

Title (en)
Heat-pipe.

Title (de)
Wärmerohr.

Title (fr)
Galoduc.

Publication
EP 0574678 A1 19931222 (DE)

Application
EP 93106689 A 19930424

Priority
DE 4219781 A 19920617

Abstract (en)
[origin: US5314011A] A heat pipe is divided longitudinally by a divider wall into a vapor channel and into a liquid channel. The divider wall is provided, preferably at uniform axial spacings with bulges that form a restriction in the flow cross-sectional area of the vapor channel and an increase in the flow cross-sectional area of the liquid channel. A small diameter through bore is positioned at the peak of each bulge to connect the liquid channel with the vapor channel at this point. The reduced pressure at the restriction in the vapor channel is sufficient to suck gas or vapor bubbles collected under the bulge into the vapor channel, but insufficient to pull liquid into the vapor channel. The cross-sectional flow area of the liquid channel increases steadily toward each bulge, either from a point centrally between two bulges or from a point directly downstream of a bulge toward the next bulge as viewed in the flow direction of the liquid.

Abstract (de)
Bei einem Wärmerohr mit wenigstens je einem Strömungskanal für das flüssige und für das in den dampfförmigen Aggregatzustand überführte Wärmeträgermedium weist die Trennwand (1) zwischen dem Dampfkanal und dem Flüssigkeitskanal in regelmäßigen Abständen Aufwölbungen (4,5) auf, die als düsenförmige Querschnittsverengungen in den Dampfkanal ragen und die jeweils an ihrer Spitze mit einer Durchgangsbohrung (6,7) versehen sind. Der Querschnitt des Flüssigkeitskanals erweitert sich jeweils zu den Aufwölbungen hin. <IMAGE>

IPC 1-7
F28D 15/02

IPC 8 full level
F28D 15/04 (2006.01)

CPC (source: EP US)
F28D 15/046 (2013.01 - EP US)

Citation (search report)
• [X] EP 0217777 A1 19870408 - BELGE CONST AERONAUTIQUES [BE]
• [A] FR 2380520 A1 19780908 - DORNIER SYSTEM GMBH [DE]

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