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(71) Applicant: **Camós García, Daniel**
08004 Barcelona (ES)

(72) Inventor: **Camós García, Daniel**
08004 Barcelona (ES)

(74) Representative: **Manresa Val, Manuel et al**
Manresa & De Rafael, S.L.
Roger de Llúria, 113, 4a planta
08037 Barcelona (ES)

(54) **Decarbonizer machine for cleaning cooking tools**

(57) It comprises a chassis (1) with a cube (2) inside which the various decarbonizer products and a basket (3), machine operating selector means (4), a lid (5) that covers said cube (2) and draining means are arranged, characterised in that it comprises raising and lowering means (6) for said basket (3), from inside cube (2) to outside and vice versa.

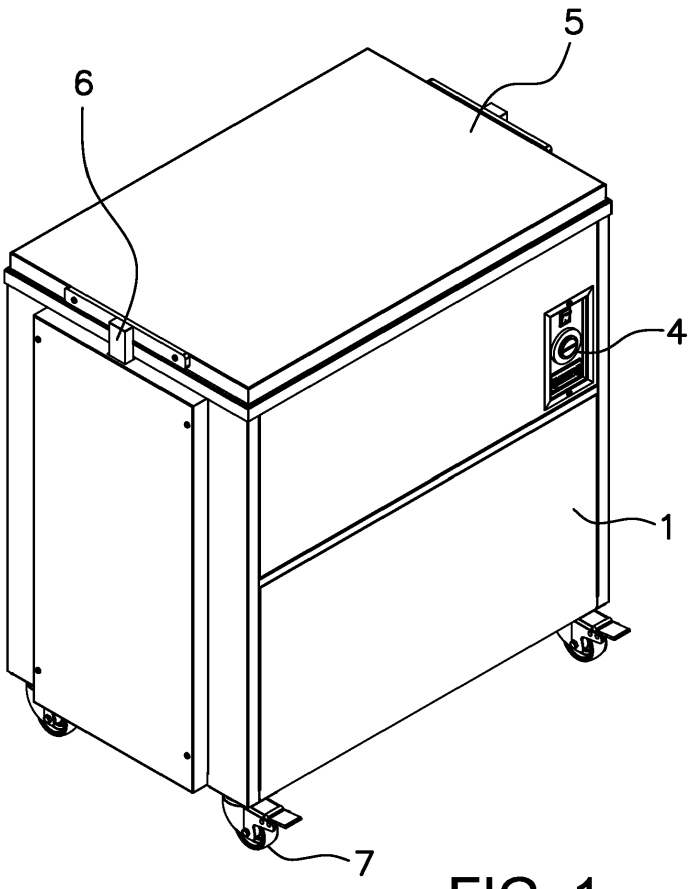

FIG. 1

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Description

[0001] Decarbonizer machine for cleaning cooking tools, of the type comprising a chassis with a cube inside which the various decarbonizer products and a basket, machine operating selector means, a lid that covers said cube and draining means are arranged, characterised in that it comprises raising and lowering means for said basket, from inside the tank to the outside and vice versa.

BACKGROUND TO THE INVENTION

[0002] In the state of the art various dishwasher machines are known in the household appliances sector.

[0003] So the dishwashers, with a side door, that provides access to the inside thereof, that is fitted with baskets, parallel to one another, where the plates and other items to be washed are placed, are known. These dishwashers are very common in the household and industrial environment.

[0004] In a more industrial type, we find dishwashers in a column, with the driving means in the bottom, which are fitted with a slider, at half height, on which a basket is placed with the plates and cutlery to be cleaned, which once it reaches above the dish washer, the dish washer closes at the top over the basket and carries out the cleaning of the products in a short period of time.

[0005] Finally, also known are the dishwashers made up of a cube, inside which a basket is arranged, which clean thanks to the action of some chemical means mixed in hot water, without the need for distributors or brushes.

BRIEF DESCRIPTION OF THE INVENTION

[0006] This application is within the sector of dishwasher machines, but for industrial use, that is, for use in sectors such as the hotel industry. More particularly, in the third group of dishwashers, mentioned in the background to the invention.

