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(54) **AN INDOOR SNOW MAKING APPARATUS**

VORRICHTUNG ZUR SCHNEEHERSTELLUNG IN INNENRÄUMEN

APPAREIL INTÉRIEUR DE PRODUCTION DE NEIGE

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Description

Technical field

[0001] This invention relates to a snow chamber comprising a snow making apparatus.

Background art

[0002] The facilities offered by many wellness centres are known to include snow chambers which recreate a typical winter climate allowing guests to feel the regenerative thrill of a cold, snowy day after a heat treatment such as a sauna, for example.

[0003] Traditional snow chambers are rooms in which snowfalls are artificially recreated with snow produced by specific snow making equipment.

[0004] The snow making apparatus generally comprises nozzles mounted at the top of the room to produce and spray the snow in such a way as to artificially make snow inside the room.

[0005] The snow produced falls mainly to the floor of the room and can be picked up by a user and used to cover his/her body in order to lower body temperature. In other words, at present, the user has to pick up the snow from the floor (by hand or using tools such as paddles) and use it to over his her body.

[0006] In any case, it should be noted that, at present, the snow making apparatus is switched off before the user enters the room. Otherwise, during operation of the snow making apparatus, the atmosphere in the room would be too damp and the user would feel only water droplets on his/her skin.

[0007] Each nozzle is of a type designed to place a flow of very fine water particles under pressure into contact with air at a low temperature to allow snowflakes to be produced which, while they are being formed, follow a downward trajectory towards the inside of the room. Preferably, the nozzles comprise nucleation nozzles and nebulizing nozzles.

[0008] A system of this kind is described in patent EP1653172. JP04-32674 also discloses a snow chamber according to the preamble of claim 1. The Applicant has found that solutions of this kind can be improved in terms of the sensation of cold perceived by the guest as he she walks through the snow chamber.

[0009] In effect, it is known that the formation of snowflakes requires a minimum time of contact and mixing of cold air and water droplets in order to promote freezing of the extremely tiny droplets/nuclei of water and their transformation into snowflakes.

[0010] In the apparatuses of the kind described above, this time is not always observed because there is no control over the snowflake forming process and the water droplets may reach the floor before the snowflakes are completely formed.

[0011] As a result, for the snow to be completely formed, it is necessary to wait for the water droplets to

be transformed into snowflakes and settle on the floor. In this situation, it is the users who must pick up the snow in order to cover their bodies with it.

Aim of the invention

[0012] The aim of this invention is to provide a snow chamber capable of overcoming the above mentioned disadvantages of the prior art.

[0013] More specifically, this invention has for its aim to provide a snow chamber which makes it unnecessary for users to do anything to cool their bodies with the snow.

[0014] Still more specifically, the aim of this invention is to provide a snow chamber which allows cooling the body of a user inside the room more effectively than in the prior art.

[0015] The aim is fully achieved by the snow chamber according to this invention as characterized in one or more of the appended claims.

Brief description of the drawings

[0016] The technical features of the invention, with reference to the above aim, are clearly described in the appended claims and its advantages are apparent from the detailed description which follows, with reference to the accompanying drawings which illustrate a non-limiting embodiment of it by way of example, and in which:

- Figure 1 is a partial cross sectional view of a snow chamber according to this invention;
- Figure 2 is a schematic representation of the snow chamber of Figure 1.

Detailed description of preferred embodiments of the invention

[0017] In the accompanying drawings, the numeral 1 denotes in its entirety a snow making apparatus according to this invention.

[0018] The snow making apparatus 1 is of a type suitable for indoor use to produce an artificial snowfall inside a closed room under controlled conditions (for example, temperature and/or humidity).

[0019] For this purpose, in the accompanying drawings, the snow making apparatus 1 forms part of a snow chamber, denoted in its entirety by the numeral 100.

[0020] The snow chamber 100 comprises a plurality of side walls 101 and a ceiling 102 delimiting a room 103 constituting a space which one or more users can walk through. For this purpose, at least one side wall 101 is provided with at least one access opening 104.

[0021] Looking in more detail, the snow making apparatus 1 comprises means 10 for generating a cold air current and a duct 20 for channelling the cold air current towards an outlet mouth 21 which leads into the room 103 by way of a specific opening made in a side wall 101 in the proximity of the ceiling 102.

