

12

EUROPEAN PATENT APPLICATION

21 Application number: **85109943.2**

51 Int. Cl.: **B 04 B 9/12, B 04 B 3/00,**
B 04 B 9/08

22 Date of filing: **21.01.81**

30 Priority: **21.01.80 US 113745**
21.01.80 US 113980

71 Applicant: **THE WESTERN STATES MACHINE**
COMPANY, 1798 Fairgrove Avenue, Hamilton,
OH 45012 (US)

43 Date of publication of application: **08.01.86**
Bulletin 86/2

84 Designated Contracting States: **DE FR GB NL SE**

72 Inventor: **Hurley, Donald Lee, 1281 Cloverbrook Drive,**
Hamilton Ohio (US)

60 Publication number of the earlier application in
accordance with Art. 76 EPC: **0044337**

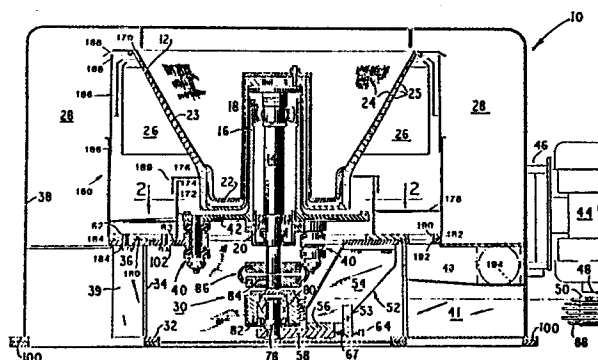
88 Date of deferred publication of search
report: **23.03.88 Bulletin 88/12**

74 Representative: **Dr. Elisabeth Jung Dr. Jürgen**
Schirdewahn Dipl.-Ing. Claus Gernhardt, P.O.
Box 40 14 68 Clemensstrasse 30,
D-8000 München 40 (DE)

54 **Improved continuous centrifugal machine.**

57 In a continuous centrifugal machine including an upwardly open frusto-conical centrifugal basket (12) secured to the upper end of a shaft (14) journaled for rotation on bearings in a bearing housing (16), a surrounding curb wall (38), buffering assemblies (40) resiliently mounting the bearing housing, and a drive motor (44) connected through pulleys (50, 82) and a belt (88) with the lower end of the shaft (14), the driven belt pulley (82) is fixed below the basket shaft (14) and connected with it through a stub shaft (84) and a flexible coupling (86) that permits angular and parallel misalignments of the shafts. An adjustable mounting arrangement for the driven pulley (82) enables adaptation of the stub shaft position to variations of the set position of the basket shaft. The belt (88) extends through a radial tunnel (41) superposed by a stationary liquid delivery tunnel (43) of the base structure of the machine, for minimal obstruction of the solids delivery space (28) inside the curb wall. The base structure includes a radial support ring (36) which is spaced inside the curb wall and supports an annular chambering unit (160) that comprises a radial annular base wall (62) and partitions (166, 172, 178) which form a liquid collecting chamber (26) outside the side wall of the basket. The buffering assemblies (40) are joined to the base wall (62) so that these assemblies and the chambering unit (160), with the bearing housing and the basket joined to them, can be

preassembled as a unit and placed and fastened together on the support ring.





European Patent
Office

EUROPEAN SEARCH REPORT

0167180

Application Number

EP 85 10 9943

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	FR-A-2 279 472 (BRAUNSCHWEIGISCHE MASCHINENBAUANSTALT) * Page 5, lines 24-36; page 7, lines 1-33 *	1	B 04 B 9/12 B 04 B 7/04 B 04 B 3/00 B 04 B 9/08
A	----	2,3	
Y	FR-A-2 369 875 (KLÖCKNER-HUMBOLDT-DEUTZ AG) * Page 7, lines 6-17; figure 1 *	1	
A	----	2,3	
Y	DE-A-1 961 505 (WESTERN STATES MACHINE) * Figure 1 *	1	
A	----	2	
Y	FR-A-2 377 231 (FIVES-CAIL BABCOCK) * Page 7, lines 1-18 *	1	
A,D	US-A-3 333 707 (BANGE et al.) * Columns 5,6; claim 1 *	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			B 04 B
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10-12-1987	Examiner VERDONCK J.C.M.J.
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	