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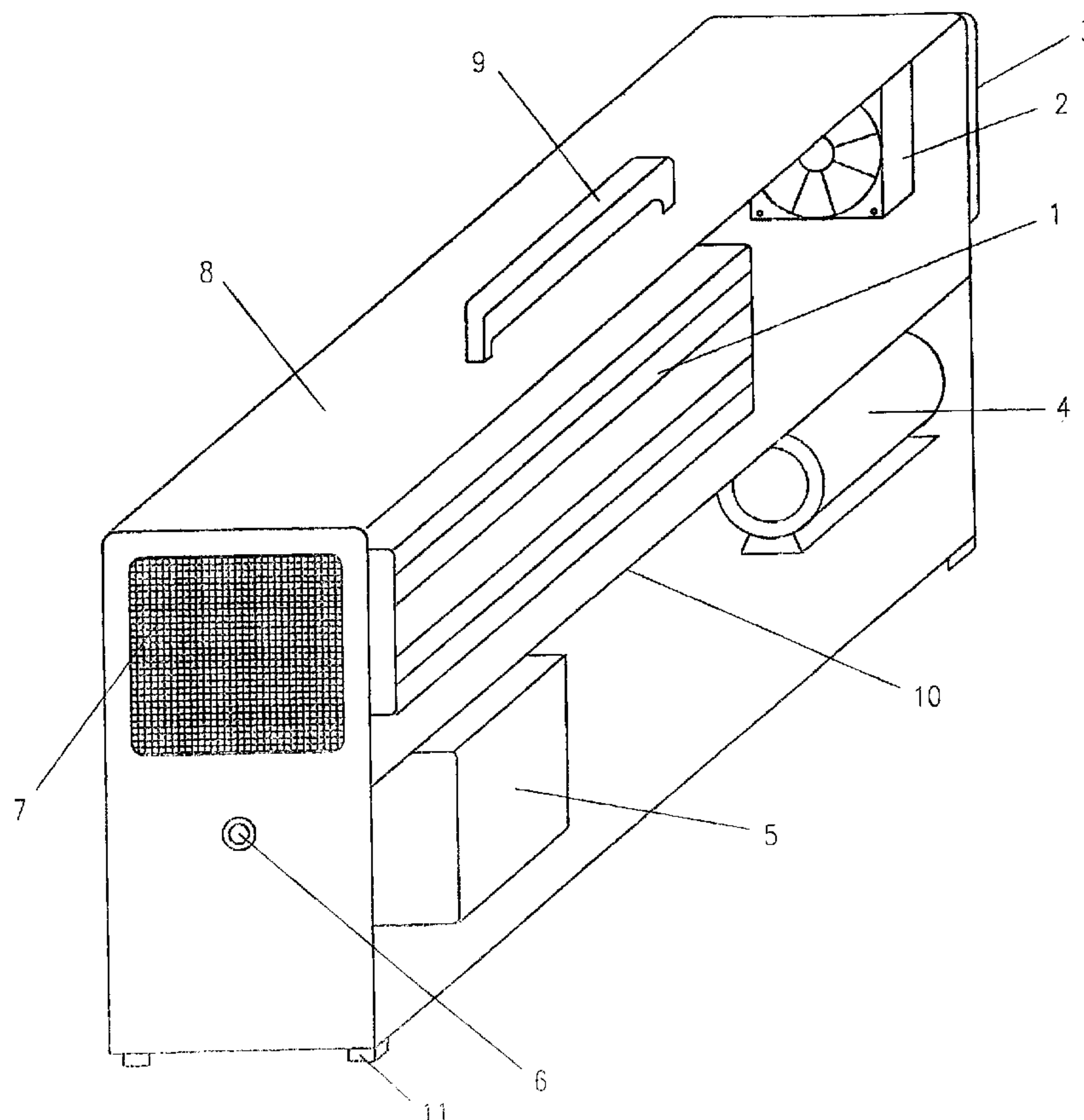
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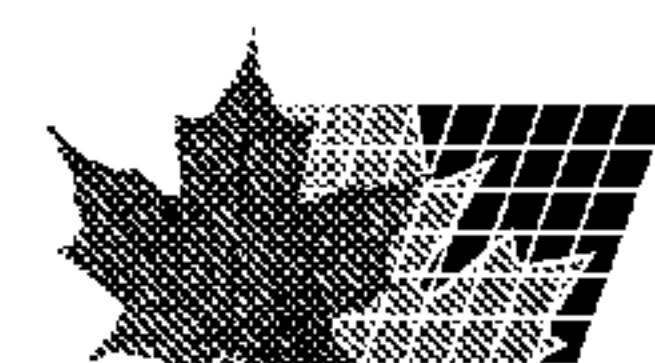
(54) Titre : APPAREIL DE DESINFECTION HYGIENATOR

