



US005843527A

United States Patent [19]
Sanada

[11] **Patent Number:** **5,843,527**

[45] **Date of Patent:** **Dec. 1, 1998**

[54] **COATING SOLUTION APPLYING METHOD AND APPARATUS**

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[21] Appl. No.: **662,216**

[22] Filed: **Jun. 11, 1996**

[30] **Foreign Application Priority Data**

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|---------------|------|-------|-------|----------|
| Jun. 15, 1995 | [JP] | Japan | | 7-174127 |
| Sep. 28, 1995 | [JP] | Japan | | 7-276373 |
| Sep. 28, 1995 | [JP] | Japan | | 7-276375 |
| Jan. 29, 1996 | [JP] | Japan | | 8-035563 |
| Jan. 29, 1996 | [JP] | Japan | | 8-035565 |
| Feb. 26, 1996 | [JP] | Japan | | 8-065502 |

[51] **Int. Cl.⁶** **B05D 3/12**

[52] **U.S. Cl.** **427/240; 427/385.5; 437/231**

[58] **Field of Search** **427/240, 385.5; 437/231**

[56] **References Cited**

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[57] **ABSTRACT**

A method of applying a coating solution to spinning substrates, in which a controller causes a rotary support to spin a substrate at low speed with a predetermined supplying rotational frequency. The coating solution is supplied through a coating solution supply nozzle to a region centrally of the substrate spinning at low speed. The rotational frequency of the substrate is increased to a target rotational frequency before the coating solution supplied to the substrate spreads over an entire surface of the substrate. Then, the controller causes the rotary support to spin the substrate at high speed with a predetermined film-forming rotational frequency, thereby coating the surface of the substrate with a film of desired thickness. Also, an apparatus for performing such method.

25 Claims, 28 Drawing Sheets

