

Title (en)  
Heat exchanger

Title (de)  
Wärmetauscher

Title (fr)  
Echangeur de chaleur

Publication  
**EP 0881452 A3 20000223 (DE)**

Application  
**EP 98101666 A 19980131**

Priority  
DE 19721927 A 19970526

Abstract (en)  
[origin: EP0881452A2] The heat exchanger is made of bundled pipes (1) with their ends mounted in bases. Cleaning springs (8) extend along the interiors of the pipes. One end (9) of each spring is taken out of each pipe and secured to a limit plate (10) at the housing of the heat exchanger (3). It also acts as a mounting for the piston and cylinder units (11) integrated into the housing at the base (4) of a pipe.

IPC 1-7  
**F28G 1/06**

IPC 8 full level  
**F28G 1/06** (2006.01)

CPC (source: EP)  
**F28G 1/06** (2013.01)

Citation (search report)  
• [XY] US 5311929 A 19940517 - VERRET NORMAND [CA]  
• [Y] US 4825940 A 19890502 - BARROYER PAUL [FR], et al  
• [A] WO 8101839 A1 19810709 - SERCK GMBH [DE], et al  
• [A] US 4718480 A 19880112 - KITO MASAHIRO [JP], et al  
• [A] FR 2224728 A1 19741031 - ROUCHY CHRISTIAN [FR]

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

DOCDB simple family (publication)  
**EP 0881452 A2 19981202; EP 0881452 A3 20000223; EP 0881452 B1 20020417**; AT E216486 T1 20020515; DE 19721927 C1 19990225

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