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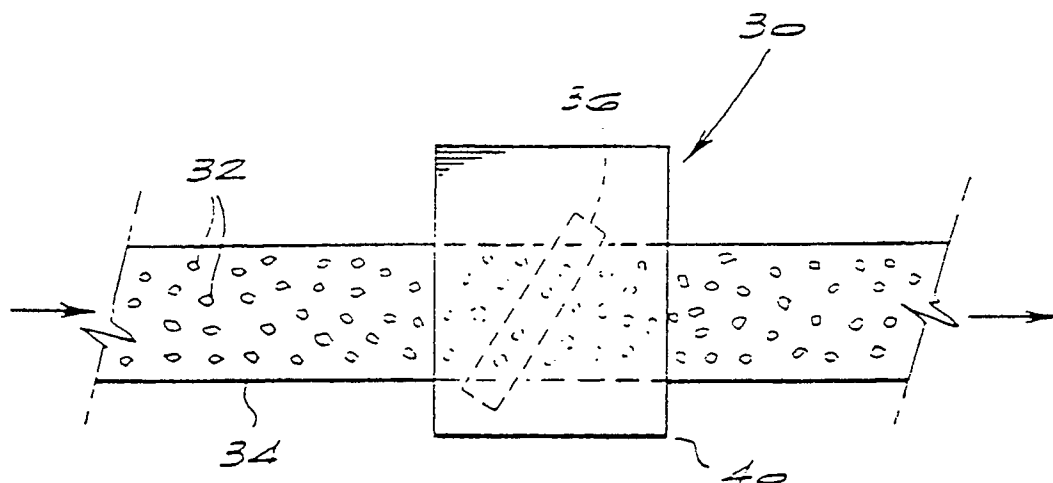
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(54) **Magnetic separation of material using eddy currents.**

(57) Non-magnetic, conductive particles are separated from one another on the basis of their respective electrical conductivities. This is achieved by irradiating the particles with microwave or radio frequency electromagnetic radiation and simultaneously subjecting the particles to a magnetic field. The eddy currents induced in the particles by the electromagnetic irradiation interact with the magnetic field to cause movements of the particles which are dependent on their conductivities.



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EUROPEAN SEARCH REPORT

Application Number

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
Y	DE-A-2336035 (ROSENTHAL TECHNIK AG) * claim 1 *	1	B03C1/00 B03C1/23
A	* page 3, paragraph 5 *	2, 3	
Y	PATENT ABSTRACTS OF JAPAN vol. 2, no. 43 (M-77)(4594) 23 March 1978, & JP-A-52 74167 (KOGYO GIJUTSUIN) 21 June 1977, * the whole document *	1	
A	---	4, 8	
A	US-A-3463310 (S. ERGUN ET AL.) * claim 1 * * column 2, line 48 - column 3, line 10; figure 1 *	1-3, 7	
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A	US-A-4137156 (B.W. MOREY ET AL.) ---		
A	US-A-4842721 (E. F. R. A. SCHLOEMANN) -----		
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			B03C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 27 JUNE 1991	Examiner DECANNIERE L.
CATEGORY OF CITED DOCUMENTS		I : 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	
X : particularly relevant if taken alone V : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

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