

Title (en)
DEVICE FOR THE REDUCTION OF THERMAL STRESS IN A HEAT EXCHANGER

Publication
EP 0041452 B1 19830803 (FR)

Application
EP 81400863 A 19810527

Priority
FR 8012189 A 19800602

Abstract (en)
[origin: ES8204534A1] Device for reducing thermal stresses on a heat exchanger between two counterflow-circulating liquid alkali metal circuits comprising an annular cylindrical nest of tubes surrounding an axial pipe for the introduction of the liquid alkali metal to be heated and extended by an annular pipe for discharging the heated liquid alkali metal, wherein it comprises in the said annular pipe for discharging the heated liquid alkali metal means for radially homogenizing the temperature of the alkali metal, said means comprising pipes which, at the outlet of the nest of tubes, tap a part of the relatively hotter alkali metal flowing along the outer periphery of the annular pipe to bring it into its flow area closest to the axis.

IPC 1-7
F28D 7/00; **F28F 13/06**

IPC 8 full level
F22B 3/02 (2006.01); **F28D 1/02** (2006.01); **F28F 9/22** (2006.01); **F28F 13/06** (2006.01)

CPC (source: EP US)
F28D 1/0213 (2013.01 - EP US); **F28F 13/06** (2013.01 - EP US); **F28D 2021/0054** (2013.01 - EP US); **F28F 2265/26** (2013.01 - EP US)

Cited by
EP0108690A1; FR2535836A1; EP0131508A1; FR2548345A1

Designated contracting state (EPC)
BE DE FR GB IT NL

DOCDB simple family (publication)
EP 0041452 A2 19811209; **EP 0041452 A3 19811216**; **EP 0041452 B1 19830803**; DE 3160726 D1 19830908; ES 502705 A0 19820501; ES 8204534 A1 19820501; FR 2483592 A1 19811204; FR 2483592 B1 19850208; JP S57120096 A 19820726; US 4423770 A 19840103

DOCDB simple family (application)
EP 81400863 A 19810527; DE 3160726 T 19810527; ES 502705 A 19810602; FR 8012189 A 19800602; JP 8425481 A 19810601; US 26886981 A 19810601