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(54) **ROOF VENT**

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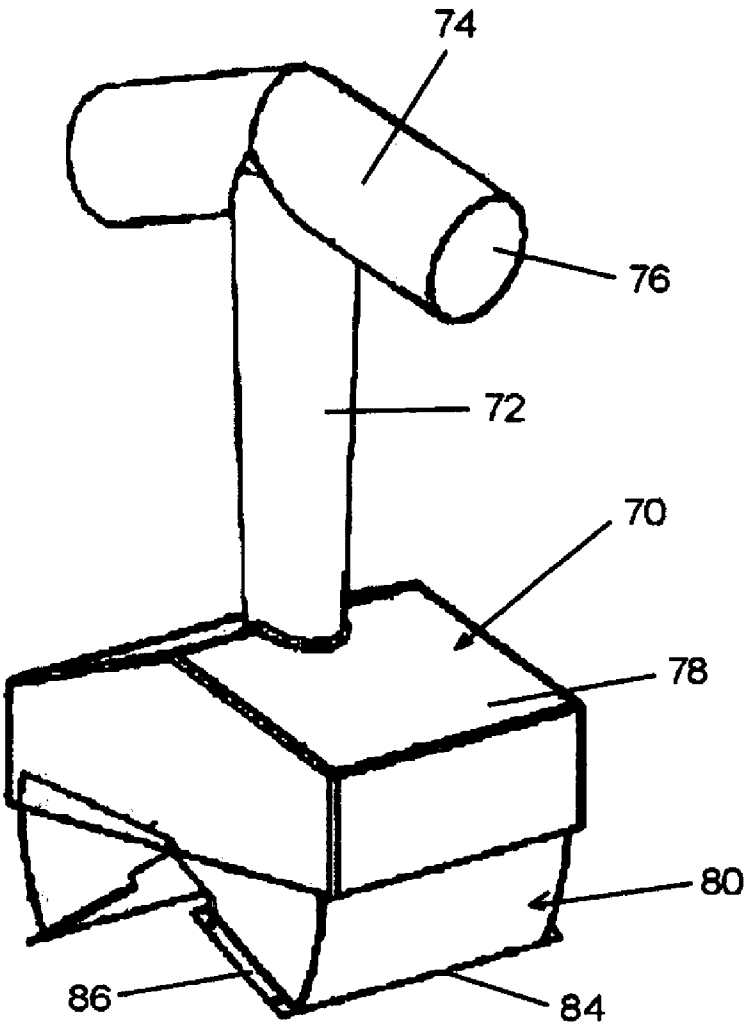
(52) **U.S. Cl.** **454/365**

(57) **ABSTRACT**

A novel roof vent in accordance with the present invention, utilizes a vent pipe communicating with a shroud, where the shroud compatibly fits over a ridge vent on a roof. The vent pipe is extended above the roof, sufficiently so as to rise above the anticipated level of snow load that may be experienced in the locale of the application. The roof vent of the preferred embodiment includes an apron that adjustably fits the roof pitch of the installation and further includes a ridge vent cutout for compatibly fitting over the ridge vent. In one version of the present invention, cosmetic dress may be used to allow the roof vent to blend with architectural requirements without impacting the functionality of the roof vent operation.



