

Title (en)
HIGH SPEED CONTINUOUS VERTICAL CASTING PROCESS FOR ALUMINIUM AND ITS ALLOYS

Publication
EP 0083611 B1 19850320 (FR)

Application
EP 82902070 A 19820707

Priority
FR 8114037 A 19810709

Abstract (en)
[origin: US4523627A] PCT No. PCT/FR82/00115 Sec. 371 Date Mar. 7, 1983 Sec. 102(e) Date Mar. 7, 1983 PCT Filed Jul. 7, 1982 PCT Pub. No. WO83/00107 PCT Pub. Date Jan. 20, 1983. The present invention concerns a process for vertical continuous casting at speeds which are close to a meter per minute. The process is characterized in that the use of a top feeder head and an electromagnetic field are combined and that, by controlling the position in respect of height of the top feeder head and the cooling system relative to the field generating means, the distances between certain parameters such as the solidification front and the base plane of the top feeder head are maintained constant in the course of the casting operation. This process makes it possible to cast aluminium and alloys thereof in the form of billets or plates, the smallest dimension of which does not exceed 150 mm and which have a surface that does not require any scalping treatment.

IPC 1-7
B22D 11/01; **B22D 27/02**

IPC 8 full level
B22D 11/01 (2006.01); **B22D 11/041** (2006.01); **B22D 11/04** (2006.01); **B22D 11/10** (2006.01); **B22D 11/115** (2006.01); **B22D 27/02** (2006.01)

CPC (source: EP US)
B22D 11/015 (2013.01 - EP US)

Designated contracting state (EPC)
CH DE LI NL

DOCDB simple family (publication)
US 4523627 A 19850618; AU 547447 B2 19851017; AU 8681282 A 19830202; BR 8207785 A 19830621; CA 1178780 A 19841204; DE 3262654 D1 19850425; EP 0083611 A1 19830720; EP 0083611 B1 19850320; ES 513801 A0 19830416; ES 8305608 A1 19830416; FR 2509207 A1 19830114; FR 2509207 B1 19831110; GB 2103972 A 19830302; GB 2103972 B 19850109; GR 69780 B 19820707; IN 156297 B 19850615; IT 1151818 B 19861224; IT 8222215 A0 19820702; IT 8222215 A1 19840102; JP S58500939 A 19830609; NO 830653 L 19830224; RO 87316 A 19850831; RO 87316 B 19850831; SU 1178315 A3 19850907; WO 8300107 A1 19830120; YU 145382 A 19860430

DOCDB simple family (application)
US 47466983 A 19830307; AU 8681282 A 19820707; BR 8207785 A 19820707; CA 406906 A 19820708; DE 3262654 T 19820707; EP 82902070 A 19820707; ES 513801 A 19820708; FR 8114037 A 19810709; FR 8200115 W 19820707; GB 8216749 A 19820609; GR 820168668 A 19820706; IN 679CA1982 A 19820611; IT 2221582 A 19820702; JP 50206882 A 19820707; NO 830653 A 19830224; RO 11020783 A 19830303; SU 3560644 A 19830304; YU 145382 A 19820705