

Title (en)  
METHOD OF AND APPARATUS FOR DIRECT CASTING OF METAL STRIP

Publication  
**EP 0362305 A4 19910731 (EN)**

Application  
**EP 89901700 A 19890829**

Priority  
• US 15571088 A 19880216  
• US 26307488 A 19881027

Abstract (en)  
[origin: WO8907498A1] A method of direct casting molten metal into strip by providing a melt (20) of the metal to be cast, providing a continuously driven metal chill surface (14), flowing a layer of the melt onto the moving chill surface and extracting heat from the layer of melt to solidify and temporarily bond the layer of melt to the chill surface and to shrink the solidified layer and cause it to be released from the chill surface, withdrawing the released solidified layer as a continuous metal strip (16), establishing a natural oxide layer (52) on said chill surface to provide an interface between said layer of melt and said chill surface (14), and maintaining said natural oxide in a smooth layer (52) of substantially uniform thickness.

IPC 1-7  
**B22D 11/06**

IPC 8 full level  
**B22D 11/06** (2006.01)

CPC (source: EP)  
**B22D 11/0665** (2013.01)

Citation (search report)  
• [Y] US 4588015 A 19860513 - LIEBERMANN HOWARD H [US]  
• [Y] US 3879009 A 19750422 - MAO GEORGE W  
• [Y] FR 2137424 A1 19721229 - INST SP  
• [A] PATENT ABSTRACTS OF JAPAN, vol. 5, no. 131 (M-84)[803], 21st August 1981; & JP-A-56 68 562 (HITACHI SEISAKUSHO K.K.) 09-06-1981  
• See references of WO 8907498A1

Cited by  
US9700937B2; US11459635B2

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**WO 8907498 A1 19890824**; AT E100743 T1 19940215; CA 1325097 C 19931214; DE 3887518 D1 19940310; DE 3887518 T2 19940623; EP 0362305 A1 19900411; EP 0362305 A4 19910731; EP 0362305 B1 19940126; JP H02503170 A 19901004

DOCDB simple family (application)  
**US 8804642 W 19881229**; AT 89901700 T 19890829; CA 589653 A 19890131; DE 3887518 T 19881229; EP 89901700 A 19890829; JP 50161289 A 19881229