Claims

1. A fan system, wherein the fan system comprises: (a) a hub, wherein the hub is configured to rotate about an axis, wherein the hub has a plurality of outwardly extending blade mounting members; (b) a plurality of fan blades mounted to the blade mounting members of the hub; (c) a drive system in communication with the hub, wherein the drive system is operable to rotate the hub; and (d) a plurality of fan blade retainers, wherein each of the fan blade retainers is secured to corresponding first and second blade mounting members of the hub, wherein each of the fan blade retainers is further secured to corresponding first and second fan blades associated with the corresponding first and second blade mounting members, and further includes an elongated portion extending radially along at least one of the first and second fan blades.

2. The fan system of claim 1, wherein the blade retainers are generally L-shaped.

3. The fan system of claim 2, wherein the blade retainers each comprise a first portion including the elongated portion and a second portion, wherein the first portion extends radially outwardly relative to the axis, wherein the second portion extends circumferentially about the axis, wherein the first portion and the second portion are joined at a third portion.

4. The fan system of claim 3, wherein each of the blade retainers comprise a first opening formed through the first portion, a second opening formed through the second portion, and a third opening formed through the third portion.

5. The fan system of claim 4, wherein the first and third openings of a first blade retainer are configured to align with openings formed in a first fan blade, wherein the second opening of the first blade retainer is configured to align with an opening formed in a second fan blade.

6. The fan system of claim 5, wherein the second fan blade is adjacent to the first fan blade.

7. The fan system of claim 5, wherein the second opening of the first fan blade retainer is further configured to align with the third opening of a second fan blade retainer.

8. The fan system of claim 3, wherein the third portion of a first blade retainer overlaps the second portion of a second blade retainer.

9. The fan system of claim 1, wherein each blade retainer is configured to bear the weight of at least one of the fan blades.

10. A fan system, wherein the fan system comprises: (a) a hub, wherein the hub is configured to rotate about an axis, wherein the hub has a plurality of outwardly extending blade mounting members; (b) a plurality of fan blades mounted to the blade mounting members of the hub; (c) a drive system in communication with the hub, wherein the drive system is operable to rotate the hub; and (d) a plurality of fan blade retainers, wherein the blade retainers each comprise a first elongated portion and a second portion, wherein the first portion extends radially outwardly relative to the axis, wherein the second portion extends circumferentially about the axis, wherein a first retainer associated with a first fan blade overlaps with a second retainer associated with a second fan blade.

11. The fan system of claim 10, wherein each retainer is generally L-shaped.

12. The fan system of claim 10, wherein the first portion is generally straight and the second portion is arcuate.

13. The fan system of claim 10, further including a corner at the junction between the first portion and the second portion.

14. A fan system having a hub configured to rotate about an axis and including a plurality of outwardly extending blade mounting members, comprising:

at least one fan blade adapted for being mounted to one of the plurality of blade mounting members of the hub; and

at least one generally L-shaped fan blade retainer for retaining the fan blade in place on the fan blade mounting member; and

at least one fastener for securing the L-shaped fan blade retainer to the at least one fan blade.

15. The fan system of claim 14, wherein the blade retainer comprises a first portion and a second portion, wherein the first portion extends radially outwardly relative to the axis, wherein the second portion extends circumferentially about the axis.

16. The fan system of claim 15, wherein the first portion is generally straight and the second portion is arcuate.

17. The fan system of claim 15, further including a corner at the junction between the first portion and the second portion.

18. The fan system of claim 14, wherein the at least one fastener is for securing the L-shaped fan blade retainer to a next-adjacent fan blade retainer.