

Title (en)
Plastic heat exchanger

Title (de)
Kunststoffwärmetauscher

Title (fr)
Échangeur thermique plastique

Publication
EP 2146173 A1 20100120 (EN)

Application
EP 08160592 A 20080717

Priority
EP 08160592 A 20080717

Abstract (en)
A heat exchanger (10) comprises a plurality of plastic cooling tubes (16) extending between a first end plate (12) and a second end plate (14) and a baffle (24) arranged in the heat exchanger (10) and extending at least partially between the first end plate (12) and the second end plate (14). The baffle (24) comprises a plurality of first openings (26) for receiving a respective plastic cooling tube (16), the baffle (24) further comprising a plurality of second openings (28) arranged between the first openings (26). The second openings (28) permit air to flow through the heat exchanger (10) whilst creating turbulence in the air flow which increase the thermal transfer between the air and the tubes (16) increasing the efficiency of the heat exchanger (10).

IPC 8 full level
F28F 21/06 (2006.01); **F28F 1/04** (2006.01); **F28F 1/12** (2006.01); **F28F 1/32** (2006.01); **F28F 1/34** (2006.01); **F28D 1/053** (2006.01); **F28D 7/16** (2006.01); **F28F 9/013** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP)
F28F 1/04 (2013.01); **F28F 1/128** (2013.01); **F28F 1/325** (2013.01); **F28F 1/34** (2013.01); **F28F 21/062** (2013.01); **F28D 1/05316** (2013.01); **F28D 1/05366** (2013.01); **F28D 7/16** (2013.01); **F28D 7/1684** (2013.01); **F28D 2021/0043** (2013.01); **F28D 2021/0082** (2013.01); **F28F 9/0131** (2013.01); **F28F 13/12** (2013.01); **F28F 2009/228** (2013.01)

Citation (search report)

- [E] US 2008173436 A1 20080724 - BAYLIS BOBBYE KAYE [CA], et al
- [Y] US 2005247442 A1 20051110 - DALY PAUL [US]
- [Y] US 3804159 A 19740416 - SEARIGHT E, et al
- [XY] US 3135322 A 19640602 - NEUGEBAUER FRANZ J
- [XY] EP 0305702 A1 19890308 - SUEDEDEUTSCHE KUEHLER BEHR [DE], et al
- [Y] JP S60101485 A 19850605 - MATSUSHITA ELECTRIC IND CO LTD
- [X] EP 0582835 A1 19940216 - STEYR NUTZFAHRZEUGE [AT]

Cited by
EP2767792A3; US11215405B2

Designated contracting state (EPC)
DE

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2146173 A1 20100120; EP 2146173 B1 20150909

DOCDB simple family (application)
EP 08160592 A 20080717