Title (en)
PROCESS FOR OPTIMISING SURFACE QUALITY OF CONTINUOUS CASTINGS

Title (de)
VERFAHREN ZUR OPTIMIERUNG DER STRANGOBERFLÄCHENQUALITÄT

Title (fr)
PROCEDE POUR OPTIMISER LA QUALITE DE SURFACE DE PIECES MOULEES PAR COULEE CONTINUE

Publication
EP 0907442 A1 19990414 (DE)

Application
EP 97922831 A 19970402

Priority
• DE 9700732 W 19970402
• DE 19614760 A 19960402

Abstract (en)
[origin: WO9736706A1] The invention relates to a process in a casting mill for producing continuous castings, in particular continuously cast steel, in which the movement of the casting is determined and modified. The invention is characterised by the following process steps: (a) the melt surface is covered with a casting powder which forms a liquid slag to produce a lubricating film between the casting outer shell and the mould inner wall; (b) a measured value characterising the friction between the casting outer shell and mould inner wall is determined in the oscillation device and forwarded to the evaluation unit (in the form of a computer); (c) the signal which characterises the path-time behaviour of the casting is likewise forwarded to the computer; (d) the computer correlates and links the measured values or signals for the path-time behaviour of the casting and the friction of the casting in the mould to produce comparable values and compares them to a reference value; (e) the reference value is determined as a mean value of the casting speed from the path-time behaviour of the casting; (f) from the discrepancy between actual and reference values, a signal is generated to adjust the casting powder composition in order to reduce friction and/or mould vibration.

IPC 1-7
B22D 11/16

IPC 8 full level
B22D 11/053 (2006.01); B22D 11/10 (2006.01); B22D 11/04 (2006.01); B22D 11/108 (2006.01); B22D 11/16 (2006.01)

CPC (source: EP)
B22D 11/165 (2013.01); B22D 11/166 (2013.01)

Designated contracting state (EPC)
AT BE DE ES FI FR GB IT NL

DOCDB simple family (publication)
WO 9736706 A1 19971009; AT E201623 T1 20010615; AU 2885797 A 19971022; AU 722408 B2 20000803; BR 9708495 A 19990803; CA 2250871 A1 19971009; CN 1072067 C 20011003; CN 1215357 A 19990428; DE 19614760 A1 19971009; DE 59703679 D1 20010705; EP 0907442 A1 19990414; EP 0907442 B1 20010530; ES 2157072 T3 20010801; JP 3130053 B2 20010131; JP H11513936 A 19991130; RU 2163856 C2 20010310; UA 44840 C2 20020315

DOCDB simple family (application)
DE 9700732 W 19970402; AT 97922831 T 19970402; AU 2885797 A 19970402; BR 9708495 A 19970402; CA 2250871 A 19970402; CN 97193564 A 19970402; DE 19614760 A 19960402; DE 59703679 T 19970402; EP 97922831 A 19970402; ES 97922831 T 19970402; JP 53483797 A 19970402; RU 98119841 A 19970402; UA 98105197 A 19970402