

Title (en)

Means for protecting molten metal in a sliding gate.

Title (de)

Vorrichtung zum Schützen geschmolzenen Metalls in Schieberverschlüssen.

Title (fr)

Protection d'un métal en fusion dans un obturateur à plaques.

Publication

EP 0048641 A1 19820331 (FR)

Application

EP 81401315 A 19810818

Priority

FR 8019837 A 19800915

Abstract (en)

[origin: US4480770A] This invention relates to the protection of the teeming flow or stream of molten metal contained in a vessel and passing through a plate-type valve or cut-off device of the kind comprising a stationary plate and a displaceable plate that is provided with at least one output nozzle. A gas which is substantially inert with respect to the metal and has a pressure slightly higher than atmospheric pressure is fed into the aforesaid device, and this gas surrounds the metal while the latter passes through the said device, in such manner as to isolate the same from the ambient air by an uninterrupted protective gaseous barrier.

Abstract (fr)

L'invention concerne la protection du jet de coulée d'un métal en fusion contenu dans un récipient (1) et traversant un dispositif obturateur à plaques comportant une plaque (11) fixe et une plaque (12) mobile munie d'une busette (13) au moins. On introduit, dans le dispositif précité, un gaz pratiquement inerte vis-à-vis du métal et ayant une pression légèrement supérieure à la pression atmosphérique et on répartit ce gaz autour du métal alors qu'il traverse ledit dispositif de façon à l'isoler de l'air ambiant par une barrière de protection gazeuse continue.

IPC 1-7

B22D 41/08

IPC 8 full level

B22D 7/12 (2006.01); **B22D 41/08** (2006.01); **B22D 41/42** (2006.01); **B22D 41/58** (2006.01)

CPC (source: EP US)

B22D 41/42 (2013.01 - EP US)

Citation (search report)

- [X] FR 2227073 A1 19741122 - DIDIER WERKE AG [DE]
- US 4131219 A 19781226 - HIND ROBERT D, et al
- FR 2403852 A1 19790420 - AIR LIQUIDE [FR]
- FR 2395095 A1 19790119 - DETALLE POL [FR]
- FR 2396611 A1 19790202 - DIDIER WERKE AG [DE]
- FR 2252157 A1 19750620 - USS ENG & CONSULT [US]
- [A] CH 387883 A 19650215 - BETEILIGUNGS & PATENTVERW GMBH [DE]

Cited by

BE1001239A3; EP0483521A1; FR2757431A1; FR2530167A1; EP0446406A1; DE4007993A1; DE3342071A1; FR2564958A1; AT392348B; DE3406076A1; US4649493A; EP0587485A1; FR2695335A1; EP0171589A1; DE3406075A1; EA000604B1; EA000774B1; BE1004804A4; US5390902A; EP0089282A1; BE1006006A3; US4586249A; FR2529811A1; USRE33036E; WO9220480A1; WO9817421A1; WO9817420A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LU NL SE

DOCDB simple family (publication)

EP 0048641 A1 19820331; **EP 0048641 B1 19841227**; **EP 0048641 B2 19890920**; AR 225364 A1 19820315; AT E10915 T1 19850115; AU 543563 B2 19850426; AU 7389881 A 19820325; CA 1186146 A 19850430; DE 3167942 D1 19850207; FR 2490123 A1 19820319; FR 2490123 B1 19831209; JP S5752564 A 19820329; US 4480770 A 19841106; ZA 815454 B 19820728

DOCDB simple family (application)

EP 81401315 A 19810818; AR 28663281 A 19810902; AT 81401315 T 19810818; AU 7389881 A 19810807; CA 385354 A 19810908; DE 3167942 T 19810818; FR 8019837 A 19800915; JP 12541781 A 19810812; US 29432381 A 19810819; ZA 815454 A 19810707