

Title (en)

APPARATUS FOR AN ELECTROMAGNETIC NOZZLE FOR CONTROLLING A JET OF LIQUID METAL

Publication

**EP 0408453 B1 19930331 (FR)**

Application

**EP 90402006 A 19900712**

Priority

FR 8909369 A 19890712

Abstract (en)

[origin: EP0408453A1] An apparatus for an electromagnetic nozzle controlling the jet of liquid metal at the exit of a crucible (2) comprises an electromagnetic inductor (1, 1a) and a magnetic-field focusing device (3) which surrounds the outlet walls of the crucible (2) and consists of three-dimensional sectors (4) separated by radial slots (3a). <IMAGE>

IPC 1-7

**B22D 39/00; B22D 41/08**

IPC 8 full level

**B22D 37/00** (2006.01); **B22D 11/18** (2006.01); **B22D 39/00** (2006.01); **B22D 41/08** (2006.01); **B22D 41/50** (2006.01); **B22F 9/08** (2006.01)

CPC (source: EP US)

**B22D 39/003** (2013.01 - EP US); **B22D 41/08** (2013.01 - EP US)

Cited by

EP0486830A3; EP0549984A3; EP0539051A1; EP0636848A1; FR2708725A1; US5563904A

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0408453 A1 19910116; EP 0408453 B1 19930331**; DE 69001217 D1 19930506; DE 69001217 T2 19930923; FR 2649625 A1 19910118; FR 2649625 B1 19940513; JP H03115508 A 19910516; JP H0645810 B2 19940615; US 5074532 A 19911224

DOCDB simple family (application)

**EP 90402006 A 19900712**; DE 69001217 T 19900712; FR 8909369 A 19890712; JP 18137390 A 19900709; US 55049190 A 19900710