

Title (en)
METHOD FOR ELECTROSTATICALLY SEPARATING A GRANULE MIXTURE MADE OF DIFFERENT MATERIALS, AND DEVICE FOR IMPLEMENTING THE SAME

Title (de)
VERFAHREN ZUR ELEKTROSTATISCHEN TRENNUNG EINES AUS VERSCHIEDENEN MATERIALIEN HERGESTELLTEN GRANULATGEMISCHES UND IMPLEMENTIERUNGSVORRICHTUNG DAFÜR

Title (fr)
PROCÉDÉ DE SÉPARATION ÉLECTROSTATIQUE D'UN MÉLANGE DE GRANULES DE MATÉRIAUX DIFFÉRENTS ET DISPOSITIF DE MISE EN OEUVRE

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Application
EP 10726143 A 20100323

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Abstract (en)
[origin: WO2010109096A1] The present invention provides a method and a device for electrostatically separating polyvalent granular insulating materials that have good properties, are energy efficient, and easily adapt to ambient atmospheric conditions and to the physiochemical properties of the granules to be separated. The invention relates to a method including the following steps: a) injecting a current of air between two electrodes in a separation chamber defined by walls and having an air inlet and outlet; b) placing the granule mixture, made of different materials, into the air current; c) controlling the air current so that the granules levitate in the air current in a turbulent mode and become electrically charged by means of the contact therebetween and/or by means of the contact with the walls of the separation chamber; d) generating an electric field between two electrodes, substantially perpendicular to the direction of the air current, such that the charged granules in step c) move, either in the direction of the electric field if the granules are positively charged or in the opposite direction if the charge thereof is negative; e) adhering the charged granules to the surface of the electrodes; and f) discharging and collecting the granules adhering to each electrode.

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