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(19) **United States**(12) **Patent Application Publication**
NG et al.(10) **Pub. No.: US 2024/0215208 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **DIPPED COATED ELECTRONIC MODULE ASSEMBLY WITH ENHANCED THERMAL DISTRIBUTION**(52) **U.S. Cl.**CPC **H05K 7/209** (2013.01); **H01L 23/3107** (2013.01); **H01L 25/16** (2013.01)(71) Applicant: **Infineon Technologies Austria AG**,
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(57)

ABSTRACT

A method of manufacturing an electronic module assembly includes forming the electronic module assembly, wherein the electronic module assembly comprises a plurality of internal exposed surfaces, a plurality of external exposed surfaces, at least one internal cavity, and an internal heat source configured to generate heat internally within the electronic module assembly; dipping the electronic module assembly into a thermally conductive material to coat the plurality of internal exposed surfaces and the plurality of external exposed surfaces and to at least partially fill the at least one internal cavity; and curing the thermally conductive material formed on the plurality of internal exposed surfaces and the plurality of external exposed surfaces and filled within the at least one internal cavity to form a thermally conductive layer, wherein the thermally conductive layer is formed as a one-piece integral member.

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