

Title (en)

PROCESS AND APPARATUS FOR ATOMISING MOLTEN METAL FOR PRODUCING FINE POWDER MATERIAL

Publication

**EP 0124023 B1 19871125 (DE)**

Application

**EP 84104377 A 19840418**

Priority

CH 238983 A 19830503

Abstract (en)

[origin: US4575325A] Very finely granular metal powders are produced by atomizing a liquid jet of metal by means of a gas jet which, in addition to a continuous band of sound frequencies, contains at least one discrete sound frequency which is at least 5 decibel above the average intensity of this band, and which is generated in a rotationally symmetrical device by means of a nozzle (4) which has the shape of a hollow cone and by means of an annular resonance space (7) with an annular edge (6) and is projected concentrically against the liquid jet of metal at a total opening angle of an average 35 DEG to 55 DEG . The atomization zone of the gas jet should preferably contain at least three discrete sound frequencies which are each at least 10 decibel above the sound intensity of the continuous band.

IPC 1-7

**B22F 9/08**

IPC 8 full level

**B05B 7/04** (2006.01); **B01J 2/02** (2006.01); **B05B 7/06** (2006.01); **B05B 7/16** (2006.01); **B22F 9/08** (2006.01)

CPC (source: EP US)

**B22F 9/082** (2013.01 - EP US); **B22F 2009/088** (2013.01 - EP US)

Cited by

EP0308933A1; CH664515A5

Designated contracting state (EPC)

BE CH DE FR GB LI SE

DOCDB simple family (publication)

**EP 0124023 A1 19841107**; **EP 0124023 B1 19871125**; CA 1228459 A 19871027; DE 3319508 A1 19841108; DE 3467726 D1 19880107; JP H049105 B2 19920219; JP S59206067 A 19841121; US 4575325 A 19860311; US 4640806 A 19870203

DOCDB simple family (application)

**EP 84104377 A 19840418**; CA 453276 A 19840501; DE 3319508 A 19830528; DE 3467726 T 19840418; JP 8800784 A 19840502; US 58369184 A 19840227; US 78268885 A 19851001