

Title (en)  
HOUSEHOLD ROBOT FOR THE AUTOMATIC SUCTION OF DUST FROM THE FLOOR SURFACES

Title (de)  
HAUSHALTSROBOTER ZUM AUTOMATISCHEN STAUBSAUGEN VON BODENFLÄCHEN

Title (fr)  
ROBOT MENAGER POUR ASPIRATION AUTOMATIQUE DE LA POUSSIERE SUR DES SOLS

Publication  
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Application  
**EP 99948679 A 19990722**

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Abstract (en)  
[origin: WO0007492A1] The present invention is used for the complete and fully automatic examination of floor surfaces of all kind as well as for a particularly efficient suction of dust therefrom since the lower areas, the edges and the recesses can be detected. In each case, the robot is controlled so as to explore the adjacent area and to detect the potential obstacles using special sensors before storing them in a data field. The displacement towards a new location is then carried out using the stored data until the whole accessible surface has been covered. One of the main constituent members of the robot consists of an extensible arm that rests on the robot and on which contact and range sensors are arranged. When the robot is used as an automatic vacuum cleaner, an air flow is forced into the robot arm and the cleaning effect can further be enhanced by providing one or more circular rotary brushes at the front end of the arm. This invention can essentially be used for domestic or industrial cleaning purposes with a view to replace traditional vacuum cleaners.

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