An electric fan assembly 10 is disclosed. The assembly 10 comprises a base 16 having an open display area 36 between a front edge region 32 and a rear edge region 34 with the base having at least one compartment 38 adapted to hold personal items, such as office supplies, to thereby provide a fan assembly with a desk organizer in the base. A support member 14 is also disclosed extending from the base 16 and being adapted to support and electric fan blower 12 in an elevated position above said base 16. The fan assembly also is collapsible between a use position and a non-use position in which the fan body is directed toward the base 16.
FAN ASSEMBLY WITH DESK ORGANIZER

DESCRIPTION

[0001] Technical Field

[0002] This invention relates to an electric fan assembly. More particularly it relates to a portable electric fan assembly having a base adapted to hold personal items, such as office supplies, and thereby serve as a desk organizer.

BACKGROUND OF THE INVENTION

[0003] Electric fan assemblies are well known in the art. One type of such a fan assembly is suitable for placement on a floor or other generally flat surface, such as a table, desk or counter. Still other types of electric fans include mounting braces that are suitable for mounting the fan or its base to a horizontal surface like a wall, and still other assemblies include a clamp for securing the fan to an edge of a counter or the like. Regardless, such types of electric fan assemblies typically includes a fan housing, which includes a motor and a bladed propeller or blower, and a base for mounting or supporting the fan housing. The base sometimes includes a combination of a lower base or stand, and a support member disposed between the stand and the fan housing to support the fan.

[0004] While it is sometimes desirable to have such a fan used in association with an office desk or the like, typical fan assemblies are not well adapted for such use because of limited space available on the desk. Placing a fan assembly upon such a surface presents a problem of using space needed for items on the desk, and creates an appearance that is not compatible with the desk or the work being performed. For example, in the space taken up by the base, the user could place a multitude of office related apparatus and supplies. These would include, inter alia, paper-clip dispenser, a stapler, tape dispenser, a light, a lamp, a clock, and containers for office supplies such as papers, self adhesive notes, or pens and pencils. Additionally, the space taken up by the base of the fan could be used to hold any variety of items including files and other documents. Also, traditional fan assemblies do not provide optimal height and orientation of the fan blower for the unique requirements for use on a desk. Most fan assemblies are not sufficiently elevated from the base to avoid disruption to the work at the desk, and/or lack suitable adjustability of the direction of the air being forced from the blower.

[0005] The present invention is provided to solve these and other problems.

SUMMARY OF THE INVENTION

[0006] According to one aspect of the invention an electric fan assembly is provided. The fan assembly comprises a base having a display area between a front edge and a rear edge a region. The display area has at least one compartment adapted to hold personal items and a substantially open face adapted to permit access to the compartment.

[0007] According to another aspect of the invention, the base is adapted to rest on a desktop and the compartment is adapted to serve as a desk organizer for holding office supplies.

[0008] According to another aspect of the invention, the support member is attached to the base adjacent the rear edge region and the fan has a fan body with a bladed propeller that is positioned generally above a central region of the base.

[0009] According to another aspect of the invention, the position of the fan is adjustable. In a preferred form, the adjustability of the fan is adapted to permit adjustment between a use position and a storage position wherein the fan body is positioned closer to the base.

[0010] Other features and advantages of the invention will be apparent from the remainder of this specification.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] The fan assembly of the invention will now be described with reference to the accompanying drawings, in which:

[0012] FIG. 1 is an elevated perspective view of a fan assembly of the present invention;

[0013] FIG. 2 is a front perspective view of a fan assembly of the present invention;

[0014] FIG. 3 is a side view of a fan assembly of the present invention with its blower positioned to face forward;

[0015] FIG. 4 is side view of a fan assembly of the present invention with the fan body positioned to face downwards;

[0016] FIG. 5 is a rear view of a fan assembly of the present invention with its blower positioned to face forwards; and

[0017] FIG. 6 is a rear view of a fan assembly of the present invention with its blower positioned to face downwards.

DETAILED DESCRIPTION

[0018] While this invention is susceptible of embodiment in many different forms, there is shown in the drawings and will herein be described in detail preferred embodiments of the invention with the understanding that the present disclosure is to be considered as an exemplification of the principles of the invention and is not intended to limit the broad aspect of the invention to the embodiments illustrated.

