

Title (en)

Corrugated fin for evaporator with improved condensate removal

Title (de)

Gewellte Rippe für Verdampfer mit verbesserter Kondensatabführung

Title (fr)

Ailette ondulée pour évaporateur avec amélioration du drainage des condensats

Publication

EP 0962736 A3 20000816 (EN)

Application

EP 99201397 A 19990504

Priority

US 8854498 A 19980601

Abstract (en)

[origin: EP0962736A2] An improved corrugated heat conduction fin (20) for an evaporator (10) includes an integral feature for reducing the critical width of condensed water films retained in the internal channels formed between diverging pairs of fin walls (22). Aligned pairs of notches (26) are cut through the diverging fin walls (22), localized within the channels and between adjacent pairs of louver banks (24). What would otherwise be a long, continuous water film (F) formed in the fin channel is thereby broken up into a series of discontinuous individual films (F1, F2 and F3), each located over a respective louver bank (24). The individual, shorter films drain more efficiently through the louver banks (24), thereby growing to a significantly smaller critical width within the channels and blocking less air flow over and through the fin walls (22). <IMAGE>

IPC 1-7

F28F 1/12; **F28F 13/04**; **F28D 1/03**

IPC 8 full level

F25B 39/02 (2006.01); **F28D 1/03** (2006.01); **F28F 1/12** (2006.01); **F28F 17/00** (2006.01)

CPC (source: EP)

F28D 1/0341 (2013.01); **F28F 1/128** (2013.01); **F28F 17/005** (2013.01)

Citation (search report)

- [A] US 2018922 A 19351029 - PALMER OSCAR C
- [X] PATENT ABSTRACTS OF JAPAN vol. 006, no. 153 (M - 149) 13 August 1982 (1982-08-13)
- [X] PATENT ABSTRACTS OF JAPAN vol. 010, no. 126 (M - 477) 10 May 1986 (1986-05-10)
- [A] PATENT ABSTRACTS OF JAPAN vol. 007, no. 271 (M - 260) 3 December 1983 (1983-12-03)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10 31 August 1998 (1998-08-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 069 (M - 286) 31 March 1984 (1984-03-31)

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US9689618B2; EP2478318A4; EP1111318A1; CN108131980A; EP1522813A1; CN115183484A; CN102893117A; JP2013082353A; US10337799B2; US6439300B1; US10247481B2; WO2007009220A1; WO2012027098A3; US10436156B2; US10539374B2; US11162742B2

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