Title (en)
NEBULIZER

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EP 0439109 A3 19911127 (EN)

Application
EP 91100734 A 19910122

Priority
IT 8550690 A 19900123

Abstract (en)
[origin: EP0439109A2] The invention discloses a nebulizer comprising an under-cap (3) inserted into the neck (5) of a bottle (2), a small tube (7) drawing the liquid (8) contained in the bottle and coupled with the underside of the under-cap (3), where there is a primary swirl chamber (12), and a cap (15) placed over the under-cap (3) and screwed around the exterior of the bottle neck (5)> The cap (15) presents an inner hollow cylindrical section (14) which, together with the under-cap (3) creates a secondary swirl chamber (13), communicating at its bottom with the primary swirl chamber (12) and at its top with the spraying hole (18). The hermetic seal of the spraying hole (18) occurs by tightening the cap (15) to the end of the thread. <IMAGE>

IPC 1-7
B05B 1/34

IPC 8 full level
B05B 1/34 (2006.01); **B05B 11/04** (2006.01); **B65D 47/24** (2006.01)

CPC (source: EP)
B05B 1/341 (2013.01); **B05B 11/043** (2013.01); **B05B 11/047** (2013.01); **B65D 47/242** (2013.01)

Citation (search report)
- [A] US 3504893 A 19700407 - SUSUKI RINNOSUKE, et al
- [A] EP 0336188 A2 19891011 - SUPERMATIC KUNSTSTOFF AG [CH]
- [A] US 4432496 A 19840221 - ITO KAZUO [JP]
- [A] DE 1761841 A1 19710902 - GRUBER LUDWIG
- [A] CH 273817 A 19510228 - MONTENIER JULES B [US]
- [A] DE 818247 C 19511022 - SHAW INSULATOR COMPANY
- [A] US 3010619 A 19611128 - ERICH GRONEMEYER, et al
- [A] US 3794247 A 19740226 - CORSETTE D

Cited by
WO2006136426A1; EP1322542A4; FR2688424A1; EP1464404A3; EP1230984A1; CN1136131C; AU701605B2; US6009868A; EP2296820A4; US10549289B2; WO9707897A1; WO03045573A1; US7441715B2; US6766922B2; US8814010B2; US10406536B2; US8469241B2; US9079198B2; US10940494B2; WO2005089953A1; WO03070590A1; US7950388B2

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