



US005499948A

United States Patent [19]

[11] Patent Number: **5,499,948**

Underwood

[45] Date of Patent: **Mar. 19, 1996**

[54] MODULAR THRESHING ASSEMBLY FOR A COMBINE

[75] Inventor: **Mark R. Underwood**, Burr Oak, Kans.

[73] Assignee: **Deere & Company**, Moline, Ill.

[21] Appl. No.: **299,921**

[22] Filed: **Sep. 1, 1994**

[51] Int. Cl.⁶ **A01F 12/00**

[52] U.S. Cl. **460/119; 56/14.6**

[58] Field of Search **460/119, 62, 69; 56/14.5, 14.6**

[56] References Cited

U.S. PATENT DOCUMENTS

3,616,800	11/1971	Rowland-Hill et al. .	
4,150,525	4/1979	De Busscher et al.	56/186
4,846,198	7/1989	Carnewal et al.	460/21
5,024,630	6/1991	Harig et al.	460/21
5,045,025	10/1991	Underwood	460/66

FOREIGN PATENT DOCUMENTS

5-103533	4/1993	Japan	460/119
----------	--------	-------------	---------

Primary Examiner—Terry Lee Melius
Attorney, Agent, or Firm—Grady K. Bergen; James Bradley

[57] ABSTRACT

A combine for harvesting a crop has a threshing assembly with a threshing rotor and a threshing grate. The threshing assembly locates within the framework of the combine. A threshing assembly frame mounts to the threshing assembly and is removably mounted to the framework of the combine so that the threshing assembly is held within the framework. The threshing assembly frame has a support leg for engaging the ground so that the frame and threshing assembly can be supported in a freestanding position when removed from the combine. The frame is oriented in the freestanding position to facilitate mounting of the threshing assembly frame and threshing assembly to the framework. The frame has a pair of side members that are located on opposite sides of threshing assembly which correspond to guide members mounted to the framework. The side members allow the threshing assembly frame to be inserted into and pulled out of the framework of the combine. Forward support members are pivotally mounted to the frame and movable between a raised and lowered position. The forward support members engage the support surface when moved to the lowered position so that the threshing assembly frame and threshing assembly can be pulled from the framework of the combine. Lift means is provided with the forward support member for moving the forward support member between the raised and lowered positions.

18 Claims, 6 Drawing Sheets