[0007] At present these machines need to use at least two people to raise and lower the basket inside the cube, depending on the weight of the washed dishes.

[0008] At the same time, the temperature inside the cube is over 80ºC, and therefore the operators have to remove the basket with gloves to prevent burns.

[0009] All this means that in the end these machines are not preferable, because they imply using many members of the personnel who have great physical strength.

[0010] So, the inventor has developed a new machine which overcomes both problems.

[0011] On the one hand, it has driving means above the machine, which raise it outside, so that even when it is very heavy, two people are not needed to remove the basket from inside the cube, because when the raising process is completed, the basket is already outside.

[0012] Also, neither does said basket have to be positioned inside the cube, because the same raising means can lower it to its given position.

[0013] Also, raising the basket loaded with the dishes outside the machine, allows the cooking tools, such as dishes, cutlery, spatulas, pans, etc. to cool quickly, and it is not necessary to pick up the basket by hand, as in the background to the invention, and therefore, it is not necessary to wear gloves as the risk of burning is no longer apparent.

[0014] An objective of this invention is a decarbonizer machine for cleaning cooking tools, of the type comprising a chassis with a cube inside which the various decarbonizer products and a basket, machine operating selector means, a lid that covers said cube and draining means are arranged, characterised in that it comprises raising and lowering means for said basket, from inside the cube to outside and vice versa.

BRIEF DESCRIPTION OF THE DRAWINGS

[0015] In order to facilitate the explanation, three sheets of drawings are attached to this specification, illustrating a practical embodiment, which is provided as a non-limiting example of the scope of this invention:

- Figure 1 is a perspective view of the object of this invention, in its working position;
- Figure 2 is an elevation view of the machine with the lid and basket raised, and
- Figure 3 is a detail of Figure 2, showing the basket area.

SPECIFIC EMBODIMENT OF THIS INVENTION

[0016] So Figure 1 shows a chassis 2 with wheels 7, selector means 4, a lid 5 and raising and lowering means 6.

[0017] Figure 2 shows chassis 2 with wheels 7, selector means 4, a cube 2, a basket 3, lid 5 and raising and lowering means 6.

[0018] Finally, Figure 3 shows chassis 2 with wheels 7, selector means 4, cube 2, basket 3 and raising and lowering means 6.

[0019] So, in a particular embodiment, this machine would operate as follows:

By virtue of the selector means 4, the machine is switched on.

[0020] Supposing that a washing process had finished, in order to proceed to lift basket 3 from inside cube 2, the raising function is selected from selector means 4, and it is kept pressed while basket 3 is raised.

[0021] In this embodiment lid 5 is raised and lowered at the same time as basket 3, even when lid 5 could be removed manually. This link has an advantage, and it is that the same raising and lowering means 6 leave lid 5 air-tight when closed and push lid 5 so that it overcomes the airtightness, during the raising movement.

[0022] So, in one of the embodiments, raising and low-

ering means 6, which in this embodiment are made up of two motors associated with respective endless screws, that join chassis 1 to lid 5, are located on the smaller sides of chassis 1. The inventor has observed that it is better to position two motors because with less accumulated power better results are achieved than with one single motor that has more power than the two motors together.

[0023] This way, when the operator sees that the raising or lifting movement of basket 3 (see Figures 2 and 3) with the cooking tools already clean, has finished, he stops pressing selector means 4. So, said cooking tools are cooled effectively, avoiding the risk that the operator might burn his hands when picking up basket 3 or the clean tools.

[0024] When he has finished unloading the cooking tools and has reloaded basket 3 with dirty tools, the operator will lower basket 3 using selector means 4 which act on raising and lowering means 6 to start the lowering operation.

[0025] This operation ends when basket 3 reaches the bottom of cube 2, and when cube 2 is closed by lid 5, which thanks to the raising and lowering means, enables an airtight environment to be created.

[0026] This invention describes a new decarbonizer machine for cleaning cooking tools. The examples mentioned herein do not limit this invention, and therefore it can have different applications and/or adaptations, all included in the scope of the following claims.

