

Title (en)
SPRAY HEAD FOR A NOZZLE HUMIDIFIER, AND METHOD FOR HUMIDIFYING

Publication
EP 0345670 A3 19900912 (DE)

Application
EP 89110067 A 19890603

Priority
DE 3819762 A 19880610

Abstract (en)
[origin: EP0345670A2] A spray head (10) for a nozzle humidifier is disclosed, having a housing (11), an air nozzle element (20) with nozzle bore (22) for air to exit, a twist body (40) arranged in the air nozzle element and a water nozzle element 30 projecting through the air nozzle element and having a nozzle connection (31) at the tip of which a water outlet opening is arranged, an annular gap being constructed between the nozzle bore and nozzle connection. A spray head of this kind serves in particular for moistening paper webs. In this spray head, it is to be possible to maintain the shape of the annular gap with a greater degree of accuracy. For this purpose, one of the two nozzle elements (20, 30) is held centrally by the other of the two nozzle elements (30, 20) and is connected to the latter by means of a fitting. <?>Furthermore, a method for moistening paper is disclosed in which an air stream is made to rotate at a low pressure and receives water from a water nozzle. In order to generate a complete cone spray jet, an additional air stream parallel to the axis of rotation is generated. <IMAGE>

IPC 1-7
B05B 7/06

IPC 8 full level
B05B 7/06 (2006.01); **B05B 7/10** (2006.01); **D21G 7/00** (2006.01); **D21H 23/50** (2006.01)

CPC (source: EP US)
B05B 7/066 (2013.01 - EP US); **B05B 7/10** (2013.01 - EP US); **D21G 7/00** (2013.01 - EP US); **D21H 23/50** (2013.01 - EP US)

Citation (search report)
• [YD] DE 952765 C 19570404 - V I B APPBAU GES M B H
• [Y] FR 1273772 A 19611013 - CURT HIEKEL
• [A] US 4335677 A 19820622 - NAGATA KOJI, et al
• [A] FR 1162039 A 19580908 - HEIZMOTOREN G M B H

Cited by
EP1774093A4; EP1541759A1; EP1541758A1; DE19921592A1; EP1050622A3; US6494988B1; DE202013105121U1

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

DOCDB simple family (publication)
EP 0345670 A2 19891213; **EP 0345670 A3 19900912**; **EP 0345670 B1 19920826**; AT E79789 T1 19920915; CA 1315834 C 19930406; DE 3819762 A1 19891214; DE 3819762 C2 19910425; ES 2034501 T3 19930401; FI 892783 A0 19890607; FI 892783 A 19891211; FI 91366 B 19940315; FI 91366 C 19940627; US 4946101 A 19900807

DOCDB simple family (application)
EP 89110067 A 19890603; AT 89110067 T 19890603; CA 602286 A 19890609; DE 3819762 A 19880610; ES 89110067 T 19890603; FI 892783 A 19890607; US 36401689 A 19890609