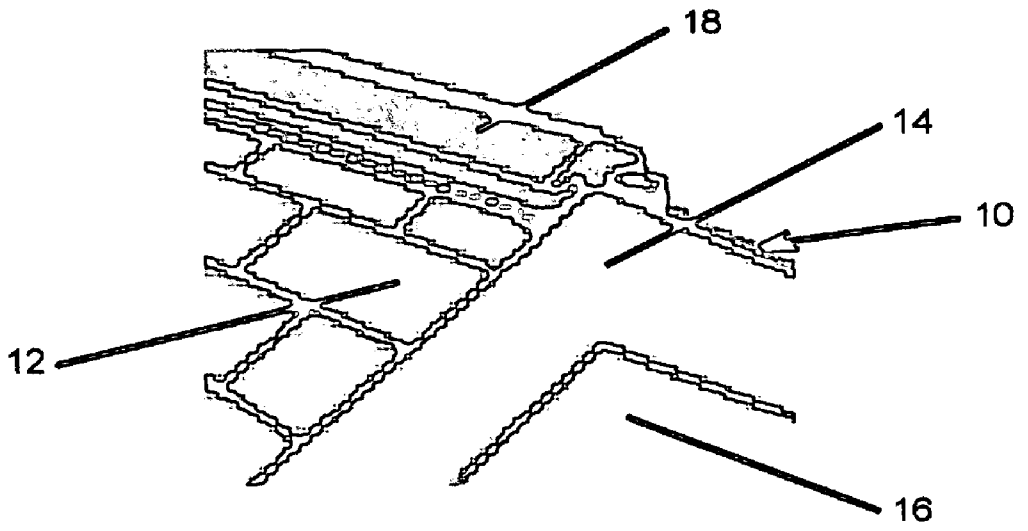


FIG. 1

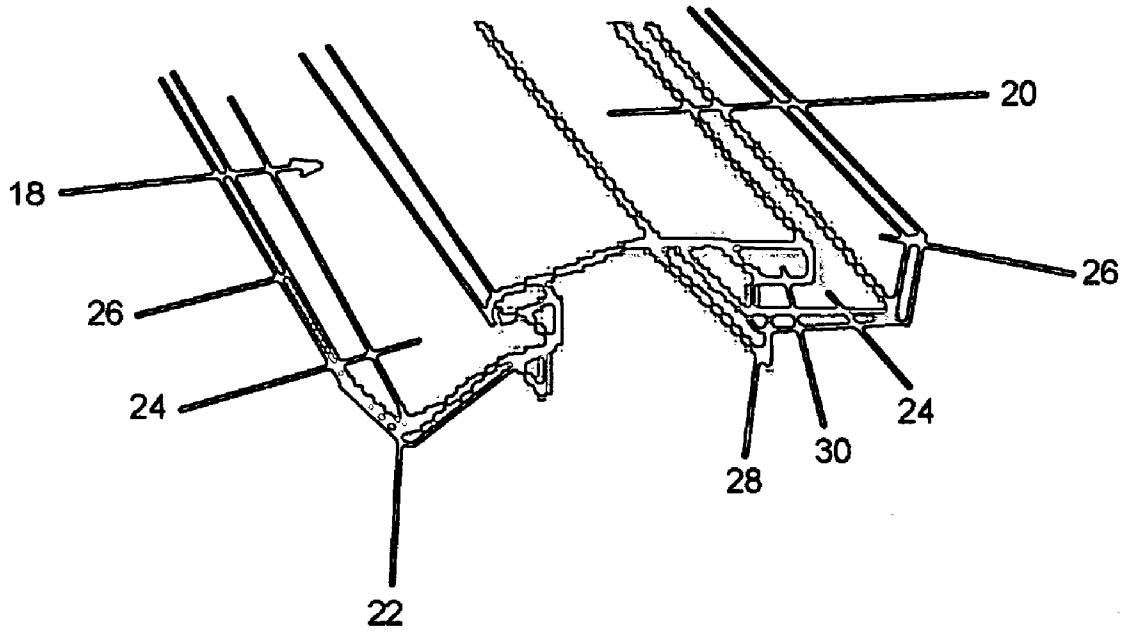


FIG. 2

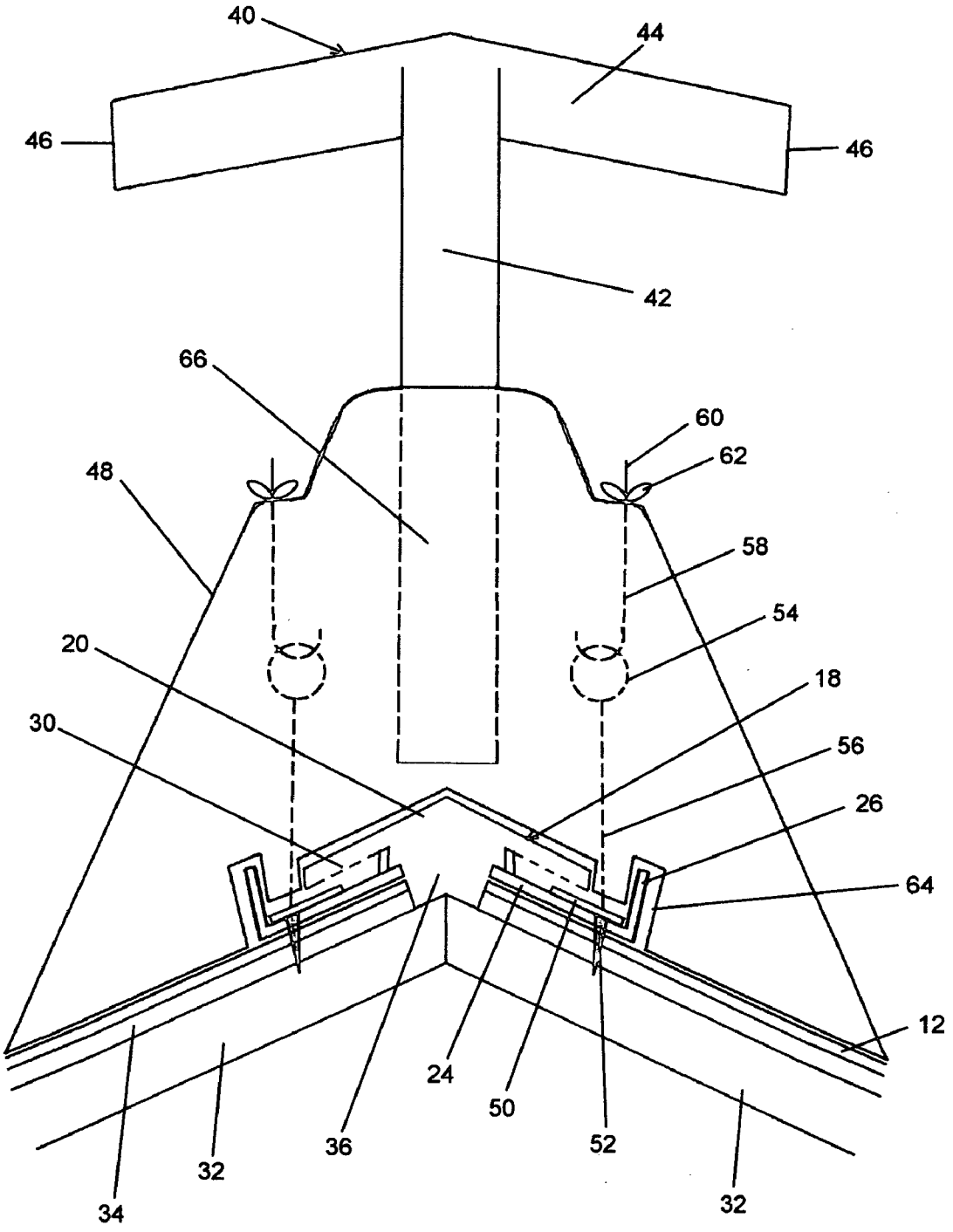

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FIG. 3

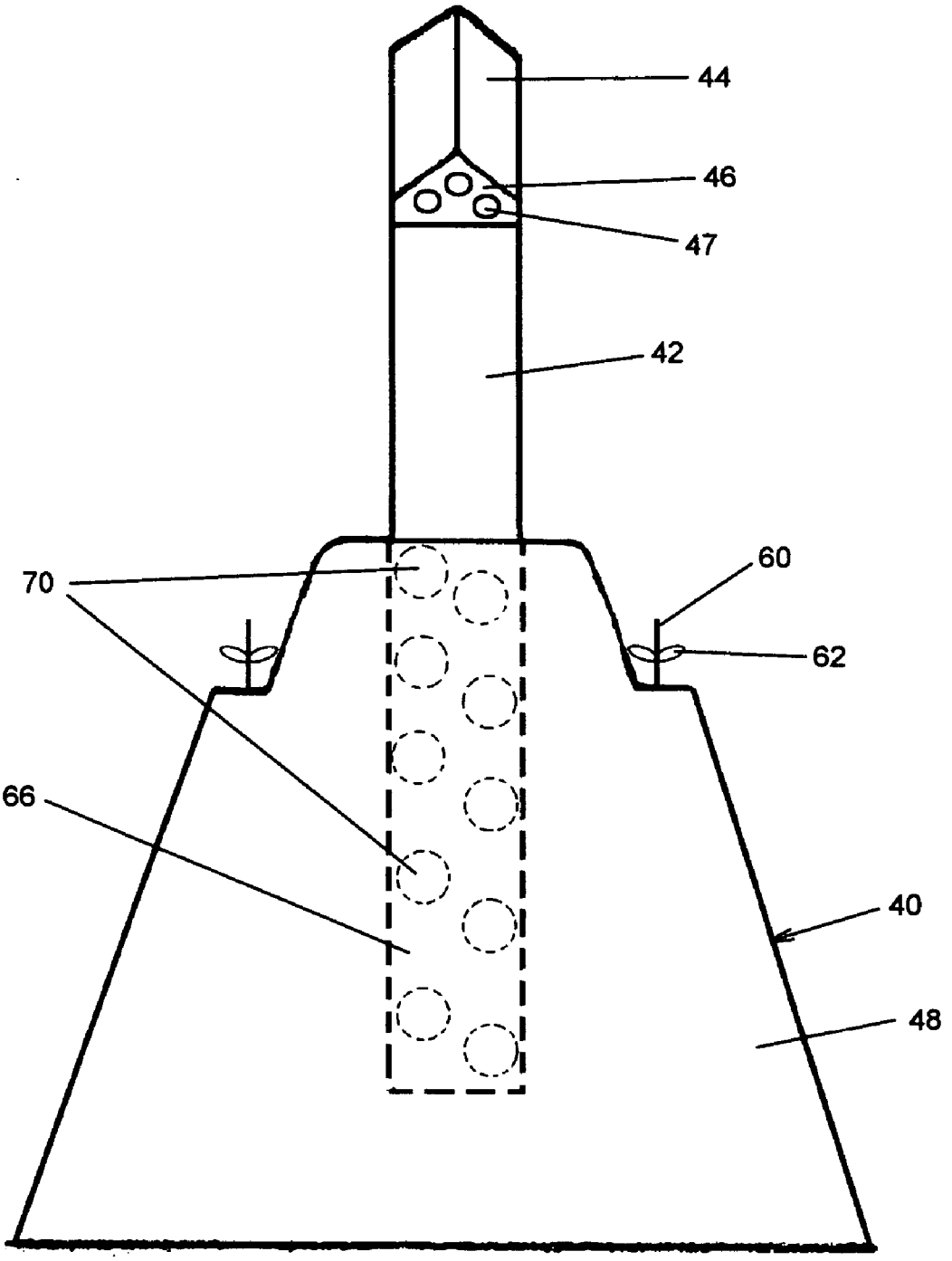

FIG. 4

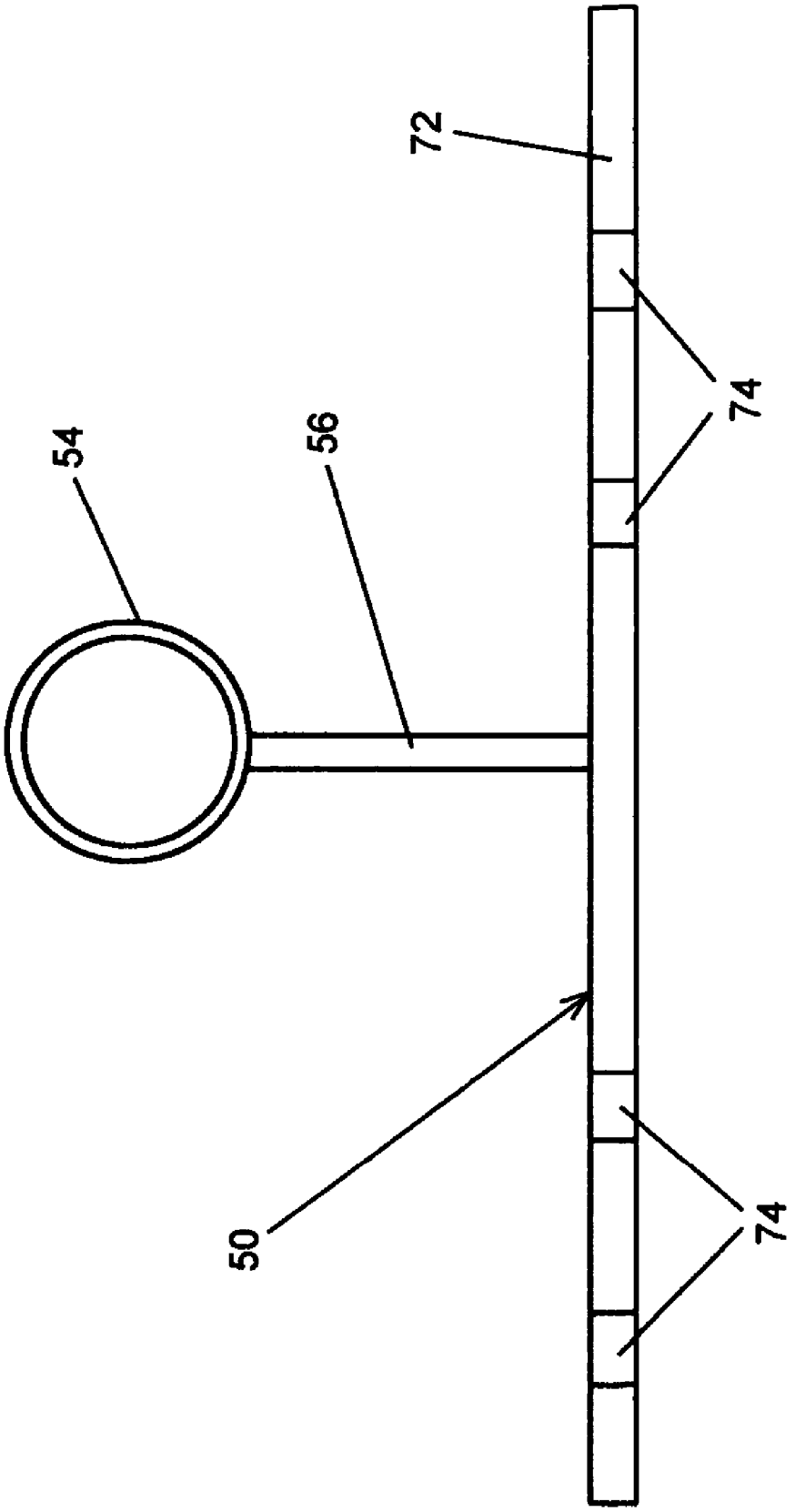

FIG. 5

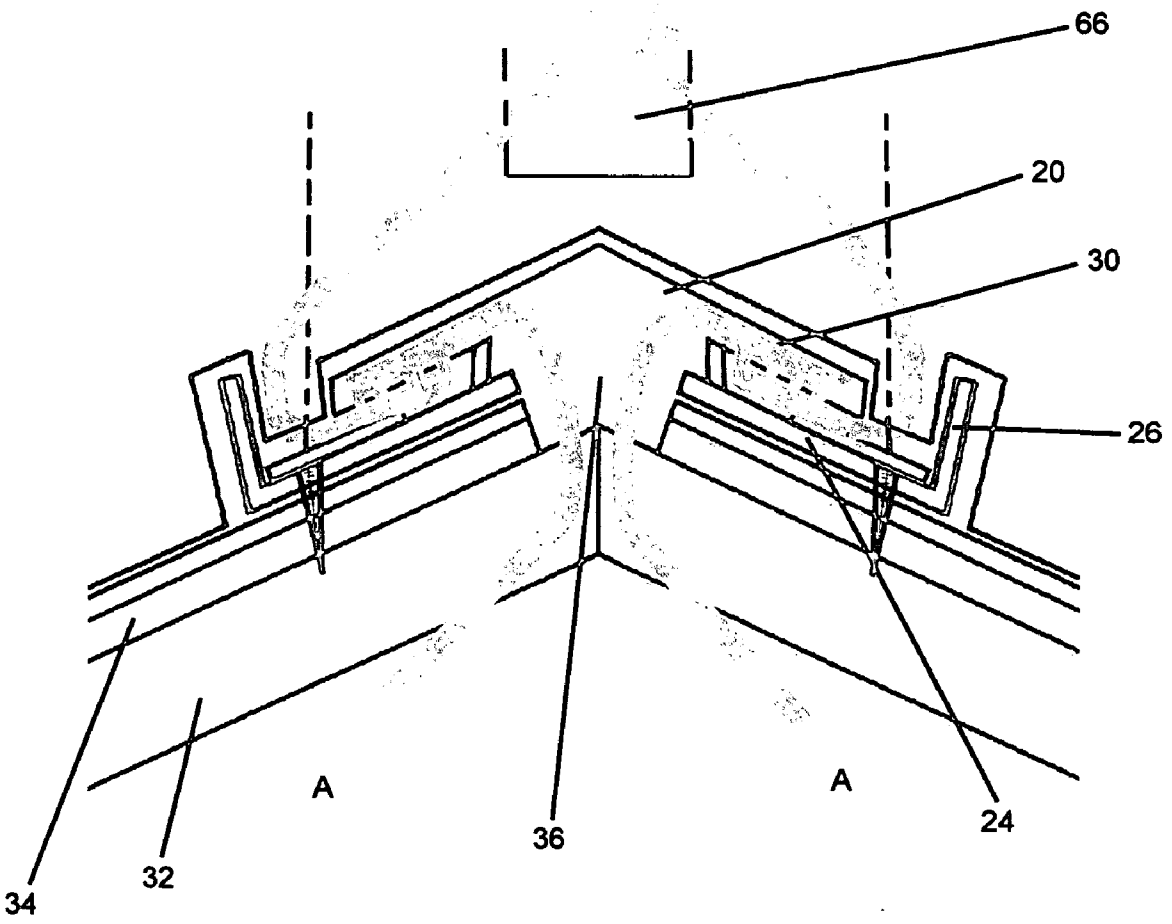

FIG. 6

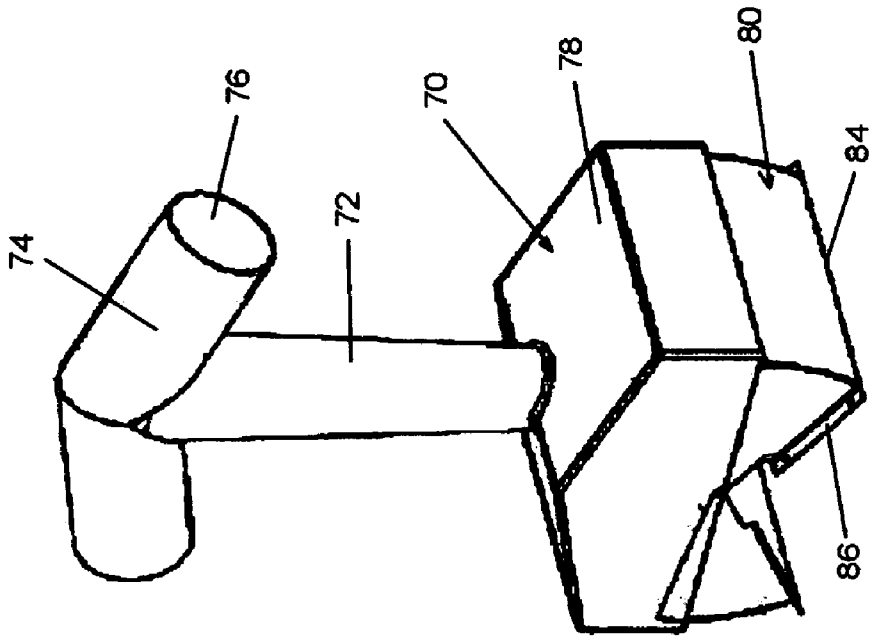

FIG. 8

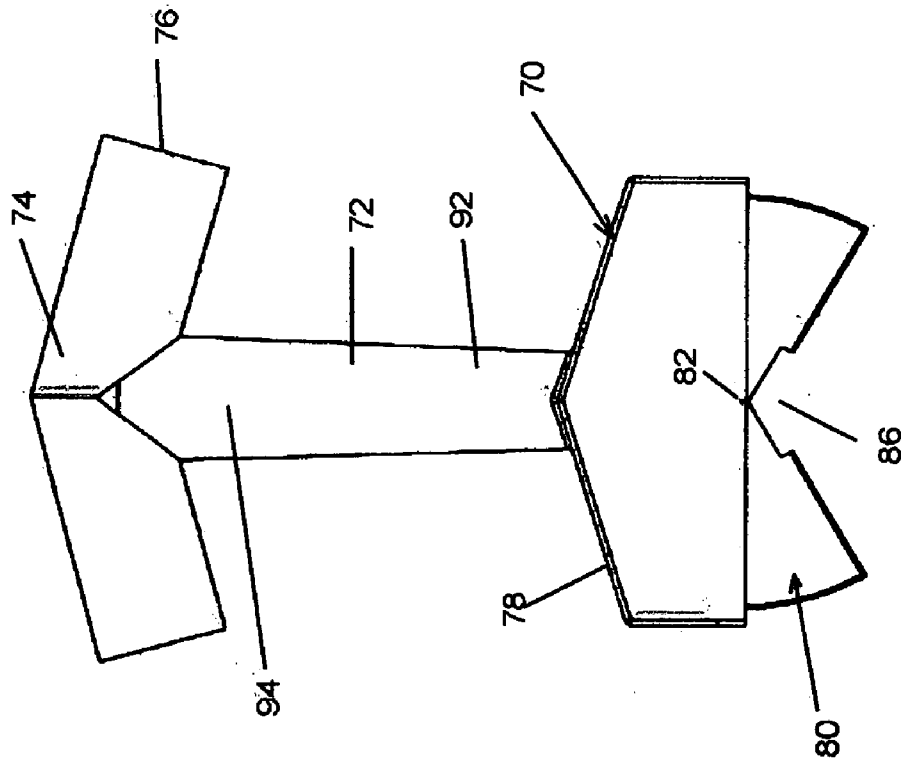

FIG. 7

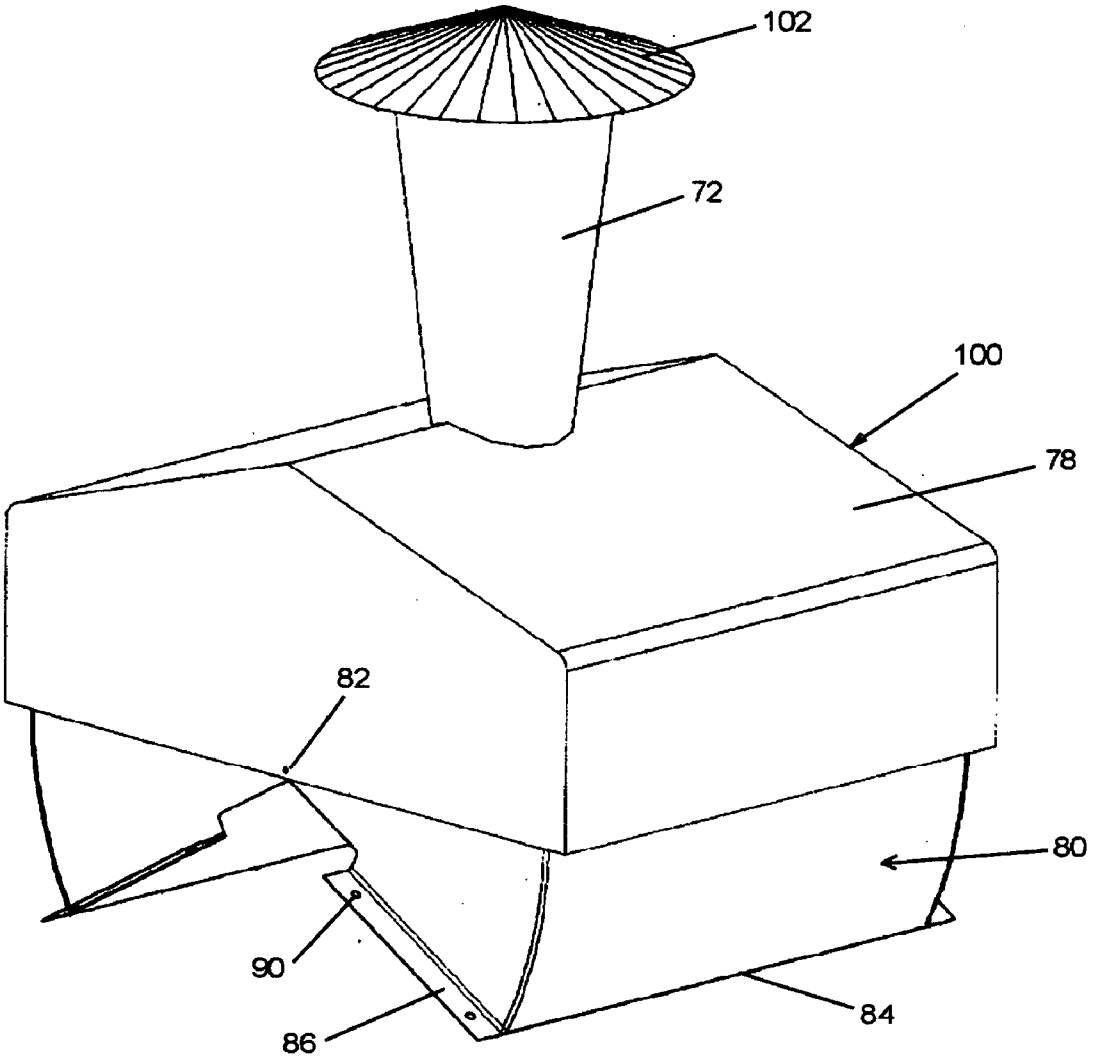

FIG. 9

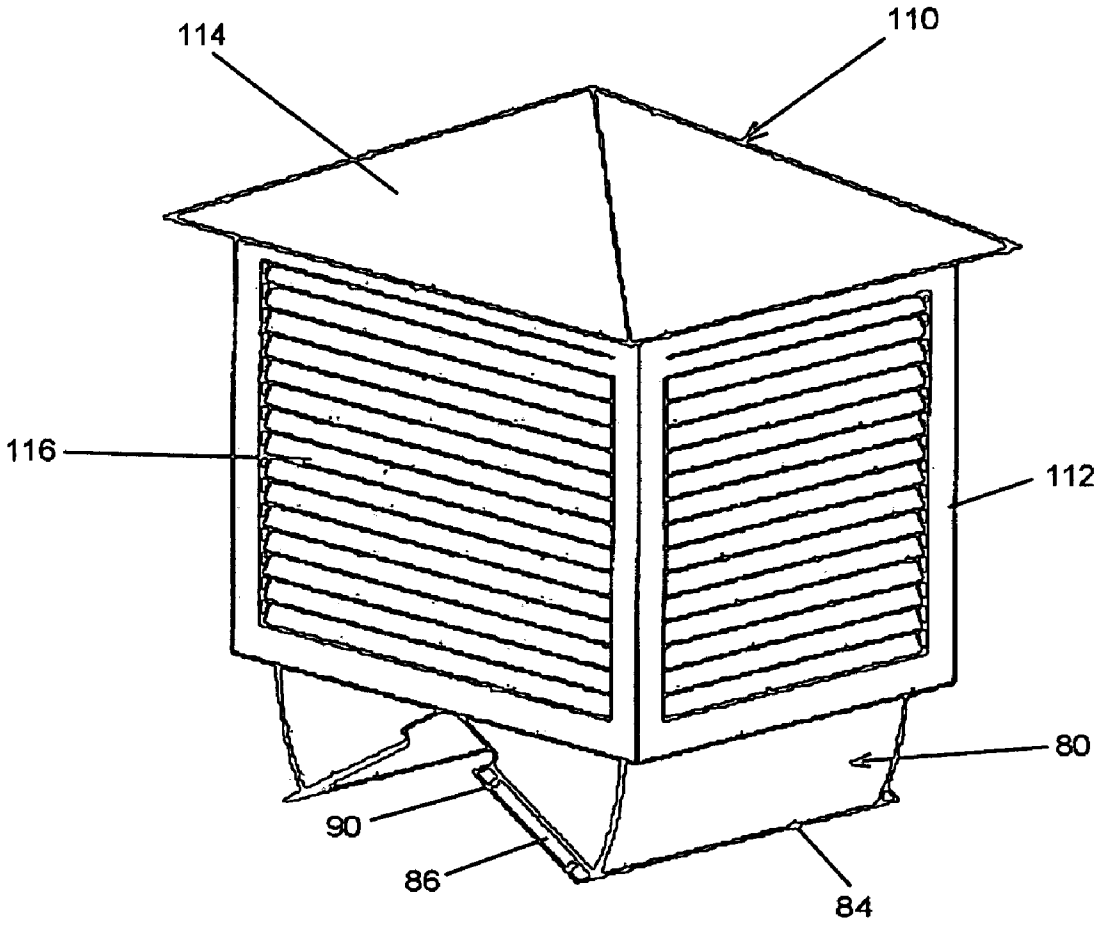

FIG. 10

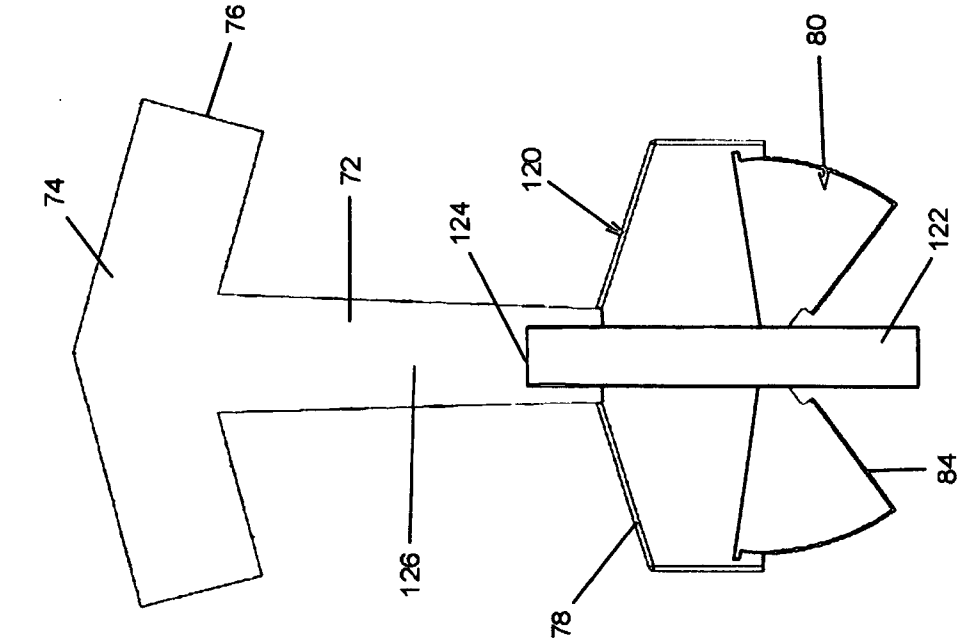

FIG. 11

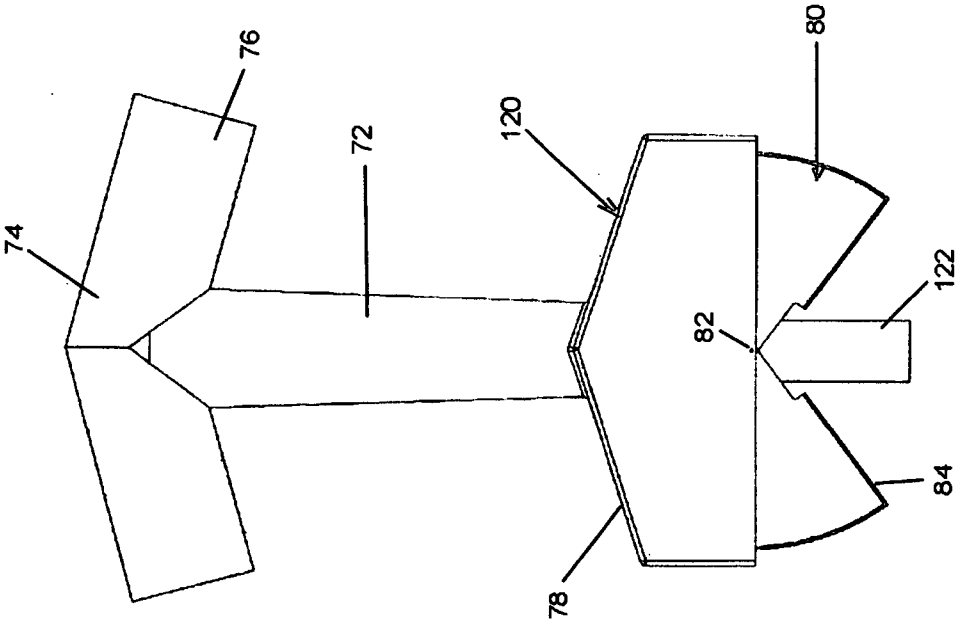

FIG. 10

ROOF VENT

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] The present application is related to a Provisional Patent Application, No. 60/601,839, filed Aug. 16, 2004.

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT

[0002] Not applicable.

BACKGROUND OF THE INVENTION

[0003] The present invention relates to roof vents, more specifically, roof vents that remain functional during periods of substantial snow loads.

[0004] Roof venting is an issue more for colder climates owing to the potential for damage when snow loading occurs. Damage results from the situation where a poorly ventilated roof is allowed to trap heat thereby melting some of the snow residing on the roof itself. Snow