

Title (en)  
PNEUMATIC POWDER INJECTOR

Publication  
**EP 0189709 B1 19890301 (FR)**

Application  
**EP 85402604 A 19851223**

Priority  
FR 8500072 A 19850104

Abstract (en)  
[origin: JPS61181559A] PURPOSE:To decrease the suction flow rate for the whole discharge flow rate as much as possible in an ejector ejecting powder for coating a base material such as glass by using the different gas sources for the first step performing the suction of powder and the second step wherein the driving gas is introduced. CONSTITUTION:In a pneumatic type ejector of powder, a Venturi 14 introducing the first gas is provided to an inlet end of a tubular injector body 10 and the powdery body is sucked from a suction port 18 of a side part and a body 10 is gradually narrowed to cause the disturbance in the inside of the powder flow. A driving gas of a side part is introduced from the apertures 34 by forming an introduction chamber 36 in a side wall of the body 10. A zone minimum in the crosssection is made to an outlet end of a tubular part 30 of a pipe to form a narrow annular clearance 46. In such a way, the ratio of the suction flow rate and the whole discharge flow rate is controlled to a small value as much as possible and the stable range of the ejector is made large and the load for suction and the rated discharge flow rate can be increased.

IPC 1-7  
**B05B 7/14**; F04F 5/46; F04F 5/22

IPC 8 full level  
**B05B 7/14** (2006.01); **B65G 53/42** (2006.01); **F04F 5/22** (2006.01); **F04F 5/46** (2006.01)

CPC (source: EP KR US)  
**B05B 7/00** (2013.01 - KR); **B05B 7/1486** (2013.01 - EP US); **F04F 5/00** (2013.01 - KR); **F04F 5/22** (2013.01 - EP US);  
**F04F 5/467** (2013.01 - EP US)

Cited by  
EA011084B1; US5954481A; EP0261973A1; EP0282061A3; DE19531421A1; US5846031A; EP0282873A3; DE3708462A1; WO9008083A1;  
WO2006123965A1; WO2004005691A1; WO2007091102A1; WO9631379A1; WO2012166058A1

Designated contracting state (EPC)  
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)  
**EP 0189709 A1 19860806**; **EP 0189709 B1 19890301**; AT E40959 T1 19890315; CA 1302981 C 19920609; CN 85109727 A 19860723;  
CN 85109727 B 19881214; DE 3568405 D1 19890406; ES 550495 A0 19870301; ES 8703754 A1 19870301; FR 2575678 A1 19860711;  
FR 2575678 B1 19880603; JP H0359743 B2 19910911; JP S61181559 A 19860814; KR 860005653 A 19860811; KR 930000398 B1 19930118;  
US 4807814 A 19890228

DOCDB simple family (application)  
**EP 85402604 A 19851223**; AT 85402604 T 19851223; CA 498967 A 19860103; CN 85109727 A 19851230; DE 3568405 T 19851223;  
ES 550495 A 19851227; FR 8500072 A 19850104; JP 29729485 A 19851226; KR 850010106 A 19851231; US 81597386 A 19860103