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United States Patent [19]
Garcia

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[54] **MACHINE FOR VARNISHING
EASY-TO-OPEN COVERS**

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4,498,415 2/1985 Tsuchiya et al. 118/712
4,605,351 8/1986 Hatcher et al. 413/58
4,768,498 9/1988 Herrick 128/75
5,895,528 4/1999 Gomariz Perez 118/324

FOREIGN PATENT DOCUMENTS

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888768 2/1962 United Kingdom .

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2269122 2/1994 United Kingdom .

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[57] **ABSTRACT**

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[52] **U.S. Cl.** **118/305; 118/323; 118/324;**
118/500; 413/58; 413/61

[58] **Field of Search** 118/300, 305,
118/323, 324, 500; 413/58, 61

A simple or double head applies varnish to the covers in a circular motion and conical projection with adjustable height by means of a varnishing gun which can be provided with an additional separator of variable thickness according to the covers; it also comprises a cover conveyor device provided with another motor, an intermittent rotation box at the outlet, and a supply box which actuates a cover positioning device and a dosing blade which collects, separates and inserts the covers in a groove of the positioning device for their supply to the conveyor device.

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,094,254 6/1963 Cullen et al. .

13 Claims, 8 Drawing Sheets

