stored in the water tub during the wash and rinse operations as well as with water thrown off from the rotary tub disposed inside the water tub during the dehydrate operation. It is thus, possible to keep the inner surface of the water tub relatively clean without applying the coating having such antifouling features. Hence, it is not possible to utilize the antifouling features even if such features are provided on the inner surface of the water tub.

PRIOR ART DOCUMENTS

PATENT DOCUMENT

[0004]

PATENT DOCUMENT 1: JP 2010-172436 A

SUMMARY OF THE INVENTION

PROBLEMS TO BE OVERCOME

[0005]

Thus, embodiments of the present ~~embodiment~~ invention seek to provide~~s~~ a washing machine in which an antifouling feature is applied to a portion where the antifouling feature is exerted most effectively.

MEANS TO OVERCOME THE PROBLEM

[0006]

~~A washing machine of one embodiment is provided with a water tub; and a rotary tub provided in the water tub, wherein the rotary tub has a hydrophilic coating inhibiting propagation of mold applied thereto.~~

~~A washing machine of one embodiment is provided with a water~~

A washing machine according to a first aspect of the present invention comprises:

a water tub;

a rotary tub made of stainless steel provided rotatably in the water tub; and

a hydrophilic portion provided by coating a hydrophilic material on the outer surface of the rotary tub,

wherein hydrophilicity is present on a surface of the hydrophilic portion before coming in contact with water and contaminant is lifted off by intrusion of water between the surface of the hydrophilic portion and contaminant attached to the hydrophilic portion.

A washing machine according to a second aspect of the present invention comprises:

a water tub;

a rotary tub made of stainless steel provided rotatably in the water tub; and

a hydrophilic coating inhibiting propagation of mold coated on the outer surface of the rotary tub,

wherein hydrophilicity is present on a surface of the coating before coming in contact with water and contaminant is lifted off by intrusion of water between the surface of the coating and contaminant attached to the coating.

~~tub; and a rotary tub provided in the water tub, wherein the rotary tub has a hydrophilic coating inhibiting propagation of mold applied thereto.~~

[0007]

~~A washing machine of one embodiment is provided with a water tub; and a rotary tub provided in the water tub, wherein the rotary tub has a hydrophilic coating inhibiting attachment of detergent applied thereto.~~

~~A washing machine of one embodiment is provided with a water tub; a rotary tub provided rotatably in the water tub; and a hydrophilic portion provided at the rotary tub.~~

A washing machine according to a third aspect of the present invention comprises:

a water tub;

a rotary tub made of stainless steel provided rotatably in the water tub; and

a hydrophilic coating inhibiting attachment of contaminant coated on the outer surface of the rotary tub,

wherein hydrophilicity is present on a surface of the coating before coming in contact with water and contaminant is lifted off by intrusion of water between the surface of the coating and contaminant attached to the coating.

A washing machine according to a fourth aspect of the present invention comprises:

a water tub;

a rotary tub made of stainless steel provided rotatably in the water tub; and

a hydrophilic coating inhibiting attachment of detergent coated on the outer surface of the rotary tub,

wherein hydrophilicity is present on a surface of the coating before coming in contact with water and contaminant is lifted off by intrusion of water between the surface of the coating and contaminant attached to the coating.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008]

[FIG.1] FIG.1 is a vertical cross-sectional view schematically illustrating one example of a structure of a drum-type washing machine of a first embodiment.

[FIG.2] FIG.2 is a vertical cross-sectional side view schematically illustrating one example of a structure of a vertical-axis washing machine of a first embodiment.

[FIG.3] FIG.3 is a development view of a rotary tub.

[FIG.4] FIG.4 indicates test conditions and the test results of the operational suitability test.

[FIG.5] FIG.5 provides a visual representation of the test results of the operational suitability test.

[FIG.6] FIG.6 indicates the test results of a simulated contaminant wash test.

[FIG.7] FIG.7 provides a visual representation of the test