[0022] More specifically, as shown more clearly in Figure 2, the means 10 for generating a cold air current "F" comprise a fan 11 located on the duct 20 to produce an air flow inside the duct, and a refrigerator 12 located on the duct 20 preferably downstream of the fan 11.

[0023] The refrigerator 12 is designed to bring the air current in the duct 20 to a predetermined temperature suitable for making artificial snow, preferably around -20°C.

[0024] In the preferred embodiment illustrated, the duct 20 on which the fan 11 and refrigerator 12 are located extends between a lower portion of the room 103 and an upper portion of the room 103. In other words, the duct 20 causes the air in the room 103 to circulate, cooling and returning it into the room 103 itself.

[0025] This configuration is clearly visible in Figure 2, which shows that the duct 20 extends between an inlet mouth 22, located near the floor of the room 103, and the aforementioned outlet mouth 21, located near the ceiling 102 of the room 103.

[0026] In this situation, upstream of the fan 11 there is a coil 13 to retain the snow in such a way as to prevent any snow sucked out of the room 103 together with the air from reaching the fan 11. The coil 13 acts by gravity, operating much like a siphon, retaining any snow present in the air and allowing only the air to reach the fan 11.

[0027] In the embodiment illustrated, the fan 11 and the coil 13 are located on a bottom stretch of the duct 20.

[0028] Thus, together with the room 103, the duct 20 defines a closed circuit for the circulation of the air, where the part of the circuit defined by the duct 20 is located on the outside of the perimeter of the room 103.

[0029] In an embodiment not illustrated, however, the inlet mouth 22 of the duct 20 might be in communication with an external air source, defining an open path for supplying cold air to the room 103.

[0030] The snow making apparatus 1 also comprises at least one nozzle 30 designed to deliver a nebulized jet of water under pressure into the cold air current "F" in order to start the snow forming process in the cold air current "F". Preferably, the nozzle 30 directs the nebulized jet of water under pressure in the same direction as the direction of the cold air current "F".

[0031] Preferably, also, the nozzle 30 extends inside the duct 20, in a portion of the duct close to the outlet mouth 21.

[0032] The snow making apparatus 1 further comprises at least one nozzle of air-liquid type (preferably air-water) to produce particles of liquid (preferably water) which will then be transformed into snowflakes.

[0033] Preferably, the air-water nozzle is a nucleation nozzle known in the artificial snow trade to produce freezing nuclei. It should be noted that in this case, since the temperature inside the room is very low (preferably around -20°C), the presence of the nucleation nozzle is sufficient to produce the snow flake.

[0034] It should also be noted that the snow making apparatus 1 comprises two or more air-liquid nozzles of

the type described above.

[0035] Alternatively, the snow making apparatus 1 might also comprise at least one nebulizing nozzle designed to produce nebulized particles of liquid (usually water).

[0036] Whatever the case, the nozzle 30 is associated with respective pumps 31 for pressurizing the water. Each pump 31 is also associated with a cooling system 32 for delivering water at a predetermined temperature. It should be noted that the system for making snow by means of nucleation and/or nebulizing nozzles is of known type and is not therefore described in detail below.

[0037] Advantageously, the snow making apparatus 1 also comprises a build-up element 40 designed to receive and accumulate from the outlet mouth 21 of the duct 20 a flow of snow being formed. For this purpose, the build-up element 40 faces the outlet mouth 21 and, looking in more detail, is located at a position where it is struck by the flow of snow carried by the cold air current "F" and emitted from the outlet mouth 21 of the duct 20. That way, the mixture of nebulized water and cold air from the outlet mouth 21 can settle on the build-up element and complete its transformation into snow.

[0038] The build-up element preferably comprises a rigid support such as, for example, a shelf fixed to the ceiling 102 or to a side wall 101 of the snow chamber 100 or to the ceiling 102 of the snow chamber 100 or to another part not specified here.

[0039] The purpose of the build-up element 40 is to support the snow being formed as it flows out of the outlet mouth 21 of the duct 20, and to accumulate the snow in a well-defined place. This is facilitated by the special reciprocal position between the outlet mouth 21 and the build-up element 40, so as to expose the latter to the cold air flow "F" from the outlet mouth 21 (together with the snow being formed).

