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(54) Particulate matter extraction device

(57) The device (20) is for extracting gas-borne particulate matter from a partly enclosed space through which a mass of bulk material is being conveyed. The device (20) comprises a casing (17) having an entry end and an exit end arranged to allow a conveyor (16) to move through the casing in order to convey a mass of bulk material through the casing. The device includes a duct (21) mounted on the casing (17) and having an inlet (26) which communicates with the casing so as to extract gas-borne particulate matter from the casing and

an outlet communicating with the casing in order to return the particulate matter to the casing (17). A liquid nozzle (22) is arranged in the duct (21) so as to direct a jet spray of liquid in a direction towards the outlet and thereby induce a flow of gas-borne particulate material into the duct (21) through the inlet thereof and which material is wetted prior to return of the material to the casing via the outlet. The outlet being arranged in use to direct the wetted material downwardly onto a collection surface (29) located in the casing.

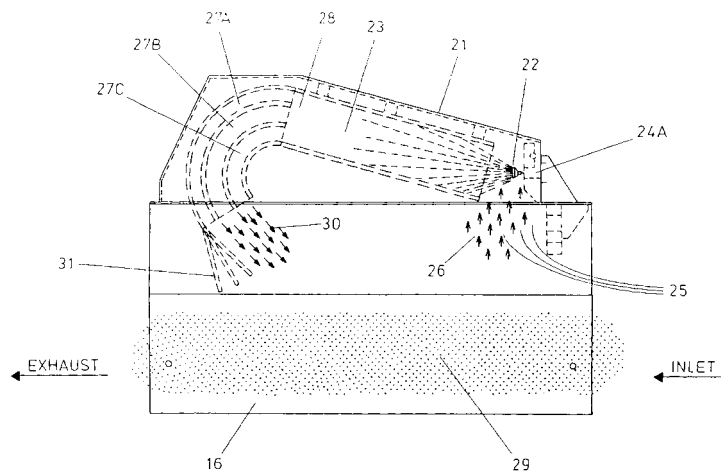


FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 0354

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.6)
A	US 3 757 491 A (GOURDINE M) 11 September 1973 (1973-09-11) * abstract; figures 1,5 * * column 2, line 30 - line 33 * * column 3, line 51 - line 65 * * column 4, line 5 - line 10 * ---	1,10	B08B17/00 B65G69/18 B01D47/06
A	US 2 573 290 A (VAN GUILDER W) 30 October 1951 (1951-10-30) * figure 2 * * column 1, line 7 - line 13 * * column 2, line 6 - line 17 * * column 2, line 40 - column 3, line 12 * -----	1,10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			B08B E01C B65G B01D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		3 November 1999	Plontz, N
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>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</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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03-11-1999

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US 2573290 A	30-10-1951	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82