

Title (en)
DEVICE AND METHOD FOR SEPARATING IMPURITIES FROM A BULK STREAM

Title (de)
VORRICHTUNG UND VERFAHREN ZUM AUSSCHEIDEN VON VERUNREINIGUNGEN AUS EINEM SCHÜTTGUTSTROM

Title (fr)
DISPOSITIF ET PROCÉDÉ D'ÉLIMINATION DES IMPURÉRÉS D'UN FLUX EN VRAC

Publication
EP 2994245 A1 20160316 (DE)

Application
EP 14724358 A 20140505

Priority
• DE 102013104740 A 20130508
• EP 2014059054 W 20140505

Abstract (en)
[origin: WO2014180762A1] The invention relates to a device for segregating unwanted items (1) from a stream of bulk material, wherein the device has at least one inlet opening (3) for the bulk material (4), which can be connected to a bulk material feed (2), a segregating unit (5), which is arranged downstream of the inlet opening (3) in a transporting direction (F) of the stream of bulk material, and also at least one outlet (6) for the bulk material (4) freed of unwanted items (1) with the aid of the segregating unit (5), arranged downstream of the segregating unit (5) in said transporting direction (F). It is proposed according to the invention that the segregating unit (5) has at least two transporting channels (7) arranged in parallel and branching away from the inlet opening (3), wherein the transporting channels (7) can respectively be passed by a partial stream of bulk material branching off from the stream of bulk material flowing in by way of the inlet opening (3), and wherein each of the transporting channels (7) is assigned at least one detector (8) for the detection of unwanted items (1) and a separating device (9), with the aid of which the partial stream of bulk material passing the respective transporting channel (7) can be diverted into a system of disposal channels (10). A description is also given of a method for segregating unwanted items (1) from a stream of bulk material with the aid of a segregating unit (5), which is distinguished by the fact that the stream of bulk material is divided into at least two partial streams of bulk material before or within the segregating unit (5), wherein each partial stream of bulk material is monitored individually with regard to the presence of unwanted items (1) with the aid of a separate detector (8) of the detector arrangement (18), and wherein only the partial stream of bulk material that has an unwanted item (1) is diverted into a system of disposal channels (10).

IPC 8 full level
B07C 5/36 (2006.01)

CPC (source: EP RU US)
B07C 5/36 (2013.01 - EP US); **B07C 5/36** (2013.01 - RU)

Citation (search report)
See references of WO 2014180762A1

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 102013104740 A1 20141113; **DE 102013104740 B4 20160421**; CN 105163872 A 20151216; EP 2994245 A1 20160316; JP 2016516579 A 20160609; KR 20150138338 A 20151209; RU 2609189 C1 20170130; US 2016082481 A1 20160324; WO 2014180762 A1 20141113

DOCDB simple family (application)
DE 102013104740 A 20130508; CN 201480025799 A 20140505; EP 14724358 A 20140505; EP 2014059054 W 20140505; JP 2016512310 A 20140505; KR 20157031386 A 20140505; RU 2015152234 A 20140505; US 201414785089 A 20140505