

Title (en)

Apparatus for repairing blast furnace taphole facings

Title (de)

Reparaturvorrichtung der Auskleidung einer Hochofenabstichöffnung

Title (fr)

Dispositif de réparation du revêtement d'un trou de coulée d'un haut fourneau

Publication

EP 1233077 A1 20020821 (EN)

Application

EP 02380017 A 20020129

Priority

ES 200100338 A 20010215

Abstract (en)

Starting from the use of a taphole stopper gun (7), connecting with the face of the taphole (5) to supply to the latter a dense mass of material for closing of the pig-iron outlet opening, it consists in equipping the nozzle (10) of this gun (7) with a sleeve (11) an axial projection of this nozzle (10) and designed to hold in its interior a refractory ring (12) of axial dimension adequate to fill the hollow (9) that has been caused in the face (8) of the taphole (5) by wear, so that in the actual closing operation of the taphole (5) the refractory ring (12) remains deposited in this hollow (9) the sleeve (11) being withdrawn on the nozzle, (10) on the impact of its external limit stops with the face (8) of the taphole (5), this ring (12) remaining integrated in the taphole, secured by the same closing mass of material, filling the hollow (9), with which the automatic repair of the taphole is achieved in conjunction with its closing. <IMAGE>

IPC 1-7

C21B 7/12

IPC 8 full level

C21B 7/12 (2006.01)

CPC (source: EP ES)

C21B 7/12 (2013.01 - EP ES)

Citation (search report)

- [A] DE 19755932 C1 19981210 - DANGO & DIENENTHAL MASCHBAU [DE]
- [A] EP 0315311 A1 19890510 - FOSECO INT [GB]
- [A] US 4909487 A 19900320 - SCHNEIDER WERNER [DE]
- [A] FR 2680179 A1 19930212 - BOULONNAIS TERRES REFRACTAIRES [FR]
- [A] EP 1069191 A1 20010117 - VON ROLL UMWELTECHNIK AG [CH]

Cited by

CN103966375A; WO2007034974A1; US10933612B2; US11318718B2

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