

Title (en)

STOPPER FOR A CONTAINER FOR USE IN FREEZE-DRYING

Title (de)

STOPFEN FÜR EINEN BEHÄLTER ZUR VERWENDUNG BEI GEFRIERTROCKNUNG

Title (fr)

BOUCHON DE RÉCIPIENT DESTINÉ À ÊTRE UTILISÉ LORS DE LA LYOPHILISATION

Publication

**EP 3384219 B1 20201118 (DE)**

Application

**EP 17769107 A 20170926**

Priority

- EP 16202437 A 20161206
- EP 2017074314 W 20170926

Abstract (en)

[origin: WO2018103906A1] The invention relates to a stopper (1) for a container (18) for use in freeze-drying processes, also referred to as lyophilization. The invention additionally relates to an assembly of a stopper (1) and a container (18). The stopper (1) has an insertion section (2) which can be inserted into the container (18). The insertion section (2) has a sealing section (16) for closing the container (18) in a fluid-tight manner from the surroundings of the container (18) in a sealing position of the stopper (1) and a contact section (17) which adjoins the sealing section (16) axially from a cover surface (5) in the direction of a base surface (4) for holding the stopper (1) in a drying position of the stopper (1) during the freeze-drying process. The contact section (17) has at least one passage opening (6) for a gas exchange between the interior (22) of the container (18) and the surroundings of the container (18) during the freeze-drying process. The stopper (1) further has a sealing element (7) and a main part (8) which are connected together, and the main part (8) consists of a material which has a higher degree of hardness than the material which makes up the sealing element (7). Regions of a lateral surface (3) of the insertion section (2), said regions contacting the inner surface (21) of a container wall (24) in the drying position and/or the sealing position, are made of outer surfaces of the sealing element (7) in the region of the contact section (17), and the main part (8) is formed within the sealing element (7) in the region of the contact section (17).

IPC 8 full level

**F26B 5/06** (2006.01)

CPC (source: EP US)

**B65D 39/0076** (2013.01 - EP US); **B65D 39/0094** (2013.01 - US); **B65D 51/241** (2013.01 - EP); **F26B 5/06** (2013.01 - EP); **B65D 51/002** (2013.01 - US); **B65D 51/241** (2013.01 - US); **B65D 2539/008** (2013.01 - US); **F26B 5/06** (2013.01 - US)

Cited by

US11434050B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3333523 A1 20180613**; **EP 3333523 B1 20190904**; EP 3384219 A1 20181010; EP 3384219 B1 20201118; US 11434050 B2 20220906; US 2019389630 A1 20191226; WO 2018103906 A1 20180614

DOCDB simple family (application)

**EP 16202437 A 20161206**; EP 17769107 A 20170926; EP 2017074314 W 20170926; US 201716466466 A 20170926