

Title (en)
LIQUID-COOLED ROOFS FOR ELECTRIC-ARC FURNACES

Publication
EP 0085462 B1 19850807 (DE)

Application
EP 83200126 A 19830126

Priority
CH 55382 A 19820129

Abstract (en)
[origin: US4443880A] A liquid cooled cover for an electric furnace, wherein in order to lengthen the service life of the thermally highly stressed cover, cooling pipes are located essentially parallel and approximately vertically to the furnace tipping direction at a predetermined distance from each other. The cooling pipes are embedded in a fireproof construction material (57, 57') and constitute its reinforcement. The cooling liquid is supplied and removed exclusively via a cover ring, which is constructed as a cooling liquid distributing conduit in the periphery of the cover and which provided with integrated bypass openings. The composite construction of cooling pipes and fireproof construction material achieves a high thermal and mechanical stability of the furnace cover and the cooling system is largely removed from altering temperature stresses.

IPC 1-7
F27B 3/16; **F27B 3/24**; **F27D 1/12**

IPC 8 full level
F27B 3/08 (2006.01); **F27B 3/16** (2006.01); **F27B 3/24** (2006.01); **F27D 1/12** (2006.01); **F27D 1/18** (2006.01)

CPC (source: EP US)
F27B 3/16 (2013.01 - EP US); **F27B 3/24** (2013.01 - EP US); **F27D 1/1816** (2013.01 - EP US)

Cited by
EP0205903A1; DE19545984A1; DE19545984B4

Designated contracting state (EPC)
CH DE FR GB IT LI SE

DOCDB simple family (publication)
EP 0085462 A1 19830810; **EP 0085462 B1 19850807**; BR 8300426 A 19831101; DE 3360484 D1 19850912; JP H0222878 B2 19900522; JP S58208581 A 19831205; US 4443880 A 19840417

DOCDB simple family (application)
EP 83200126 A 19830126; BR 8300426 A 19830128; DE 3360484 T 19830126; JP 1160683 A 19830128; US 46030183 A 19830124