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(54) SYSTEM FOR PARTITIONING COMPARTMENTS OF A DISHWASHER

(57) A system (1) for partitioning two or more compartments (2, 3) of a dishwasher which are placed one over another in the dishwasher (4), and one or more dishes are adapted to be kept in each of the compartments (2, 3) for cleaning, the system (1) comprising a separator (5) and a movement means (11). The separator (5) is adapted to be coupled to at least one of a first wall (6) of the dishwasher (4) at a first location (7), the separator (5) is adapted to be in an extended position (8) by extending in proximity to a second wall (9) opposite to the first wall (6), and to be in a collapsed position (10) by being in collapsed form in proximity to the first wall (6). The movement means (11) is adapted to extend the separator (5) to be in the extended position (8) from the collapsed position (10), or to collapse the separator (5) being in the collapsed position (10) from the extended position (8).

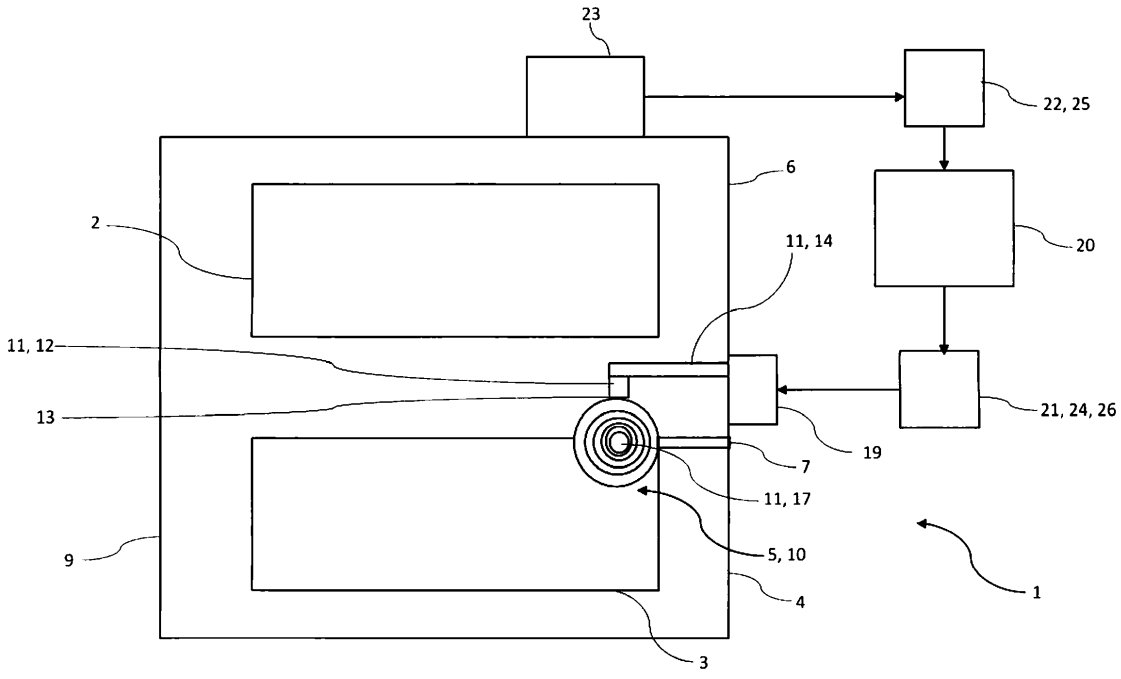

Fig 1

EP 3 539 441 A1

Description

[0001] This invention refers to a system for partitioning two or more compartments of a dishwasher which are placed one over another in the dishwasher according to claim 1, and a method for partitioning two or more compartments of a dishwasher according to claim 11.

Background of the Invention

[0002] Dishwashers are generally provided with partitions, which are placed one above the other. In each of the partitions, the dishes are kept for washing. When the washing operation is completed, and the dishes in the above compartment are still wet, water droplets fall from these dishes placed in upper compartment onto the dishes placed onto the lower compartment, thus making the dishes in the lower container wet for a longer period and sometimes resulting into dry marks when the water droplets get dried onto to dishes, which substantially reduces quality of cleaning of the dishes.

[0003] European Patent Publication EP 1723890 A1 discloses a dishwasher which has a washing tub divided into two washing zones disposed one above the other and separated by a partition. Spraying units are associated to the respective zones to spray washing water on dishes loaded on the zones. The partition has two concavities turned towards bottom with a shape of a portion of cylinder. Each concavity is connected to a lateral surface in contact with a lateral wall of the tub. The connecting surfaces of the partition form a slope inclined towards the back and the bottom of the tub to flow the water towards bottom wall of the tub.

