conventional washing machine, a base forming the agitator and the shape of raised blades provided on the base are modified so as to generate a complex water stream by the agitator. This increases the chance of exchange of positions of the pieces of laundry moving in washing water, and reduces variance in the cleaning performance.

In recent years, washing capacity is more and more increased, but with growing awareness towards saving water, washing machines are being developed for which the amount of water used as washing water is set as small as possible.

In a washing machine as described above, the amount of washing water at the time of washing is small relative to the volume of laundry. Accordingly, buoyancy of the laundry in the washing water is small, and the laundry tends to sink. The sunken laundry changes its shape to a certain degree in accordance with protrusions/recesses of the agitator, realizing a state in which the weight of the laundry is placed on an upper surface of the agitator. In this state, the effect of the laundry being moved by being in direct contact with the blades of the agitator contributes more than the effect of water stream. Accordingly, with the structure of the agitator of the conventional washing machine, especially in a case where the amount of washing water is small, there is not much chance of exchange of positions between pieces of laundry. As a result, there is a problem that pieces of laundry tend to be unevenly washed.

Citation List

Patent Literature

PTL 1: Unexamined Japanese Patent Publication No. 2004-321629

SUMMARY ~~OF THE INVENTION~~

~~The~~ Embodiments of present invention provides a washing machine by which unevenness in washing is unlikely even in a case where the amount of washing water is small relative to the volume of laundry.

That is, ~~the~~ in an aspect, a washing machine ~~of the present invention includes~~is provided comprising an inner tub, opened upward, for accommodating laundry and washing water, and an agitator, disposed on an inner bottom portion of the inner tub, for being rotated by a rotation driving unit. Furthermore, the agitator includes a center vane extending from a rotation center of the agitator toward an outer periphery of the agitator, the center vane being raised upward from a base of the agitator, and a peripheral vane extending from the outer periphery toward the rotation center, the peripheral vane being raised upward from the base of the agitator. Moreover, the center vane and the peripheral vane are disposed at different positions in a circumferential direction of the agitator.

Accordingly, even in a case where the amount of washing water used is small relative to the volume of laundry, the chance of exchange of positions of pieces of laundry may be increased by a rotation movement of the agitator. As a result, a washing machine by which uneven washing is unlikely may be realized.

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a plan view showing a structure of an agitator of a washing machine according to an exemplary embodiment of the present invention.

FIG. 2 is a cross-sectional view of the agitator in FIG. 1, along a line 2-2.

FIG. 3 is a perspective view of the agitator of the washing machine according to the present exemplary embodiment.

FIG. 4 is a diagram for illustrating movement of laundry due to