Claims

1. A housing for use with a vertical-axis wind turbine, the housing defining a vertical axis and being configured to surround a vertical-axis wind turbine, the housing comprising:

a top portion;

a base portion; and

a plurality of louvres arranged circumferentially around the vertical axis and disposed between the top portion and the base portion, wherein:

each louvre comprises an inner edge and an outer edge;

the inner edges of each louvre form a first circle;

each louvre is arranged at angle α, wherein α is between 85° and 100°; and wherein

α is the angle between a straight line between the inner and outer edge of each louvre and a radius of the first circle at the inner edge of the louvre.

2. The housing according to claim 1, wherein α is about 90°, for example 90°.

3. The housing according to claim 1 or claim 2, wherein each louvre is curved, such that the straight line between the inner and outer edge of each louvre is a chord of the louvre, and α is the angle between the chord of the louvre and the radius of the first circle at the inner edge of the louvre.

4. The housing according to claim 3, wherein the direction of curvature of each louvre reverses once, such that each louvre is S-shaped.

5. The housing according to any preceding claim, wherein the plurality of louvres comprises at least 6, at least 8, at least 10, or 12, louvres.

6. The housing according to any preceding claim, wherein at least one of the plurality of louvres is the same as, or similar to, or substantially the same as another one of the plurality of the louvres.

7. The housing according to any preceding claim, wherein the base portion is configured to be connected to an existing structure.

8. The housing according to claim 7, wherein the existing structure comprises at least one of: a roadside bollard, a roof of a building, and a chimney stack.

9. The housing according to claim 7 or claim 8, wherein the base portion comprises at least one slot.

10. The housing according to any preceding claim, wherein an outer diameter of the housing is between 0.5 metres and 2 metres, for example about 1 metre.

11. An apparatus comprising a housing according to any one of claims 1 to 10 and a vertical-axis wind turbine.

12. The apparatus according to claim 11, wherein a number of blades in the vertical-axis wind turbine is different to the number of louvres in the housing, for example wherein the number of blades is greater than the number of louvres, for example wherein the number of blades is one or two greater than the number of louvres.