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FIG.1

(54) Method and device for separating particulate matter.

The invention relates to a method and a device for separating at least one particulate, electrically conductive, non-magnetic material which is included as a constituent or as constituents in a mixture, the separation being performed in a space permeable to magnetic waves, and the mixture in the space is subjected to an alternating magnetic field generated by a rotating element equipped with magnets. According to the invention, the particles are thrown up from the bottom of the space in a direction opposite to the direction of rotation of the magnet-equipped element and corresponding to a throwing angle $\boldsymbol{\alpha}$ relative to the horizontal plane, $0 < \alpha < 90$, and the magnet-equipped element is disposed above the separation space.

The device comprises a separation space (2, 3, 4) permeable to magnetic waves, means (5) for generating an alternating magnetic field, and feeding and discharging means. The means (5) is a rotating element equipped with magnets, and a throwing apparatus (11) is provided for throwing up the particles in the separation space in a direction opposite to the direction of rotation of the means (5), which is disposed above the separation space.

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EUROPEAN SEARCH REPORT

Application Number

EP 91 85 0268

Category	Citation of document with in of relevant pas		Relevant to claim	CLASSIFICATION OF THE APPLICATION (int. Cl.5)	
Y A	DE-A-2 129 002 (VANDERB) * page 7, paragraph 2 - claims 1,3-5,7-9,11; fig	ILT UNIVERSITY) page 12, paragraph 3;	1,4	B03C1/24	
Y A	US-A-4 229 288 (M.AKAMA) * column 1, line 60 - co 1; figures 1,2 *		1,4		
A, D	US-A-4 313 543 (M.M. PATE	ERSON)			
A, D	EP-A-0 307 250 (ALCAN IN	NTERNATIONAL LTD)			
:				TECHNICAL FIELDS SEARCHED (Int. Cl.5)	
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	The present search report has be	en drawn up for all claims			
	Place of search	Date of completion of the search		Examiner	
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X : par Y : par doc A : tec O : noi	CATEGORY OF CITED DOCUMEN ticularly relevant if taken alone ticularly relevant if combined with ano ument of the same category nnological background n-written disclosure ermediate document	E: earlier patent after the filin ther D: document cite L: document cite &: member of th	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document		