

Title (en)
VAPOR COOLING HEAT EXCHANGER

Title (de)
WÄRMETAUSCHER MIT DAMPFKÜHLUNG

Title (fr)
ÉCHANGEUR DE CHALEUR À REFROIDISSEMENT PAR LA VAPEUR

Publication
EP 2500680 A1 20120919 (EN)

Application
EP 10829883 A 20101105

Priority
• JP 2009258118 A 20091111
• JP 2010069677 W 20101105

Abstract (en)
A vapor cooling heat exchanger is provided with: a partition wall (19) for partitioning path (21) for a fluid to be cooled through which a fluid to be cooled flows, and path (24) for a refrigerant through which a refrigerant for cooling the fluid to be cooled flows; and fins which are disposed within path (21) for a fluid to be cooled, and which is thermally connected to the partition wall (19). The fins constitute a first fin (31) and a second fin (30), the local heat flux of which on the partition wall (19) is smaller than the first fin (31). The first fin (31) and the second fin (30) are arranged on the basis of the relationship between the local heat flux on the partition wall (19) and the heat flux limit of the refrigerant. As a consequence, the occurrence of local burn-out on the vapor cooling heat exchanger is suppressed.

IPC 8 full level
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CPC (source: EP KR US)
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