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(54) **HEAT TRANSFER DEVICES FOR ENHANCED THERMAL PERFORMANCE OF ELECTRONIC SYSTEMS**

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(71) Applicant: **Micron Technology, Inc.**, Boise, ID (US)

(72) Inventors: **Ravi Kumar Kollipara**, Puppalaguda (IN); **Deepu Narasimiah Subhash**, Yeshwanthpur (IN); **Suresh Reddy Yarragunta**, RR Nagar (IN)

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(57) **ABSTRACT**

A system with a circuit with components, an enclosure with a top and a bottom, and a heat transfer device. The heat transfer device has an exterior surface with a first portion, a second portion, and a third portion, where the first portion faces opposite the second portion; and an interior surface with a fourth portion, a fifth portion, and a sixth portion, where the fourth portion faces the fifth portion. The first portion configured to thermally couple to the top of the enclosure. The second portion configured to thermally couple to the bottom of the enclosure. The fourth portion configured to couple to a component mounted on a primary side of the circuit board. The fifth portion configured to face a secondary side of the circuit board. The first heat transfer device configured to distribute thermal energy generated from a component to the top and bottom of the enclosure.

