US 20220282439A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0282439 A1

Mesadieu (43) Pub. Date: Sep. 8, 2022

(54) VACUUM HEATED SNOW MELTING BLOWER

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(21) Appl. No.: **17/193,530**

(22) Filed: **Mar. 5, 2021**

Publication Classification

(51) **Int. Cl.**

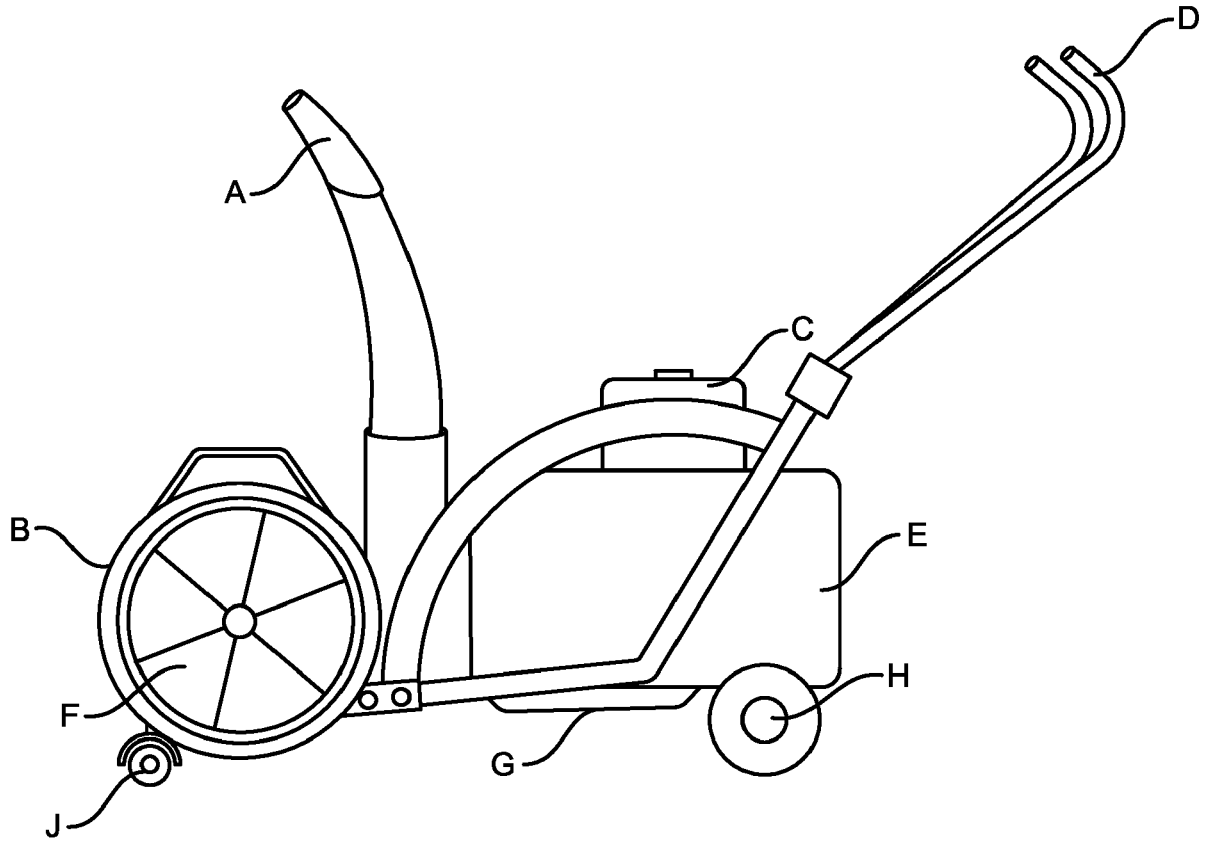
E01H 5/07	(2006.01)
E01H 10/00	(2006.01)
E01H 5/10	(2006.01)

(52) **U.S. Cl.**

CPC ***E01H 5/076*** (2013.01); ***E01H 10/007*** (2013.01); ***E01H 5/10*** (2013.01)

(57) **ABSTRACT**

The vacuum heating snow melting blower (VHSMB) is the only product of its kind that provides an improved and novel device for snow management. The VHSMB is uniquely designed to be safe and easy to use catering to professionals and laymen, alike. The disclosure includes a vacuum component configured to suck snow from an adjacent floor surface, a heat component configured to heat the adjacent floor surface in arrears of the vacuum component and a blow component configured to blow the sucked snow from the snow removal apparatus, wherein a mechanism of the vacuum component configured to suck snow is also a mechanism of the blow component configured to blow the snow.