[0004] US Patent Publication US 2014/0083472 A1 discloses a slid able divider that separates tub into an upper tub and lower tub. A drawer is coupled to the divider. The drawer is sloped to drain out cleaning fluid from the upper treating chamber.

[0005] Further, European Patent Publication EP 3212055 A1 discloses a dishwasher comprising a tub, a pivotable door, an upper and a lower pull-out rack, an upper and a lower spray means, a supply means for selectively supplying the upper and the lower spray means with wash liquor. The dishwasher of the present invention further comprises a partition plate, which is releasably mountable between the upper and the lower parts of the tub.

[0006] In the above prior art documents, the separator is kept intact even when the washing operation is going on. This requires for more washing liquid and water, as well as more cleaning time is required for cleaning the dishes in the partitioned compartments, hence this results in a non-efficient and costly cleaning operation.

Object of the Invention

[0007] It is therefore the object of the present invention is to provide a partitioning mechanism for a dishwasher which enables cost effective and efficient cleaning as well provides a better cleaning quality of the dishes being washed in the dish washer.

Description of the Invention

[0008] The before mentioned object is solved by a system for partitioning two or more compartments of a dishwasher which are placed one over another in the dishwasher according to claim 1.

[0009] According to the invention a system for partitioning two or more compartments of a dishwasher is provided which are placed one over another in the dishwasher, and one or more dishes are adapted to be kept in each of the compartments for cleaning, the system comprising a separator adapted to be coupled to at least one of a first wall of the dishwasher at a first location, the separator is adapted to be in an extended position by extending in proximity to a second wall opposite to the first wall, and to be in a collapsed position by being in collapsed form in proximity to the first wall, and a movement means adapted to extend the separator to be in the extended position from the collapsed position and to collapse the separator be in collapsed position from the extended position.

[0010] This embodiment is helpful, as it provides a mechanism to move the separator in a collapsible fashion whenever it is required, so as to create a partition between the compartments. This helps to prevent water dropping into a lower compartment whenever required by user, more specifically, once the washing operation is completed. This helps to keep the dishes stain free without waterdroplets, which improoves the quality of the cleaning operation.

[0011] Further preferred embodiments are subject-matter of dependent claims and/or of the following specification parts.

[0012] According to a preferred embodiment of the system, the movement means comprises a metal head fixed to a free end of the separator.

[0013] This embodiment is beneficial as it provides a way to easily pull or push the separator.

[0014] According to a further preferred embodiment of the system, the move mechanism comprises a collapsible rod unit physically connected to the metal head, the collapsible rod unit is adapted to extend when the separator is adapted to be in the extended position and is adapted to collapse when the separator is adapted to be in the collapsed position.

[0015] This embodiment is helpful, as the collapsible rod unit directs the metal head to move in a specific direction, more specifically to the second wall, such that when the separator extends to the proximity of second wall, it creates the partition between the compartments.

[0016] According to another embodiment of the system, the collapsible rod unit comprises a plurality of hollow rods telescopically connected to each other, so that one hollow rod collapses into another hollow rod when

the collapsible rod unit extends, and the hollow rods extend out from each other when the collapsible rod unit collapses.

[0017] This embodiment is helpful, as it provides an efficient mechanism to extend and collapse the collapsible rod unit.

[0018] According to a further preferred embodiment of the system, the separator is having an alternate foldable structure, where the separator shall be divided into multiple strips, and adjacent strips shall be folded onto each other when the separator is in the collapsed position.

[0019] This embodiment is helpful, as it provides an easy and user friendly mechanism to collapse or extend the separator. Moreover, with this structure of the separator, it shall be possible to avoid falling of any water into the lowe compartment which is left out while the separator is moved to the collapsed position.

[0020] According to a preferred embodiment of the system, the movement means comprises a rolling wheel having one end of the separator fixed to the rolling wheel, the rolling wheel is adapted to rotate to wind or unwind the separator onto the rolling wheel, the separator is adapted to be wind completely onto the rolling wheel when the separator is in the collapsed position and is adapted to be unwind completely when the separator is in the extended position.

[0021] This embodiment is helpful, as it provides another user friendly mechanism to collapse or extend the separator. This mechanism also avoids spilling of the left out water into the lower compartment, as while winding the separator, the left out water shall slip off to the first wall or in a space between the rotating wheel and the first wall.

[0022] According to another embodiment of the invention, the system comprises a motor functionally coupled to the movement means for triggering the movement means to extend the separator to be in the extended position from the collapsed position, or to collapse the separator be in collapsed position from the extended position.

[0023] This embodiment is beneficial, as it provides an automated mechanism to trigger the movement mechanism without human efforts.

