

Title (en)  
Reinforced end plate for heat exchanger.

Title (de)  
Verstärkte Endplatte für Wärmetauscher.

Title (fr)  
Plaque collectrice renforcée pour échangeur de chaleur.

Publication  
**EP 0684441 A1 19951129 (FR)**

Application  
**EP 95107767 A 19950522**

Priority  
FR 9406398 A 19940526

Abstract (en)  
The collector plate (1) has apertures (5) for fluid circulation tubes in a flat section (2) of the plate, and adjoining curved sections (6, 7). The inner surfaces of the curves are reinforced by ribs (8) made e.g. from folds in the plate material, which is aluminium. In a variant of the design the ribs can extend across the plate from one curved section to the other, and the apertures can be elongated in shape and situated between adjacent ribs.

IPC 1-7  
**F28F 9/02**

IPC 8 full level  
**F28F 9/02** (2006.01)

CPC (source: EP KR US)  
**F28F 9/0224** (2013.01 - EP KR US); **F28F 2225/08** (2013.01 - EP KR US); **Y10S 165/906** (2013.01 - EP US); **Y10T 29/49389** (2015.01 - EP US)

Citation (applicant)  
FR 2538526 A1 19840629 - CHAUSSON USINES SA [FR]

Citation (search report)  
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• [A] US 4881594 A 19891121 - BEAMER HENRY E [US], et al  
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• [A] FR 2270471 A1 19751205 - CHAUSSON USINES SA [FR]  
• [A] EP 0521489 A1 19930107 - THERMAL WAERME Kaelte KLIMA [DE]  
• [DA] FR 2538526 A1 19840629 - CHAUSSON USINES SA [FR]

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ES 2122392 T3 19981216; FR 2720490 A1 19951201; FR 2720490 B1 19960712; KR 950033405 A 19951226; US 5492172 A 19960220

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KR 19950013112 A 19950525; US 44761995 A 19950523