

Title (en)  
HYBRID HEAT PIPE ASSEMBLY WITH BONDED FINS ON THE BASEPLATE

Title (de)  
HYBRID-WÄRMEROHREINHEIT MIT VERBUNDENEN RIPPEN AUF DER GRUNDPLATTE

Title (fr)  
ENSEMBLE DE CALODUCS HYBRIDE AVEC DES AILETTES LIÉES À LA PLAQUE DE BASE

Publication  
**EP 3006885 A1 20160413 (EN)**

Application  
**EP 15188786 A 20151007**

Priority  
• US 201462061311 P 20141008  
• US 201514872259 A 20151001

Abstract (en)  
A hybrid heat pipe assembly (2) includes a baseplate (8) dimensioned to be placed in surface contact with a device (4). The baseplate (8) is configured to extract heat from the device (4). A plurality of fins (10) is bonded to the baseplate (8). The fins (10) are configured to transfer a first portion of the extracted heat from the baseplate (8) to air surrounding the fins (10). A complex heat pipe (12) extends from the baseplate (8) and has an end positioned within the baseplate (8). The complex heat pipe (12) is configured to receive and transfer a second portion of the extracted heat transferred from the baseplate (8). The complex heat pipe (12) is configured to transfer the second portion of heat to a heat pipe fin stack (14).

IPC 8 full level  
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**F28D 15/02** (2013.01 - US); **F28D 15/0266** (2013.01 - EP US); **F28D 15/0275** (2013.01 - EP US); **F28F 1/32** (2013.01 - EP);  
**F28F 3/02** (2013.01 - EP US)

Citation (search report)  
• [XY] US 2005094375 A1 20050505 - CHIANG TSAI L [TW], et al  
• [Y] EP 0952612 A1 19991027 - FERRAZ DATE IND [FR]  
• [Y] EP 1387139 A2 20040204 - MITSUBISHI ALUMINIUM [JP], et al  
• [X] DE 102004042154 A1 20060302 - ASIA VITAL COMPONENTS CO LTD [TW]  
• [X] US 2011024088 A1 20110203 - LIN KUO-LEN [TW], et al  
• [X] US 2005135062 A1 20050623 - KILEY RICHARD F [US], et al  
• [X] US 6964295 B1 20051115 - YU GUANG [CN], et al  
• [X] US 2007008702 A1 20070111 - CHANG CHIEN-LUNG [TW], et al  
• [A] US 2007144705 A1 20070628 - CHEN CHUN-CHI [CN], et al

Cited by  
JPWO2016104729A1; JPWO2016104727A1; WO2019229876A1

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