(54) Title: HYGIENATOR



(57) Abrégé/Abstract:

A method and apparatus for disinfecting an enclosed area with the apparatus comprising a housing having an ozone generator, an air inlet to the housing and an air outlet therefrom, a fan for moving air from the air inlet past the ozone generator to the air outlet, a reservoir preferably containing a fungicide or a bactericide, a compressor mounted in the housing to permit spraying of the reservoir.



A B S T R A C T

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HYGIENATOR

FIELD OF THE INVENTION

The present invention relates to an apparatus and method, and more particularly, relates to an apparatus to sanitize an enclosed area and a method for so doing.

BACKGROUND OF THE INVENTION

Often there is a requirement to sanitize or disinfect an enclosed area such an enclosed room or vehicle. While it is known to utilize cabinets or chests into which equipment such as sports equipment is placed in order to sanitize the equipment, there is still a requirement for an apparatus which is suitable for a closed room or vehicle. Such closed rooms may, for example, be locker rooms or the like.

SUMMARY OF THE INVENTION

According to one aspect of the present invention, there is provided an apparatus for disinfecting an enclosed area, the apparatus comprising a housing, an ozone generator within the housing, an air inlet to the housing, an air outlet from the housing, a fan for moving air from the air inlet past the ozone generator to the air outlet, a reservoir, a compressor mounted in the housing, and an air line between the compressor and the container to permit spraying of the contents of the container exteriorly of the housing.

BRIEF DESCRIPTION OF THE DRAWINGS

Having thus generally described the invention, reference will be made to the accompanying drawings illustrating an embodiment thereof, in which:

Figure 1 is a perspective view of an apparatus according to one embodiment of the present invention; and

Figure 2 is a side elevational view thereof.

DETAILED DESCRIPTION OF THE INVENTION

As shown, the apparatus consists of a stainless steel enclosure 8, a separating wall 10, a carrying handle 9, four pads 11, an ozone generator 1, a fan 2, a filter 3, a compressor 4, a reservoir 5, a spray nozzle 6, a grill 7, an air line 12 and a liquid line 13.

The apparatus is placed on a flat surface, and the machine named the hygienator is turned on. Once the machine is on, the fan 2 draws in the contaminated air of the closed area through the filter 3. The oxygen in this air is transformed into ozone by the ozone generator 1, and is expelled through the grill 7. After the ozone cycle, the fan 2 continues to run and the ozone generator 1 is automatically turned off. The compressor 4, located under the separating wall 10, turns on and pumps air through the air line 12 to the spray nozzle 6 in order to disburse an agent from the reservoir 5. The agent is extracted from the reservoir 5 by the liquid line 13.

The fan 2 is constantly on throughout the ozone generating cycle, as well as, throughout the liquid spraying cycle.

The filter 3 is there to protect the ozone generator 1 and to keep out any solid airborne impurities.

The agent extracted from the reservoir 5 can be any type of bactericide, fungicide, etc, and the spraying of this agent can be regulated for any length of time after the ozone cycle. These agents contain water, therefore when sprayed by the spray nozzle 6, the ozone is neutralized, becoming a low concentration of hydrogen peroxide H_2O_2 and thus creates a sterilized, disinfected environment.

The apparatus is designed in such a way that the length of the ozone cycle, as well as the agent spraying cycle can be adjusted to suit the application.

