

Title (en)

Apparatus for injecting pulverized coal into a blast furnace

Title (de)

Vorrichtung zum Einblasen von Kohlenstaub in einen Hochofen

Title (fr)

Dispositif pour l'injection de charbon pulvérisé dans un creuset de haut-fourneau

Publication

EP 0576869 B1 19981111 (FR)

Application

EP 93109093 A 19930607

Priority

- LU 88139 A 19920701
- LU 88249 A 19930421

Abstract (en)

[origin: EP0576869A2] Process for the combined injection of pulverised coal and of a gaseous oxidising agent into a crucible of a shaft furnace, especially a blast furnace, through a hot blast tuyere. At the mouth opening of the tuyere into the crucible the pulverised coal is injected into the hot blast in the form of a hollow annular jet and the gaseous oxidising agent is injected inside the hollow annular jet. A lance for making use of the process comprises two coaxial pipes (16 and 18) and a distribution block provided with a central bore (52) for the pulverised coal. <IMAGE>

IPC 1-7

C21B 5/00; **C21B 7/16**

IPC 8 full level

C21B 5/00 (2006.01); **C21B 7/00** (2006.01); **C21B 7/16** (2006.01)

CPC (source: EP US)

C21B 5/003 (2013.01 - EP US); **C21B 7/16** (2013.01 - EP US)

Cited by

US6090182A; US7914279B2; US6206949B1; EP2796566B1

Designated contracting state (EPC)

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EP 0576869 A2 19940105; **EP 0576869 A3 19940309**; **EP 0576869 B1 19981111**; BR 9302315 A 19940125; CA 2098514 A1 19940102; CN 1037527 C 19980225; CN 1080960 A 19940119; DE 69322002 D1 19981217; DE 69322002 T2 19990401; ES 2123018 T3 19990101; JP H0688107 A 19940329; RU 2103375 C1 19980127; US 5451034 A 19950919

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EP 93109093 A 19930607; BR 9302315 A 19930630; CA 2098514 A 19930616; CN 93107659 A 19930630; DE 69322002 T 19930607; ES 93109093 T 19930607; JP 16260893 A 19930630; RU 93051217 A 19930629; US 8520193 A 19930630