

Title (en)
METHOD OF TERMINATING THE CASTING OPERATION IN A STEEL STRIP CASTING PLANT

Publication
EP 0234491 B1 19900926 (DE)

Application
EP 87102281 A 19870218

Priority
DE 3606289 A 19860227

Abstract (en)
[origin: US4729420A] A method for concluding the operation of the continuous casting of strip metal comprising the steps of casting said strip in a narrow slotted strip shaped continuous casting mold having a flared inlet pouring zone necking down to a distal zone in which the walls of the mold are parallel and spaced apart by substantially the desired cross-sectional shape and dimensions of the strip being cast, pouring liquid metal through a pouring tube having an orifice into said flared zone, and controlling the pouring rate thereof, continuously detecting and monitoring the instantaneous surface level of the metal bath in said mold, withdrawing the casting from the distal end of said mold, and controlling the rate of withdrawal, adjusting the pouring rate and withdrawal rate so that the level of the metal bath is at a maximum height for said mold when in normal operation, continuously sensing whether or not there is present downstream of said mold evidence of the liquid core of said cast strip, reducing the pouring and withdrawal rates for concluding the casting to a rate at which the liquid core of the cast strip is near to but downstream of the mold and at which the metal bath level remains constant, terminating said pouring while continuing said withdrawal, whereby the metal bath level descends rapidly toward the neck end of said flared zone, reducing the withdrawal rate when the metal bath level is close to the lower end of the flared zone to a rate at which the upper surface of the metal bath can congeal sufficiently for further processing downstream by the time it reaches the end of the distal zone, and thereafter withdrawing the casting.

IPC 1-7
B22D 11/04; B22D 11/14

IPC 8 full level
B22D 11/10 (2006.01); **B22D 11/04** (2006.01); **B22D 11/14** (2006.01); **B22D 11/18** (2006.01); **B22D 11/20** (2006.01)

CPC (source: EP KR US)
B22D 11/04 (2013.01 - KR); **B22D 11/10** (2013.01 - KR); **B22D 11/182** (2013.01 - EP US); **B22D 11/202** (2013.01 - EP US)

Cited by
AT512214A1; AT512214B1; US9254520B2

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

DOCDB simple family (publication)
EP 0234491 A2 19870902; EP 0234491 A3 19880107; EP 0234491 B1 19900926; AT E56898 T1 19901015; CA 1288927 C 19910917; DE 3606289 A1 19870903; DE 3765132 D1 19901031; ES 2017650 B3 19910301; IN 169181 B 19910914; JP S62203652 A 19870908; KR 870007740 A 19870921; KR 960002406 B1 19960217; US 4729420 A 19880308

DOCDB simple family (application)
EP 87102281 A 19870218; AT 87102281 T 19870218; CA 530686 A 19870226; DE 3606289 A 19860227; DE 3765132 T 19870218; ES 87102281 T 19870218; IN 130MA1987 A 19870225; JP 4049087 A 19870225; KR 870000989 A 19870207; US 1762387 A 19870224