

Title (en)
Heat exchanger

Title (de)
Wärmetauscher

Title (fr)
Echangeur de chaleur

Publication
EP 0887611 A2 19981230 (EN)

Application
EP 98304365 A 19980602

Priority
JP 18745297 A 19970627

Abstract (en)
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 9/18 (2006.01); **F28F 9/02** (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)

Cited by
EP1079195A1; FR2986316A1; FR2988825A1; CN104321607A; DE102011080673A1; EP3179191A1; CN107014117A; EP2079973A4; US11512903B2; US10048011B2; US6237677B1; US9834061B2; US10132573B2; WO2020090377A1; WO2013113686A1; WO2013149879A1; US8225853B2

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)
EP 0887611 A2 19981230; **EP 0887611 A3 19991124**; JP H1123186 A 19990126

DOCDB simple family (application)
EP 98304365 A 19980602; JP 18745297 A 19970627