

Title (en)

HIGH SPEED CONTINUOUS VERTICAL CASTING PROCESS FOR ALUMINIUM AND ITS ALLOYS.

Title (de)

VERFAHREN ZUM VERTIKALEN STRANGGIESSEN VON ALUMINIUM UND DESSEN LEGIERUNGEN MIT HOHER GESCHWINDIGKEIT.

Title (fr)

PROCEDE DE COULEE CONTINUE VERTICALE A GRANDE VITESSE DE L'ALUMINIUM ET DE SES ALLIAGES.

Publication

**EP 0083611 A1 19830720 (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.

Abstract (fr)

Procédé de coulée verticale en continu à des vitesses voisines du mètre par minute. Ce procédé est caractérisé en ce que l'on combine l'utilisation d'une rehausse (1) et d'un champ électromagnétique et que, par réglage en hauteur de la position de la rehausse et du système de refroidissement (5) par rapport au dispositif (3) générateur du champ, on maintient constantes, au cours de la coulée, les distances entre certains paramètres comme le front de solidification et le plan de base de la rehausse.

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