

# United States Patent [19]

Okada

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[54] **METHOD OF FORMING A UNIFORM RESIST FILM BY SELECTING A DURATION OF ROTATION**

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[30] **Foreign Application Priority Data**

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[51] Int. Cl.<sup>4</sup> ..... **B05D 3/12**

[52] U.S. Cl. .... **427/240; 427/385.5; 430/270; 430/935**

[58] Field of Search ..... **427/240, 385.5; 430/270, 935**

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[57] **ABSTRACT**

In a method of coating a substrate with a resist film, the substrate is rotated at a first speed of rotation, and a duration of rotation, and a multiplication product between the first speed and the rotation in consideration of a desired thickness after a resist is dropped on the substrate. The resist is uniformly spread on the substrate to form a wide uniform area because uniformity of the resist depends not only on the first speed but also on the duration and the multiplication product. After elapse of the duration of rotation, the spread resist is dried to form the resist film by rotating the substrate at a second speed slower than the first speed. The first speed is selected between 100 (rpm) and 6,000 (rpm) while the duration and the multiplication product do not exceed 20 (sec) and 24,000 (rpm.sec), respectively. The second speed is not faster than 130 (rpm).

**8 Claims, 1 Drawing Sheet**