[0024] According to a preferred embodiment of the invention, the system comprises a microcontroller coupled to the motor and adapted to generate and send a triggering signal to the motor, wherein the motor is adapted to receive the triggering signal and trigger the movement means.

[0025] This embodiment is beneficial, as it further reduces requirement for human efforts and intervention for triggering the motor.

[0026] According to a further preferred embodiment of the system, the microcontroller is adapted to receive a completing signal related to completion of a washing operation of the dishes from a controller of the dishwasher, to process the completing signal, and to generate a first triggering signal based on the processing of the completing signal, wherein the motor is adapted to receive the first triggering signal, and adapted to move the separator in the extended position.

[0027] This embodiment is beneficial, as it provides a mechanism to automatically extend the separator to the extended position when the washing operation is completed for the dishwasher.

[0028] According to another embodiment of the system, the microcontroller is adapted to receive a starting signal related to starting of a washing operation of the dishes from the controller of the dishwasher, to process the starting signal, and to generate a second triggering signal based on the processing of the starting signal, wherein the motor is adapted to receive the second triggering signal, and adapted to move the separator in the collapsed position.

[0029] This embodiment is beneficial, as it provides a mechanism to automatically collapse the separator to the collapsed position when the washing operation is to be started inside the dishwasher.

[0030] The before mentioned object is also solved by a method for partitioning two or more compartments of a dishwasher according to claim 11.

[0031] According to the invention a method for partitioning two or more compartments of a dishwasher is disclosed which are placed one over another in the dishwasher, and one or more dishes are adapted to be kept in each of the compartments for cleaning, the dishwasher is provided with a separator physically coupled to at least one of a first wall of the dishwasher at a first location. The method comprises collapsing and/or extending the separator using the movement means, such that the separator to be in a collapsed position by being in collapsed form in proximity to the first wall or extending the separator to be in an extended position by extending in proximity to a second wall opposite to the first wall.

[0032] According to a further embodiment of the method, the movement means includes a metal head and a collapsible rod unit, the metal head fixed to a free end of the separator, and the collapsible rod unit is physically coupled to the metal head. The method comprises collapsing or expanding the collapsible rod unit, such that the separator is in the extended position when the collapsible rod unit expands, and the separator is in the collapsed position when the collapsible rod unit collapses.

[0033] According to a further preferred embodiment of the invention, the method comprises triggering the movement means by using a motor to extend the separator to be in the extended position from the collapsed position, or to collapse the separator being in collapsed position from the extended position.

[0034] According to another embodiment of the invention, the method comprises generating a triggering signal by a microcontroller and receiving the triggering signal by the motor and accordingly triggering the movement means.

[0035] According to a further preferred embodiment of the invention, the method comprises receiving a com-

pleting signal related to completion of a washing operation of the dishes or a starting signal related to starting of a washing operation of the dishes by the microcontroller from a controller of the dishwasher, and processing the completing signal or the starting signal by the microprocessor, and accordingly generating the triggering signal for either moving the separator in the extended position or moving the separator in the collapsed position.

[0036] Further benefits, goals and features of the present invention will be described by the following specification of the attached figures, in which components of the invention are exemplarily illustrated. Components of the devices and method according to the inventions, which match at least essentially with respect to their function, can be marked with the same reference sign, wherein such components do not have to be marked or described in all figures.

[0037] The invention is just exemplarily described with respect to the attached figure in the following.

Brief Description of the Drawings

[0038]

Fig. 1 illustrates a schematic diagram of a system for partitioning two or more compartments of a dishwasher, according to an embodiment of the invention.

Fig. 2 illustrates a schematic diagram of the system when an upper compartment of the dishwasher is being drawn out of the dishwasher.

Fig. 3 illustrates a separator, which is provided in a zebra curtain structure.

Detailed Description of the Drawings

[0039] The present invention focuses on providing a partition, which can be collapsed or extended as per user's requirement. Generally, it's user's choice or the way a dishwasher functions, according to which a user can determine or the system can be programmed to collapse or extend a separator in the dishwasher. For easy handling of the separator, a movement means is also provided which can support in extending or collapsing the separator in the dishwasher.

[0040] Fig. 1 shows a system 1 for partitioning two or more compartments 2, 3 of a dishwasher 4. It is generally the user's requirement that the water from an upper compartment 2 should not spill over or fall over to the dishes kept in a lower compartment 3. For this reason, the system 1 is provided with a separator 5, which is collapsible. The separator 5 is physically coupled to a first wall of the dishwasher 4 at a first location 7 through a collapsible rod unit 14. However, in another embodiment, the separator 5 can be directly physically coupled to the first wall 6, more specifically in the embodiment where the separator 5 is provided as a zebra curtain structure. The collapsing or extension of the separator 5 is facilitated by using a movement means 11.