[0040] The build-up element 40 is preferably located in an upper portion of the room 103 near the ceiling 102. Further, the build-up element 40 is spaced from the outlet mouth 21 by a predetermined distance sufficient to allow the snowflakes to be formed. Preferably, the build-up element 40 is located on a side wall of the snow chamber 100 opposite to the side wall on which the outlet mouth 21 is located.

[0041] As shown in Figure 2, the snow tends to build up uniformly on the build-up element 40, forming a mass "M" which extends both above and below the build-up element 40 (thanks to the adherence property of snow).

[0042] Advantageously, the snow making apparatus 1 also comprises a distributor unit 50 associated with the build-up element 40 and configured to remove a part of the snow which accumulates on the build-up element 40 and to direct it towards a distribution zone "D".

[0043] The distributor 50 is configured in such a way as to remove the snow which has accumulated on the build-up element 40. Removal is carried out by scraping or other similar methods not expressly described here.

[0044] Preferably, the distributor 50 comprises a rotor

equipped with blades 51 and configured to scatter the snow removed from the build-up element 40, as in a snowfall.

[0045] In the embodiment illustrated in Figure 1, the blades 51 are arranged radially around a vertical axis of rotation.

[0046] In other embodiments not illustrated, the distributor 50 might not be of rotary type. In such a case, the distributor 50 might be configured to apply a scraping action by means of a grater-like element having reciprocating linear motion.

[0047] Preferably, the distributor 50 acts by gravity to distribute the snow separated from the mass "M" accumulated on the build-up element 40 towards the distribution zone "D" below. In such a case, the distributor 50 is also positioned in an upper portion of the room 103, near the ceiling 102.

[0048] In the embodiment illustrated, the distributor 50 is located under the build-up element 40 and is configured to remove from the build-up element 40 at least the snow sticking to the underside thereof.

[0049] In some embodiments not illustrated, however, the distributor 50 might be located beside or above the build-up element 40. Also, the distributor 50 might be located inside the build-up element 40, at a suitable opening.

[0050] Moreover, there might be two or more distributors 50 located at similar or different positions relative to the build-up element 40.

[0051] In a preferred embodiment, the distributor 50 and the build-up element 40 are movable relative to one another so as to keep the distributor 50 in operative contact with the snow which accumulates and is gradually used up. In effect, during operation of the snow making apparatus 1, the scraping effect of the distributor 50 may reduce the depth of the mass "M" of snow the distributor 50 is operating on. In this situation, the distributor 50 may move towards the build-up element 40 or to other zones of the mass "M" where there is more snow.

[0052] It should be noted that the distributor 50 might be movable and the build-up element 40 fixed, or the build-up element 40 might be movable relative to the distributor 50 which would be fixed or both the build-up element 40 and the distributor 50 might be movable towards and away from each other.

[0053] Preferably, the distributor 50 is located at a predetermined height off the floor of the snow chamber 100 so that the distribution zone "D" can contain a person.

[0054] In particular, the distribution zone D is not divided from the rest of the room 103 by predetermined structures. Said the room 103 forming a single space which the distribution zone D forms part of.

[0055] The invention achieves the set aim by overcoming the disadvantages of the prior art.

[0056] In effect, the use of a build-up element makes it possible for the snow to accumulate in a well-defined zone. The snowfall effect can thus be achieved when all of the liquid water content has been safely transformed

into snow. This effect is further enhanced by the precise position of the build-up element relative to the cold air current outlet mouth since it is the cold air current which helps maintain the optimum conditions for the snow to accumulate on the build-up element.

[0057] Further, the presence of the distributor inside the room which guests can walk through, above the distribution zone, makes the guests feel as if they are enjoying a real snowfall and thus optimizes their feeling of well being. In effect, the distributor recreates the effect of snow falling from high above and makes it unnecessary for users to pick up the snow from the floor and cover themselves with it.

[0058] In other words, the distributor is activated when a user is present inside the room so as to create a "snowfall" effect. In effect, it should be noted that it would not be possible to enjoy the snowfall effect while the snow making apparatus is in operation because the room would be too damp and noisy and thus unsuitable for the user.

[0059] Moreover, the snow build-up directly inside the snow chamber allows keeping the interior of the snow chamber at a sufficiently low temperature.

