BLOWER WITH VERTICALLY DISPOSED MOTOR

Comment [HH1]: The original title is OK and matches the preamble of the independent claim.

However, should new claims directed to method are added, the title should be

BLOWER AND METHOD OF OPERATING

The revised title reflects an alternative approach of making the title more descriptive of the claimed subject matter.

Technical Field ~~Of The Invention~~

[0001] The present disclosure ~~invention~~ relates to a blower.

Comment [HH2]: According to recent US drafting style, "invention" should not be used alone. It should be accompanied by "embodiments" or replaced with "disclosure. "

This Field statement is broader enough.

Background ~~Of The Invention~~

[0002] ~~The prior art~~ Several blowers are ~~mostly~~ in vertical orientation, that is, its blades are vertically disposed. The prior-art blowers are constructed to comprise a motor, blades, and an exhaust channel, wherein the blades are vertically mounted in the channel in a way that a rotation surface of the blades is vertical, and the motor is mounted on the other side of the channel. ~~Since the blower employs a vertical construction, the unbalance of weight of the motor and the blades is liable to cause deflection of center of gravity so that the blower cannot be placed stably and stable operation and service life of the blower are affected. On the other hand, the motor is not disposed in the air intake channel, and heat dissipation mainly depends on small-sized heat dissipating blades at the tail of the motor, which leads to an undesirable heat dissipating effect and a large energy consumption. The Chinese Patent CN200512345678.9 discloses a horizontal type blower which solves the problems such as deflection of center of gravity and~~

Comment [HH3]: It is recommended not to admit anything as "conventional" or "prior art".

It might not be actually prior art if it was inventor's prior work that has not been placed in the public domain

Comment [HH4]: The rest of the Background can be deleted to obtain a "dry" Background.

If you wish to keep the discussion of known art issues, add

--The inventor has recognized that-- to the beginning of this deleted section.

Don't attack prior art.

Comment [HH5]: careful in cited reference, could be Applicants' own inventions.

IDS is sufficient to cite this reference.

of the motor. In order to improve the waterproof performance, a ring of waterproof rib 13 and an annular waterproof sponge 2 are provided in the motor cover 1, and the annular waterproof sponge 2 is disposed between the motor rear end cover 32 and the waterproof rib 13 as shown in FIG. 8 or disposed between the motor sidewall and the waterproof rib 13 as shown in FIG. 9 to filter vapor and avoid vapor from being sucked in the motor 3. As shown in FIGS. 6-9, a water baffle 100 is provided between the motor 3 and the blades 7, and specifically, the water baffle is disposed below and abuts closely against the motor front end cover 31. As shown in FIG. 14, the water baffle 100 is provided with ventilation openings 101 and ventilation opening rings 102. The above construction resists against water on the following principle: after the motor 3 drives the blades 7 and sucks water droplet-entraining gas inside through the slit-shaped air intake ports 11 on the motor cover, when the gas passes through the waterproof rib 13 on the motor cover 1 and the waterproof ring wall 43 at the outer circumference of the motor mounting chamber, part of the water droplets in the gas are intercepted by the waterproof rib 13 and the waterproof ring wall 43, and part of the remaining water droplet-entraining gas enters the interior of the motor via the motor rear end cover 32 to cool the motor 3, whereupon the water droplets-entraining gas is sucked in the annular waterproof sponge 2 and the droplets are further intercepted by the annular waterproof sponge 2 to prevent them from entering the motor 3; meanwhile, another part of the

Comment [HH25]: claim interpretation issues, i.e., waterproof to keep out vapor ?
Accused device with an element for keeping out vapor but not water-proof could escape infringement

Comment [HH26]: claim interpretation issue:

So, is the water baffle water proof (or vapor proof) or not due to this ventilation openings ?

Fig. 14

Comment [HH27]: claim interpretation issue, i.e., how can gas passes through a waterproof rib ?

Comment [HH28]: enablement issue – how to make

what is the material of waterproof rib 13 and the waterproof ring wall 43 ?

Comment [HH29]: reference numeral needed in Fig. 9

Comment [HH30]: enablement issue – how to make

what is the material of waterproof sponge 2 ?

how it is different from waterproof rib 13 and the waterproof ring wall 43 ?

Comment [HH31]: reference numeral is needed in Fig. 9

WHAT IS CLAIMED IS:

1. A blower, comprising:

a ~~snail-shaped~~ base,

a ~~snail-shaped~~ cover,

blades, and

a motor,

the ~~snail-shaped~~ base and the ~~snail-shaped~~ cover forming an exhaust channel,

~~characterized in that~~ wherein

the blades are horizontally provided in the exhaust channel,

the ~~snail-shaped~~ cover above the blades is provided with ~~an air intake channel formed by~~

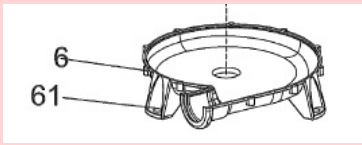
a motor mounting chamber, ~~and~~

a motor cover, and

an air intake channel formed by the motor mounting chamber and the motor cover, and

the motor is vertically disposed in the air intake channel and connected to the blades therebelow.

Comment [HH34]: not supported by drawings → potential claim construction issue



Comment [HH35]: snail is too limiting can be designed around by a box or cylinder shape.

Comment [HH36]: unnecessary limitation.

Can be changed to "oriented in a first direction"

Comment [HH37]: This is inferential claiming that should be avoided.

Comment [HH38]: unnecessary limitation.

Can be changed to "oriented in a second direction *transverse* to the first direction"

7. The blower according to claim 1, further comprising, ~~characterized in that~~ on the ~~snail shaped~~ cover, ~~are provided~~ a sealed capacitor junction box which comprises ~~is formed by sealingly engaging~~

a capacitor junction cavity, and ~~with~~

a capacitor junction lid sealingly engaged with the capacitor junction cavity.

Comment [HH42]: product-by-process claim language should be avoided

8. The blower according to claim 7, ~~characterized in that~~ further comprising:

a switch ~~is provided~~ on the capacitor junction lid, and

a waterproof seal switch sleeve ~~is provided~~ between the switch and the capacitor junction lid.

Comment [HH43]: not shown until Fig. 6

this claim is might not be enabled by the priority application.