

Title (en)

Condensate retention arrangement for cold hearth refining

Title (de)

Kondensatauffanganordnung für Schmelzbehandlung in Kalttherdofen

Title (fr)

Collecteur du condensé pour four d'affinage à creuset froid

Publication

EP 0900854 B1 20010530 (EN)

Application

EP 98202473 A 19980723

Priority

US 92320197 A 19970904

Abstract (en)

[origin: EP0900854A1] In the condensate retention arrangement for cold hearth refining described in the specification, a member (26, 40) having a concave water-cooled surface (22, 34) is disposed above a hearth (12) to collect condensate (25) of vaporized constituents of an alloy being processed in the hearth. The condensate (25) collected on the water-cooled surface is less brittle and less likely to break away and fall into the hearth (12) which could change the composition of the refined material. The member (26, 40) having the concave surface may be the lid of an enclosure (10) containing the hearth or a separate member disposed above the hearth. Dovetail retention grooves (36) may be formed in the surface (34) facing the hearth to enhance retention of the condensate. <IMAGE>

IPC 1-7

C22B 9/22; **C22B 34/12**; **F27D 1/02**; **F27D 1/12**

IPC 8 full level

C22B 9/02 (2006.01); **C22B 9/22** (2006.01); **C22B 34/12** (2006.01); **F27B 3/24** (2006.01); **F27D 1/02** (2006.01); **F27D 1/12** (2006.01)

CPC (source: EP)

C22B 9/228 (2013.01); **C22B 34/1295** (2013.01); **F27D 1/025** (2013.01); **F27D 1/12** (2013.01)

Cited by

CN113249587A; CN113249586A; EP1845325A4; US7757748B2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0900854 A1 19990310; **EP 0900854 B1 20010530**; DE 69800856 D1 20010705; DE 69800856 T2 20020912; JP 3076306 B2 20000814; JP H11132664 A 19990521

DOCDB simple family (application)

EP 98202473 A 19980723; DE 69800856 T 19980723; JP 24809498 A 19980902