melt will have a tendency to refreeze at times, especially as it migrates and accumulates near the lower roof edges. Once the ice starts to pile up in this manner, it can act like a dam and cause subsequent snow melt to accumulate in greater and greater quantities. The resulting water flows will seek the avenue of least resistance which in some cases the penetration of the roofing system (typically shingles) which leads to leaking through the roof deck and into the residence. Additionally, the water that pools during these events is subject to refreezing and if this happens it will expand. Water that is trapped in this fashion, creates a great deal of damage to roof systems when refrozen since it will fracture, or separate, or otherwise disrupt the protection afforded by the roofing system, again leading to leakage.

[0005] This phenomenon has long been experienced in the Northern portions of the United States (as well as other parts of the world where the climate includes yearly snowfall) and over the years various strategies have been developed to help defeat the buildup of the damaging concentrations of ice. These efforts include the usage of attic insulation which retards the escape of heat into the attic which thereby influences the temperature of the roof. However, the implementation of insulation, even in applications where it is very efficient in retarding heat loss, has not been able to completely solve the historic ice buildup problems associated with modern roofing. The small amount of heat loss that does occur still is enough to generate the melting and freezing cycle, although it is understood that this process may be enhanced by the heat absorption that may occur by a roofing system on a sunny day, irrespective of outside temperatures.

[0006] As a result, homebuilders and roofing contractors have turned to the use of venting as a method to further reduce the buildup of any heat sufficient to commence the melting of the snow loads. Roof vents used for this purpose come in many different forms but the function is common to all. By allowing for air flow within the area between the underside of the roof construction, and the top of the insulated living area of a home or building, (typically called the "attic"), the roof temperature is kept as close to the outside temperature as possible. Air flows from the eaves at the lower edges of the roof construction through the attic area, and out strategically placed venting disposed about the roof.

[0007] The venting typically occurs via a drafting mechanism where the height and the pitch of the roof will generate negative pressure at intake vents located under the eaves. Airflow proceeds through the eave vents and then through the attic space and then out the roof vents wherever these may be located. The vents themselves may be point exhausts where they individually comprise through holes of various dimensions in the roof construction penetrating all the way into the attic space. As may be appreciated, these exhaust holes are covered appropriately to retain the protective properties of the roof although they do provide for an unimpeded path for the air flows. Typical of vents of this type are those that have a short vertical duct that is fastened to the roof and into the through hole. With the use of appropriate flashing and sealant materials, the ducting is made weatherproof as between it and the roof, and the vent is capped by shield that covers the duct in order to keep precipitation out while allowing a serpentine path for the air flows to exit.

[0008] Another type of roof venting, ridge venting, is known and one example of this approach is shown in U.S. Pat. No. 6,599,184 where the ridge line formed at the top of a typical hip roof is used as the exit zone for the air flows. These ridge vents have the advantage of providing a very large venting area right at the peak of the roof construction. This will maximize the efficiency of venting under normal conditions and given the low profile design of the ridge vents, the cosmetics of such a system are obvious.

