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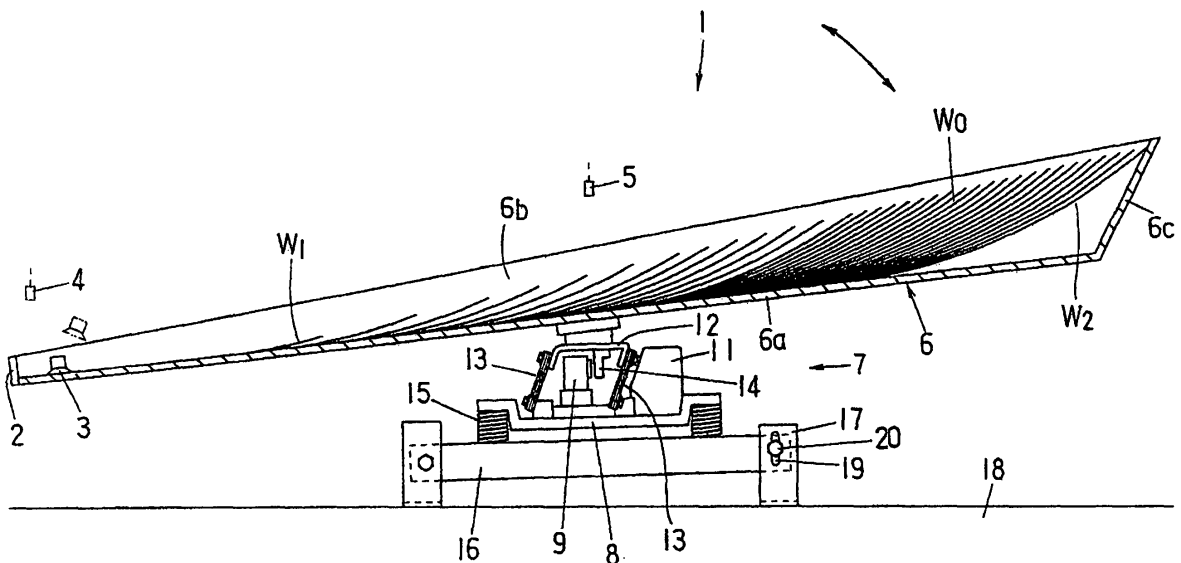
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(54) **Bag supplying apparatus for a bag-filling packaging machine**

(57) A bag supplying apparatus for a bag-filling packaging machine, including a vibrating feeder that involves a trough (6) in which bags are placed in a cascade fashion and a vibration driver (7) which vibrates the trough (6) so as to cause the bags (W0) to be conveyed forward, a

positioning stopper (2) provided at a final end of a conveying path of the bags so that the tip end of a leading bag (W1) being conveyed comes into contact with the stopper (2), and a suction disk (3) that suction-chucks and lifts a bag positioned by the position stopper (2) and feeds the bag to another location.



**FIG. 1**



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
D,A	JP 01 120204 A (ISEKI AGRICULT MACH) 12 May 1989 (1989-05-12) * abstract *		INV. B65B35/14 B65B43/18
D,A	JP 03 117411 A (ISEKI AGRICULT MACH) 20 May 1991 (1991-05-20) * abstract *		
D,A	JP 10 194238 A (GEN PACKER CO LTD) 28 July 1998 (1998-07-28) * abstract *		
A	US 3 673 759 A (AYRES RICHARD H ET AL) 4 July 1972 (1972-07-04) * abstract; figure 1 *		
A	US 2 817 936 A (PETERSON WILLIAM R) 31 December 1957 (1957-12-31) * column 6, line 59 - column 7, line 7; figure 1 *		
A	US 4 537 015 A (INGLETT JR WILFRED L [US] ET AL) 27 August 1985 (1985-08-27) * the whole document *		
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			B65B
Place of search		Date of completion of the search	Examiner
Munich		8 February 2007	Ungureanu, Mirela
CATEGORY OF CITED DOCUMENTS			
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		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	

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 02 3023

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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08-02-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 1120204	A	12-05-1989	JP 2643195 B2	20-08-1997
JP 3117411	A	20-05-1991	JP 2932527 B2	09-08-1999
JP 10194238	A	28-07-1998	NONE	
US 3673759	A	04-07-1972	CA 943926 A1	19-03-1974
			DE 2055217 A1	11-11-1971
			FR 2092260 A5	21-01-1971
			GB 1286947 A	31-08-1972
			JP 49022190 B	06-06-1974
US 2817936	A	31-12-1957	NONE	
US 4537015	A	27-08-1985	NONE	