CLAIMS

1. A fan comprising:

a casing having an air inlet and an air outlet;

an impeller housing mounted on an annular seat located within the casing;

an impeller located within the impeller housing for generating an air flow along a path extending from the air inlet to the air outlet through the impeller housing;

a motor housing connected to the impeller housing;

a motor located within the motor housing for driving the impeller;

an annular seal in sealing engagement with the impeller housing and the seat; and

at least one resilient support located between the impeller housing and the seat for reducing the compressive load applied to the annular seal.

2. A fan as claimed in claim 1, wherein the seat is connected to the casing.

3. A fan as claimed in claim 2, wherein the seat extends radially inwardly from a side wall of the casing.

4. A fan as claimed in any preceding claim, wherein the impeller housing comprises a recessed section defining an annular channel for receiving the seal.

5. A fan as claimed in claim 4, wherein the recessed section comprises a seal engaging surface extending radially outwardly from a side wall of the impeller housing and parallel to the seat.

6. A fan as claimed in any preceding claim, comprising means for inhibiting rotation of the seal relative to the impeller housing.

7. A fan as claimed in any preceding claim, comprising means for inhibiting angular movement of the impeller housing relative to the seat.

8. A fan as claimed in any preceding claim, wherein the at least one resilient support ~~comprises a plurality of resilient supports.~~extends about the seal.

9. A fan as claimed in ~~claim 8~~any of claims 1 to 7, wherein the ~~resilient supports are angularly spaced about the impeller housing~~at least one resilient support comprises a plurality of resilient supports.

10. A fan as claimed in ~~claim 8 or~~ claim 9, wherein a peripheral surface of the seal is profiled so as to form a plurality of recesses each for at least partially receiving a respective resilient support.

11. A fan as claimed in ~~any of claims 8 to 10~~claim 9 or claim 10, wherein the impeller housing comprises a plurality of mounts each connected to a respective resilient support.

12. A fan as claimed in any of claims ~~8~~9 to 11, wherein the annular seal comprises a plurality of recesses each for receiving a respective resilient support.

13. A fan as claimed in any of claims ~~8~~9 to 12, wherein each resilient support comprises a respective spring.

14. A fan as claimed in any preceding claim, wherein the annular seal is a foam annular seal.

15. A fan as claimed in any preceding claim, wherein the annular seal is formed from a closed cell foam material.

16. A fan as claimed in any preceding claim, wherein the annular seal is spaced from an inner side surface of the casing.

~~17. A fan substantially as herein described with reference to the accompanying drawings.~~