[0009] Notwithstanding the success that the roof vents of various types have enjoyed with respect to reducing damage during periods of snow loads, there are occasions when this function breaks down. Particularly in those parts of the country where the snow loading ranges from moderate to heavy, it is possible for the snow levels on a roof to rise above the top of such prior art vents and prevent them from working as intended. Ironically, the same climatic condition that spawned the need for roof venting in the first instance can work to nullify the effects of the device at times.

[0010] The potential for the described adverse effects can be appreciated when one considers the ridge vent shown in U.S. Pat. No. 6,599,184. The low profile, while cosmetically pleasing, also allows the ridge vent to become entirely snowbound within a few inches of snow loading. At first some venting may still occur, even with snow completely covering the unit, given the interstitial space within the collected snow. But in many sections of the United States the snow loads will actually accrue to levels that will more than eliminate any potential venting through the snow and then, over time, the snow will compact and will further eliminate any potential for "breathing" underneath.

[0011] In a way, the limitations of the prior art vents do prove the effectiveness of the concept of venting the roof The applicant's own experience has resulted in the observation that blockage of the ridge vent, or any other roof vent for that matter, will quickly restore the damaging cycle of snow melts and ice buildup.

[0012] There are roof vents known in the prior art where the devices employ a degree of vertical height that would, in

part, elevate the venting above some snow loads. Units of this type appear to be focused on the advantages gained in drafting rather than providing a means to retain venting during periods of heavy snow. One such roof vent employs a rotating element at the top of a vertical duct. The finned element spins about an axis and when small amounts of wind impact it, it causes the finned portion to rotate and to generate a negative pressure condition interior to the roof Units of this type are usually deployed on utility buildings such as barns or garages and are meant to reduce the tendency for hot air to accumulate in the upper reaches of such buildings. While the unit may have some effectiveness when confronting snow levels, the function of this device is unrelated to the strategic reduction of the roof temperature (and avoidance of ice dams) in a roof construction such as would be contemplated with the usage of the present invention.

[0013] Other distinctions may be made between the prior art devices used as roof venting as may be more evident in the description of the preferred embodiment below.

SUMMARY OF THE INVENTION

[0014] The present invention is comprised of a roof vent with an extended portion that exceeds anticipated snow loads in Northern climates. More particularly, the present invention comprises a collection part that compatibly connects to a through hole in a roof construction or engages with an existing roof vent, and which provides an exhaust part that extends well above anticipated snow loads and which provides increased drafting for the exhausting of air flows within a roof system.

[0015] The present invention also comprises an improvement to existing ridge vents for the exhausting of airflows during periods of heavy snow loads. In one embodiment of the present invention, the roof vent is compatible with installation onto an existing ridge vent without the need for any modifications or changes.

[0016] The present invention also comprises an improvement in roof venting by increasing the drafting efficiency of ridge venting.

[0017] These and other benefits of the present invention will be apparent in the description of the preferred embodiments herein.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] **FIG. 1** is a partial perspective view of a roof construction employing a conventional ridge vent.

[0019] **FIG. 2** is a partial perspective view of a conventional ridge vent.

[0020] **FIG. 3** is a side elevational view of a roof vent of the present invention showing it in an installation on a roof construction in cross section.

[0021] **FIG. 4** is a front elevational view of a roof vent of the present invention.

[0022] **FIG. 5** is a side elevational view of the anchor plate for the roof vent of the present invention.

[0023] **FIG. 6** is a side cross sectional view of a portion of the present invention installed onto a ridge vent with the airflows indicated thereon.

[0024] **FIG. 7** is a side elevational view of an alternate embodiment of the present invention.

[0025] **FIG. 8** is a front isometric view of the roof vent of **FIG. 7**.

[0026] **FIG. 9** is a front isometric view of a modified roof vent of **FIGS. 7 and 8**, as shown with a "rice hat" top.

[0027] **FIG. 10** is a front isometric view of a modified roof vent of **FIGS. 7 and 8**, as shown covered by "cupola" housing.

[0028] **FIG. 10** is a side elevational view of the roof vent of **FIGS. 7 and 8**, as shown installed over a pre-existing vent pipe.

[0029] **FIG. 11** is a cross sectional view of the roof vent shown in **FIG. 10**.

DETAILED DESCRIPTION OF THE INVENTION

[0030] A new roof vent in accordance with the present invention overcomes the problems associated with roof venting that is rendered ineffective or totally useless in the face of substantial snow loads. While it should be appreciated that the teachings of the present invention are applicable to many types of roof vents, the particular type of venting design used to illustrate the present invention will be the ridge type ventilation. Ridge vents can be used on different roof types as well, including gable roofs, hip roofs, gambrel roof, and combinations of these.

[0031] Turning to **FIG. 1**, a roof ventilation system of the prior art is shown as installed on roof **10**, in this case a gable roof, which includes shingles **12**, roof peak **14**, sidewall **16** and ridge vent **18**. As the name implies, the ridge vent is located on the ridge line formed at the top of the conventional style gable roof design. There is some natural symmetry in the appearance of the ridge vent since it is outwardly shaped with angles that roughly mimic the angles used for the roof construction. In this fashion the ridge vent tends to be less obvious and it can be colored (by paint or tint) to coordinate with the color of the shingles selected for the roof construction.

[0032] **FIG. 2** shows the end of a section of a ridge vent **18** which further comprises the cap **20**, the vent flanges **22**, and the vent portion **30**. The vent flanges further comprise the bottom leg **24** and the top leg **26**.

[0033] The ridge vent of the prior art may be fabricated from plastic or metal, although it is typically formed as a one-piece construction. The roof construction allows for a gap at the ridge line which is sufficient to receive the anchor plate and thereafter allow the ridge vent to be fitted into the gap and fastened to the roof decking or joists. The gap provides an opening to the attic area underneath the roof which communicates with the area in between the anchor plates and with the vent portion of the ridge vent. The vent portion typically contains louvered or slotted openings throughout the length of the ridge vent and through these openings air flows emanating from the attic area are free to travel through the ridge vent and to the outside. Conversely, the cap and the recessed design of the vent portion serve to cover and protect the openings within the vent portion and keep the weather away from the interior components of the roof system and the attic area.

[0034] The vent flanges are believed to assist in keeping debris and small animals from entering the ridge vent while providing structure that acts like flashing for the roofing system.

[0035] Other variations on the ridge vent described above are known that include filters or screening in the vent portions or have different profiles. Generally speaking, these versions all utilize the gap in the ridge line of the roof construction as a convenient and efficient means for exhausting air contained within the attic area. Other variations include roof vents that may be fabricated from plastic, or that allow the venting system to be disguised by providing a surface for attaching shingles on top.

[0036] Other types of roof vents are known, including those that are installed on point locations on the roof surface. These units are positioned somewhat mid-way between the ridge line and the lower edge of a roof field and several may be disposed about a given roof area. Most commonly, roof vents of this type have a vertical duct that is fitted into a through hole that is cut into the roof field. The vertical duct is integrated with a mounting assembly that secures it to the roof deck and that also typically provides a flashing for sealing the installation upon completion of the roofing system. Lastly, the unit also includes a top portion that, in somewhat similar fashion to the ridge vent, partially shields and covers the ducting from the elements and protects the roof components and the attic area from damage. Air flows are free to pass from the attic area through the ducting, and out the gap that has been left between the top of the roof vent and the top of the ducting. Additional enhancements are usually provided such as screening, to prevent debris and/or animals from entering the attic through the roof vent.

[0037] With the foregoing in mind, a new roof vent of the present invention is shown in **FIG. 3**. Specifically, the roof vent **40** sits directly upon the roof components, the roof joist or rafters **32** and the roof deck **34**. Further, the roof vent in this embodiment is placed directly over the existing roof vent and therefore, over the ridge line and the ridge opening **36**.

[0038] The roof vent itself is comprised of the vent pipe **42**, the tee **44**, the tee ends **46**, the roof vent shroud **48**, the anchor plate **50**, the anchor screw **52**, the anchor eye **54**, the anchor eye rod **56**, the "J" hook **58**, the "J" hook end **60**, and the wing nuts **62**. Further, there is viewable, the inner pipe portion **66**.

