Title (en)

PROCESS FOR CONTROLLING A MULTI-LINE CASTING PLANT

Publication

EP 0274516 B1 19910417 (DE)

Application

EP 87904869 A 19870721

Priority

DE 3624596 A 19860721

Abstract (en)

[origin: WO8800504A1] In the continuous casting plant described, a melt which is poured from a distribution channel (10) with several discharge nozzles (11, 12, 13, 14) solidifies in a corresponding number of chill moulds and is withdrawn in the form of cast bars (15, 16, 17, 18), which after being subjected or not to forming, are cut to the desired bar length in a parting installation (19). After initiation of "end of casting", all of the discharge nozzles (11, 12, 13, 14) should first be left open until the height of the melt in the distribution channel (10) has dropped to a predetermined threshold value, upon which first one (for example 11) of the two outer nozzles is closed. Thereafter a new threshold value is determined for the remaining nozzles still open (12, 13, 14). After this new value has been reached, the other two (14) outer nozzles are closed. This process is continued until progressively from the outside inwards all of the nozzles have been closed. The closing times of the nozzles (11, 12, 13, 14) are so selected that the length of the residual bar still to be extracted corresponds to a multiple of the predetermined bar cutting length plus a predetermined final bar length. The final bar length is obtained from the sum of the bar cutting length and a predetermined stub length. In this way, an optimum distribution of the remaining melt is achieved on the discharge nozzles in such a way that only in the case of the last open discharge nozzle is a final bar length set, which deviates from the preset final bar length.

IPC 1-7

B22D 11/12; B22D 11/16

IPC 8 full level

B22D 11/12 (2006.01); B22D 11/126 (2006.01); B22D 11/16 (2006.01)

CPC (source: EP)

B22D 11/126 (2013.01); B22D 11/163 (2013.01)

Citation (examination)

Patent Abstacts of Japan, vol.6, No 134(M144)(1012), 21 July 1982, see the whole abstract & JP,A,5758971 (KAWASAKI SEITETSU K.K.) 09 April 1982

Cited by

CN110976804A; CN115283632A

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

WO 8800504 A1 19880128; DD 257778 A5 19880629; DE 3624596 A1 19880128; DE 3769456 D1 19910523; EP 0274516 A1 19880720; EP 0274516 B1 19910417

DOCDB simple family (application)

EP 8700396 W 19870721; DD 30516487 A 19870720; DE 3624596 A 19860721; DE 3769456 T 19870721; EP 87904869 A 19870721