

Title (en)

Process and apparatus for degassing and maintaining a low hydrogen content in molten aluminium alloys during transport in ladles.

Title (de)

Verfahren und Anlage zum Entgasen und Aufrechterhalten eines niedrigen Wasserstoffgehaltes in legierten Aluminiumschmelzen während des Pfannentransportes.

Title (fr)

Procédé et dispositif de dégazage et de maintien d'une faible teneur en hydrogène dans les alliages d'aluminium liquides au cours de leur transport dans des poches.

Publication

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Application

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Priority

FR 8908731 A 19890613

Abstract (en)

Process and apparatus for degassing and maintaining a low hydrogen content in liquid aluminium alloys during their transport in ladles. The process is characterised in that a stream of gases which are inert towards aluminium is circulated in the ladle at a low and controlled flow rate and the said gas(es) is (are) then removed from the ladle. The apparatus consists of at least one ladle (1) and at least one bottle (4) containing a gas under pressure, these being joined together by a circuit (5) comprising a pressure reducer (6), a flow- meter (7) and a gas injection system, the said ladle being equipped in its upper part with a controlled gas leakage system. This invention makes it possible to reduce and avoid the gassing of metal during its transport and to provide the users with an aluminium alloy which is suitable for moulding articles which are metallurgically healthy.
<IMAGE>

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] FR 2160720 A1 19730706 - KOCKS GMBH FRIEDRICH
- [X] EP 0216393 A1 19870401 - SHOWA ALUMINUM CORP [JP]
- [X] EP 0142727 A1 19850529 - SHOWA ALUMINUM CORP [JP]
- [X] US 3159478 A 19641201 - GOTTSCHALK ROY F
- [A] US 1810801 A 19310616 - WILHELM TODT
- [A] US 2160812 A 19390606 - HERBERT ALDEN JOHN, et al
- [A] FR 787996 A 19351002 - ALUMINIUM LTD
- [A] GB 738510 A 19551012 - AMERICAN SMELTING REFINING
- [A] DE 2427751 A1 19750109 - MANSFELD KOMBINAT W PIECK VEB

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