[0019] Referring to the figures, there is shown therein an electric fan assembly 10 including a fan body 12, a support 14 and a base 16.

[0020] The fan body 12 includes a motor housing 18, a fan housing or grill 20 and a blower mounting 22. The motor housing 18, encloses an electric motor (not shown) and an oscillating mechanism (not shown) with an oscillation control 23. The electric motor and oscillating mechanism are well known in the art and are not described herein in detail.

[0021] The housing 20 is mounted to the motor housing 18 and encloses blades 24. The blades 24 are operably connected to the electric motor and they are adapted to force air in a generally laminar flow direction, caused by rotation of the bladed propeller 24 driven by the electric motor.

[0022] The motor housing 18 is preferably rotatably connected to the blower mounting 22. The blower mounting 22 includes a control mechanism 26. The control mechanism 26
is operably connected to the electric motor through the blower mounting 22 and motor housing 18 and is used to control the speed of the rotation of the blades 24.

The motor is provided a means for electrical connection to an electric power source. This may include a power cord adapted for connection with a standard electrical outlet. Such a power cord may pass directly into the assembly at the motor housing 18 of the fan body 12. Alternatively, the power cord may pass into the base 16 or the support member 14, with a connecting electrical cord passing through, or adjacent, the support member 14 to the motor housing 18. The motor may also be provided with an internal or integral power source, such as a battery power source. Such battery power is preferably provided in the base, with electrical connection between the battery and the motor being an electrical cord passing through the support member 14.

The support 14 extends between the base 16 and the blower 12. In the embodiment shown in the Figures provided herein, the support member passes in a generally vertical direction such that the fan body 12 is supported generally above the base 16. In the preferred embodiment, the support 14 includes a pair of laterally spaced elongated members 28. Each elongated member 28 includes a bend or angle 29 defining a first segment 31 and a second segment 33. A first or lower end of each elongated member 28 is attached to the base 16. A second or upper end of each elongated member 28 is rotationally connected to the blower mounting 22. A horizontal positioner 30 is located at the upper ends of the elongated members 28 and allows the fan blower 12 to rotate vertically and to be positioned about a horizontal axis through the positioner 30.

In alternative embodiments, which do not materially depart from the invention, the support member 14 may provide support of the fan body 12 in alternative positions, such as being supported to the side, rear, or below the base 16. Also, alternative embodiments of the present invention include support member 14 construction with a single elongated member, or other body styles that provide suitable support for the fan body 12. Such suitable support preferably includes a structure adapted to provide positioning of the fan body in the central region of the base, which is adapted to provide support with a center of gravity of the fan body 12 that resides directly above at least a portion of the base 16.

In a preferred embodiment, the base 16 has a front edge region 32 and a rear edge region 34. Generally displaced between the two and integrally formed in an upper surface of the base 16 is a display area 36. The display area 36 is additionally bound by lateral edge regions 35. Such edge regions at least partially define an outer peripheral edge of the base. This is shown in the Figures as a plurality of linear edges, but may also comprise a plurality of curvilinear edges, even that which collectively form a circle or oval outer perimeter of the base.

As shown in the Figures, the display area 36 includes a plurality of compartments 38-43. The compartments 38-43 preferably are of provided in various shapes and sizes and adapted to hold a variety of personal items, including different types of office supplies. Compartment 38 and 39 are vertically elongated and particularly suitable for holding and storing pens, pencils, scissors and other generally elongated items. Compartments 40-43 are shallow as compared to compartments 38-29 and are adapted primarily for holding, among other things, paper clips, small note pads including those of a self adhering nature, rubber bands, other commonly used office supplies and personal items such as pocket change, watches and the like. Compartment 42, is horizontally elongated and can be used to store the elongated office supplies mentioned above horizontally, rather than vertically. Also depicted is a tape dispenser 44 integrally formed into the display area 36. It is understood that other items, such as a stapler, or hole punch may be included in addition to or in place of the tape dispenser 44. Also, it is preferable for an additional compartment 45 to be positioned on the opposite side of the fan body and/or support member (FIGS. 5 and 6). This additional compartment 45 is preferably dimensioned to hold business cards in a display position, and is accessible to persons positioned to the rear of the assembly proximal to the rear edge 34.

