

## Title (en)

Portable dispenser for packaging and dispensing colored cosmetic products

## Title (de)

Tragbarer Spender zum Aufbewahren und Ausgeben von gefärbten kosmetischen Produkten

## Title (fr)

Distributeur portatif pour le conditionnement et la distribution de produits cosmétiques colorés

## Publication

**EP 1040773 A1 20001004 (FR)**

## Application

**EP 00400897 A 20000331**

## Priority

FR 9904152 A 19990402

## Abstract (en)

Portable distributor with at least two reservoirs (2, 3) contains different colored products (A, B) operated to allow the products to be distributed in proportions chosen by the user and a mixing chamber (42) in which the products can mix. There is a agitator (11) in the mixing chamber which is operated to allow the user to see the color of the mixture before taking it out. The mixing chamber has at least one transparent wall (8). The agitator has a control shaft and is movable axially along the axis of the shaft as well as in rotation about the shaft. The distributor contains a piston (9) to distribute the product contained in the mixing chamber. The piston is movable relative to the reservoirs. The piston has first and second resting positions which allow it to engage with the agitator after mixing to use the displacement of the agitator to move the piston. The agitator has a pierce disk (12) and the mixing chamber is connected to a distribution nozzle with a valve which opens when the volume in the mixing chamber reduces. The distributor contains a valve which is at least two-way, connecting to the two reservoirs in its two positions. A third position isolates the mixing chambers from the reservoirs. The outlet nozzle valve only opens when the valve is in its third position and the volume in the mixing chamber reduces. Each reservoir contains a piston to send the product to the mixing chamber and the mixing chamber and reservoirs are contained in a box which is at least partially transparent. A cover can be removed to allow the reservoirs to be filled. The pistons in the reservoirs are moved by increasing pressure on one side, using a blower which can exert pressure on all the pistons at the same time.

## Abstract (fr)

Distributeur portatif comportant au moins deux réservoirs (2,3) agencés pour permettre de distribuer les produits (A ; B) qu'ils contiennent dans des proportions choisies par l'utilisateur et une chambre de mélange à l'intérieur de laquelle les produits contenus dans les réservoirs sont distribués et peuvent se mélanger. Les produits (A ; B) contenus dans les réservoirs ont des teintes différentes, par le fait qu'il comporte au moins un agitateur (12) mobile dans ladite chambre de mélange (42), et par le fait que cette dernière est agencée pour permettre à l'utilisateur d'observer la teinte du mélange obtenu avant de le prélever. <IMAGE>

## IPC 1-7

**A45D 19/02**; **A45D 44/00**; **B01F 13/00**; **B01F 11/00**; **B05C 17/005**

## IPC 8 full level

**A45D 34/00** (2006.01); **A45D 19/02** (2006.01); **A45D 44/00** (2006.01); **B01F 11/00** (2006.01); **B01F 13/00** (2006.01); **B05C 17/005** (2006.01); **B65D 47/06** (2006.01); **B65D 47/20** (2006.01); **B65D 81/32** (2006.01); **B65D 83/00** (2006.01)

## CPC (source: EP US)

**A45D 19/02** (2013.01 - EP US); **A45D 44/00** (2013.01 - EP US); **B01F 31/441** (2022.01 - EP US); **B01F 33/5011** (2022.01 - EP US); **B01F 35/7174** (2022.01 - EP US); **B05C 17/00553** (2013.01 - EP US); **B05C 17/00569** (2013.01 - EP US); **A45D 2200/058** (2013.01 - EP US)

## Citation (applicant)

US 4893729 A 19900116 - IGGULDEN JERRY R [US], et al

## Citation (search report)

- [Y] DE 29602244 U1 19960613 - LINEA CONCEPTION SOFTWARE GMBH [DE]
- [Y] DE 19647617 A1 19980520 - ERN GUENTER [DE]
- [A] EP 0313519 A1 19890426 - GURIT ESSEX AG [CH]
- [A] US 4432469 A 19840221 - EBLE MONIKA [DE], et al
- [A] WO 9904893 A1 19990204 - MAI RALF [DE]

## Cited by

CH702425A1; CN108025273A; FR2910252A1; WO2010070596A1; WO2017013212A1; EP1656853A1; US11090621B2; EP1356870A3; CN114617351A; EP4316457A1; EP4286038A3; US11291287B2; US11974651B2; US11980277B2; US11998104B2; US12004630B2; WO2017207776A1; WO2017207803A1; WO2017207778A1

## Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

## DOCDB simple family (publication)

**EP 1040773 A1 20001004**; **EP 1040773 B1 20031001**; AT E250874 T1 20031015; CA 2302855 A1 20001002; CA 2302855 C 20040601; DE 60005584 D1 20031106; DE 60005584 T2 20040805; ES 2206154 T3 20040516; FR 2791648 A1 20001006; FR 2791648 B1 20010525; JP 2000313487 A 20001114; JP 3492974 B2 20040203; US 6402364 B1 20020611

## DOCDB simple family (application)

**EP 00400897 A 20000331**; AT 00400897 T 20000331; CA 2302855 A 20000331; DE 60005584 T 20000331; ES 00400897 T 20000331; FR 9904152 A 19990402; JP 2000100578 A 20000403; US 53647300 A 20000328