

Title (en)  
HEAT-EXCHANGER, MORE PARTICULARLY EVAPORATOR FOR REFRIGERANT

Publication  
**EP 0253167 B1 19890531 (DE)**

Application  
**EP 87109108 A 19870624**

Priority  
DE 3622953 A 19860709

Abstract (en)  
[origin: EP0253167A1] 1. Heat exchanger, particularly a cooling medium evaporator, consisting of a plurality of flat pipes parallel with one another, but arranged with a space between them and joined together, between which pipes a plurality of fins have been fitted to increase the heat exchange surface, said pipes being provided at both their end regions with a widened part of the pipe wall, being laid by means of this part directly on a corresponding part of the adjacent pipe and connected therewith, particularly by soldering, there being provided in each widened part, transversally to the longitudinal axis of the flat pipes, connection openings with the adjacent flat pipe or to the adjacent group of pipes, characterized in that the widened part (2a, 2b) of each flat pipe (2) extends over the entire width of the pipe, but, towards the narrow longitudinal sides (2') runs in the form of a pointed arch into the arc-shaped parts (8) of the flat pipe, and in that, in the region (20, 21) of each flat pipe (2, 20) lying between the widened parts (2a, 2b, 20a, 20b) of the pipe wall (4) turbulence inserts (7, 70) are provided which fill up the entire pipe width (B).

IPC 1-7  
**B21C 37/22**; **B21D 53/08**; **F25B 39/02**; **F28D 1/053**; **F28F 1/02**; **F28F 13/12**

IPC 8 full level  
**B21C 37/22** (2006.01); **B21D 53/08** (2006.01); **F25B 39/02** (2006.01); **F28D 1/053** (2006.01); **F28F 1/02** (2006.01); **F28F 1/40** (2006.01); **F28F 9/02** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP)  
**B21C 37/22** (2013.01); **B21D 53/08** (2013.01); **F25B 39/02** (2013.01); **F28D 1/05358** (2013.01); **F28F 1/025** (2013.01); **F28F 9/0221** (2013.01); **F28F 13/12** (2013.01); **F28D 2021/0071** (2013.01)

Cited by  
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