

Title (en)

PNEUMATIC METHOD FOR SEPARATING MINERAL RAW MATERIALS

Title (de)

PNEUMATISCHES VERFAHREN ZUR TRENNUNG MINERALISCHER ROHMATERIALIEN

Title (fr)

PROCÉDÉ D'ENRICHISSEMENT PNEUMATIQUE DE MATIÈRES DE BASE MINÉRALES

Publication

EP 3563939 A4 20200923 (EN)

Application

EP 16925969 A 20161227

Priority

RU 2016000937 W 20161227

Abstract (en)

[origin: EP3563939A1] The invention relates to the field of separating mineral raw materials and can be used for producing mobile separating plants which are intended for processing and classifying raw materials according to fractions virtually in any weather conditions, including at ambient air temperatures of -50 to +50°C. What is claimed is a pneumatic method for separating mineral raw materials, comprising placing raw materials which are to be separated on an air-permeable surface which traverses a separation chamber with a rising air flow that lifts light fractions from the air-permeable surface, the latter being in the form of a conveyor passing beneath the lower base of the separation chamber, in which, by selection of the velocity of the air flow, a dilute fluidized bed layer is formed from particles of a specified density, into which less dense particles enter and through which said particles pass without obstruction before being transferred with the rising air flow out of the separation chamber into a gravitational deposition chamber. What is novel is that the separation chamber is mounted at an inclination to the plane of the conveyor, wherein the lower base of said separation chamber is parallel to the plane of the conveyor, and the acute angle formed between the longitudinal walls of the separation chamber and the base thereof is oriented in the direction of movement of the conveyor.

IPC 8 full level

B07B 4/08 (2006.01); **B03B 4/04** (2006.01)

CPC (source: EA EP)

B07B 4/08 (2013.01 - EA EP)

Citation (search report)

- [A] DE 2219179 A1 19731025 - RECUPERATION IND DE PRODUITS S
- See references of WO 2018124910A1

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 3563939 A1 20191106; EP 3563939 A4 20200923; EP 3563939 B1 20210922; CN 110022994 A 20190716; CN 110022994 B 20220722;
EA 036686 B1 20201208; EA 201800423 A1 20191129; WO 2018124910 A1 20180705; ZA 201900871 B 20191218

DOCDB simple family (application)

EP 16925969 A 20161227; CN 201680091198 A 20161227; EA 201800423 A 20161227; RU 2016000937 W 20161227;
ZA 201900871 A 20190211