

Title (en)

THERMAL INTERFACE MATERIALS AND METHODS FOR PROCESSING THE SAME

Title (de)

WÄRMEZWISCHENSCHICHTMATERIALIEN UND VERFAHREN ZU IHRER VERARBEITUNG

Title (fr)

MATÉRIAUX D'INTERFACE THERMIQUE ET PROCÉDÉS POUR LEUR TRANSFORMATION

Publication

**EP 2710628 A2 20140326 (EN)**

Application

**EP 12785480 A 20120517**

Priority

- US 201113111735 A 20110519
- US 2012038280 W 20120517

Abstract (en)

[origin: US2012292005A1] A thermal interface material is provided for use to fill a gap between surfaces in a thermal transfer system to transfer heat between the surfaces. The thermal interface material includes a base material and thermally conductive particles dispersed within the base material. The thermal interface material is conditioned under reduced pressure (e.g., prior to being placed in the gap between the surfaces, while being placed in the gap, after being placed in the gap, etc.) and, within about forty-eight hours or less of conditioning, the conditioned thermal interface material is either positioned in a container that inhibits ambient gas from contacting it (either alone or applied to the surfaces), or used to transfer heat between the surfaces. As such, the thermal interface material is substantially free of cracks following exposure to thermal cycling comprising a temperature change of at least about 100 degrees Celsius for at least about 10 cycles.

IPC 8 full level

**F28F 13/00** (2006.01); **H01L 23/373** (2006.01); **H01L 23/42** (2006.01)

CPC (source: CN EP KR US)

**F28F 13/00** (2013.01 - CN EP US); **H01L 21/31** (2013.01 - KR); **H01L 23/3737** (2013.01 - CN EP US); **H01L 23/42** (2013.01 - CN EP US);  
**F28F 2013/006** (2013.01 - CN EP US); **F28F 2255/00** (2013.01 - CN EP US); **H01L 2924/0002** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**US 2012292005 A1 20121122**; CN 103548123 A 20140129; EP 2710628 A2 20140326; EP 2710628 A4 20150408; JP 2014514755 A 20140619;  
KR 101523009 B1 20150526; KR 20140021668 A 20140220; TW 201314163 A 20130401; TW I499753 B 20150911;  
WO 2012158876 A2 20121122; WO 2012158876 A3 20130321

DOCDB simple family (application)

**US 201113111735 A 20110519**; CN 201280024408 A 20120517; EP 12785480 A 20120517; JP 2014502705 A 20120517;  
KR 20137030681 A 20120517; TW 101116324 A 20120508; US 2012038280 W 20120517