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Swain

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[54] SPIN COATING APPARATUS WITH AN INDEPENDENTLY SPINNING ENCLOSURE

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[51] Int. Cl.⁵ **B05C 11/02**

[52] U.S. Cl. **118/52; 118/56; 118/64; 118/320; 134/153; 134/902**

[58] Field of Search **118/52, 54, 56, 64, 118/320; 427/240; 134/153, 902**

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[57] ABSTRACT

An improved spin coating apparatus (10) having a spin tub (28) surrounding a chuck (14), the chuck (14) being adapted for hold a workpiece (16) for coating. The chuck (14) and the spin tub (28) are spun coaxially and independently such that the chuck (14) may be stopped while the spin tub (28) remains spinning. The spin tub (28) defines a frustum of a cone with a plurality of outlet slots (60) distributed at a large end (52) thereof such that centrifugal force will direct contaminants out of the spin tub (28) through the outlet slots (60). A plurality of fan vanes (62) create an air stream (88) through the spin tub (28) which pulls contaminants through the outlet slots (60) and into a plenum chamber (72) where they are expelled therefrom through a vent tube (64).

19 Claims, 4 Drawing Sheets