The embodiments of an invention in which an exclusive property or privilege is claimed is defined as follows:

1. An apparatus for disinfecting an enclosed area, the apparatus comprising:

a housing;

an ozone generator within said housing;

an air inlet to said housing;

an air outlet from said housing;

a fan for moving air from said air inlet past said ozone generator to said air outlet;

a reservoir;

a compressor mounted in said housing; and

an air line between said compressor and said reservoir to permit spraying of the contents of said reservoir exteriorly of said housing.
2. The apparatus of Claim 1 further including a grill in said housing, said grill operatively associated with said reservoir to spray contents of said reservoir therethrough.
3. The apparatus of Claim 1 wherein said housing has an upper compartment and a lower compartment, said ozone generator being mounted in said upper compartment.
4. The apparatus of Claim 3 further including a handle mounted on said housing.
5. The apparatus of Claim 4 further including a plurality of pads on the bottom of said housing.
6. The apparatus of Claim 3 wherein said housing is formed of a stainless steel.
7. The apparatus of Claim 3 wherein said reservoir contains a fungicide.
8. The apparatus of Claim 3 wherein said reservoir contains a bactericide.
9. A method for disinfecting an enclosed area, the method comprising the steps of:

placing the apparatus of Claim 1 in said enclosed area;

operating said ozone generator and said fan to allow the passage of ozone into said enclosed area;

stopping said ozone generator while continuing to operate said fan;

spraying a water containing agent from said reservoir to neutralize the ozone in said enclosed area.