[0041] The movement means 11 is shown to include a metal head 12, a collapsible rod unit 14, and a rolling wheel 17, which together supports in extending or collapsing the separator 5.

[0042] The metal head 11, 12 facilitates in pushing the separator 5 into the collapsed position 10 or pulling the separator 5 to the extended position. In one embodiment, the metal head 12 is not required, rather any other structure can be provided, like a hook, through which pulling or pushing of the separator 5 is possible for achieving the collapsible position 10 or an extended position.

[0043] The collapsible unit 14 is physically coupled to the metal head 12 and helps in pushing or pulling the metal head 12 for achieving the extended position, or the collapsed position 10 respectively. The collapsible rod unit 14 also helps in a guided movement of the separator 5. The collapsible rod unit 14 is made of multiple hollow rods which are having different diameters, so that these rods can be piped into each other when collapsed and can extend out of each other when extended. These hollow rods are provided with complimentary holding structures at their ends, so that the rods remain intact within a subsequent rod while completely extended. This structure is telescopic in nature. In one embodiment, the collapsible rod unit 14 can have any other structure or material, which can facilitate extension and collapsing of the rod.

[0044] The rotating wheel 17 is provided to wind or unwind the separator 5. One fixed end of the separator 5 is fixed to a surface of the rotating wheel 17, and a free end 13 of the separator 5 is attached to the metal head 12. When the separator 5 is in collapsed position 10, the separator 5 completely winds up onto the rotating wheel 17, and when the separator 5 achieves the extended position, the separator 5 completely unwraps from the rotating wheel 17. In one embodiment, specifically where the separator 5 is in zebra curtain structure, the rotating wheel 17 is not required.

[0045] In one embodiment, the metal head 12 is not required, however, any other structure can be provided, like a hook, through which pulling or pushing of the separator 5 is possible for achieving the collapsible position 10 or an extended position. In an alternate embodiment, the movement means 11 can be just the metal head 12, specifically in a scenario when the separator 5 is provided in the zebra structure format. In yet another embodiment, the movement means 11 can be made of just the metal head 12 and the rolling wheel 17, specifically in a scenario where the rolling wheel can be directly fixed to the first wall 6, without including the collapsible rod unit 14. In one embodiment, the movement means 11 can just include the metal head 12 and the collapsible rod unit 14, specifically in a scenario, where the separator is in the zebra structure form, and it is required to only partially partition the compartment. In such a scenario, some part

of the lower compartment 3 shall remain exposed even when the separator 5 is fully extended.

[0046] The system 1 is also provided with a motor 19, which triggers the movement mechanism 11. The motor 19 is coupled to the collapsible rod unit 14, so that the collapsible rod unit 14 can be extended or collapsed. When the collapsible rod unit 14 extends, it pulls the metal head 12, so that the separator 5 can be pushed to the extended position, and when the collapsible unit 14 is collapsed it pulls the metal head 12 backwards, so that the separator 5 moves into the collapsed position. In one embodiment, the motor 19 is not provided and the user has to manually extend or collapse the collapsible rod unit 14. For collapsing or extending the collapsible rod unit 14 in such way, a user may have to open the door of the dishwasher to manually handle the collapsible rod unit 14 Alternatively, a lever can be provided externally to manually handle the collapsible rod unit 14. In one embodiment, where both motor 19 and the collapsible rod unit 14 is not provided, the user can directly use the metal head 12 or the free end 13 of the separator 5 for handling the separator 5 to be in the collapsed position 10 or the extended position. Again, such handling can be done by opening the door of the dishwasher 4 or providing an external lever attached to the metal head 12 or the free end 13 of the separator 5 for collapsing or extending the separator 5.

[0047] The system 1 is also provided with a microcontroller 20 which shall activate the motor 19. The microcontroller 20 and the motor 19 together substantially automates the collapsing or extending of the separator 5. The microcontroller 20 generates a triggering signal 21, and send it to the motor 19, and the motor 19 further triggers the collapsible unit 14 to extend or collapse, as per the triggering signal 21. In one embodiment, the microcontroller 20 is not provided, and the user has to manually handle triggering of the motor for specific movement of the collapsible rod unit 14 for extending or collapsing.

