

Title (en)

Device for spraying liquid or solid materials, preferably melted metals.

Title (de)

Vorrichtung zum Zerstäuben von flüssigen und festen Stoffen, vorzugsweise geschmolzenen Metalls.

Title (fr)

Dispositif de pulvérisation de matières fluides ou solides, de préférence de métaux fondus.

Publication

EP 0434980 B1 19950531 (DE)

Application

EP 90122347 A 19901122

Priority

DE 3939178 A 19891127

Abstract (en)

[origin: EP0434980A2] In a device for atomising at least one jet of a liquid or solid material, preferably molten metal, the atomising process takes place in a stationary ultrasonic field which is produced between at least one pair of ultrasonic vibrators. In order to increase performance, a plurality of atomising fluid jets, and in a complementary fashion thereto additional fluid jets (e.g. gas) are introduced from nozzles in each node point area of the stationary ultrasonic wave. In this way, the atomisation fluid mass throughput is very greatly increased and thus the atomisation power raised. In addition, special sonotrode shapes are proposed in order to increase the performance further. <IMAGE>

IPC 1-7

B05B 17/06

IPC 8 full level

B05B 17/06 (2006.01); **B06B 1/00** (2006.01); **B22F 9/08** (2006.01)

CPC (source: EP US)

B05B 17/0623 (2013.01 - EP US); **B22F 9/082** (2013.01 - EP US); **B22F 2009/088** (2013.01 - EP US)

Cited by

WO9321353A1

Designated contracting state (EPC)

AT CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0434980 A2 19910703; **EP 0434980 A3 19911204**; **EP 0434980 B1 19950531**; AT E123239 T1 19950615; DE 3939178 A1 19910529; DE 59009180 D1 19950706; JP H03242257 A 19911029; US 5122047 A 19920616

DOCDB simple family (application)

EP 90122347 A 19901122; AT 90122347 T 19901122; DE 3939178 A 19891127; DE 59009180 T 19901122; JP 31814890 A 19901126; US 61867890 A 19901127