

# PATENT SPECIFICATION

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## (54) COMPARTMENTALISATION IN A TREATMENT ROOM

(71) We, REINDEER N.V., WILLEMS-TAD, of John B. Corsiraweg 6, Curacao, Netherlands Antilles, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:-

The invention relates to storage chambers 10 for the treatment or storage of products wherein an air current is forced around the products situated in stacks of containers in the storage chamber.

In order to ensure that a controlled air current is obtained through the stacks of the containers which hold the products to be treated, these stacks must be screened off sideways. The screening should be such that it is possible to remove or stack these containers, which are placed on pallets, for example, by means of a fork lift truck.

An object of the invention is to achieve this aim.

According to one aspect of the present invention there is provided a method of treating products in a storage chamber comprising locating said products in container stacks in the storage chamber, moving at least one vertical wall normal to its vertical plane to an operative position adjacent the stacked products to seal them off sideways, directing a forced air current around the stacked products and thereafter moving the vertical wall away from the products so as to make them accessible to a transport means.

According to another aspect of the present invention there is provided a storage chamber for carrying out the method of said one aspect, said chamber comprising a plurality of container stacks, each stack having a plurality of containers, means for directing a forced air current around products located in the containers, and at least one vertical wall which is movable in the chamber normal to its vertical plane between an opera-

tive position adjacent a stack in which it forms a side wall of the stack and a position remote from the stack to allow access to the containers.

The invention will be described now by 50 way of example only with particular reference to the accompanying drawings. In the drawings:

Figure 1 shows a ground plan of a part of the room with container stacks, and 55

Figure 2 is a cross-section through a compartmentalisation wall.

Referring to Figure 1 a plurality of container stacks 1, 1', 11" are shown within a treatment room. The stacks 1, 1' and 1" are 60 screened separately by means of compartmentalisation walls 2, which can be moved in horizontal direction as shown by the arrows in Figure 1.

When a compartmentalisation wall 2 is 65 moved away from a stack, a fork lift truck can then be moved into the spaces between the stacks to take in or remove a container or containers from the stack which are on pallets. 70

A compartmentalisation wall 2, with the direction of movement indicated by an arrow, is illustrated in Figure 2 on a larger scale.

The wall 2 has on top a number of bogie 75 wheels 3 which can move in the horizontal direction along a number of horizontal rails 4 mounted, for example, against the ceiling 5 of the room.

The wall 2 has at its bottom a sealing strip 80 6 which, at a position adjacent the stacks, bears against the floor 7 whereby a good sealing is guaranteed.

Next to one or more bogie wheels 3 a pinion 8 is located which is rotatable by a 85 reversible electric motor. The pinion 8 is arranged to engage with a rack 9 mounted on the horizontal rail 4.

The wall 2 can then be displaced by energising the electric motor so that the pinion 90

moves along the rack 9.

From the Figure it can be seen that the rail 4 and the rack 9 are curved downwards at one end. This arrangement allows the wall 2 to seal against the floor and to move free of the floor when it is displaced.

WHAT WE CLAIM IS:

1. A method of treating products in a storage chamber comprising locating said products in container stacks in the storage chamber, moving at least one vertical wall normal to its vertical plane to an operative position adjacent the stacked products to seal them off sideways, directing a forced air current around the stacked products and thereafter moving the vertical wall away from the products so as to make them accessible to a transport means.

2. A storage chamber for carrying out the method of claim 1, said chamber comprising a plurality of container stacks, each stack having a plurality of containers, means for directing a forced air current around products located in the containers, and at least one vertical wall which is movable in the chamber normal to its vertical plane between an operative position adjacent a stack in which it forms a side wall of the

stack and a position remote from the stack to allow access to the containers.

3. A storage chamber according to claim 2 characterised in that the vertical wall has rollers movable along at least one substantially horizontal rail, and that said rail has a downwardly curved portion adjacent the operative position of the wall, said wall having a sealing strip adjacent the lower edge thereof.

4. A storage chamber according to claim 3 characterised in that a reversible electric motor is mounted on the wall, said motor having a pinion which is in engagement with a gear rack extending along the rail.

5. A method according to claim 1 and substantially as hereinbefore described with reference to the accompanying drawings.

6. A storage chamber according to claim 2 and substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

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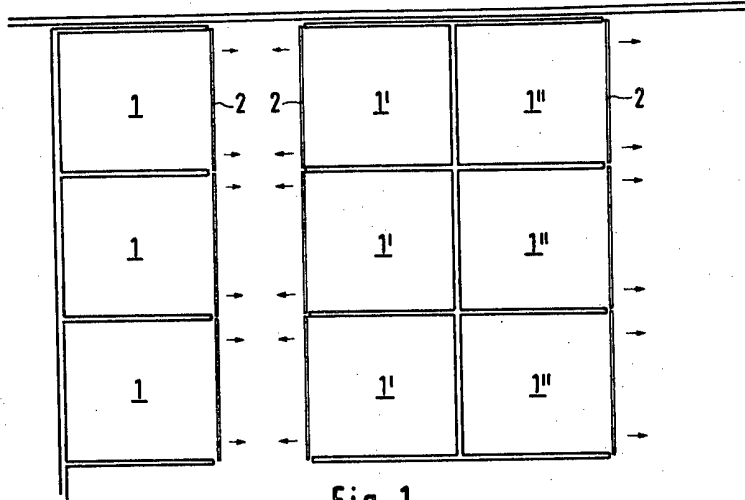


Fig. 1

Fig. 2

