

Title (en)

PROCESS FOR CASTING STEEL COMPRISING A PROTECTION OF THE METAL BATH BY CARBON DIOXIDE SNOW

Publication

**EP 0274290 B1 19900613 (FR)**

Application

**EP 87402629 A 19871123**

Priority

FR 8616475 A 19861126

Abstract (en)

[origin: US4781122A] Process of casting steel from a ladle into a tundish, in which the metal which is in the tundish is protected against oxidation and nitridation. The process comprises two consecutive steps: a first step which includes flushing the tundish before the start of the casting of the liquid metal during which a high flow of dry ice or liquid argon is introduced until the oxygen concentration in the vicinity of the zone corresponding to the base of the jet of liquid metal at the start of the casting is lower than about 0.5%; and a second step for the upkeep of the atmosphere in the vicinity of the base of the jet which begins when the liquid metal starts to flow in the tundish, during which dry ice or liquid argon is injected as an upkeep flow which is less than the flushing flow, so as to maintain an oxygen concentration lower than about 0.5% in the vicinity of the base of the jet.

IPC 1-7

**B22D 11/10**; **B22D 41/08**

IPC 8 full level

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CPC (source: EP US)

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Cited by

US5343491A; AU667640B2; EP0383184A1; US5683652A; EP0639650A1; US5538184A

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**US 4781122 A 19881101**; AT E53519 T1 19900615; AU 598610 B2 19900628; AU 8181587 A 19880602; CA 1330159 C 19940614; DE 3763153 D1 19900719; EP 0274290 A1 19880713; EP 0274290 B1 19900613; ES 2016643 B3 19901116; FR 2607039 A1 19880527; FR 2607039 B1 19890331; JP S63252650 A 19881019; ZA 878848 B 19880526

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**US 12534387 A 19871125**; AT 87402629 T 19871123; AU 8181587 A 19871126; CA 552785 A 19871125; DE 3763153 T 19871123; EP 87402629 A 19871123; ES 87402629 T 19871123; FR 8616475 A 19861126; JP 29627587 A 19871126; ZA 878848 A 19871125