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(54) **Multistage pump for supplying semi-solid material**

(57) The invention relates to a pump for supplying fluids such as musts together with the marc, in which a first impeller (6) with a biconvex shape is supplied by a feeder screw (3) mounted on the same shaft (8).

the bottom so as to allow the material to pass from one chamber to the other.

The pump also comprises a second biconvex impeller (7) mounted downstream of the first impeller on the same shaft and staggered at 90° with respect thereto; the two impellers are housed inside respective chambers (10, 11) which communicate at the top and at

The pump thus constructed has an efficiency which is greater than that which can be obtained with a single impeller housed inside a corresponding chamber with a capacity equivalent to that of both the communicating chambers.

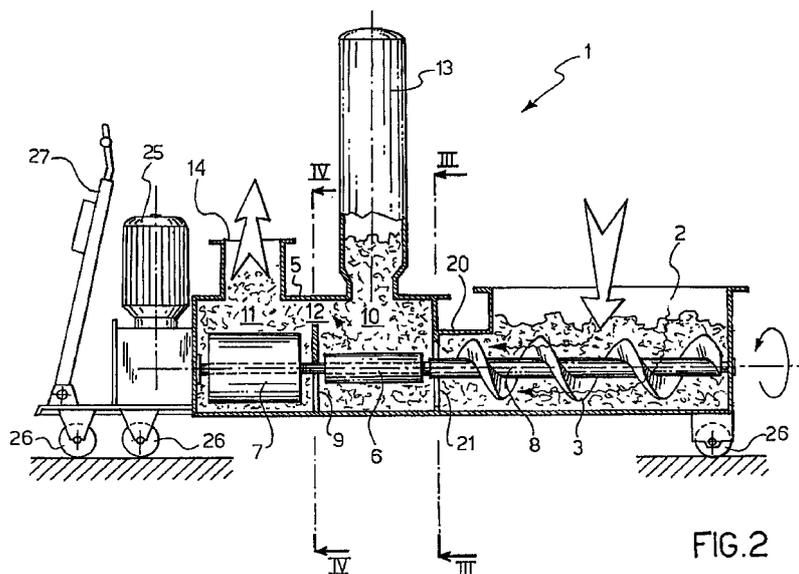


FIG. 2



European Patent Office

EUROPEAN SEARCH REPORT

Application Number  
EP 00 20 0272

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.7)
D,A	IT 229 226 Y (VELO SPA) 1998 * Utility Model. The whole document* ---	1	F04D7/04 F04D1/06
A	US 2 042 641 A (F.F. VICTORIA) 2 June 1936 (1936-06-02) * page 1, left-hand column, line 4 - line 13 * * page 1, right-hand column, line 8 - line 9 * * page 1, right-hand column, line 24 * * page 2, right-hand column, line 15 - line 20; figure 1 * ---	1	
A	US 4 141 510 A (SMITH ARTHUR) 27 February 1979 (1979-02-27) * figure 2 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F04D
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	13 September 2000	Zidi, K	
CATEGORY OF CITED DOCUMENTS		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	
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			

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

EP 00 20 0272

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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13-09-2000

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