

Title (en)
HEAT EXCHANGER.

Title (de)
WÄRMETAUSCHER.

Title (fr)
ECHANGEUR DE CHALEUR.

Publication
EP 0411112 B1 19940615

Application
EP 90904267 A 19900219

Priority

- DE 3905140 A 19890220
- EP 9000267 W 19900219

Abstract (en)

[origin: WO9009555A1] A heat exchanger for cooling hot raw gas with aggressive constituents and for heating the pure gas obtained by purification of the raw gas comprises a housing with two side walls and an upper and a lower tubesheet. The inner side walls are associated with partitions to form flow channels. The ends of a plurality of exchanger tubes parallel to each other and to the side walls are inserted in the upper and lower tubesheets. The hot raw gas flows through the exchanger tubes and the pure gas flows through the housing perpendicular to the exchanger tubes. The housing and the partitions are made preferably of highly corrosion-resistant sheet metal and the exchanger tubes are made preferably of glass. To improve this type of heat exchanger so as to obtain the desired heating of the side walls and hence prevent corrosive condensation, with a relatively simple structure, the pure gas outlet from the heat exchanger communicates through at least one pure gas duct (4) with the flow channels (4) of the two side walls (3). The pure gas ducts (4) open into the upper and/or lower regions of the flow channels (14). The flow channels (14) have front outlet orifices (10) for the recycled pure gas.

IPC 1-7
F28D 21/00; F28F 21/00; F28F 19/00

IPC 8 full level
F28D 21/00 (2006.01); **F28F 19/00** (2006.01); **F28F 21/00** (2006.01)

CPC (source: EP)
F28D 21/0008 (2013.01); **F28F 19/00** (2013.01); **F28F 21/006** (2013.01)

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 9009555 A1 19900823; AT E107409 T1 19940715; DE 3905140 A1 19900823; DE 59006114 D1 19940721; EP 0411112 A1 19910206;
EP 0411112 B1 19940615

DOCDB simple family (application)
EP 9000267 W 19900219; AT 90904267 T 19900219; DE 3905140 A 19890220; DE 59006114 T 19900219; EP 90904267 A 19900219