

Title (en)  
Heat exchanger

Title (de)  
Wärmetauscher

Title (fr)  
Echangeur de chaleur

Publication  
**EP 0887611 A3 19991124 (EN)**

Application  
**EP 98304365 A 19980602**

Priority  
JP 18745297 A 19970627

Abstract (en)  
[origin: EP0887611A2] A heat exchanger has tubes (4) protruding into a tank (3) containing a flow reducing plate (10) which has a constricting hole (9). In order to minimise noise at a critical flow velocity the position of the hole is related to the maximum protrusion of the tubes so that flow passing through the hole does not impinge directly on the tubes. <IMAGE>

IPC 1-7  
**F28F 9/02**; **F28F 27/02**

IPC 8 full level  
**F28F 9/02** (2006.01); **F28F 9/18** (2006.01); **F28F 9/22** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP)  
**F28F 9/0212** (2013.01); **F28F 9/028** (2013.01)

Citation (search report)  
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• [A] EP 0779491 A1 19970618 - SANDEN CORP [JP]  
• [A] EP 0660063 A2 19950628 - SANDEN CORP [JP]  
• [A] US 5284203 A 19940208 - DAUVERGNE JEAN [FR]  
• [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 044 (M - 1207) 4 February 1992 (1992-02-04)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 016, no. 044 (M - 1207) 4 February 1992 (1992-02-04)

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Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
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