[0048] The microcontroller 20 is further coupled to a controller 23 of the dishwasher 4. The controller 23, either sends a starting signal 25 to the microcontroller 20 or a completing signal 22 to the microcontroller 20. The starting signal 25 relates to starting of a cleaning operation inside the dishwasher, and such signal is generated when the dishwasher 4 is ready for a cleaning operation. The completing signal 22 relates to completing of a cleaning operation inside the dishwasher, and such signal is generated when the cleaning operation is completed inside the dishwasher 4. When the microcontroller 20 receives the completing signal 22, the microcontroller 20 generates a first triggering signal 24 which when received by the motor 19, the motor 19 moves the collapsible rod unit 14 to extend, so that the separator shall be in the extended position. When the microcontroller 20 receives the starting signal 25, the microcontroller 20 generates a second triggering signal 26 which when received by the motor 19, the motor 19 moves the collapsible rod unit 14 to collapse, so that the separator shall be in the collapsed position 10. This embodiment helps in complete automation of the partitioning of the compartments 2, 3, which enables partitioning of the compartments when the cleaning operation is completed, and which removes the partition when the cleaning operation begins. In an alternate embodiment, the controller 23 is not connected to the microcontroller 20, however, the microcontroller 20 is programed to handle the movement of the separator 5 according to predefined rules, or there may be certain sensors provided inside the dishwasher which can help in identifying the presence of water in the upper compartment 2, and the microcontroller 20 shall receive the data from these sensors to handle extending and collapsing of the separator 5. In one embodiment, the controller 23 may just send either of the completing signal 22 or the starting signal 25 to the microcontroller 20. In such scenario, at least one of the extending or collapsing of the separator is handled manually or through predefined rules by the microcontroller 20.

[0049] Fig. 2 shows the system 1 when the upper compartment 2 of the dishwasher 4 is being drawn out of the dishwasher 4. It can be noted when the upper compartment 2 is being drawn out, the leftover water 27 in droplets drops onto the separator 5 which is in the extended position 10. In this extended position 10, the separator 5 is shown to be in complete extended form, and both the free end 13 and the fixed end 18 attached to the rotating wheel 17 are visible. The free end 13 can be seen in proximity to the second wall 9 which is opposite to the first wall, and the fixed end 18 is shown to be in proximity to the first wall 6. The figures show that when the separator 5 moves into the extended position, the partition is established in the upper compartment 2 and the lower compartment 3, such that the leftover water 27 does not drop into the lower compartment 3, and the leftover water 27 drops onto the separator 5. This helps in achieving a qualitative cleaning operation. Moreover, when the separator 5 winds the droplets of leftover water 27 collected onto the separator 5 shall be lodged out into a space between the rotating wheel 17 and the first wall 6.

[0050] Fig. 3 shows a separator 5, which is provided in a zebra or accordion curtain structure. The separator is shown with various stripes 16 which are made onto a single sheet of the separator 15 by applying pressure while creating folds of the adjacent stripes 16. This type of separator eliminates requirement of the rotating wheel 17. Even, the collapsible rod unit 14 can be eliminated by using such separator 5. This type of separator 5 can have a free end and a fixed end. The fixed end can be fixed to one side of the wall of the dishwasher, while the free end can be pulled to achieve the extended position of the separator or pushed to achieve the collapsed position of the separator. Even, the metal head can be eliminated, and a simple hook can be provided attached to the free end of the separator. In the extended position this hook can be hooked to a hanging structure provided on the opposite wall, opposite to the wall fixing the fixed end of the separator.

[0051] In a further embodiment of the invention the system for partitioning two or more compartments of a dishwasher including the separator can be sold separately as a unit and can be installed within a dishwasher by a user.

[0052] Thus, the present invention provides for a system 1 for partitioning two or more compartments 2, 3 of a dishwasher which are placed one over another in the dishwasher 4, and one or more dishes are adapted to be kept in each of the compartments 2, 3 for cleaning. The system includes a separator 5, and a movement means 11. The separator 5 is coupled to at least one of a first wall 6 of the dishwasher 4 at a first location 7, and to be in an extended position 8 by extending in proximity to a second wall 9 opposite to the first wall 6, and to be in a collapsed position 10 by being in collapsed form in proximity to the first wall 6. The movement means 11 extends the separator 5 to be in the extended position 8 from the collapsed position 10, or to collapse the separator 5 to be in the collapsed position 10 from the extended position 8.

List of reference numbers

[0053]

1	system
2	upper compartment
3	lower compartment
4	dishwasher
5	separator
6	first wall
7	first location
8	extended position
9	second wall
10	collapsed position
11	movement means
12	metal head
13	free end of the separator
14	collapsible rod unit
15	hollow rods
16	strips of the separator
17	rolling wheel
18	fixed end of the separator
19	motor
20	microcontroller
21	triggering signal
22	completing signal
23	controller
24	first triggering signal
25	starting signal
26	second triggering signal
27	leftover water

Claims

1. A system (1) for partitioning two or more compartments (2, 3) of a dishwasher which are placed one over another in the dishwasher (4), and one or more dishes are adapted to be kept in each of the compartments (2, 3) for cleaning, the system (1) comprising:

- a separator (5) adapted to be coupled to at least one of a first wall (6) of the dishwasher (4) at a first location (7), the separator (5) is adapted to be in an extended position (8) by extending in proximity to a second wall (9) opposite to the first wall (6) and to be in a collapsed position (10) by being in collapsed form in proximity to the first wall (6), and
- a movement means (11) adapted to extend the separator (5) to be in the extended position (8) from the collapsed position (10) and adapted to collapse the separator (5) to be in the collapsed position (10) from the extended position (8).

