

Title (en)

ARRANGEMENT FOR COOLING BULKY STRUCTURAL MEMBERS, IN PARTICULAR FOR COOLING HEAT EXCHANGER END PLATES

Publication

EP 0130361 A3 19850522 (DE)

Application

EP 84106055 A 19840528

Priority

DE 3323781 A 19830701

Abstract (en)

[origin: US4869315A] A device is provided for direct cooling of thick essentially horizontal wall members which are charged with different temperatures and possibly different pressures on their upper and lower sides, such as for cooling a heat exchanger tube sheet. Cooling of the wall member or component from the "cold side" is afforded by closed end bores formed in the wall member which bores are open on the "cold side" and closed on the "hot side". Each closed end bore has a tube projecting from the "cold side" of the wall member and extending into the bore with its end within the bore located adjacent the closed end of the bore. The diameter of the tube is smaller than the diameter of the bore so that flow through the tube into the bore can reverse direction at the closed end and flow through the space between the tube and the bore.

IPC 1-7

F28F 9/02

IPC 8 full level

F28F 9/02 (2006.01)

CPC (source: EP US)

F28F 9/0229 (2013.01 - EP US)

Citation (search report)

- [A] DE 1751085 A1 19700709 - BASF AG
- [A] FR 2298074 A1 19760813 - SHELL INT RESEARCH [NL]
- [A] GB 2029955 A 19800326 - BORSIG GMBH
- [A] FR 2424500 A1 19791123 - BRONSWERK BV [NL]
- [A] FR 2284851 A1 19760409 - SHELL INT RESEARCH [FR]
- [AD] DE 3022480 A1 19820107 - UHDE GMBH [DE]

Cited by

EP0274006A1; AU606084B2

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0130361 A2 19850109; EP 0130361 A3 19850522; EP 0130361 B1 19861230; AT E24608 T1 19870115; CA 1277312 C 19901204; DE 3323781 A1 19850110; DE 3323781 C2 19860403; DE 3461863 D1 19870205; JP S6023792 A 19850206; US 4869315 A 19890926

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