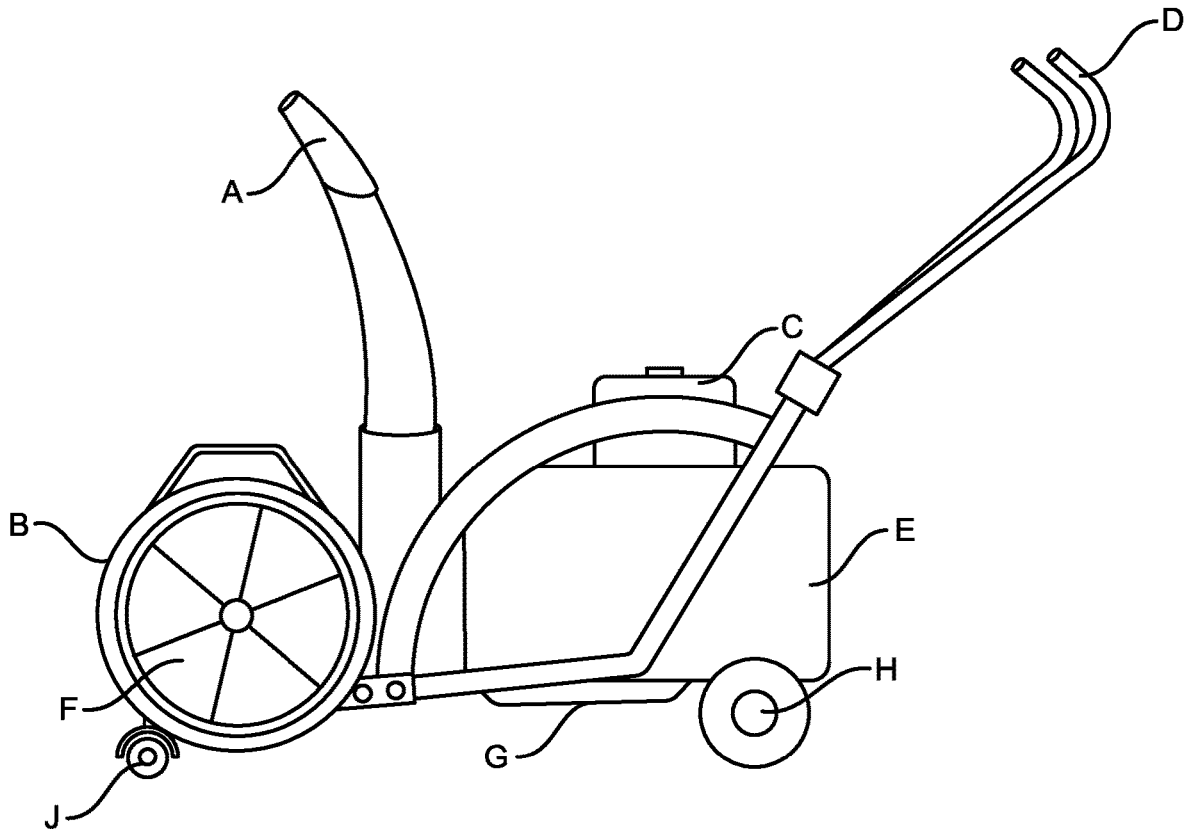


FIG. 1

VACUUM HEATED SNOW MELTING BLOWER

BACKGROUND

[0001] Managing property after snowfall is a requirement to ensure safety. Yet conventional snow removal tools tend to be both energy and time consuming, while not effectively clearing a path to avoid slippage or incidents often associated with poor snow management. Shoveling snow is arduous and back breaking and itself leads to injury. Brushing snow works for only the lightest of snow falls. Machine blowing can clear surface snow fall but yet leaves icy pavement underneath.

[0002] Presently there are limited options on the market which can effectively and safely remove unwanted snow while requiring less exertion from the user. There have been no products available as original equipment or as an aftermarket to address this problem. There exists a need for a device and a system that is not being met by any known or disclosed device or system of present.

SUMMARY OF THE INVENTION

[0003] The vacuum heated snow melting blower (VHSMB) is a manually operated device that effectively facilitates snow removal through a process of vacumm, heating and blowing snow from a surface. The main purpose of the VHSMB is to introduce novel machinery that melts and removes snow at a rapid pace. The disclosure includes a vacuum component configured to suck snow from an adjacent floor surface, a heat component configured to heat the adjacent floor surface in arrears of the vacuum component and a blow component configured to blow the sucked snow from the snow removal apparatus, wherein a mechanism of the vacuum component configured to suck snow is also a mechanism of the blow component configured to blow the snow.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] FIG. **1** This is a side elevational view of the VHSMB apparatus in accordance with an embodiment of the present disclosure.

