

Title (en)

PROCESS AND DEVICE FOR THE MEASURED SUPPLY OF FINE SOLID PARTICLES TO AN INDUSTRIAL FURNACE

Publication

EP 0235562 A3 19880928 (DE)

Application

EP 87101087 A 19870127

Priority

DE 3603078 A 19860201

Abstract (en)

[origin: US4758118A] A process and apparatus for the metered introduction of fine-grain materials, particularly pulverulent solid substances (i.e., coal dust) from a pressurized metering container which contains a supply of solid material, into an industrial furnace having a plurality of feed locations such as a blast furnace or cupola furnace is presented. The solid material is fed to the individual feed locations in a carrier gas stream through a conveying duct, the gas stream being highly charged with the solid material. The carrier gas is fed to the lower end section of the metering container in a flow which causes a local loosening in the lower section of the supply of solid material with the conveying ducts opening into the loosening region. The apparatus includes a metering container, which is designed as a pressure vessel and which is adapted to be filled at its upper end section with solid material to be fed to the furnace. The metering container includes at its lower end section a plurality of upwardly open chambers. At least one conveying duct leading to a feed location opens into each of the chambers. The conveying ducts are provided in each instance with a gas-permeable incident flow floor. Also, on the side of each conveying duct remote from the metering container a carrier gas duct for the carrier gas feed communicates therewith.

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F27D 3/10; **F27D 23/00**; **F27B 1/20**

IPC 8 full level

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Citation (search report)

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EP 0235562 A2 19870909; **EP 0235562 A3 19880928**; **EP 0235562 B1 19911016**; AT E68589 T1 19911115; BR 8700455 A 19871208; CA 1296530 C 19920303; DE 3603078 C1 19871022; RU 2054047 C1 19960210; US 4758118 A 19880719

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