

Title (en)

Spray cap and bottle engagement.

Title (de)

Verbindung zwischen Sprühkappe und Flasche.

Title (fr)

Joint entre un récipient et son capuchon pour vaporiser.

Publication

EP 0208390 A1 19870114 (EN)

Application

EP 86301997 A 19860319

Priority

- US 72520585 A 19850419
- US 76069085 A 19850730

Abstract (en)

The invention includes a spray bottle (10) which including a bottle (12, 12 min) and sprayer (14). The sprayer (14) includes a cap portion (22) which can be axially snapped onto the neck (13, 13 min) of the bottle (12, 12 min) during initial assembly. When it is desired to refill the bottle (12), the cap portion (22) can be twisted off of the bottle neck (13) by depressing the cap portion (22) to further compress a seal liner (50). This allows cap dogs (30) attached to the cap (22) to escape corresponding dog recesses (66) formed by the neck (13). The cap (22) can then be easily twisted off of the bottle neck (13). Once the bottle (12) has been refilled, the sprayer (14) can be reinstalled by simply twisting the cap portion (22) onto the neck (13), compressing the seal (50) to allow the dogs (30) to reenter the dog recesses (66). When it is desired to refill bottle (12 min), the cap portion (22) is twisted off by overcoming the resistance posed by a pair of neck elements (80) which normally hold the cap dogs (30) in place.

IPC 1-7

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IPC 8 full level

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CPC (source: EP)

B05B 11/001 (2013.01); **B05B 11/1045** (2023.01); **B05B 11/1057** (2023.01)

Citation (search report)

- GB 2014233 A 19790822 - ADM SPA
- EP 0034998 A2 19810902 - OBRIST AG ALBERT [CH]
- US 4454965 A 19840619 - KIRK JR DONALD C [US]
- US 3191814 A 19650629 - CORSETTE DOUGLAS F, et al
- GB 2122692 A 19840118 - SAR SPA

Cited by

EP0477588A3; EP0845100A4; FR2925033A1; US5487507A; US5409168A; US5366121A; US5224653A; EP0867230A3; EP0582701A4; FR2925031A1; EP2039435A3; EP1982770A3; NL1016714C2; CZ300987B6; US8292132B2; WO2009080980A1; WO2017049331A1; WO2012092989A1; WO9413547A1; US7841491B2; US7980427B2; WO2010072359A1; US11400025B2; US7178702B2; WO0242006A1

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