

Title (en)

A SLIDING CLOSURE AT THE OUTLET OF A VESSEL, ESPECIALLY ONE CONTAINING MOLTEN METAL, AND SUITABLE FIREPROOF CLOSURE COMPONENTS

Publication

**EP 0422141 B1 19921216 (DE)**

Application

**EP 90903373 A 19900207**

Priority

CH 118989 A 19890331

Abstract (en)

[origin: WO9011854A1] In a sliding closure (20) in the outlet of a vessel (22), especially one containing molten metal, closure components (23, 24) are fitted with flow apertures (32, 33) which project inside the vessel and each have there two mutually parallel and approximately plane sliding surfaces (25, 26, 27, 28) on which they may be moved relatively to each other to open or close the flow aperture.

IPC 1-7

**B22D 41/14**

IPC 8 full level

**B22D 41/18** (2006.01); **B22D 41/14** (2006.01); **F27D 3/14** (2006.01)

CPC (source: EP KR US)

**B22D 41/14** (2013.01 - EP KR US)

Designated contracting state (EPC)

AT ES FR GB IT NL SE

DOCDB simple family (publication)

**WO 9011854 A1 19901018**; BR 9006278 A 19910806; CA 2030545 A1 19901001; CH 678701 A5 19911031; CN 1045935 A 19901010; DE 3913750 C1 19901004; EP 0422141 A1 19910417; EP 0422141 B1 19921216; ES 2037556 T3 19930616; IL 93758 A0 19901223; IL 93758 A 19940227; JP H03505065 A 19911107; KR 920700083 A 19920219; RU 1831411 C 19930730; US 5154875 A 19921013; ZA 902004 B 19901228

DOCDB simple family (application)

**EP 9000198 W 19900207**; BR 9006278 A 19900207; CA 2030545 A 19900207; CH 118989 A 19890331; CN 90101755 A 19900329; DE 3913750 A 19890426; EP 90903373 A 19900207; ES 90903373 T 19900207; IL 9375890 A 19900315; JP 50360690 A 19900207; KR 900702507 A 19901123; SU 4831838 A 19901129; US 61352290 A 19901108; ZA 902004 A 19900315