The base 16 also includes a visible portion 46 adapted to receive the elongated members 28 of the support 14. The visible portion 46 includes a front surface 48 having and area generally designated by the numeral 50 that can be adapted for displaying a clock. It is understood that other electronic accessories can be integrally formed in the front surface 48, for example a calculator. An embodiment including a calculator is preferably adapted to permit access to the calculator at a front edge region 32 of the base 16. Additionally, a calendar could be located in the front surface 48, or elsewhere on the base 16. In addition, the base 16, also serves as a support for a reading or desk lamp (not shown). A separate support for the lamp, for example, alternatively attaches to the base near the juncture of the rear edge region 34 and/or one of the lateral edge regions 35.

Although not shown, as indicated above, the fan body 12 may be adapted to be connected to an external power source such as a standard electrical outlet, or adapted to be battery powered. It is noted that the fan blower 12 may share its power source with any other electrical accessory included in the base such a clock or calculator. Alternatively, the body 12 and other accessories may be separately powered in any combination of power sources.

In a preferred embodiment, the lower ends of the elongated members 28 are centrally located in the rear edge region 34. Referring to FIGS. 3 & 4, the angle or bend 29 of the elongated members 28 permit the support 14 to hold the fan body in an elevated position over a central or middle region of the base, forward of the rear edge region 34, while permitting the required access to the display area 36. The lateral spacing 49 of the elongated members 28 allows the blower mounting 22, and/or control 26, to pass through the support 14 when the fan body 12 is fully rotated in a counterclockwise direction from the perspective of FIG. 4. In this embodiment, the fan body 12 is moved to a non-use position by movement of the body 12 toward the base 16, preferably into a collapsed arrangement (FIG. 4). In the embodiment shown, the support member 14 is adapted to at least partially receive a portion of the body 12, such as a portion of the mounting 22. More specifically, the support member 14 includes a receiving area 49 that is adapted to at least partially receive a portion of the fan body assembly 12, and preferably receives an extended body area (shown as 22). In other alternative embodiments, the fan body 12 is brought to a non-use position by collapsing the body 12 toward the base 16 without pivotal rotation of the fan body.
One example of this is by an assembly having a support member 14 with segments that are adapted to provide slidable engagement, such as telescoping segments. Another aspect, regardless of the means for moving the body 12 between use and non-use positions, is a control mechanism 50 for locking the body in use position. In the embodiment shown in the Figures, the control or locking mechanism 50 includes a screw-clamp mechanism for locking rotational movement of the fan body 12. Alternatives include mechanical manipulation of a locking pin or latch, or mating receiver and projection (not shown).

[0031] It is understood that a number of alterations of the above described embodiment come to mind without departing from the present invention. One alternative embodiment would include a motor and fan assembly 12 integrated with a base 16 according to the present invention, the blower being ducted to an exhaust blowing air from an elevated position above the base. An additional alternative embodiment would include a flexible or otherwise adjustable support 14. Its flexibility may thereby eliminate need for the horizontal positioner 30 of above described embodiment. Additional variations on the support 14 are possible without departing from the present invention. Further, the present invention also is achieved by providing a fan assembly 12 adapted to removably connect to the base 16 with a display area 36.

[0032] Also, the base 16 as depicted in the figures is generally rectangular. However, other configurations and geometries are possible. These other geometries would not depart from the present invention, provided they are adapted to support the fan body 12, and have a display area 36 adapted hold a personal item, such as office supplies, in a manner adapted to provide access to the items.

[0033] While the specific embodiments and various details thereof have been illustrated and described, numerous modification come to mind without significantly departing from the spirit of the invention and the scope of protection is only limited by the following claims.

We claim:

1. An electric fan assembly comprising:
   a fan body having a motor connected to a bladed propeller, a support member connected to the body and adapted to at least partially support said body in spaced relation from a base;
   the base having a display area between a front edge region and a rear edge region, the display area having at least one compartment adapted to hold personal items and having a substantially open face for access to said compartment.

2. The electric fan assembly of claim 1 wherein said base is adapted to rest on a generally flat desk surface, and said compartment is dimensioned to hold office supplies and is adapted to provide access to contents of said compartment.

