

Title (en)
HEAT EXCHANGER

Publication
EP 0356648 B1 19920325 (DE)

Application
EP 89111721 A 19890628

Priority
DE 3828034 A 19880818

Abstract (en)
[origin: JPH0275895A] PURPOSE: To enable simple use of a control structure for adjusting an outlet temperature, by a method wherein a mixing chamber is built as mixing tube, and the mixing tumble is directly connected to an outlet joint piercing an outlet chamber to eliminates damages to the outlet chamber and components thereof because of corrosion by a medium to be cooled. CONSTITUTION: A medium flow 17 entering an inlet chamber 5 is distributed into two shunts 18 and 19 and the shunt 18 flows out into an outlet chamber 6 from a heat exchanging tube 2 and then, into a mixing tube 13 through a cylinder 12 via an opening 14. The shunt 18 is mixed in the mixing tube 13 with the shunt 19 yet to be cooled guided through a shunt pipe 11. The ratio in quantity between the shunts 18 and 19 and the temperature of the mixed medium flow 20 flowing out through an outlet joint 8 are adjusted by a control plate 16. The shunt 19 is discharged directly without contacting the outlet chamber 6 via the outlet joint 8. Therefore, when the medium exhibits a corrosive action within a specified range, it is only sufficient to build the shunt pipe 11, the cylinder 12 and the mixing tube 13 alone up of an anticorrosive material.

IPC 1-7
F28D 7/16; **F28F 27/00**

IPC 8 full level
F28D 7/16 (2006.01); **F28F 27/00** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP US)
F28D 7/163 (2013.01 - EP US); **F28F 27/02** (2013.01 - EP US); **F28D 2021/0075** (2013.01 - EP US); **F28F 2250/06** (2013.01 - EP US)

Cited by
EP2312252A1; DE102015013517A1; US7412945B2; CN105492828A; EP1367253A1; DE102005057674A1; DE102005057674B4; RU2700215C2; EP4368933A1; US9828275B2; DE102009048592A1; WO2017001147A1; WO2007068343A1; WO2014210412A1; WO9012993A1; DE102016013459A1; WO2018086759A1; US9127893B2; EP3159646A1; US11226159B2; EP3159646B2; EP1367253B2

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
EP 0356648 A1 19900307; **EP 0356648 B1 19920325**; DE 3828034 A1 19900222; DE 58901025 D1 19920430; JP H0275895 A 19900315; US 4993367 A 19910219

DOCDB simple family (application)
EP 89111721 A 19890628; DE 3828034 A 19880818; DE 58901025 T 19890628; JP 17695589 A 19890707; US 39145889 A 19890809