

EUROPEAN PATENT APPLICATION

Application number: **88303843.2**

Int. Cl.4: **F 01 P 11/12**

Date of filing: **28.04.88**

Priority: **29.04.87 US 43915**

Date of publication of application:
09.11.88 Bulletin 88/45

Designated Contracting States: **BE DE FR IT**

Date of deferred publication of search report:
21.06.89 Bulletin 89/25

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Self-cleaning rotary screen for filtering air.

A self cleaning rotary screen of a combine harvester is provided with a planar circular screen (54) that is secured to an outwardly extending circular flange having an external groove and an internal groove. The screen is rotatably mounted on a hinged door (30) by a plurality of freely rotatable wheels (44-48) which are spaced around an aperture (40) in a door plate (38) and engage in the internal groove of the flange. Also secured to the door are two freely rotatable idler sheaves (66, 68) located adjacent to the hinge axis (P) of the door so that the endless drive belt which runs in the external groove passes from the two idler sheaves to a positionally fixed drive sheave (70) in tangential directions approximately aligned with the hinge axis (P). The drive sheave is driven by the propulsion system of the harvester and its rotational axis intersects the hinge axis (P). The door (30) can thus be opened without uncoupling the belt (64).

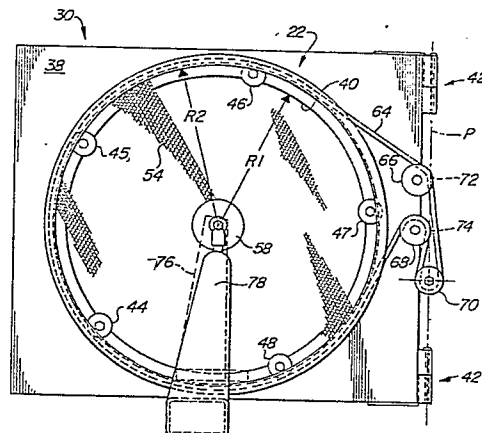


Fig. 3



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)
A,D	US-A-4 233 040 (B.F. VOGELAAR) * Column 3, line 62 - column 6, line 14; figures 1-9 *	1,3,5,9,10-12	F 01 P 11/12
A	DE-A-2 542 568 (LTG LUFTECHNISCHE GmbH) * Page 11; figures 1-4 *	1	
A	DE-A-1 407 943 (E. DREHER) * Pages 14,16; figures 1-5 *	1	
A	WO-A-8 501 311 (MASSEY-FERGUSON SERVICES N.V.)		
A	DE-A-2 556 687 (MASSEY-FERGUSON SERVICES N.V.)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			F 01 P B 01 D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 04-04-1989	Examiner KOOIJMAN F.G.M.
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			