

## Title (en)

Method for the vacuum packaging of products, in particular cosmetic or pharmaceutical products, in containers with variable capacity, closed by a dispensing means without air exhaust.

## Title (de)

Verfahren zum Vakuumverpacken von Produkten, insbesondere kosmetische oder pharmazeutische Produkte, in Behältern mit veränderbaren Größen, verschlossen durch ein Verteilungsorgan ohne Abluft.

## Title (fr)

Procédé pour conditionner sous vide des produits notamment cosmétiques et pharmaceutiques à l'intérieur de réservoirs de contenance variable obturés par un organe de distribution sans reprise d'air, dispositif pour le mettre en oeuvre et distributeurs ainsi obtenus.

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## Application

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## Abstract (en)

The vacuum-packaging of liquid to pasty products inside containers (R) with variable capacity, closed by a dispensing means without air exhaust, makes it possible to obtain dispensers which are particularly advantageous, above all when the means is a precompression pump (P). However, the implementation of such a packaging is not immediate. In fact, an intake of air inside such a container (R) can lead to a variation in its capacity (for example, by deformation of its envelope (10) if it is flexible), rather than the creation of the desired vacuum. In order to avoid this, the present invention proposes a method comprising at least one phase of fastening the pump (P) onto the container (R), filled with product, in a leaktight manner, characterised in that the said fastening is effected when the said container (R) is located in a chamber (1, 3) where an air vacuum (void) is maintained. A device (3) for implementing this method comprises, for example, a ring (300, ..., 308) adapted to be applied at the bottom and in a leaktight manner over the open top of a cup (110) containing the said container (R), so that the said chamber (1, 3) may be created. Means (308, 318) are provided therein for aspiration of the air, as are means (320, ..., 329) for fastening the said pump (P). <IMAGE>

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- [E] FR 2653744 A1 19910503 - VALOIS [FR]
- [AD] EP 0324289 A1 19890719 - STEP SOC TECH PULVERISATION [FR]
- [AD] EP 0349396 A1 19900103 - VALOIS SA [FR]
- [AD] FR 2343137 A1 19770930 - VALOIS SA [FR]
- [A] US 3745741 A 19730717 - CUNNINGHAM E, et al

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