 portion is heated with the heat produced by the component to evaporate. The resulting gas flows toward other portion, where the gas releases heat through the clad plate and liquefies. The working liquid thus liquefied again returns to the heat



receiving portion. The liquid remaining at locations other than the heat receiving portion flows into the heat receiving portion. This operation is repeated to dispose of the heat
5 produced by the component.

(Fig. 2)

THIS SHEET HAS BEEN
REPLACED

This Sheet Has Been Replaced