[0005] Throughout the description, similar reference numbers may be used to identify similar elements depicted in multiple embodiments. Although specific embodiments of the invention have been described and illustrated, the invention is not to be limited to the specific forms or arrangements of parts so described and illustrated. The scope of the invention is to be defined by the claims appended hereto and their equivalents.

DETAILED DESCRIPTION

[0006] Reference will now be made to exemplary embodiments illustrated in the drawings and specific language will be used herein to describe the same. It will nevertheless be understood that no limitation of the scope of the disclosure is thereby intended. Alterations and further modifications of the inventive features illustrated herein and additional applications of the principles of the inventions as illustrated herein, which would occur to one skilled in the relevant art and having possession of this disclosure, are to be considered within the scope of the invention.

[0007] FIG. **1** is a side elevational view of the VHSMB apparatus in accordance with an embodiment of the present disclosure. The view shows A. Blower, B. Snow melting heater, C. Motor, D. Handle/accelerator, E. Salt container, F. vacuum tines, G. salt distributor, H. rear wheel drive and J. front swivel steering in accordance with an embodiment of the present disclosure.

[0008] This innovative product is comprised of 2 plates, one plate supplies salt onto snow while the other plate offers a combination of heat. VHSMB then utilizes a powerful vacuuming feature to remove the slush/snow buildup with ease. Providing both a practical and convenient tool, the VHSMB can proficiently run off of gas and/or electricity and will offer two options: either a small battery powered hand-held design in order to provide optimal transportability or a larger option that will be constructed like the size of sanitation trucks, using four (4) powerful vacuums along with the standard hot plate, able to cover large grounds. The VHSMB may prove to be an ideal product for consumers who are responsible for managing snowfall.

[0009] Although the operations of the method(s) herein are shown and described in a particular order, the order of the operations of each method may be altered so that certain operations may be performed in an inverse order or so that certain operations may be performed, at least in part, concurrently with other operations. In another embodiment, instructions or sub-operations of distinct operations may be implemented in an intermittent and/or alternating manner.

What is claimed is:

1. A snow removal apparatus comprising:

a vacuum component configured to suck snow from an adjacent ground surface;

a heating component configured to heat the adjacent ground surface in arrears of the vacuum component; and

a blowing component configured to blow the sucked snow from the snow removal apparatus.

2. The snow removal apparatus of claim **1**, wherein the vacuum component includes tines in proximity to the adjacent ground surface.

3. The snow removal apparatus of claim **1**, wherein the heating component includes an electrically resistive element.

4. The snow removal apparatus of claim **1**, wherein the vacuum component includes tines which act a blower in the blowing component.

5. The snow removal apparatus of claim **1**, further comprising an electric engine configured to power the heating component and to power the blowing component.

6. The snow removal apparatus of claim **1**, further comprising a gas powered heater in the heating component.

7. The snow removal apparatus of claim **1**, further comprising a handle configured to enable a control of the snow removal apparatus.

8. The snow removal apparatus of claim **1**, further comprising a corrosive material container wherein the corrosive chemically melts ice.

9. The snow removal apparatus of claim **1**, further comprising a scatter distributor of a corrosive material contained adjacent the apparatus.

10. The snow removal apparatus of claim **1**, further comprising a drop distributor of a corrosive material contained adjacent the apparatus.

11. The snow removal apparatus of claim **1**, further comprising a drive train of the apparatus in communication with an engine adjacent the apparatus.

12. The snow removal apparatus of claim **1**, further comprising a swivel front wheel on the apparatus configured to steer the apparatus.

13. The snow removal apparatus of claim **1**, further comprising a chassis for the carriage of the vacuum, heating and blowing components of the apparatus.

14. A snow removal device comprising:

a vacuum component configured to suck snow from an adjacent floor surface;

a heat component configured to heat the adjacent floor surface in arrears of the vacuum component; and

a blow component configured to blow the sucked snow from the snow removal apparatus,

wherein a mechanism of the vacuum component configured to suck snow is also a mechanism of the blow component configured to blow the snow.

15. The snow removal device of claim **14**, wherein the mechanism of the vacuum component is a plurality of tines which are also a plurality of tines for the blow component.

16. The snow removal device of claim **14**, wherein a sucked snow via the vacuum component becomes a blown snow via the blow component.

17. The snow removal device of claim **14**, wherein the mechanism of the vacuum component is a high speed auger rotating at a nominal 3600 revolutions per minute.

18. The snow removal device of claim **14**, wherein the mechanism of the blow component is a high speed auger rotating at a nominal 3600 revolutions per minute.

19. The snow removal device of claim **14**, further comprising a control for the vacuum component and a control for the blow component comprising a single control.

20. The snow removal device of claim **14**, further comprising a separate control for the vacuum component, a separate control for the heat component and a separate control for the blow component.

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