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(54) **Multi-stage particulate material dryer having channelized discharge.**

(57) A gravity-flow grain dryer (10) for particulate material comprises first and second generally vertical drying columns (68, 100) spaced apart to provide a plenum chamber (112) therebetween, the drying columns each having opposed spaced walls (20, 70, 108, 110) with perforate portions. Drying air is passed through the perforate portions in a treating zone in the columns (68, 100). First and second inputs (32, 72, 90, 96) are provided for introducing particulate material into top portions of the first and second drying columns (68, 100), respectively. First, second, third and fourth discharge means (84, 82, 126, 124) are also provided for removing particulate material from bottom portions of the first and second drying columns (68, 100), respectively. Associated with the first and second discharge means (82, 84) is a dividing wall (76) which extends between a pair of the spaced walls (20, 70) below the treating zone of the column (68) for dividing a bottom portion of the column into at least two channels (78, 80). The first discharge means (84) is associated with a first of the channels (80) and the second discharge means (82) is associated with a second of the channels (78). The first channel (80) is adjacent the first wall (70) and the first discharge means (84) is adapted to discharge particulate material at a rate faster than the second discharge means (82).

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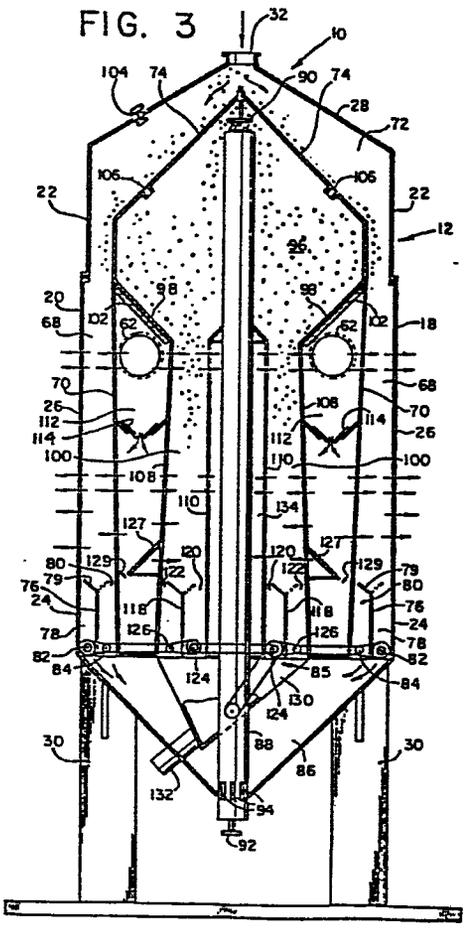
FIG. 3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EUROPEAN SEARCH REPORT

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Application number

EP 86 10 7817

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.4)
Y	GB-A- 20 758 (UHLHORN)(A.D. 1909) * Whole document *	1,2,4, 5,10, 13	F 26 B 17/12 F 26 B 25/00
Y	DE-A-1 803 052 (SULZER) * Whole document *	1,2,4, 5,10, 13	
A	US-A-2 732 630 (MARKOWICH) * Whole document *	1,2,4, 5,7	
A	GB-A- 213 799 (SCHUELER) * Figures 1,2 *	7	
A	US-A-3 426 442 (TOSHIHIKO SATAKE)		TECHNICAL FIELDS SEARCHED (Int. Cl.4) F 26 B
A	DE-B-1 729 452 (SERMIA)		

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	02-12-1986	SILVIS H.

CATEGORY OF CITED DOCUMENTS

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