

Title (en)

Freeze-drying plant and device for loading and unloading an adjustable plate of a freeze-drying plant

Title (de)

Gefriertrocknungsanlage und Vorrichtung zum Be- und Entladen einer Stellplatte einer Gefriertrocknungsanlage

Title (fr)

Installation de lyophilisation et dispositif de chargement et de déchargement d'une plaque de réglage d'une installation de lyophilisation

Publication

**EP 2211132 A3 20120530 (DE)**

Application

**EP 09014814 A 20091215**

Priority

DE 102008064094 A 20081219

Abstract (en)

[origin: US2010154242A1] Described in the examples herein are devices for loading and unloading of an adjusting plate of a freeze-drying apparatus with a number of vials, with a transfer table provided upstream of the freeze-drying apparatus for temporary accommodation of the vials, with a shifting device for shifting the vials from the transfer table onto the adjusting plate or from the adjusting plate onto the transfer table, and with a right and/or left side limit. According to one example, the creation of a device, so that the vials can be brought into and out of the freeze-drying apparatus by maintaining their sequence and order, is achieved by the side limit being provided with elements which are movable with low friction by striking vials.

IPC 8 full level

**F26B 5/06** (2006.01); **B65G 65/00** (2006.01); **F26B 25/00** (2006.01)

CPC (source: EP US)

**F26B 5/06** (2013.01 - EP US); **F26B 25/001** (2013.01 - EP US); **F26B 25/18** (2013.01 - EP US)

Citation (search report)

- [Y] EP 1619459 A1 20060125 - IMA TELSTAR S L [ES]
- [Y] DE 10015566 A1 20011004 - NOVATEC GMBH [DE]
- [A] US 4415074 A 19831115 - LEINENGER JOHN T [US]

Cited by

CN105083960A; CN106081594A; CN105783428A; DE202014006276U1

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**US 2010154242 A1 20100624**; DE 102008064094 A1 20100701; EP 2211132 A2 20100728; EP 2211132 A3 20120530; EP 2211132 B1 20140402

DOCDB simple family (application)

**US 63513909 A 20091210**; DE 102008064094 A 20081219; EP 09014814 A 20091215