

Title (en)  
CONTINUOUS CASTING METHOD OF STEEL

Title (de)  
STRANGGIESSVERFAHREN FÜR STAHL

Title (fr)  
PROCÉDÉ DE COULÉE CONTINUE D'ACIER

Publication  
**EP 2371468 B1 20181017 (EN)**

Application  
**EP 09834617 A 20091028**

Priority  
• JP 2009068462 W 20091028  
• JP 2008330188 A 20081225

Abstract (en)  
[origin: EP2371468A1] A continuous casting method of steel is provided that can reduce segregation and center porosity by causing a slab to undergo impact vibration under optimum conditions. In the continuous casting method of steel in which a slab having a rectangular cross section is cast while causing vibration in the slab with liquid core by disposing impact-vibration equipments on both short side surfaces of slab and continuously impacting those surfaces, the method includes the steps of: adjusting a vibration energy, a distance between shafts of adjacent guide rolls and a liquid core thickness, so that, among intersections generated by the impacting of the short side surface, between a curve of displacement  $\delta(x)$  of the long side slab surface in a slab thickness-wise direction as defined by the following formulas (1) and (2) and a straight line  $\delta(x) = 0.10$  mm, a distance from an impact position of the intersection farther away from the coordinate origin is at least 200 mm; and impacting the short side,  $\delta x = \exp - 1.5 \times \ln x / 200 \times \#R / \#R 0 0.587 2 \times \delta_{\max} \delta_{\max} = L 0 \times E / E 0 0.5 \times \#R / \#R 0 \times t / t 0 0.446$

IPC 8 full level  
**B22D 11/128** (2006.01); **B22D 11/16** (2006.01); **B22D 11/20** (2006.01)

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