

Title (en)

Lance for accelerating solid particles.

Title (de)

Lanze zur Beschleunigung fester Teilchen.

Title (fr)

Dispositif d'adaptation pour tuyère d'accélération de particules solides.

Publication

**EP 0165198 A2 19851218 (FR)**

Application

**EP 85630080 A 19850514**

Priority

LU 85363 A 19840515

Abstract (en)

[origin: ES8608113A1] An acceleration nozzle for particles entrained in a carrier gas comprises a first central nozzle having a first diverging cross-section, and an extension nozzle section extending from the first nozzle. The extension nozzle section has a flare or diverging angle which is greater than that of the first acceleration nozzle. The nozzle extension is surrounded about its mouth or opening by a second nozzle forming a casing or housing therearound the second nozzle being connected to a source of gas. In a preferred embodiment, instead of utilizing two distinct gas sources to supply the first acceleration nozzle and the second "housing" nozzle, a portion of the gas passing through the acceleration nozzle may be diverted by means of slits built into the latter. The slits act as a separator of the gaseous phases and solid particles, and prevent the solid particles from penetrating the second nozzle. Acceleration nozzles of the present invention are typically used for delivering carboniferous powdered materials into a steel bath.

Abstract (fr)

Dispositif d'adaptation pour tuyère (1) d'accélération de particules solides, en particulier de matières carbonifères pulvérulentes destinées à recarburer un bain d'acier. La tuyère (1) d'accélération est prolongée par une pièce (4) ayant sensiblement la forme d'un cône tronqué dont l'angle d'évasement est supérieur à celui de la tuyère d'accélération et par un tube cylindrique (6) dont la paroi s'amincit vers son embouchure (7). La pièce (4) est entourée par une deuxième tuyère (8) formant enveloppe ayant des parois parallèles vers son embouchure (9).

IPC 1-7

**C21C 5/46**

IPC 8 full level

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Cited by

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