Claims

1. A snow chamber (100) comprising a plurality of side walls (101) and a ceiling (102) delimiting a room (103) constituting a space which a user can walk through, a snow making apparatus (1) distributing snow inside the room (103); the snow-making apparatus (1) being configured to produce snow directly inside the room (103) and comprising:

- means (10) for generating a cold air current (F);
- a duct (20) having an outlet mouth (21) and designed to channel the cold air current (F) towards the outlet mouth (21) which leads into the room (103) by way of a specific opening;
- at least one nozzle (30) designed to deliver a nebulized jet of water under pressure into the cold air current (F) in order to start the snow forming process in the cold air current (F);

a build-up element (40) located inside the room (103), outside the duct (20) and facing the outlet mouth (21) to receive and accumulate a flow of snow being formed from the outlet mouth (21), **characterized by** at least one distributor (50) located entirely inside the room (103) and associated with the build-up element (40) and configured to remove a part of the snow which accumulates on the build-up element (40) and to direct that part of the snow build-up towards a distribution zone (D) located inside the room (103) itself, the distributor (50) acting at least partly by gravity to distribute the snow along a vertical path which passes along the distribution zone (D) which

the user can walk through; said distributor (50) being configured in such a way as to scrape off the snow which has accumulated on the build-up element (40), and the distribution zone (D) is located under the distributor (50), so as to create a snowfall effect for the user from high above.

2. The snow chamber (100) according to claim 1, wherein the build-up element (40) is located at a position of interference with the snow flow being pushed by the cold air current (F) and emitted through the outlet mouth (21). 10
3. The snow chamber (100) according to claim 1 or 2, wherein the build-up element (40) comprises a rigid support. 15
4. The snow chamber (100) according to any one of the preceding claims, wherein the distributor (50) is located inside the build-up element (40) at an opening in the build-up element (40). 20
5. The snow chamber (100) according to any one of the preceding claims, wherein the distributor (50) comprises a rotor equipped with blades (51) and configured to scatter the snow removed from the build-up element (40), as in a snowfall. 25
6. The snow chamber (100) according to any one of the preceding claims, wherein the distributor (50) is located under the build-up element (40) and is configured to remove from the build-up element (40) at least the snow sticking to the underside of the build-up element (40) in such a way as to make it fall along the vertical path along the distribution zone (D). 30 35
7. The snow chamber (100) according to any one of the preceding claims, wherein the distributor (50) and the build-up element (40) are movable relative to one another so as to keep the distributor (50) in operative contact with the snow which accumulates on the build-up element (40). 40
8. The snow chamber (100) according to any one of the preceding claims, wherein the nozzle (30) directs the nebulized jet of water in the same direction as the cold air current (F). 45
9. The snow chamber (100) according to any one of the preceding claims, wherein the nozzle (30) extends inside the duct (20), in a portion of the duct close to the outlet mouth (21). 50
10. The snow chamber (100) according to any one of the preceding claims, wherein the nozzle (30) is a nucleation nozzle. 55
11. The snow chamber (100) according to any one of

the preceding claims, wherein the means (10) for generating a cold air current (F) define a predetermined path along which the snow being formed is propagated; the build-up element (40) being located along the path in such a way as to receive the snow being formed.

12. The snow chamber (100) according to any one of the preceding claims, wherein the distribution zone (D) is located under the build-up element (40).
13. The snow chamber (100) according to any one of the preceding claims, wherein the build-up element (40) is located in an upper portion of the room (103) near the ceiling (103).
14. The snow chamber (100) according to any one of claims 1 to 14, wherein the build-up element (40) is located on a side wall of the snow chamber (100) opposite to the side wall on which the outlet mouth (21) is located
15. The snow chamber (100) according to any one of the preceding claims, wherein the distributor (50) is located under the build-up element (40).