[0039] The roof vent shroud conforms to the roof components and the angles they form, and to the existing ridge vent **18**, which has a profile characterized by the top leg **26**, the bottom leg **24**, and the cap **20**. This portion of the roof vent shroud that so closely conforms to the roof and ridge vent is the cut-out **64** and it is fitted to compatibly allow caulking or other sealing of the joint area defined by the junction of the roof vent shroud with the roof components and the ridge vent. In this fashion, the roof vent of the present invention maintains the protections afforded by the ridge vent and keeps the roof components and the attic area free from the effects of the weather and from the infiltration of small animals and the like. In addition, it is noted, although not shown, that most roof vents include a mesh or filter portion that is placed to keep debris and small animals from entering the vent structure. This is a feature that is known in roof vents and is left for one skilled in the art to include in an installation of the present invention.

[0040] As may be understood from the above, the vent pipe communicates directly with the area enclosed by the shroud (through the inner pipe portion) and to the outside environment by means of the tee. Air flows can travel from the interior of the area enclosed by the roof (attic space), through the ridge opening, through the vent portion **30** into the area enclosed by the roof vent shroud and eventually through the vent pipe and the out through the tee ends. Thus air flow communication is allow between the attic space and the outside environment. The tee redirects the exhaust exiting from the vent pipe portion in order to keep the elements from entering into the roof vent and into the attic space. The tee and the tee ends act as the end of the vent pipe in this fashion and are really extensions of the vent pipe. Either the tee ends, or if the tee were to be eliminated leaving a vertical vent pipe as the sole structure above the shroud, the truncated vent pipe, may be termed the vent pipe exhaust for the purposes of identifying where the air flows exit the roof vent.

[0041] The present embodiment is integrally related to the ridge vent in this type of application and may be compatibly installed onto the ridge vent with a minimal of skills and without doing any damage to the roofing system or the ridge vent. In practice, the anchor plate **50** is first secured on top of the bottom leg **24** of the ridge vent. The anchor plate is merely located within the channel area defined by the bottom leg and the top leg, and then flat screws are installed through the fastener holes in the anchor plate, then the ridge vent, through the shingles, and into the roof deck and/or joists.

[0042] This leaves the anchor rod projecting upwards from the ridge vent with the anchor eye in a position to engage the "J" hook. The anchor rod may be connected to the anchor plate by several means (not shown) including the peening over of the lower end of the anchor rod once it passes through a compatible hole in the anchor plate. Another method is to weld the end of the anchor rod directly to the anchor plate, although this reduces the flexibility of the anchor rod and may introduce low tolerance for the positioning the "J" hook and shroud for engagement with the anchor eye. In any event, it is desired to have the anchor rod and eye affixed to the anchor plate in a way that retains the whole roof vent to the roof under all anticipated exterior conditions.

[0043] The roof vent shroud essentially forms a housing which covers a portion of the ridge vent. As mentioned above, the anchor plate is fastened to the roof via screws, and the orientation of the roof vent shroud is necessary to align the cut out **64** with the overall profile of the ridge vent and to seat the roof vent shroud compatibly with the angle of the roof peak. In order to complete the installation, it is necessary to secure the "J" hooks to the corresponding anchor eyes and then tighten down the wing nuts on the "J" hook ends, which are threaded for this purpose. As might be appreciated, placing the roof vent shroud over the ridge vent and the anchor plates in this fashion would be very difficult to achieve since the installer cannot see how the alignment is progressing. In the present embodiment, however, the roof vent of the present invention would include doors or removable panels that would allow the "J" hooks to be visible and accessible for the engagement with the anchor eyes.

[0044] Turning now to **FIG. 4**, the roof vent is shown with the inner pipe portion **66** revealed in phantom inside the roof

vent shroud. Further, the inner pipe portion has the vent pipe holes **70** disposed about its length. While the bottom end of the inner pipe portion is preferably left open so as to accept air flows, the vent pipe holes serve the same purpose and minimize the resistance to air flows that are captured and routed through the system. In addition, vent pipe holes may be added to the underside of the tee ends **44** for the purpose of allowing condensate to drain from the tee ends which are angled downwardly towards their ends which helps to promote such drainage.

[**0045**] **FIG. 5** shows an anchor plate **50** of the present invention with the base plate **72** and the fastener holes **74**. As indicated above, the anchor rod and anchor eye project upward from the anchor plate. The base plate is comprised of a high service steel that will serve to distribute the loads that are placed on the roof vent as a result of weather and snow loads. This is necessary to prevent the roof vent from shifting position or loosening. In addition, several fastener holes assist in ensuring that the holding power of several screws is used to make the anchor plate fast to the roof

[**0046**] Lastly, **FIG. 6** shows a cutaway portion of the present invention, as shown in **FIG. 3**, with the airflows "A" that originate from the attic area. As can be seen, these air flows are able to progress through the ridge opening and through the ridge vent, and then through the roof vent of the present invention. Thus the roof vent allows for continued functioning of the ridge vent even when it would otherwise be blocked by snow loads.

[**0047**] The roof vent of the present invention may be fabricated from any materials that would accept the configuration described and perform under the anticipated parameters, that would be known to one skilled in the art. Specifically, the present embodiment is fabricated from a plastic resin, although it may easily be fabricated from metal which is coated with an appropriate finish to resist the elements. It would be possible to leave the finish of the roof vent in a primed condition so that it can be painted by the installer with a color calculated to match the rest of the roof or house color.

[**0048**] In an alternate embodiment using metal for the roof vent, it should be grounded so as to prevent damage if it were hit by lightning. Plastic construction is obviously preferred in this instance since it would have the advantage of inhibiting the potential for a lightning strike.

[**0049**] It should be readily understood that the size of the roof vent shroud exceeds the footprint of the ridge vent (or any other roof vent to which the teachings of the present invention may be applied) for the purposes of sealing off the underlying structure. The height of the roof vent is preferentially designed for 30 inches from the peak to the vent pipe exhaust (whether this is the tee ends or the top of the vent pipe if the tee is installed), which has been shown to work adequately in actual use and for many of the anticipated snow loads that would occur in the northern climates. Taller units would certainly be expected to perform as well, or perhaps better given the additional drafting that would occur, although these would be well within the teachings of the invention herein. In yet another version of the present invention, the vent pipe may be supplied as a height-adjustable component, such as a pair of telescoping tubes, or as a part that may be cut to length to accommodate the installation and/or anticipated snow load conditions at a given site.

[**0050**] The doors that would be located on the roof vent shroud would preferentially be spring loaded so as to ensure the unit remains secure and protected from the elements.

[**0051**] It would be feasible to lengthen the anchor rod and place the anchor eye closer to the "J" hooks or conversely, to lengthen the "J" hooks to better reach the anchor eyes. This would be a matter of choice and preference in efforts to improve the ease of installation of the device.

[**0052**] Turning now to another embodiment of the present invention, **FIGS. 7 and 8** reveal a roof vent suited for the ridge vent type applications. The preferred embodiment is disclosed as the roof vent **70**, with the vent pipe **72**, the tee **74**, the tee end(s) **76** and the roof vent shroud **78**. This embodiment further includes the apron **80**, with the apron hinge **82**, the apron base **84**, the apron flange(s) **86**, the ridge vent cutout **88** and the mounting holes **90**. In addition, there is noted a differential in the diameter of the vent pipe, where the diameter is less at the lower end **92** of the vent pipe **72**, than it is at the upper end **94** of the vent pipe.

[**0053**] This embodiment utilizes the apron to good advantage in fitting the roof vent to a particular roof. The pitch of roofs can vary, which would be a concern when installing any equipment on a roof. In the present case, the aprons are adjustable since they are hinged and allowed to rotate about the apron hinge. Once the vent pipe is held in a vertical and true position at the installation point on the roof, the aprons can then be rotated through a number of angles corresponding to different roof pitches, with a portion of the aprons telescopically residing inside the shroud housing. Once the correct angle for each apron is determined, the aprons can be fixed by drilling a number of holes through the shroud and into the portion of the apron residing within the shroud and then installing screws into the shroud and then into the part of the apron that resides inside the shroud, thus fixing the aprons in place. Other methods for fixing the aprons in place relative to the shroud can be used as well, and would be known to one skilled in the art.

