

Title (en)

Assembly for dispensing at least one fluid product.

Title (de)

Abgabevorrichtung für wenigstens ein flüssiges Produkt.

Title (fr)

Ensemble de distribution d'au moins un produit fluide.

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Application

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Abstract (en)

The invention relates to an assembly (2501) for dispensing at least one fluid product. This assembly comprises at least one dispensing channel (2105b), comprising at its end part a closure system (F) which opens onto the outside. The closure system is formed by a shutter (2105a) which forms part of a piece made of an elastically deformable material, and a seat (2104d) which forms part of another piece (2104) of the dispensing head (2103), the shutter being in contact with its associated seat when dispensing is not taking place, and moving away from its seat by elastic deformation under the pressure of the product to be dispensed, and returning by elasticity into contact with the said seat when the dispensing ceases. The dispensing head (2103) contains a second valve (2113) associated with the closure system (F). <IMAGE>

Abstract (fr)

L'invention concerne un ensemble de distribution (2501) d'au moins un produit fluide. Cet ensemble comporte au moins un canal (2105b) de distribution, comportant à sa partie terminale un système de fermeture (F) s'ouvrant sur l'extérieur. Le système de fermeture est formé par un obturateur (2105a) qui fait partie d'une pièce en matériau élastiquement déformable et un siège (2104d) qui fait partie d'une autre pièce (2104) de la tête de distribution (2103), l'obturateur étant en contact avec son siège associé lorsqu'il n'y a pas de distribution, s'écartant du siège par déformation élastique sous la pression du produit à distribuer et revenant par élasticité en contact avec ledit siège lorsque cesse la distribution. La tête de distribution (2103) contient une seconde valve (2113) associée au système de fermeture (F). <IMAGE>

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Citation (search report)

- [X] US 3820689 A 19740628 - COCITA A
- [AD] US 4099651 A 19780711 - VON WINCKELMANN EMIL H
- [A] US 4124150 A 19781107 - MOSS NORMAN W
- [A] GB 2083142 A 19820317 - PFEIFFER KUNSTSTOFFTECH GMBH
- [A] US 4487326 A 19841211 - UHLIG ALBERT R [US]

Cited by

CN110505818A; EA015473B1; US5753943A; US6146947A; EP0649683A1; FR2711555A1; US5505341A; US11457716B2; WO9726998A3; WO2008083423A1; US8177449B2; US8419307B2; US8807861B2; US9289586B2

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