Patentansprüche

1. Schneekammer (100), umfassend eine Vielzahl an Seitenwänden (101) und eine Decke (102), abgrenzend einen Raum (103), darstellend einen Bereich, durch den ein Nutzer gehen kann, wobei eine Vorrichtung zur Schneeherstellung (1) Schnee im Raum (103) verteilt, wobei die Vorrichtung zur Schneeherstellung (1) ausgelegt ist, um Schnee direkt im Raum (103) zu erzeugen, und umfassend:
 - Mittel (10) zum Erzeugen eines kalten Luftstroms (F);
 - eine Leitung (20), aufweisend eine Auslassmündung (21) und ausgestaltet, um den kalten Luftstrom (F) zur Auslassmündung (21) zu leiten, die durch eine spezifische Öffnung in den Raum (103) führt;
 - mindestens eine Düse (30), ausgestaltet, um einen vernebelten Wasserstrahl unter Druck in den kalten Luftstrom (F) einzubringen, um den Schneeformungsprozess im kalten Luftstrom (F) zu starten;

ein Anhäufungselement (40), das sich im Raum (103) außerhalb der Leitung (20) befindet und der Auslassöffnung (21) zugewandt ist, um einen geformten Schneefluss von der Auslassmündung (21) zu empfangen und anzusammeln, **gekennzeichnet durch** mindestens einen Verteiler (50), der sich in vollem Umfang im Raum (103) befindet und mit dem

- Anhäufungselement (40) assoziiert und ausgelegt ist, um einen Teil des Schnees, der sich auf dem Anhäufungselement (40) ansammelt, zu entfernen und diesen Teil der Schneeanhäufung zu einer Verteilerzone (D) zu leiten, die sich im Raum (103) befindet, wobei der Verteiler (50) mindestens teilweise per Schwerkraft wirkt, um den Schnee entlang eines vertikalen Wegs, der entlang der Verteilerzone (D) verläuft, durch die der Nutzer gehen kann, verläuft, wobei der Verteiler (50) so ausgelegt ist, dass der Schnee, der sich auf dem Anhäufungselement (40) angesammelt hat, abgeschabt wird, und wobei sich die Verteilerzone (D) unterhalb des Verteilers (50) befindet, sodass ein Schneefalleffekt für den Nutzer von hoch oben geschaffen wird.
2. Schneekammer (100) nach Anspruch 1, wobei sich das Anhäufungselement (40) an einer Interferenzposition mit dem Schneefluss befindet, der durch den kalten Luftstrom (F) gedrückt und durch die Auslassmündung (21) ausgegeben wird.
 3. Schneekammer (100) nach Anspruch 1 oder 2, wobei das Anhäufungselement (40) eine steife Halterung umfasst.
 4. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei sich der Verteiler (50) im Anhäufungselement (40) an einer Öffnung im Anhäufungselement (40) befindet.
 5. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei der Verteiler (50) einen Rotor umfasst, der mit Schaufeln (51) ausgestattet und ausgelegt ist, um den vom Anhäufungselement (40) entfernten Schnee wie bei einem Schneefall zu verstreuen.
 6. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei sich der Verteiler (50) unter dem Anhäufungselement (40) befindet und ausgelegt ist, um vom Anhäufungselement (40) mindestens den Schnee zu entfernen, der an der Unterseite des Anhäufungselements (40) haftet, sodass dieser veranlasst wird, entlang des vertikalen Wegs entlang der Verteilungszone (D) zu fallen.
 7. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei der Verteiler (50) und das Anhäufungselement (40) relativ zueinander bewegbar sind, sodass der Verteiler (50) in einem betriebswirksamen Kontakt mit dem Schnee gehalten wird, der sich auf dem Anhäufungselement (40) ansammelt.
 8. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei die Düse (30) den vernebelten Wasserstrahl in dieselbe Richtung wie den kalten Luftstrom (F) richtet.
 9. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei sich die Düse (30) in der Leitung (20) in einem Abschnitt der Leitung nah an der Auslassmündung (21) erstreckt.
 10. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei die Düse (30) eine Dampfblasenbildungsdüse ist.
 11. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei die Mittel (10) zum Erzeugen eines kalten Luftstroms (F) einen vorgegebenen Weg definieren, entlang dessen der geformte Schnee ausgebreitet wird, wobei das Anhäufungselement (40) entlang des Wegs angeordnet ist, so dass es den geformten Schnee empfängt.
 12. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei sich die Verteilerzone (D) unter dem Anhäufungselement (40) befindet.
 13. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei sich das Anhäufungselement (40) in einem oberen Abschnitt des Raums (103) nah der Decke (103) befindet.
 14. Schneekammer (100) nach einem der Ansprüche 1 bis 14, wobei das Anhäufungselement (40) an einer Seitenwand der Schneekammer (100) angeordnet ist, entgegengesetzt zur Seitenwand, an der sich die Auslassmündung (21) befindet.
 15. Schneekammer (100) nach einem der vorhergehenden Ansprüche, wobei sich der Verteiler (50) unter dem Anhäufungselement (40) befindet.

