

Title (en)

Improvements in or relating to blast furnace apparatus.

Title (de)

Vorrichtung an Hochöfen.

Title (fr)

Dispositif pour hauts fourneaux.

Publication

**EP 0112084 A1 19840627 (EN)**

Application

**EP 83307233 A 19831128**

Priority

GB 8234573 A 19821203

Abstract (en)

The invention provides blast furnace apparatus wherein granular coal is arranged to be injected, by means of a lance (4), into the furnace through a blast pipe (3) thereof, including a check valve assembly in the wall of the blast pipe through which the lance is passed, said check valve assembly including a chamber (8) disposed above and radially outwardly from a bore (7) passing therethrough and adapted to receive the lance; a collar member (10) adapted to be seated at least partially around the bore and opening on one side into the chamber, the collar having an inclined surface generally directed away from the outlet mouth of the blast pipe; and a ball (9) adapted to be held in the chamber by the lance when passed through the valve into the blast pipe and adapted to run down the inclined surface of the collar into the bore upon withdrawal of the lance from the bore so as to close the bore and seal the valve assembly.

IPC 1-7

**C21B 7/16**

IPC 8 full level

**C21B 5/00** (2006.01)

CPC (source: EP)

**C21B 5/003** (2013.01)

Citation (search report)

- [Y] GB 1067508 A 19670503 - NORMANDIE STE METALLURGIQUE
- [Y] US 2432996 A 19471223 - LEONARD LARSON, et al

Cited by

EP0208132A1; CN104611489A; KR101224704B1

Designated contracting state (EPC)

DE FR IT SE

DOCDB simple family (publication)

**EP 0112084 A1 19840627**; AU 2140483 A 19840607; ES 527740 A0 19850101; ES 8502539 A1 19850101; GB 2131529 A 19840620; GB 2131529 B 19860820; ZA 838592 B 19840725

DOCDB simple family (application)

**EP 83307233 A 19831128**; AU 2140483 A 19831116; ES 527740 A 19831202; GB 8234573 A 19821203; ZA 838592 A 19831117