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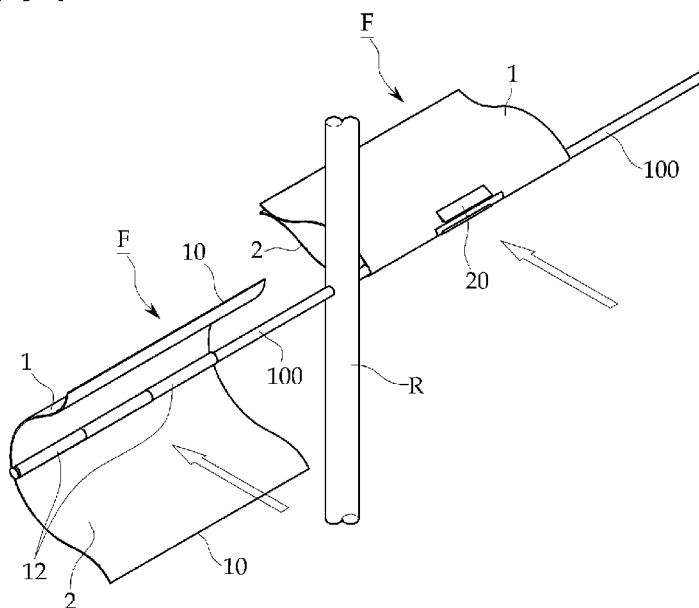
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(54) Title: WHEEL HAVING NABI BLADE

[Fig. 1]



(57) Abstract: The present invention discloses a wheel having a NABI blade for a power generation apparatus whose shape is variably changed according to a rotational position corresponding to a flow of external force in nature. The wheel having the NABI blade for the power generation apparatus includes a rotational shaft; an arm installed on the rotational shaft in a right angle; and a plurality of blades that is foldably installed on the arm, sequentially changes its shape according to a rotational position, and has a bucket shape upon opening.

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AMENDED CLAIMS

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【Claim 1】 (amended)

A wheel having a NABI blade for a power generation apparatus including:

a rotational shaft;

an arm installed on the rotational shaft in a right angle; and

a plurality of blades that is foldably installed on the arm, sequentially changes its shape according to a rotational position, and has a bucket shape upon opening,

wherein the blade is further installed with a guide blade for expanding a receiving function of moving energy and increasing a rotatory power in the blade.

【Claim 2】

The wheel having a NABI blade according to claim 1, wherein the blade is configured to have a streamline when each blade is folded.

【Claim 3】

The wheel having a NABI blade according to claim 1, wherein each blade is configured as first and second loading blades, such that they can be hinge-coupled to the arm and can be folded and opened.

【Claim 4】

The wheel having a NABI blade according to claim 3, wherein each of the first and second loading blades is opened independently when the front thereof receives the moving energy upon viewing from the opened inlet side of the blade and is closed independently when the rear thereof receives the moving energy.

【Claim 5】

The wheel having a NABI blade according to claim 3, wherein the first and second loading blades whose cross section is a wave shape are formed to be opposite to each other.

【Claim 6】

The wheel having a NABI blade according to claim 3, wherein the hinge-coupled position of the first and second loading blades is formed with an open stopper that is limited not to be opened at a predetermined angle.

【Claim 7】 (cancelled)

【Claim 8】

The wheel having a NABI blade according to claim 3, wherein the hinge coupling parts of the first and second loading blades or the arm and the hinge coupling portions are formed with insertion hollow parts in which the arm is slidably fitted.

【Claim 9】

The wheel having a NABI blade according to claim 3, wherein the first and second loading blade is further formed with ends bent outwardly to the inlet side end so that they are easily opened if the front surfaces of the first and second loading blades are formed with the moving energy.

【Claim 10】

The wheel having a NABI blade according to claim 3, wherein the inner surfaces of the inlet sides of the first and second loading blades are further formed with a plurality of opening plates.

【Claim 11】

The wheel having a NABI blade according to claim 3, wherein the first and second loading blades is further installed with a spring so that they are easily opened if the front surface thereof receive the moving energy.

【Claim 12】

The wheel having a NABI blade according to claim 3, wherein the first and second loading blade is further installed with a check valve.

【Claim 13】

The wheel having a NABI blade according to claim 3, wherein each arm is further installed with an auxiliary arm.

STATEMENT UNDER ARTICLE 19 (1)

The applicant, who received the International Search Report relating to the above-identified International Application, transmitted on March 30, 2009, hereby files amendment under Article 19 as in the attached sheet.

Therefore, Applicant hereby cancels claim 7 and incorporates the technical solution of claim 7 into claim 1; and retains claims 2 to 6 and 8 to 13 as originally filed at the international filing date. Please substitute the enclosed new set claims for all the claims as originally filed.