Revendications

1. Chambre à neige (100) comprenant une pluralité de cloisons latérales (101) et un plafond (102) délimitant une salle (103) constituant un espace qu'un utilisateur peut traverser, un appareil de production de neige (1) distribuant de la neige à l'intérieur de la salle (103) ; l'appareil de production de neige (1) étant configuré pour produire de la neige directement à l'intérieur de la salle (103) et comprenant :
 - des moyens (10) pour générer un courant d'air froid (F) ;
 - un conduit (20) comportant une embouchure de sortie (21) et conçu pour canaliser le courant d'air froid (F) vers l'embouchure de sortie (21) qui mène à la salle (103) au moyen d'une ouverture spécifique ;
 - au moins une buse (30) conçue pour propulser un jet d'eau nébulisé sous pression dans le courant d'air froid (F) afin de démarrer le processus

de formation de neige dans le courant d'air froid (F) ;

un élément d'accumulation (40) situé à l'intérieur de la salle (103), à l'extérieur du conduit (20) et faisant face à l'embouchure de sortie (21) pour recevoir et accumuler un flux de neige étant formé à partir de l'embouchure de sortie (21), **caractérisée en ce qu'**au moins un distributeur (50) situé entièrement à l'intérieur de la salle (103) et associé à l'élément d'accumulation (40) et configuré pour retirer une partie de la neige qui s'accumule sur l'élément d'accumulation (40) et pour orienter cette partie de la neige accumulée vers une zone de distribution (D) située à l'intérieur de la salle (103) elle-même, le distributeur (50) agissant au moins en partie par gravité pour distribuer la neige le long d'un parcours vertical passant le long de la zone de distribution (D) que l'utilisateur peut traverser ; ledit distributeur (50) étant configuré de manière à racler la neige s'étant accumulée sur l'élément d'accumulation (40), et la zone de distribution (D) est située sous le distributeur (50) de sorte à créer un effet de chute de neige au-dessus de l'utilisateur.

2. Chambre à neige (100) selon la revendication 1, dans laquelle l'élément d'accumulation (40) est situé en correspondance d'une position d'interférence avec le flux de neige étant poussé par le courant d'air froid (F) et émis à travers l'embouchure de sortie (21).
3. Chambre à neige (100) selon la revendication 1 ou 2, dans laquelle l'élément d'accumulation (40) comprend un support rigide.
4. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle le distributeur (50) est situé à l'intérieur de l'élément d'accumulation (40) en correspondance d'une ouverture dans l'élément d'accumulation (40).
5. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle le distributeur (50) comprend un rotor équipé de lames (51) et configuré pour disperser la neige retirée de l'élément d'accumulation (40), comme dans une chute de neige.
6. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle le distributeur (50) est situé sous l'élément d'accumulation (40) et est configuré pour retirer de l'élément d'accumulation (40) au moins la neige collant sur le dessous de l'élément d'accumulation (40) de manière à la faire tomber le long du parcours vertical le long de la zone de distribution (D).

7. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle le distributeur (50) et l'élément d'accumulation (40) sont mobiles l'un par rapport à l'autre de manière à maintenir le distributeur (50) en contact fonctionnel avec la neige qui s'accumule sur l'élément d'accumulation (40).
8. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle la buse (30) oriente le jet d'eau nébulisé dans la même direction que le courant d'air froid (F).
9. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle la buse (30) se prolonge à l'intérieur du conduit (20) dans une partie du conduit à proximité de l'embouchure de sortie (21) .
10. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle la buse (30) est une buse à nucléation.
11. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle les moyens (10) servant à générer un courant d'air froid (F) définissent un parcours prédéfini le long duquel est propagée la neige étant formée ; l'élément d'accumulation (40) étant situé le long du parcours de sorte à recevoir la neige étant formée.
12. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle la zone de distribution (D) est située sous l'élément d'accumulation (40).
13. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle l'élément d'accumulation (40) est situé dans une partie supérieure de la salle (103) à proximité du plafond (103) .
14. Chambre à neige (100) selon l'une quelconque des revendications de 1 à 14, dans laquelle l'élément d'accumulation (40) est situé sur une cloison latérale de la chambre à neige (100) à l'opposé de la cloison latérale sur laquelle est située l'embouchure de sortie (21) .
15. Chambre à neige (100) selon l'une quelconque des revendications précédentes, dans laquelle le distributeur (50) est situé sous l'élément d'accumulation (40).

