

Title (en)

Method and apparatus for spraying a liquid, especially a high viscosity liquid by using at least one auxiliary gas.

Title (de)

Verfahren und Vorrichtung zum Versprühen einer Flüssigkeit, insbesondere einer hochviskosen Flüssigkeit mittels mindestens eines Hilfgases.

Title (fr)

Procédé et dispositif de pulvérisation d'un liquide, notamment d'un liquide à haute viscosité, à l'aide d'au moins un gaz auxiliaire.

Publication

EP 0676244 A1 19951011 (FR)

Application

EP 95400386 A 19950223

Priority

FR 9402825 A 19940311

Abstract (en)

The atomiser head (1) has several primary conduits (11) whose atomising orifices (12) are regularly located around a circular crown. The different primary conduits are supplied with liquid from a single supply channel (4). Each primary conduit is associated with two secondary conduits (13,14) connected to a pressurised auxiliary gas supply. The gas is supplied from a single annular channel (9) concentric with the liquid supply channel. The auxiliary gas is injected laterally into the primary conduits in two longitudinally separated places, upstream of the atomising orifice and perpendicular plane to the primary conduit axis. The axes of the two secondary conduits make angles between zero and 90 degrees with the primary conduit axis. The primary and secondary conduits have a transverse dimension equal to 1mm <IMAGE>

Abstract (fr)

L'invention concerne un dispositif de pulvérisation d'un liquide, notamment d'un liquide à haute viscosité, à l'aide d'au moins un gaz auxiliaire sous pression, ce dispositif comprenant une pluralité de premiers conduits (11), alimentés en liquide à pulvériser, ces premiers conduits comprenant chacun un orifice de pulvérisation (12). Selon l'invention, à chaque premier conduit (11) sont associés deux seconds conduits (13,14) connectés à une source de gaz auxiliaire sous pression, ces deux seconds conduits (13,14) débouchant latéralement dans le premier conduit (12) en deux emplacements distincts. <IMAGE>

IPC 1-7

B05B 7/04; F23D 11/10

IPC 8 full level

B05B 7/04 (2006.01); B05B 7/08 (2006.01); F23D 11/10 (2006.01)

CPC (source: EP KR US)

B05B 7/00 (2013.01 - KR); B05B 7/0441 (2013.01 - EP US); B05B 7/0475 (2013.01 - EP US); B05B 7/0483 (2013.01 - EP US); B05B 7/0491 (2013.01 - EP US); B05B 7/0892 (2013.01 - EP US); F23D 11/10 (2013.01 - EP US)

Citation (search report)

- [X] US 4846402 A 19890711 - SANDELL MICHAEL A [US], et al
- [X] US 4893752 A 19900116 - SPINK DONALD R [CA], et al
- [A] DE 9111224 U1 19930121
- [A] US 4562966 A 19860107 - SMITH DONALD A [US], et al
- [A] GB 2135905 A 19840912 - BABCOCK PROD ENG
- [A] US 3567116 A 19710302 - LINDLOF JAMES A

Cited by

GB2316022B; EP0781961A1; FR2743012A1; US5829683A; WO2013093289A2; WO2009019481A1; WO2016055115A1

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

DOCDB simple family (publication)

EP 0676244 A1 19951011; EP 0676244 B1 19980930; AT E171652 T1 19981015; CA 2144349 A1 19950912; CA 2144349 C 20081014; CN 1056102 C 20000906; CN 1133206 A 19961016; DE 69505035 D1 19981105; DE 69505035 T2 19990408; ES 2123920 T3 19990116; FR 2717106 A1 19950915; FR 2717106 B1 19960531; JP H08103698 A 19960423; KR 100367149 B1 20030219; KR 950031242 A 19951218; US 5810252 A 19980922; ZA 951973 B 19951211

DOCDB simple family (application)

EP 95400386 A 19950223; AT 95400386 T 19950223; CA 2144349 A 19950310; CN 95102404 A 19950310; DE 69505035 T 19950223; ES 95400386 T 19950223; FR 9402825 A 19940311; JP 5081595 A 19950310; KR 19950004756 A 19950309; US 40287195 A 19950313; ZA 951973 A 19950309