2. The system (1) according to the claim 1, wherein the movement means (11) comprising a metal head (12) fixed to a free end (13) of the separator (5).

3. The system (1) according to the claim 2, wherein the move mechanism (11) comprising:

- a collapsible rod unit (14) physically connected to the metal head (12), the collapsible rod unit (14) is adapted to extend when the separator (5) is adapted to be in the extended position (8) and is adapted to collapse when the separator (5) is adapted to be in the collapsed position (10).

4. The system (1) according to the claim 3, wherein the collapsible rod unit (14) comprises a plurality of hollow rods (15) telescopically connected to each other, so that one hollow rod (15) collapses into another hollow rod (15) when the collapsible rod unit (14) extends, and hollow rods (15) extend out from each other when the collapsible rod unit (14) collapses.

5. The system (1) according to the any of the claims 1 to 4, wherein the separator (5) is having an alternate foldable structure, where the separator is divided into multiple strips (16), and adjacent strips (16) are folded onto each other when the separator (5) is in the collapsed position (10).

6. The system (1) according to any of the claims 1 to 4, wherein the movement means (11) comprises a rolling wheel (17) having one end (18) of the separator (5) fixed to the rolling wheel (17), the rolling wheel (17) is adapted to rotate to wind or unwind the separator (5) onto the rolling wheel (17), the separator (5) is adapted to be wind completely onto the rolling wheel (17) when the separator (5) is in the collapsed position (10) and is adapted to be unwind

completely when the separator (5) is in the extended position (8).

7. The system (1) according to any of the claims 1 to 6 comprising:

- a motor (19) functionally coupled to the movement means (11) for triggering the movement means (11) to extend the separator (5) to be in the extended position (8) from the collapsed position (10), or to collapse the separator (5) be in the collapsed position (10) from the extended position (8).

8. The system (1) according to the claim 7 comprising:

- a microcontroller (20) coupled to the motor (19) and adapted to generate and send a triggering signal (21) to the motor (19), wherein the motor (19) is adapted to receive the triggering signal (21) and trigger the movement means (11).

9. The system (1) according to claim 8, wherein the microcontroller (20) is adapted to receive a completing signal (22) related to completion of a washing operation of the dishes from a controller (23) of the dishwasher (4), to process the completing signal (22), and to generate a first triggering signal (24) based on the processing of the completing signal (22), wherein the motor (19) is adapted to receive the first triggering signal (24), and adapted to move the separator (5) in the extended position (8).

10. The system (1) according to any of the claims 8 or 9, wherein the microcontroller (20) is adapted to receive a starting signal (25) related to starting of a washing operation of the dishes from the controller (23) of the dishwasher, to process the starting signal (25), and to generate a second triggering signal (26) based on the processing of the starting signal (25), wherein the motor (11) is adapted to receive the second triggering signal (26), and adapted to move the separator (5) in the collapsed position (10).

11. A method for partitioning two or more compartments (2, 3) of a dishwasher (4) which are placed one over another in the dishwasher (4), and one or more dishes are adapted to be kept in each of the compartments (2, 3) for cleaning, the dishwasher (4) is provided with a separator (5) coupled to at least one of a first wall (6) of the dishwasher at a first location (7), the method comprising:

- collapsing and extending the separator (5) using a movement means (11), such that the separator (5) to be in a collapsed position (10) by being in collapsed form in proximity to the first wall (6) and extending the separator (5) to be in an extended position (8) by extending in proximity to a second wall (9) opposite to the first wall (6).

12. The method according to the claim 11, wherein the movement means (11) includes a metal head (12) and a collapsible rod unit (14), the metal head (12) is fixed to a free end (13) of the separator (5), and the collapsible rod unit (14) is physically coupled to the metal head (12), the method comprising:

- collapsing and expanding the collapsible rod unit (14), such that the separator (5) is in the extended position (8) when the collapsible rod unit (14) expands, and the separator (5) is in the collapsed position (10) when the collapsible rod unit (14) collapses.

13. The method according to any of the claims 11 or 12 comprising:

- triggering the movement means (11) by using a motor (19) to extend the separator (5) to be in the extended position (8) from the collapsed position (10), or to collapse the separator (5) be in collapsed position (10) from the extended position (11).

