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**Goli et al.**(10) **Pub. No.: US 2022/0369516 A1**(43) **Pub. Date: Nov. 17, 2022**(54) **THREE-DimensionALLY PATTERNABLE  
THERMAL INTERFACE****Publication Classification**(51) **Int. Cl.***H05K 7/20* (2006.01)*B29C 64/112* (2006.01)*B29C 64/209* (2006.01)*B29C 64/336* (2006.01)*B33Y 10/00* (2006.01)*B33Y 70/00* (2006.01)*B33Y 80/00* (2006.01)(52) **U.S. Cl.**CPC ..... *H05K 7/20481* (2013.01); *B29C 64/112*(2017.08); *B29C 64/209* (2017.08); *B29C**64/336* (2017.08); *B33Y 10/00* (2014.12);*B33Y 70/00* (2014.12); *B33Y 80/00* (2014.12);*B29K 2105/0094* (2013.01)(71) Applicant: **Henkel AG & Co. KGaA**, Duesseldorf  
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(57)

**ABSTRACT**

A three-dimensional geometry of a thermal interface body may be customized to substantially fill an irregular gap along a thermal dissipation pathway in an electronic package. The thermal interface body is fabricated through an additive deposition process, wherein sequential patterns of thermal interface material are coherently connected to other deposited patterns of thermal interface material.

