

Title (en)  
Pressurised atomising nozzle.

Title (de)  
Druckzerstäubungsdüse.

Title (fr)  
Buse de pulvérisation par pression.

Publication  
**EP 0461447 B1 19950510 (DE)**

Application  
**EP 91108522 A 19910525**

Priority  
CH 190890 A 19900607

Abstract (en)  
[origin: EP0461447A1] In the operation of a pressurised atomising nozzle, the liquid fuel atomising cone from the nozzle (4) is mixed with a gaseous medium (7) in front of a first screen (3) which is mounted downstream of the nozzle (4) in the flow-off direction. In this connection, this atomising cone is struck radially and/or quasi-radially by the gaseous medium (7). In this connection, the original atomising angle from the nozzle, which amounts to around 40 DEG , is reduced to less than half. To this end, it is sufficient if the gaseous medium (7) has a pressure of 20 mbar. The new atomising angle is established with the first screen (3), there being provided in the flow-off direction according to requirements a second screen (2) which functions according to the same principle as the first, i.e. in the case of the second screen also, the mixture already produced is struck radially and/or quasi radially by the remaining proportion of the gaseous medium which was not used at the first screen (3). By changing the distances (D) between nozzle (4) and front wall of the first screen (3) and between rear wall of the first screen (3) and front wall of the second screen (2), the atomising cone of the mixture is varied between full cone and hollow cone. In the case of two screens (3, 2), their throughflow is to be kept roughly the same. <IMAGE>

IPC 1-7  
**F23D 11/40**

IPC 8 full level  
**F02C 7/22** (2006.01); **F02C 7/232** (2006.01); **F23D 11/38** (2006.01); **F23D 11/40** (2006.01); **F23N 1/00** (2006.01)

CPC (source: EP US)  
**F23D 11/40** (2013.01 - EP US)

Cited by  
EP2842635A1

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

DOCDB simple family (publication)  
**EP 0461447 A1 19911218; EP 0461447 B1 19950510**; AT E122447 T1 19950515; CH 681480 A5 19930331; DE 59105418 D1 19950614; ES 2074192 T3 19950901; JP 3360734 B2 20021224; JP H04254109 A 19920909; US 5165606 A 19921124

DOCDB simple family (application)  
**EP 91108522 A 19910525**; AT 91108522 T 19910525; CH 190890 A 19900607; DE 59105418 T 19910525; ES 91108522 T 19910525; JP 13466191 A 19910606; US 70922191 A 19910603