

Title (en)

RH vacuum process with controlled circulation rate for the decarburization of steel melts

Title (de)

RH-Vakuumverfahren mit Massenumlaufrateststeuerung zur Reduzierung des Kohlenstoffgehalts einer Stahlschmelze

Title (fr)

Procédé RH de dégazage sous vide à taux de circulation contrôlé pour réduire la teneur en carbone d'aciers en fusion

Publication

**EP 0949339 B1 20010530 (DE)**

Application

**EP 99105806 A 19990323**

Priority

DE 19815298 A 19980406

Abstract (en)

[origin: EP0949339A1] RH vacuum decarburization process for molten steel uses a decarburization kinetics computer model to determine the carbon content reduction for comparison with a threshold carbon content value. RH vacuum decarburization process for molten steel comprises: (a) determining the differential force for melt circulation from the melt differential pressure in riser and fall pipes resulting from injected transport gas (VFG) and produced reaction gas (VCO) in the riser pipe (5); (b) determining the circulating melt mass flow (MSt) from the differential force; (c) determining the reduction in oxygen and carbon contents in the melt using a computer model for decarburization kinetics; (d) repeating steps (a) to (c) if the determined carbon content is greater than a threshold value (Ce); and (e) ending the treatment if the determined carbon content is not greater than the threshold value.

IPC 1-7

**C21C 7/10; C22B 9/04**

IPC 8 full level

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