Claims

1. Decarbonizer machine for cleaning cooking tools, of the type comprising a chassis (1) with a cube (2) inside which the various decarbonizer products and a basket (3), machine operating selector means (4), a lid (5) that covers said cube (2) and draining means are arranged, **characterised in that** it comprises raising and lowering means (6) for said basket (3), from inside cube (2) to outside and vice versa.

2. Machine, according to claim 1, **characterised in that** said raising and lowering means (6) move at the same time lid (5), so that by raising basket (3) lid (5) raises opening cube (2) and when basket (3) lowers lid (5) lowers closing cube (2) in airtight fashion.

3. Machine, according to claim 1 or 2, **characterised in that** raising and lowering means (6) consist of two motors associated to respective endless screws, that join chassis (1) to lid (5), and are located on the smaller sides of chassis (1).

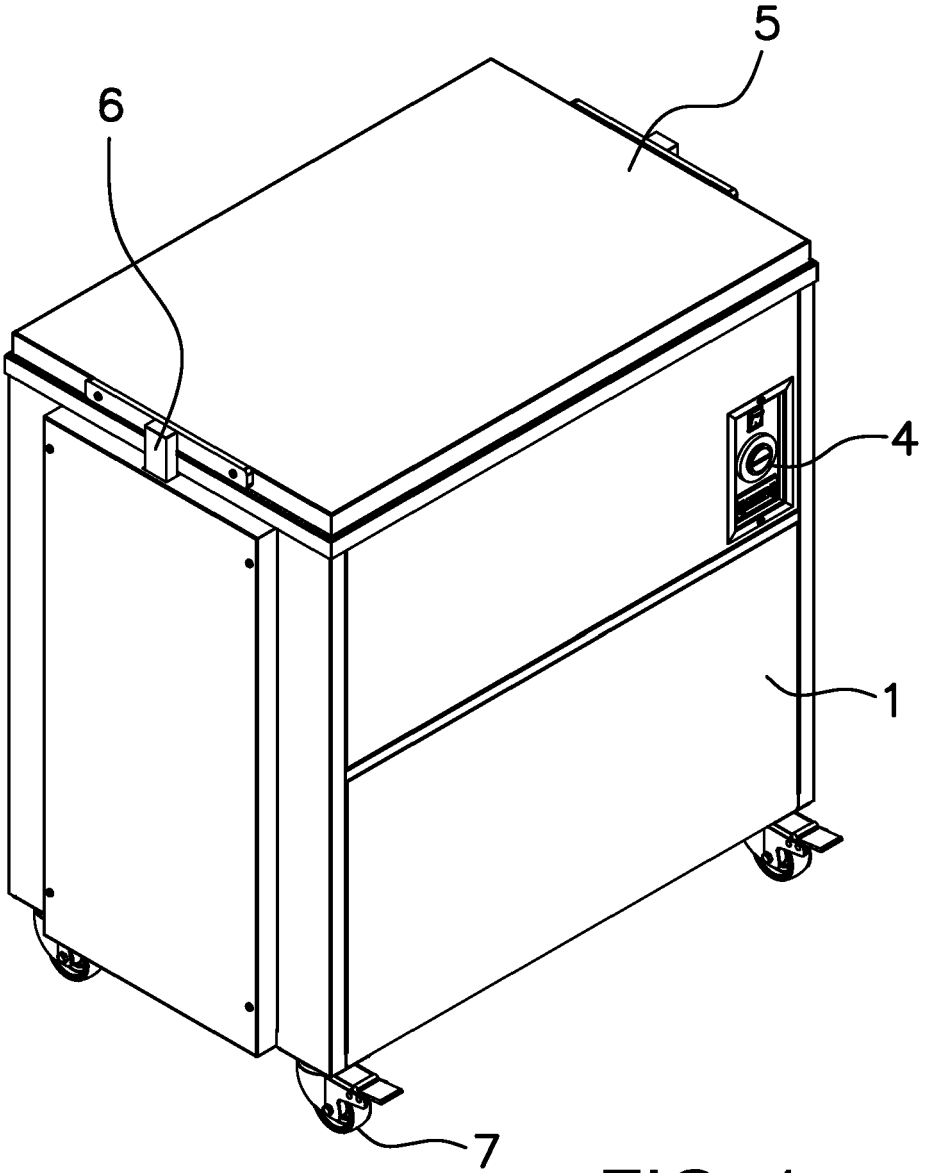

FIG. 1

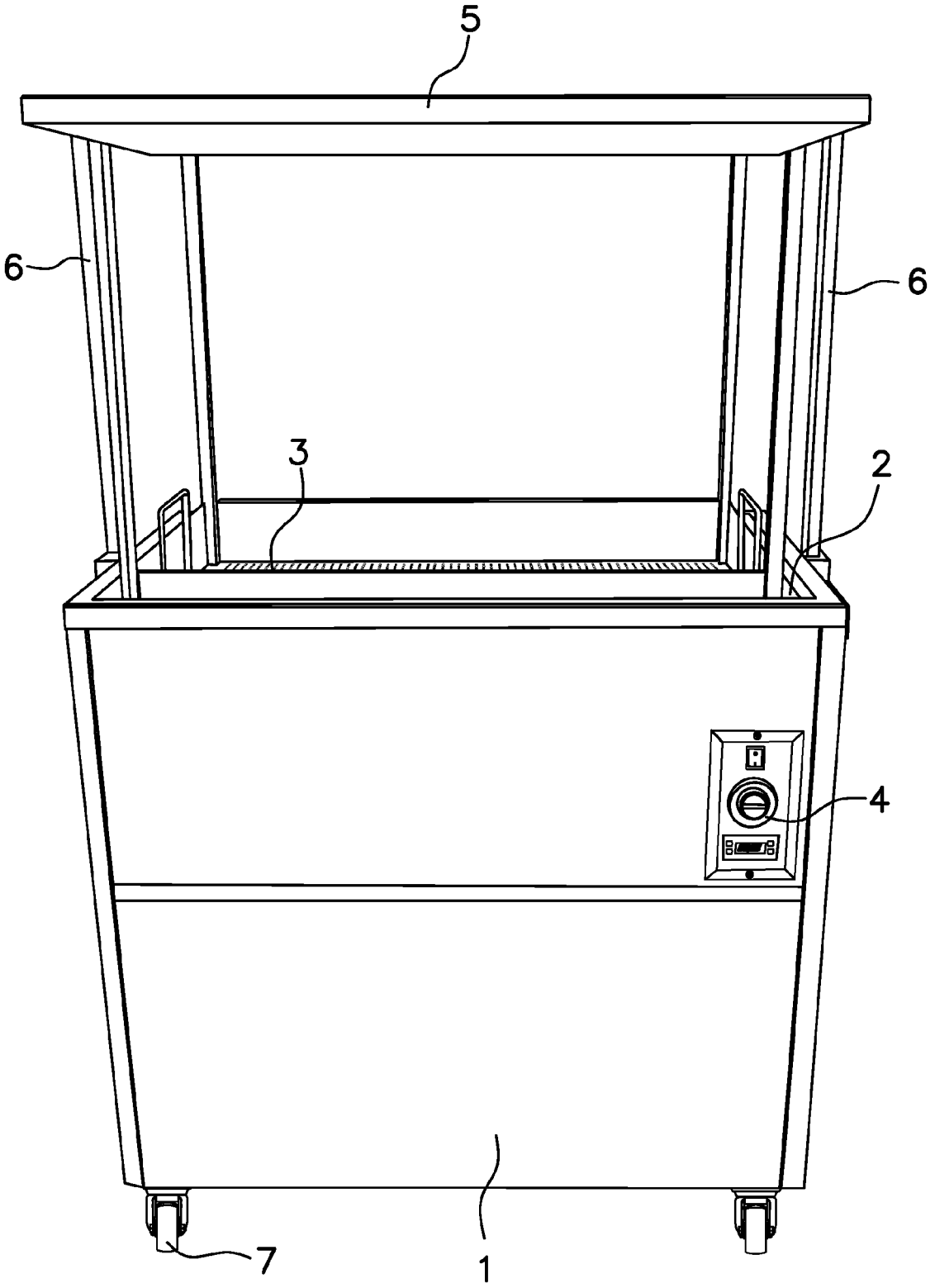

FIG. 2

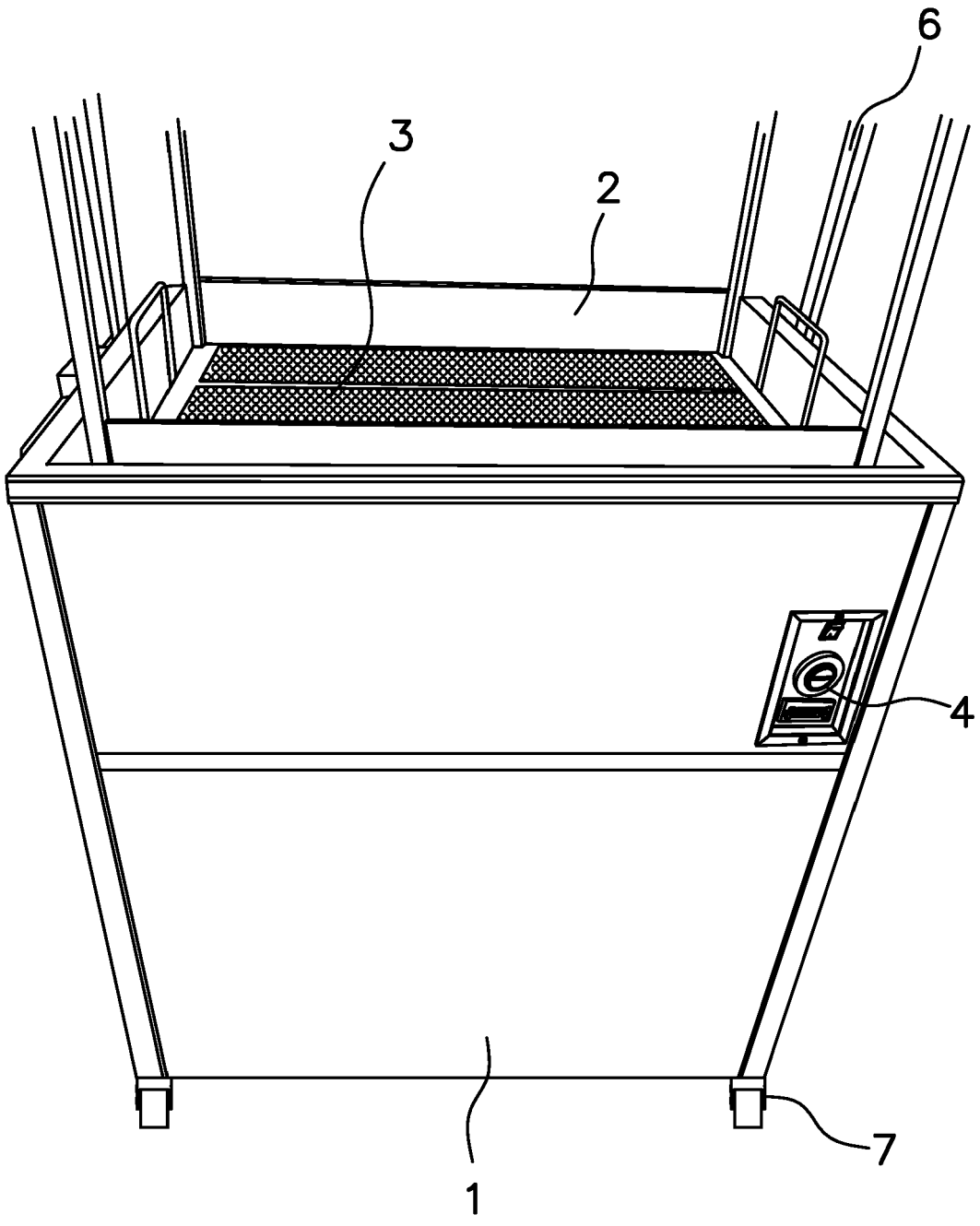

FIG. 3

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EUROPEAN SEARCH REPORT

Application Number
EP 11 38 2009

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	5 July 2011	Lopez Vega, Javier

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82