

Title (en)
HAMMERING VIBRATOR IN CONTINUOUS CASTING

Title (de)
HAMMERVIBRATOR FÜR STRANGGUSSVORGÄNGE

Title (fr)
VIBRATEUR À MARTELAGE POUR COULÉE CONTINUE

Publication
EP 2174734 A4 20170222 (EN)

Application
EP 08791358 A 20080718

Priority
• JP 2008063049 W 20080718
• JP 2007207039 A 20070808

Abstract (en)
[origin: EP2174734A1] PROBLEM: To effectively prevent the occurrence of segregation in a casting slab, even when the slab width is large.
MEANS: Continuously performing soft reduction during continuous casting of a slab having a rectangular transverse cross section such that a solid fraction at center in a direction of thickness f S is at least 0.1-0.9 and a reduction ratio in a direction of slab thickness is within 1% per meter of length in a direction of casting, and continuously impacting both of the opposing sides of a narrow side of the slab 1 in a direction of slab width at at least one site where the solid fraction at center in the direction of thickness f S is within the range of 0.1-0.9, the impact being performed by using a block 3 disposed between paired pinch rolls 2a, 2b disposed adjacent to each other at a vibration frequency of impact of 4-12 Hz and an impact energy of 30-150 J. ADVANTAGEOUS EFFECTS: The occurrence of segregation such as center segregation and V-shape segregation is effectively prevented, even in a casting slab having a large slab width, thereby resulting in a casting slab with good internal quality.

IPC 8 full level
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CPC (source: EP)
B22D 11/114 (2013.01); **B22D 11/12** (2013.01); **B22D 11/1206** (2013.01)

Citation (search report)
• [XP] JP 2007229748 A 20070913 - SUMITOMO METAL IND
• See references of WO 2009019969A1

Cited by
WO2013170844A1; EP2371468A4; US11077492B2; WO2020221657A1; DE102012009870A1

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