[**0054**] The roof vent of the present embodiment also provides for installation on top of the ridge vent, using the ridge vent cutout area on the apron to assist in making the fit. The aprons have flanges extending from the sides of the apron base and with the mounting holes thereon, the roof vent assembly can be mounted to the roof using the appropriate screws. The flange also provides a surface for flashing the roof vent to further ensure that no leaks develop. With this version of the roof vent embodiment, the installation requirements are minimized and the benefits of the previously discussed embodiment are obtained. The variation in the diameter of the vent pipe, increasing in size as it goes from the lower end of the vent pipe to the upper end of the vent pipe, increases the volume of the air flow that is contained within the vent pipe as per its cross section at each of the two points. In so doing, a pressure differential is created, in favor of the reduced volume at the upper end of the vent pipe, which will promote the acceleration of the airflow through the roof vent.

[**0055**] Turning now to **FIG. 9**, a modified version of the alternate embodiment is shown where the roof vent **100**, is fitted with a "rice hat" top **102**. This is a conventional style of venting that is used on roof application and the benefits of the present invention are compatible with this type of style.

[0056] Similarly, the version of the alternate embodiment shown in **FIG. 10** is a cosmetic modification that incorporates the roof vent of the present invention. Notably, the roof vent **110** is given an exterior treatment as a cupola in order to match the design treatment of a user's building. The roof vent includes the cupola sidewalls **112**, the roof **114**, and the cupola vents **116**. As may be appreciated, the structure of the roof vent as shown in **FIGS. 7 and 8**, is incorporated into the interior of this design approach. The cupola treatment is a facade that allows the roof vent to operate as described herein since the cupola vents provide communication to the atmosphere. The object is to stylize the roof vent in order to meet architectural expectations without impacting the functionality of the roof vent concept.

[0057] In **FIGS. 10 and 11**, the roof vent of the alternate embodiment is shown as having been installed over a pre-existing vent pipe. In this view, the interior portion of the aprons are visible and it can be understood that when they are adjusted for the angle of the roof pitch, they rotatably extend and contract as the circumstance warrants. The portion of the apron residing within the interior of the shroud, however, remains close to the bottom of the shroud portion and it is in this area that the fixing of the apron to the shroud is best accomplished using a screw as mentioned above. The roof vent **120** in this application is positioned over the pre-existing vent pipe **122** such that it extends into the interior of the shroud **78** and upward into the vent pipe interior **126**. The pre-existing vent pipe top **124** remains enclosed within the vent pipe **72** and contributes to the functionality of the device as will be discussed. The diameter of the pre-existing vent pipe is less than the diameter of the vent pipe of the present invention and this gap allows the roof vent to operate in the same fashion excepting for the physical presence of the pre-existing vent pipe. It is believed that the combination of the pre-existing vent pipe and the roof vent structure provides a mutually beneficial action in promoting ventilation. For instance, when the pre-existing vent pipe is exhausting volumes, it will induce a venturi effect that will enhance the venting of the space underneath the roof that is the object of the roof vent. Conversely, when the conditions are such that the roof vent is producing a good exhausting effect, the reverse principle is true for the beneficial effects on the venting from the pre-existing vent pipe. This venturi function, when combined with the induced pressure differential of the present embodiment, further enhances and improves upon the venting functions of the roof vent.

[0058] The roof vent of the present invention may also be considered a seasonal accessory for the homeowner's roofing system. It would be entirely possible for the home owner to leave the anchor plate of the first embodiment affixed to the bottom leg of the ridge vent, making sure that it is sealed properly, and if the anchor rod was made removable such as threading it into the base plate, or in the alternate, by providing a keyway or slot for reversible engagement. In any event, the roof vent could be deployed on the roof in advance of the winter season, remain functional throughout the period of heavy snow loads, and then removed when warranted. This would reduce any cosmetic detriments associated with the size and location of the device on the roof of a residence. The venting is therefore deployed, only when needed for the protection of the roof system and when it is not desired, it does not remain as a potential eyesore. In either embodiment, consideration can be made in finishing the roof vent in a dark color in order to gain some thermal advantage. By inducing increased temperatures in the roof vent, the differential would also promote the acceleration of airflows. Cosmetic prohibitions may apply though, and the color selection of the product may be a matter of choice on the part of the consumer.

[0059] Depending on the amount of the roof field that would require venting, it would be entirely feasible to install more than one roof vent of the present invention along the same, or several, ridge vents. This would have the effect of not only increasing the potential flow rates but it would also more evenly distribute the venting function across the roof field. The more even the distribution, the less likely there will be any variance in the roof temperatures and avoidance of any zones that might stay warm enough to defeat the purpose of the venting. In the case where existing stand alone roof vents are in place, the teachings of the present invention may be modified to allow installation of a new roof vent of the type described herein, but with appropriate modifications for anchoring the unit to the stand alone and for orienting the vent pipe appropriately in a vertical alignment. Another method for increasing the effectiveness of the roof vent is to use a powered blower with the system to augment the natural drafting conditions. The blower could be triggered by a thermostatic control or it could be switched off and on manually.

[0060] It should be understood that the teachings of the present invention are not strictly limited to the embodiments as disclosed herein. For instance, the cosmetic treatments given to the preferred embodiment are not exclusive and any other dress may be reasonably applied to the roof vent in accordance with the teachings herein. The benefits and features the invention can be applied to roof vents of differing types and in installations other than ridge venting. Such variations are well within the scope of one skilled in the art and are not expressly shown herein, but are understood to be within the scope of the invention, as may be allowed.

We claim:

1. A roof vent for venting the air in an attic space to the outside, where the roof vent comprises:

A shroud mountable onto a roof;

A vent pipe mounted onto said shroud and with a vent pipe exhaust extendable above the anticipated snow load for said roof; and,

Where there is communication of airflows between the air in the attic space through the shroud and the vent pipe to the outside environment.

2. The roof vent of claim 1, where the shroud is mountable onto the peak of the roof.

3. The roof vent of claim 2, where the shroud is mountable onto a ridge vent.

4. The roof vent of claim 1, where the vent pipe terminates in a tee with tee ends.

5. The roof vent of claim 1, where the vent pipe exhaust is elevated at least 30" above the roof.

6. The roof vent of claim 1, where the natural drafting of the roof vent is augmented by a powered blower.

7. The roof vent of claim 1, where the appearance of the roof vent may be cosmetically modified to match architectural parameters.

8. A roof vent for venting the air in an attic space to the outside, where the roof vent comprises:

A shroud mountable onto the peak of a roof and where the shroud compatibly fits over the ridge vent on the peak;

A vent pipe mounted onto said shroud and with a vent pipe exhaust extendable above the anticipated snow load for said roof; and,

Where there is communication of airflows between the air in the attic space through the ridge vent and the shroud and the vent pipe to the outside environment.

9. The roof vent of claim 8, where the shroud includes a pair of angularly adjustable aprons for adjusting the aprons to the pitch of the roof, and where the aprons include flanges for fixing the roof vent to the roof, and where said aprons are fixable relative to the shroud once the adjustments have been completed.

10. The roof vent of claim 8, where the vent pipe terminates in a tee with tee ends.

11. The roof vent of claim 8, where the vent pipe exhaust is elevated at least 30" above the roof peak.

12. The roof vent of claim 8, where the natural drafting of the roof vent is augmented by a powered blower.

13. The roof vent of claim 8, where the appearance of the roof vent may be cosmetically modified to match architectural parameters.

14. A roof vent for venting the air in an attic space to the outside, where the roof vent comprises:

A shroud mountable onto the peak of a roof and where the shroud compatibly fits over the ridge vent on the peak and where the shroud includes a pair of angularly adjustable aprons for adjusting the aprons to the pitch of the roof, and where the aprons include flanges for fixing the roof vent to the roof, and where said aprons are fixable relative to the shroud once the adjustments have been completed;

A vent pipe mounted onto said shroud and with a vent pipe exhaust extendable above the anticipated snow load for said roof; and,

Where there is communication of airflows between the air in the attic space through the ridge vent and the shroud and the vent pipe to the outside environment.

15. The roof vent of claim 14, where the vent pipe exhaust is elevated at least 30" above the roof peak.

16. The roof vent of claim 14, where the natural drafting of the roof vent is augmented by a powered blower.

17. The roof vent of claim 14, where the appearance of the roof vent may be cosmetically modified to match architectural parameters.

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