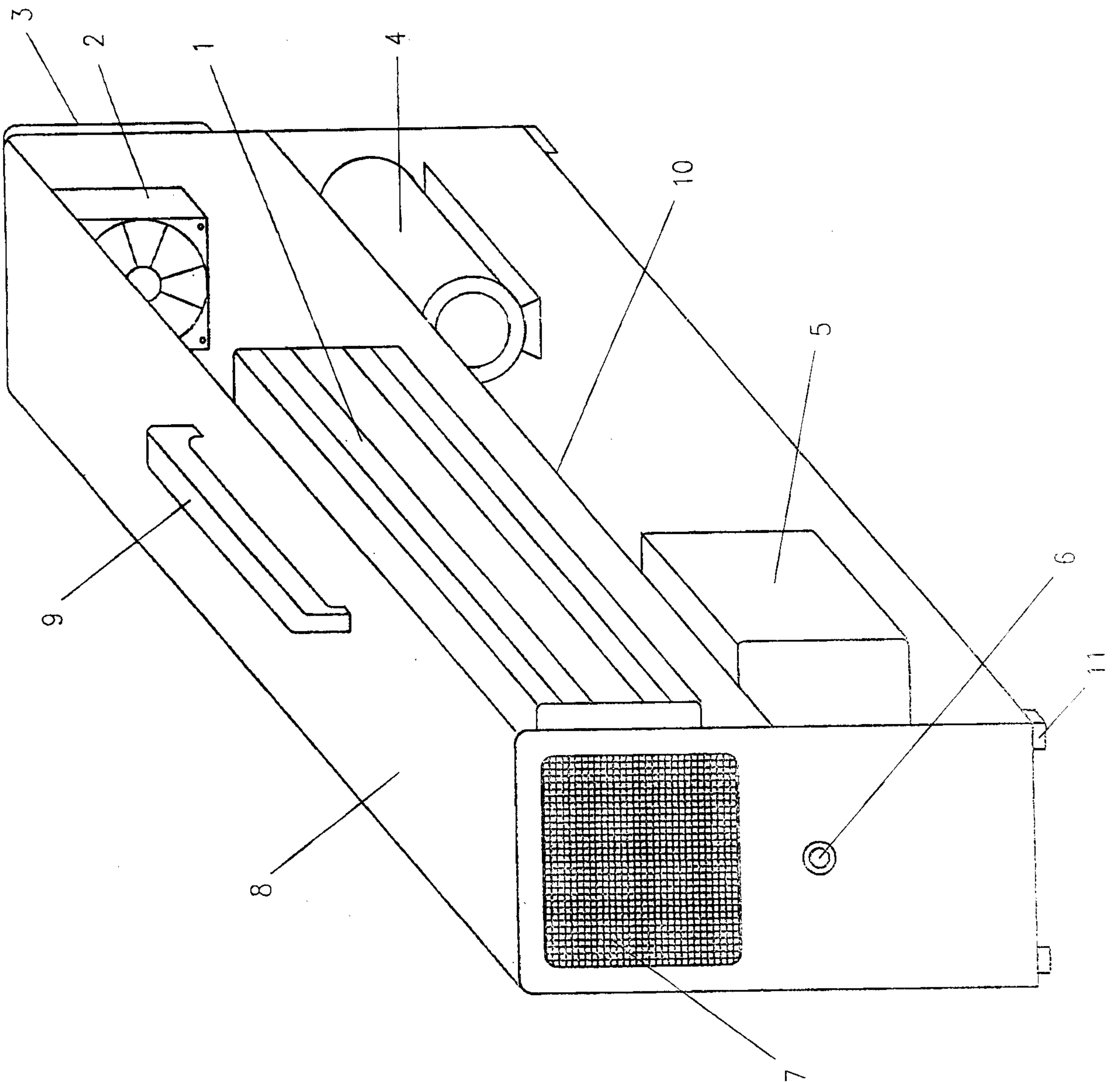


Fig. 1

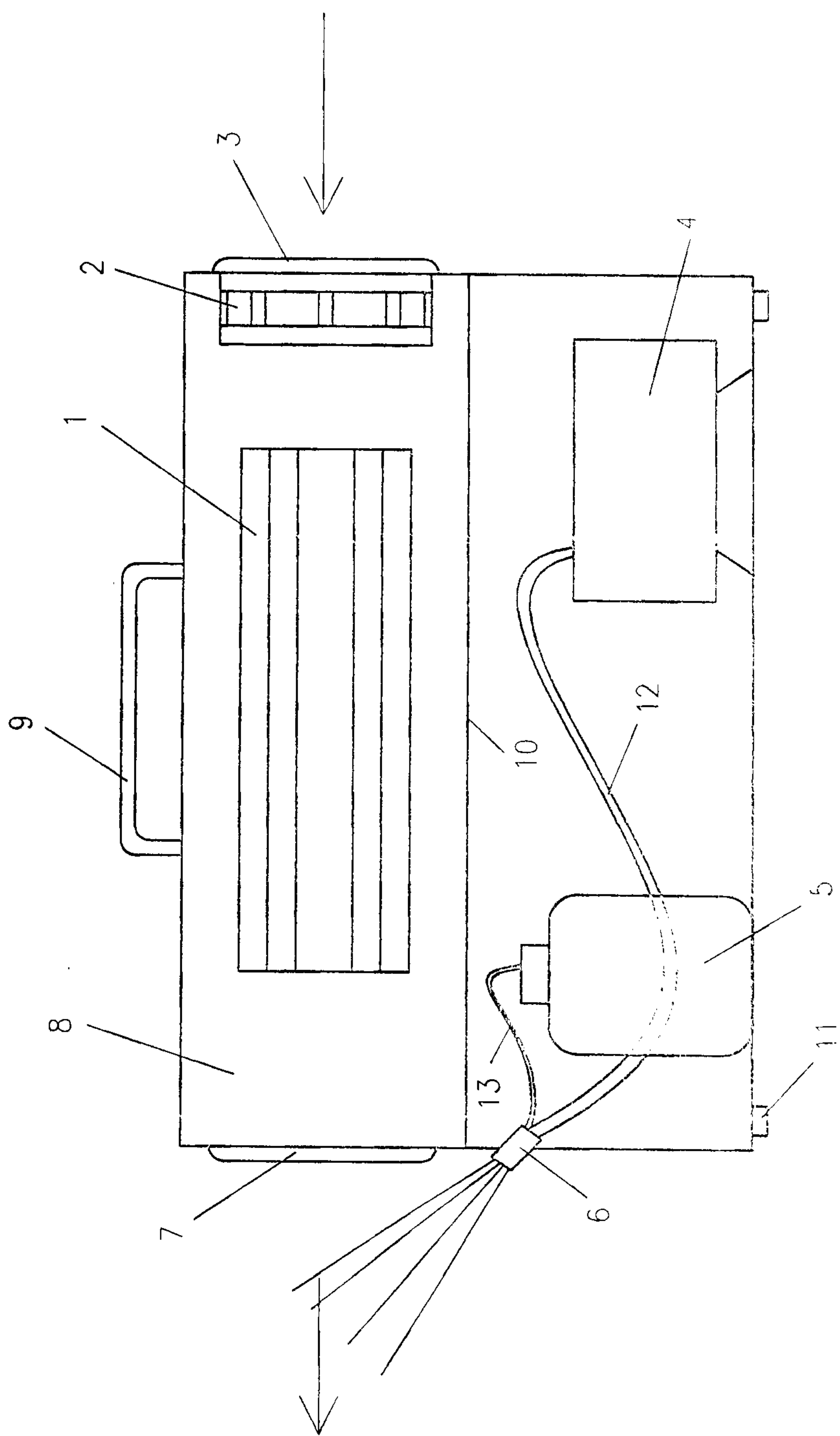


Fig. 2

