Title (en)

DEVICE FOR ADDING ONE GAS TO ANOTHER FLOWING THROUGH A TUBE

Publication

EP 0388639 B1 19931013 (DE)

Application

EP 90103150 A 19900219

Priority

DE 3908914 A 19890318

Abstract (en)

[origin: EP0388639A1] The admixing of a gas to a gas flowing through a line (1), for example the admixing of oxygen for enrichment of the blast in shaft furnaces, is usually effected by means of an angled pipe (2) which is taken into the line and whose endpiece (8) is closed and runs in the direction of the line. The endpiece has nozzle orifices (7) which are distributed over its length and from which the gas to be admixed is blown perpendicularly into the flowing gas. For optimised mixing, a defined exit velocity of the gas to be admixed is necessary. To ensure this exit velocity even if the pressure of the gas to be admixed is changed, a spring-loaded piston (9) subjected to the gas to be admixed is provided in the endpiece. Depending on the pressure of the gas to be admixed, the piston then clears a greater or lesser number of the nozzle orifices distributed over the length of the endpiece. <IMAGE>

IPC 1-7

B01F 5/04

IPC 8 full level

B01F 5/04 (2006.01)

CPC (source: EP)

B01F 25/313 (2022.01); B01F 25/31331 (2022.01); B01F 35/833 (2022.01)

Cited by

CN104043354A; EP1346763A1; GB2579648A; GB2242705A; GB2242705B; WO2014073974A1; WO2009068920A1

Designated contracting state (EPC)

AT BE DE FR GB IT

DOCDB simple family (publication)

EP 0388639 A1 19900926; EP 0388639 B1 19931013; AT E95725 T1 19931015; DE 3908914 A1 19900920; DE 59003044 D1 19931118

DOCDB simple family (application)

EP 90103150 A 19900219; AT 90103150 T 19900219; DE 3908914 A 19890318; DE 59003044 T 19900219