

Title (en)
TWIN-ROLL CASTING MACHINE

Title (de)
ZWEIWALZEN-GIESSMASCHINE

Title (fr)
MACHINE DE COULÉE À DEUX ROULEAUX

Publication
EP 2011590 A4 20091111 (EN)

Application
EP 06745686 A 20060426

Priority
JP 2006308708 W 20060426

Abstract (en)

[origin: EP2011590A1] Provided are a pair of chilled rolls 1 on which molten steel solidifies for delivery of a steel strip 3 from a nip G between the rolls, a noncontact type sensor 6 for measuring thickness distribution of the strip 3 widthwise of the strip, marking means 8 for making a mark 7 on the strip 3 whenever the chilled rolls 1 make one rotation, mark detection means 9 for sensing the marks 7 on the strip 3 and nip estimating means 10. From thickness-distribution information 12 by the sensor 6 and passed-mark information 13 by the mark detection means 9, the nip estimating means 10 calculates variation of the nip G between the rolls 1 whenever the rolls make one rotation, on the basis of variation in thickness distribution widthwise of the strip 3 between confirmed passing of the mark 7 and confirmed passing of the next mark 7, and stores the same as data.

IPC 8 full level
B22D 11/16 (2006.01)

CPC (source: EP US)
B22D 11/0622 (2013.01 - EP US); **B22D 11/16** (2013.01 - EP US); **B22D 11/168** (2013.01 - EP US)

Citation (search report)

- [A] JP 2002066704 A 20020305 - NIPPON KOKAN KK
- [DY] JP S6027458 A 19850212 - ISHIKAWAJIMA HARIMA HEAVY IND
- [Y] JP H06134554 A 19940517 - NIPPON STEEL CORP, et al
- [Y] JP H05285607 A 19931102 - MITSUBISHI HEAVY IND LTD
- [Y] JP H0740008 A 19950210 - NIPPON STEEL CORP
- [Y] JP S6083746 A 19850513 - ISHIKAWAJIMA HARIMA HEAVY IND
- [X] US 5787967 A 19980804 - VENDEVILLE LUC [FR], et al
- [X] US 4565240 A 19860121 - SHIBUYA KIYOSHI [JP], et al
- [X] JP H0788599 A 19950404 - NIPPON STEEL CORP
- See references of WO 2007129373A1

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