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# United States Patent [19]

DeMoore

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[54] **DELIVERY CONVEYOR WITH CONTROL WINDOW VENTILATION AND EXTRACTION SYSTEM**

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[51] Int. Cl.<sup>6</sup> ..... **B41F 35/00**

[52] U.S. Cl. .... **101/483; 101/419; 101/424.1; 101/240; 55/267; 34/88; 34/611**

[58] Field of Search ..... 101/419, 420, 101/424.1, 424.2, 487, 488, 231, 232, 238, 239, 240, 483; 55/267; 34/611, 88

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

1,487,362	3/1924	Rice	101/424.1
3,861,351	1/1975	Bonwit et al.	101/424.2
3,907,274	9/1975	D'Amato et al.	101/232
4,099,463	7/1978	Zimmermann	101/232
4,399,767	8/1983	Simeth	101/232
4,409,741	10/1983	Bonomi	101/232
4,501,072	2/1985	Jacobi, Jr. et al.	101/488
4,662,899	5/1987	Tandon	55/267
5,060,572	10/1991	Waizmann	101/488

5,265,536 11/1993 Millard ..... 101/424.2

**FOREIGN PATENT DOCUMENTS**

0507760	4/1976	U.S.S.R.	34/88
0646175	2/1979	U.S.S.R.	34/88

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[57] **ABSTRACT**

An extractor and a ventilation control window are coupled to the housing of a sheet delivery conveyor to extract unwanted heat, moisture, volatile vapors and obnoxious odors from the conveyor housing to eliminate the need for a separate venting system above the sheet delivery stacker. The suction airflow is varied by adjusting the speed of a vacuum source or motor driven fans, or by adjusting a ventilation window. A sheet control ventilation window is covered by a slidable, transparent panel which permits the operator to observe the orientation of the freshly printed sheets as the suction airflow is adjusted to precision. The sheet control window is also covered by a slidable screened panel which prevents introduction of objects into the press. Volatile vapors, moisture laden air and the like are also extracted from laterally opposite sides of the sheet delivery path, thus helping to control air turbulence at the delivery sheet stacker.

**27 Claims, 7 Drawing Sheets**

