

Title (en)  
EVAPORATOR

Publication  
**EP 0132620 B1 19870916 (DE)**

Application  
**EP 84107488 A 19840628**

Priority  
DE 3327179 A 19830728

Abstract (en)  
[origin: ES279746U] An evaporator apparatus comprises an evaporator assembly to which a coolant is supplied by an expansion valve and a flow divider. The connecting means between the expansion valve and the flow divider is provided with at least one bend. The bend causes a non-homogeneous coolant flow at the flow divider, resulting in an uneven distribution of gaseous and liquid coolant to the individual evaporator pipe sets. A mixing element, provided directly upstream of the flow divider, has a flow cross-section which expands in the direction of the coolant flow, resulting in a brisk mixing of the gaseous and liquid coolant phases to provide a homogeneous mixture. Preferred embodiments of this mixing element include a cylindrical mixing cell having a preferred inlet diameter/cell diameter ratio, a tapered insert which first decreases and then increases the flow cross-section, and a simple screen. The two latter embodiments may be installed in pipes which have constant diameters.

IPC 1-7  
**F25B 39/02**

IPC 8 full level  
**F25B 39/02** (2006.01)

CPC (source: EP US)  
**F25B 39/028** (2013.01 - EP US); **F25B 41/45** (2021.01 - EP); **F25B 2500/01** (2013.01 - EP US)

Cited by  
AT396834B; DE19824881A1; EP0566899A1; DE19515527A1

Designated contracting state (EPC)  
DE FR GB IT SE

DOCDB simple family (publication)  
**EP 0132620 A2 19850213; EP 0132620 A3 19851218; EP 0132620 B1 19870916**; DE 3327179 A1 19850207; DE 3466276 D1 19871022; ES 279746 U 19841116; ES 279746 Y 19850601; US 4543802 A 19851001

DOCDB simple family (application)  
**EP 84107488 A 19840628**; DE 3327179 A 19830728; DE 3466276 T 19840628; ES 279746 U 19840606; US 62756184 A 19840703