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# United States Patent [19] Lemaster

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- [54] **DUAL AIR CURTAIN APPARATUS FOR REDUCING INFILTRATION OF DAMPENING SOLUTION IN A LITHOGRAPHIC PRINTING PRESS**
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- [52] **U.S. Cl.** ..... **101/170; 101/141; 101/349.1**
- [58] **Field of Search** ..... 101/141, 142, 101/147, 148, 349.1, 424.1, 483, 170

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### [57] ABSTRACT

Separate air curtains of low pressure, high flow volume air are discharged onto the leading inking form roller on the feeder side and onto the trailing inking form roller on the delivery side of the plate cylinder to evaporate water entrained with the ink and which has migrated from the printing plate to the inking form rollers as a result of uneven application of water to the plate cylinder. A pair of elongated distribution manifolds are mounted on the press in proximity to the inking form rollers, one manifold directing a curtain of air onto the inking form roller and adjacent vibrator roller on the feeder side, and the other manifold directing a curtain of air onto the inking form roller and adjacent vibrator roller on the delivery side of the plate cylinder. Gap streak caused by periodic interruption in the transfer of dampening solution to the printing plate is eliminated by the dual air curtains which evaporate dampening solution picked up from the printing plate by the inking form rollers before the excess dampening solution has an opportunity to infiltrate the inking roller train.

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**10 Claims, 2 Drawing Sheets**