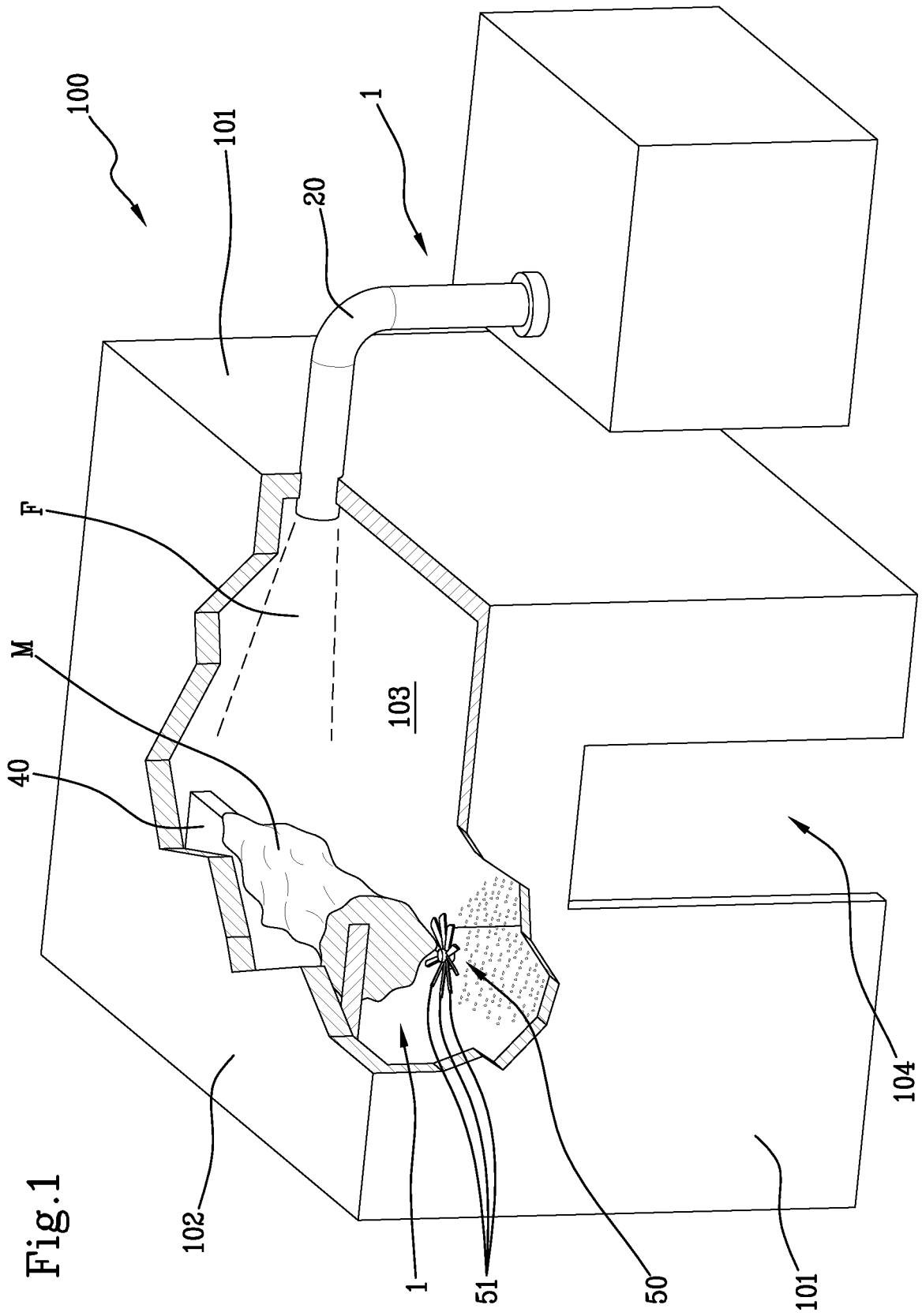
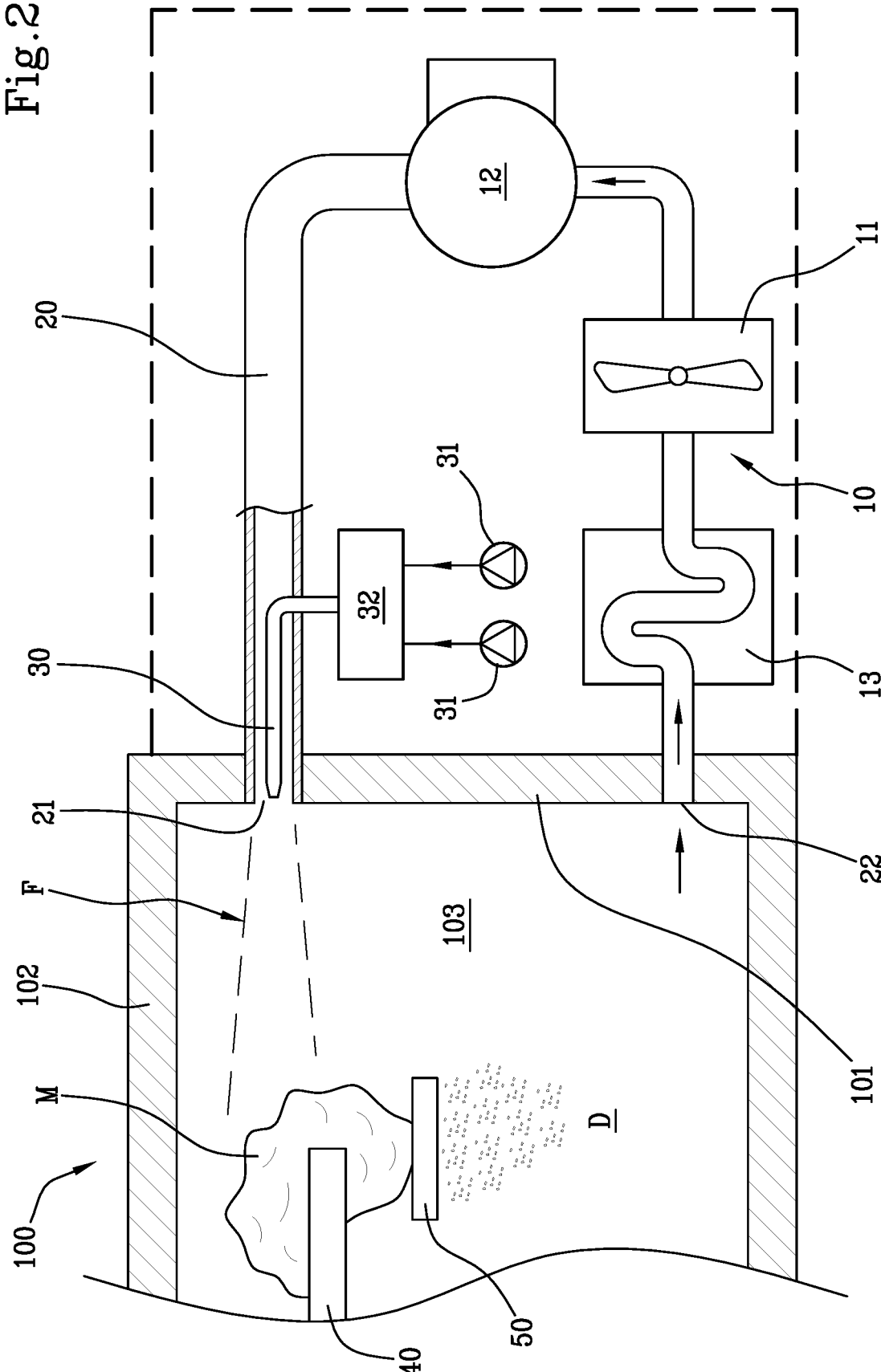


Fig.2



REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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