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# United States Patent [19]

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Lin et al.

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[54] **METHOD AND APPARATUS FOR CONTROLLING AIR FLOW IN A LIQUID COATER**

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## [57] ABSTRACT

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[52] U.S. Cl. .... **430/311**; 430/935; 427/240; 427/385.5; 118/52

[58] Field of Search ..... 430/311, 327, 430/935; 427/240, 385.5; 118/52

The present invention discloses a method and apparatus for controlling air flow in a liquid coating apparatus by providing an adjustable housing that consists of an upper compartment and a lower compartment such that the height of the cavity contained therein can be adjusted. Subsequently, the spacing between a substrate to be coated and the interior wall of the upper compartment can be suitably adjusted to allow a desirable quantity of air flowing therethrough. The redeposition of liquid coating particles thrown off the substrate surface during a spin coating process and then bouncing back from the interior wall of the upper compartment onto the substrate surface can therefore be prevented. The contamination of the substrate surface can therefore be eliminated or reduced. The present invention adjusting means may further include a removable roof member which can be turned by thread means to adjust the spacing between the bottom surface of the roof member and the substrate resulting in an adjustable air flow rate through such spacing.

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**20 Claims, 2 Drawing Sheets**