14. The method according to the claim 13 comprising:

- generating a triggering signal (21) by a microcontroller (20); and
- receiving the triggering signal (21) by the motor (19) and accordingly triggering the movement means (11).

15. The method according to the claim 14 comprising:

- receiving a completing signal (22) related to completion of a washing operation of the dishes or a starting signal (25) related to starting of a washing operation of the dishes by the microcontroller (20) from a controller (23) of the dishwasher (4); and
- processing the completing signal (22) or the starting signal (23) by the microprocessor (20), and accordingly generating the triggering signal (21, 24, 26) for either moving the separator (5) in the extended position (8) or moving the separator (5) in the collapsed position (10).

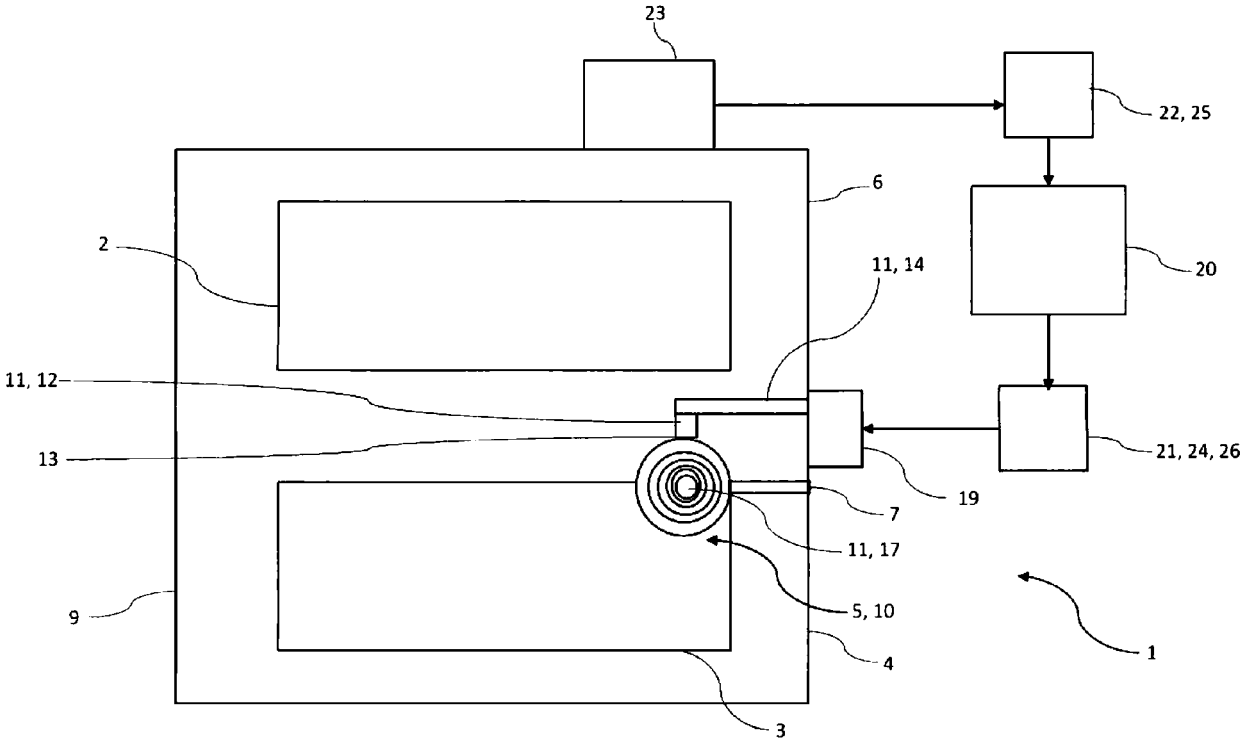

Fig 1

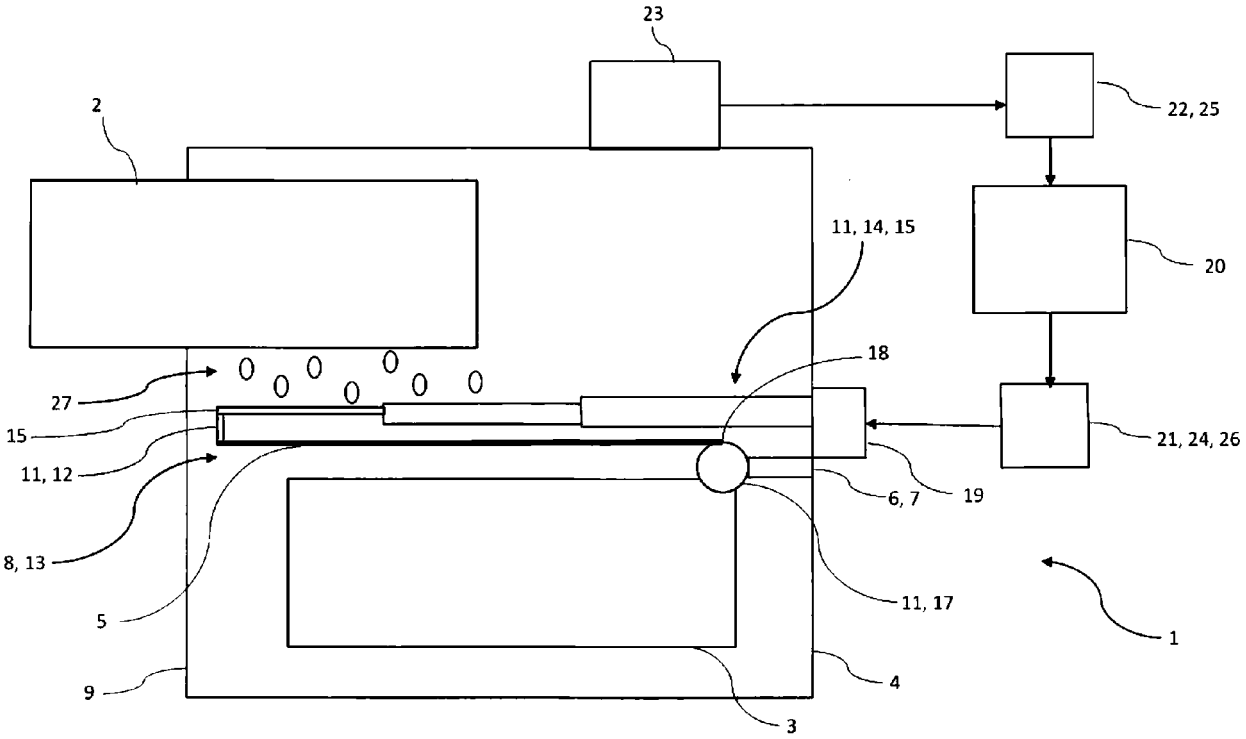

Fig 2

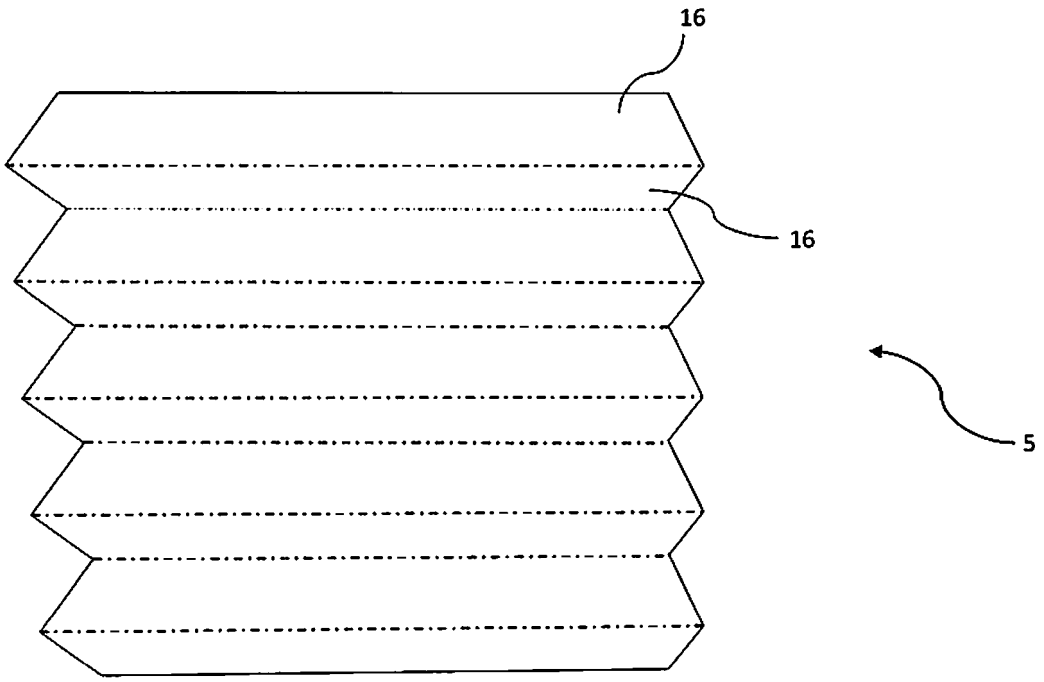

Fig 3

Europäisches Patentamt
European Patent Office
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EUROPEAN SEARCH REPORT

Application Number
EP 18 16 1138

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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