

Title (en)

METHOD AND DEVICE FOR REMOVING DUST FROM BULK MATERIALS, IN PARTICULAR BY MEANS OF IONISATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUM ENTSTAUBEN VON SCHÜTTGÜTERN, INSBESONDERE MITTELS IONISIERUNG

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DÉPOUSSIÉRAGE DE PRODUITS EN VRAC, EN PARTICULIER PAR IONISATION

Publication

**EP 3528970 A1 20190828 (DE)**

Application

**EP 17790982 A 20171010**

Priority

- DE 102016119827 A 20161018
- EP 2017075830 W 20171010

Abstract (en)

[origin: WO2018073053A1] In order to remove dust, in particular the dust (11) adhering to the granulate grains (4), from the granulate (4), the granulate grains (4) are moved upwards out of the granulate collection on the base of the granulate intermediate container (9) via a preferably laminar air flow (32), in order to preferably prevent friction of the granulate grains (4) against one another, and to prevent the associated formation of new dust (11), until, under the influence of gravity, the granulate grains (4) drop back down laterally outside of the air flow (32) and fall back into the granulate collection (4). Simultaneously, a vacuum is applied above this air flow (32), in order to suction upwards the dust being removed from the granulate grains (4). Both together can be achieved by applying an, in particular controlled, vacuum at the air outlet opening (18) for the dust-laden air. In order to facilitate the removal of the dust (11) from the granulate grains (4), the air of the air flow (32) is ionised during or before reaching the granulate collection (4).

IPC 8 full level

**B07B 7/02** (2006.01); **B07B 4/00** (2006.01); **B07B 4/08** (2006.01); **B07B 11/04** (2006.01)

CPC (source: EP KR)

**B07B 4/00** (2013.01 - EP KR); **B07B 7/02** (2013.01 - EP KR); **B07B 11/04** (2013.01 - KR); **B07B 4/08** (2013.01 - EP); **B07B 11/04** (2013.01 - EP)

Citation (search report)

See references of WO 2018073053A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102016119827 A1 20180419**; **DE 102016119827 B4 20200123**; CN 109890519 A 20190614; EP 3528970 A1 20190828; EP 3528970 B1 20220330; KR 102351295 B1 20220113; KR 20190065292 A 20190611; WO 2018073053 A1 20180426

DOCDB simple family (application)

**DE 102016119827 A 20161018**; CN 201780063129 A 20171010; EP 17790982 A 20171010; EP 2017075830 W 20171010; KR 20197010557 A 20171010