

Title (en)
MICRO HEAT PIPE AND MANUFACTURING METHOD THEREFOR

Title (de)
MIKROHEIZROHR UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)
MICRO-CALODUC ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3318831 A1 20180509 (EN)

Application
EP 15896788 A 20150630

Priority
CN 2015082950 W 20150630

Abstract (en)
A micro heat pipe (10) includes a pipe body (11, 11'), a second capillary structure (21) disposed inside the pipe body (11, 11'), and a working fluid injected into the pipe body (11, 11'). The pipe body (11, 11') has two enclosed ends and is defined with a heat absorbing section (H), a heat isolating section (A) and a condensing section (C). The pipe body (11, 11') is provided on an inner pipe wall thereof with etched patterns serving as a first capillary structure (12, 12') and fully distributed in the aforementioned sections. The heat absorbing section (H) is filled up with the second capillary structure (21). The micro heat pipe (10) is manufactured in a way that the inner pipe wall of the pipe body (11, 11') is etched to form the first capillary structure (12, 12'), the second capillary structure (21) is filled in the heat absorbing section (H) and then sintered, the working fluid is injected into the pipe body (11, 11'), and the pipe body (11, 11') is vacuumed and sealed.

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