3. The electric fan assembly of claim 1 wherein the base has a rear edge region and said support member is connected to said base at a position adjacent the rear edge region.

4. The electric fan assembly of claim 3 wherein said support member extends above said base in an angular direction adapted to position the fan body forward of said rear edge region.

5. The electric fan assembly of claim 1 wherein the fan body is positioned elevated above a middle region of the base, said middle region being located between a front edge region and said rear edge region.

6. The electric fan assembly of claim 1 wherein said spaced relation of the fan body from the base is adjustable.

7. The electric fan assembly of claim 1 wherein said fan body is supported at a height above said base, said height being adjustable.

8. The electric fan assembly of claim 7 wherein the support member is adapted to provide said adjustable height of the fan body.

9. The electric fan assembly of claim 1 wherein the support member has a first segment extending from the base and another segment extending at an angular direction from said first segment.

10. A portable electric fan assembly, comprising:
   a fan body portion having an electric motor adapted to propel an attached blade assembly, said body portion being connected to a base portion, said base portion having an upper surface comprising at least one compartment for holding office supplies, and wherein connection of the fan body to the base portion includes a support member adapted to position the fan body an extent above said compartment for permitting access to said compartment.

11. The fan assembly of claim 10, wherein; said support member comprises an elongated body having a lower portion connected to the base portion, and having an upper portion connected to said fan body.

12. The fan assembly of claim 11, wherein; said base portion extends between a front edge and a rear edge, at least a portion of said fan body being positioned above the base in a central region between said front and rear edge.

13. The fan assembly of claim 10, wherein; the base has a central region, said fan body being positioned above the central region and said base being adapted to provide support radially outward of the fan body.

14. The fan assembly of claim 10 wherein the fan body is adapted to oscillate generally horizontally.

15. The fan assembly of claim 10, wherein;
   a portion of said base houses a clock.

16. The fan assembly of claim 10, wherein;
   said base including a calculator, said calculator being located in a front area of the base and adapted to provide access by a user.

17. The fan assembly of claim 10, wherein;
   said base includes a plurality of separate compartments adapted to contain office supplies.

18. The fan assembly of claim 17 wherein at least one of the compartments is elongated and adapted for holding writing utensils.

19. The fan assembly of claim 10, wherein;
   a portion of said base houses a tape dispenser.

20. The fan assembly of claim 10, wherein;
   a hole-punch mechanism is integrally formed in the base.

21. The fan assembly of claim 11, wherein; said upper and lower portions of the support member are separated by a bend, said bend being adapted to direct the upper portion toward a position above the central region of the base.
22. The fan assembly of claim 21, wherein; the bend comprises a curvilinear segment of the elongated body positioned between an upper and lower end of the support member.

23. A fan and desk-organizer assembly, comprising:

an electric fan assembly having an electric motor and a bladed propeller;

a base adapted and sized to stand on a generally flat surface and having a compartment for holding office supplies, the base further having a front edge and a rear edge;

an elongated support member having a first end and a second end, the first end of the support member being connected adjacent the rear edge, the second end of the support member being connected to the electric fan assembly and adapted to allow open access to said compartment.

24. The fan assembly of claim 23 wherein the support member includes a bend providing an angular portion.

25. The fan assembly of claim 23 wherein the support member includes a curvilinear portion.

26. The fan assembly of claim 23 wherein the base has a width, said support member being adapted to support the fan assembly elevated above said base in a position generally central of said width.

27. The fan assembly of claim 23 wherein the base has a depth between front and rear of the base, said support member being adapted to support the fan assembly elevated above said base in a position generally central of said depth.

28. A fan and desk-organizer assembly, comprising:

an electric fan body assembly having an electric motor and a bladed propeller;

a base supporting said body and having a display area with at least one compartment adapted to hold office supplies, said base having an outer peripheral edge defining a dimension of width of the base;

an adjustable support member having a first portion connected to said base and a second portion connected to the fan body, and a means for adjusting said assembly between a storage configuration wherein the fan body is located adjacent the base, and an expanded configuration wherein said body is positioned further away from the base.

29. The fan assembly of claim 28, wherein; the means for adjusting includes a pivot of said fan body toward said base.

30. The fan assembly of claim 28, wherein; the means for adjusting includes telescoping connection between said first and second segments of said support member.