

Title (en)

Air-by-steam-replacement deaeration method for use in bag packaging and nozzle for use in said method

Title (de)

Verfahren zum Entlüften durch Ersetzen von Luft durch Wasserdampf zur Verwendung beim Verpacken in Beutel sowie Düse zur Verwendung bei diesem Verfahren

Title (fr)

Procédé de désaération par le remplacement de l'air par de la vapeur à utiliser dans le conditionnement en sachet et buse correspondante

Publication

**EP 1932769 A1 20080618 (EN)**

Application

**EP 07022569 A 20071121**

Priority

JP 2006334028 A 20061212

Abstract (en)

A steam-replacement deaeration method uses a nozzle (1) having a double-tube structure of an inner first nozzle member (3) and an outer second nozzle member (23). An insert part (9) of the first nozzle member that is to be inserted into a bag has a flat cross-sectional configuration. The body of the second nozzle member (23) has a circular cross-section and surrounds the insert part (9) of the first nozzle member (3). At a first stage of steam injection, both the first and second nozzle members are inserted into the bag, and steam is injected from the spouts of both of them. Next, only the second nozzle member (23) is removed from the bag, and the steam injection therefrom is stopped. While the steam injection from the first nozzle member (3) being continued, the bag mouth is brought into a tensed state. Next, the first nozzle member (3) is removed from the bag, and the bag is moved to the subsequent step with the bag mouth kept in the tensed state.

IPC 8 full level

**B65B 31/06** (2006.01)

CPC (source: EP US)

**B65B 31/06** (2013.01 - EP US)

Citation (applicant)

JP H0995311 A 19970408 - ISHII SHOKUHIN KK, et al

Citation (search report)

- [XA] US 4418513 A 19831206 - PLAHM JACK E [US]
- [A] GB 1564399 A 19800410 - UNILEVER LTD
- [A] US 4016705 A 19770412 - WILSON DONALD C, et al

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EP2933198A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

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DOCDB simple family (publication)

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