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(54) **TOTALLY ENCLOSED WIND DRIVEN TURBINE**

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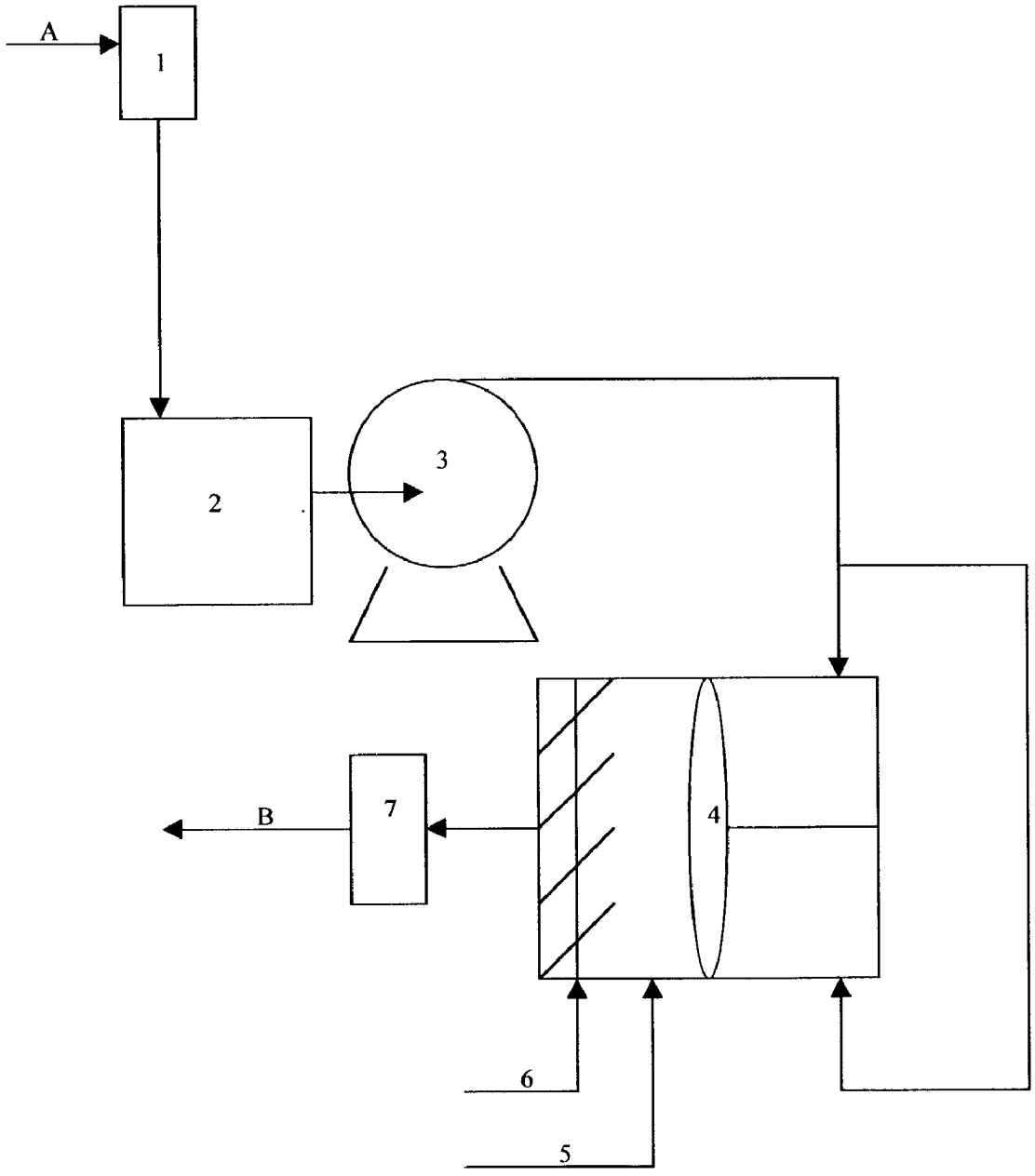
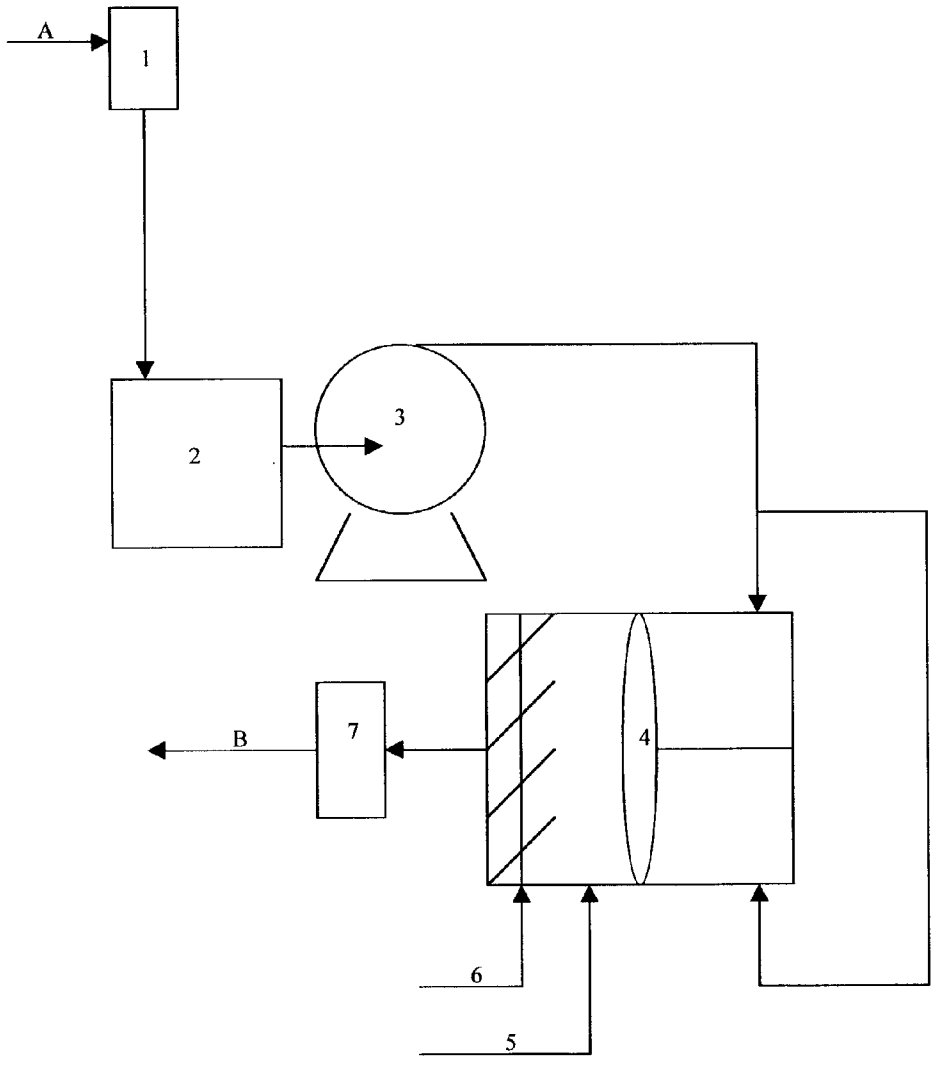
(57) **ABSTRACT**

