



March 18, 2016

**Certification**

**Park IP Translations**

This is to certify that the attached translation is, to the best of my knowledge and belief, a true and accurate translation from French into English of: Bonneyrat French Pat. 2828480.PDF.

Sarah Dunham

Project Manager

Project Number: KPS\_1603\_012

15 W. 37th Street 8th Floor  
New York, NY 10018  
212.581.8870

(19) FRENCH REPUBLIC  
NATIONAL INSTITUTE  
OF INDUSTRIAL PROPERTY  
PARIS

(11) Document No.: 2 828 480  
(to be used only for requests  
for copies)  
(21) Filing No.: 01 10771  
(51) Int. Cl<sup>7</sup>: B 65 D 83/14

(12) PATENT APPLICATION

A1

(22) Filing date: 10.08.01

(30) Priority:

(43) Date of public access to the  
application:  
14.02.03 Bulletin 03/07.

(56) List of the documents cited in the  
preliminary search report: See the  
end of the present fascicule

(60) References to other related national  
documents:

(71) Applicant(s): L'OREAL Société  
anonyme – FR.

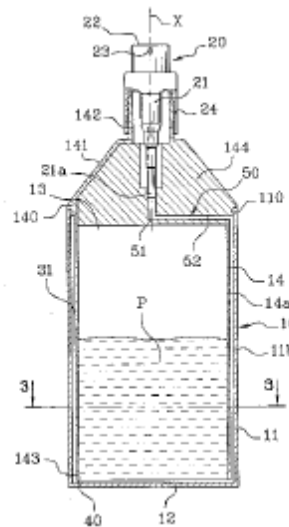
(72) Inventor(s): BONNEYRAT,  
PHILIPPE.

(73) Holder(s):

(74) Agent(s): L'OREAL

(54) DEVICE FOR THE DISTRIBUTION OF A  
PRODUCT WITHOUT PLUNGER TUBE

(57) The present invention relates to a device for the distribution of a product (P) comprising a container (10) with an axis X, surmounted by a distribution component (20; 200), which container (10) has an outer side wall (11) and a bottom (12), which device comprises an inner wall (14) delimiting with the outer wall (11) at least one longitudinal passage (31; 32), which passage (31; 32) communicates with a part of the interior of the container via an orifice (40; 41; 42) situated substantially near the bottom of the container and, on the other hand, with the distribution component (20; 200), which inner wall (14) is fixed axially relative to the outer side wall (11) of the container.



## **DEVICE FOR THE DISTRIBUTION OF A PRODUCT WITHOUT PLUNGER TUBE**

The present invention relates to a device for the distribution of a product, especially a cosmetic product or body care product and in particular a distribution device comprising a container on a distribution part, for example a pump or a valve of the aerosol type provided to operate with the head on top and without a plunger tube.

Conditioning and distribution devices traditionally comprise a container on a distribution part which is a pump or a valve of the aerosol type which are provided with a plunger tube extending from the distribution part to the container bottom.

Such a plunger tube has several disadvantages. In fact, neither the shape nor the color of such a tube can be controlled once it is arranged inside a container. The containers used, in particular for perfume bottles, are frequently transparent and show the plunger tube, which is not esthetical. It is therefore desirable to avoid using such a tube.

Several solutions have already been proposed which allow the plunger tube to be eliminated.

First of all, the bottles of the pouch bottle type or also of the piston bottle type do not use a plunger tube. However, even in the case in which a pouch or a piston is used, the pouch and the piston are visible when the bottle containing them is transparent. Such devices are therefore not acceptable from the esthetic standpoint.

Other devices have been proposed, especially the one described in patent EP 0 626 321. This document describes a distribution device comprising a pump mounted on

a reservoir. A dosing device is provided in the upper part of the reservoir just under the pump body. It concerns a retention cup with a small volume of product which is fixed on the pump body, in particular on the bearing tube of the pump body. The cup is filled by turning the bottle upside down before activating the pump for distributing the dose of the product contained in the cup. Such a device necessitates inverting the bottle before each use, which does not make its use very convenient or very rapid. Furthermore, when the container used is transparent, the cup is also visible.

Patent US 4,793,527 describes an atomizing device of the aerosol type which does not use a plunger tube. The conduit for supplying product to the distribution head is realized in the form of conduits formed at the periphery of the container. The conduits are delimited by two partitions, a first partition forming the outer wall of the container and a second, internal partition located inside the container and having a shape substantially identical to the shape of the outer wall of the container. The second partition is provided for moving along the outer wall of the container under the action of the pushbutton. When the pushbutton is not pushed down, the second partition makes tight contact with a part of the outer wall of the container in such a manner that the supply conduit of the product to the distribution head is obturated. When the pushbutton is pushed down the inner partition slides axially and moves away from the outer wall in such a manner as to free the supply conduit of the product and allows the atomization of the product. Such a distributor is relatively complicated to make since it is necessary to make a relatively bulky piece slide inside the container. Moreover, the dynamic seal between the two partitions is not easy to create.

Also, one of the goals of the invention is to make a device for the distribution of a product that does not have the disadvantages of the prior art.

A particular goal of the invention is to realize a device for the distribution of a product that eliminates a plunger tube and that does not comprise any disadvantageous element inside the container.

Another goal of the invention is to realize such a device which is convenient to use and which does not require a step prior to the activation of the distribution part.

Another goal of the invention is to realize such a device that that is easy to realize.

According to the invention these goals are achieved by realizing a device for the distribution of a product, comprising a container with an axis X set on a distribution part, which container has an outer side wall and a bottom, which device comprises an inner wall delimiting with the outer wall at least one longitudinal passage, which passage communicates on the one hand with the inside of the container via an orifice situated substantially toward the bottom of the container and on the other hand with the distribution part, and the inner wall is fixed axially relative to the outer side wall of the container.

Therefore, the conduit for supplying product to the distribution head is realized in the form of a passage formed at the periphery of the container, which avoids having to use a plunger tube. Moreover, the inner wall delimiting the passage of product with the outer side wall of the container can be realized by a transparent material which allows the creation of a conduit for supplying product which cannot be seen from the outside. Finally, the passage is delimited by walls fixed axially to one another, which is relatively simple to realize.

According to a first preferred embodiment the external side wall and the inner wall are spaced substantially radially in such a manner as to form this longitudinal passage. This then creates a passage for the supply of product which extends

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.