

Title (en)
GRAVITY-ASSISTED HEAT PIPE

Title (de)
SCHWERKRAFTUNTERSTÜTZTES WÄRMEROHR

Title (fr)
CALODUC ASSISTÉ PAR GRAVITÉ

Publication
EP 3252419 A1 20171206 (EN)

Application
EP 16172588 A 20160602

Priority
EP 16172588 A 20160602

Abstract (en)

The present disclosure describes a pipe element for heat pipe and a cold plate utilizing the pipe element. The pipe element comprises at least one through-hole between a first opening at a first end of the pipe element and a second opening at a second end of the pipe element so that the at least one through-hole forms an evaporation section and a condenser section to the pipe element. The evaporation section comprises a first helical thread on the wall of the through-hole. The crests of the first helical thread curve away from the condenser section such that, during the use of a heat pipe comprising the pipe element, the at least one first ridge and the at least one first groove form at least one pocket for boiling coolant in the evaporator section.

IPC 8 full level
F28F 1/40 (2006.01); **F28D 15/02** (2006.01); **F28F 13/18** (2006.01)

CPC (source: EP)
F28D 15/0283 (2013.01); **F28F 1/40** (2013.01); **F28F 13/187** (2013.01); **F28D 2015/0216** (2013.01); **F28F 2255/16** (2013.01)

Citation (search report)

- [XYI] WO 2005043062 A2 20050512 - WOLVERINE TUBE INC [US], et al
- [XY] JP H05106991 A 19930427 - MITSUBISHI SHINDO KK
- [Y] US 4982274 A 19910101 - MURASE TAKASHI [JP], et al
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EP3346220A1; US10480866B2

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 3252419 A1 20171206

DOCDB simple family (application)
EP 16172588 A 20160602