A Totally Enclosed Wind Powered Turbine For Producing Electricity



DRAWING NO. 1



TOTALLY ENCLOSED WIND DRIVEN TURBINE

FIELD OF THE INVENTION

[0001] 1. The present invention relates to a totally enclosed wind powered electric generating device.

BACKGROUND OF THE INVENTION

[0002] 2. Conventional wind powered generators copy the old-fashioned "south west" windmills, which tend to be inefficient. They are able to only utilize 54% of the available wind velocity.

[0003] 3. Conventional windmills are expensive to purchase and even more so to maintain.

[0004] 4. All repair parts have to be imported from Europe, which equates to long lead times resulting in extended maintenance outages.

[0005] 5. Conventional windmills require vast amount of space.

[0006] 6. Conventional windmills are not eco friendly, causing nuisances such as; noise, down stream wind turbulence and are dangerous to birds.

[0007] 7. Conventional windmills are susceptible to the forces of nature.

OBJECT OF THE INVENTION

[0008] 8. It is the object of the present invention to provide an economical, efficient, ecologically sound alternative to existing windmills.

BRIEF DESCRIPTION OF SIMPLIFIED ONE LINE DRAWING

[0009] Drawing no. **1**.

[0010] "A" denotes ambient air inlet to eco-screen.

[0011] **#1** is the target box containing the eco-screen device, which is simply ¼" hardware cloth.

[0012] **#2** is the ambient air inlet chamber.

[0013] **#3** is the wind powered turbine.

[0014] **#4** is the spent air, DC powered blower.

[0015] **#5** is the spent air plenum.

[0016] **#6** depicts the weighted louvers.

[0017] **#7** depicts the location of the spent air eco-screen.

[0018] "B" denotes spent air to atmosphere exhaust.

Accordingly, what is claimed is:

1. Wind powered, totally enclosed turbine provided with: ambient air eco-system protection screen; and a spent air eductor device, which is also provided with an eco-system protection screen. Said turbine has the capability of converting 100% of the ambient air to work.

2. Turbine of claim 1, wherein said turbine air intake need not be situated directly in the ambient air stream.

3. Turbine of claim 1, wherein said turbine is totally enclosed, no moving parts exposed.

4. Turbine of claim 1, wherein said turbine achieves the desired work by having its shaft speed increased or decreased by altering the operation of a spent air blower and weighted louvers.

5. Spent air blower of claim 4, wherein said blower capacity is equal to or greater than that of the turbine of claim 1.

6. Spent air blower and weighted louvers of claim 4, wherein the spent air blower in conjunction with the weighted louvers, function is to modulate the speed of the turbine of claim 1.

7. Spent air blower of claim 5, wherein the spent air blower throughput is determined by the speed of the DC drive motor and the position of the weighted louvers.

8. Weighted louvers of claim 7, wherein the position of the louvers depends on the pressure being exerted upon them by the spent air blower.

9. Weighted louvers of claim 7, wherein the counter balance weight is calibrated to position the louvers closed when the spent air bower is not operating and to gradually open as the volume of air from the spent air blower increases. This action alters the differential pressure across the turbine, of claim 1, air inlet and air outlet.

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