

The claims defining the invention are as follows:

1. A valve assembly for allowing filling and draining of a container with a liquid, comprising:
 - a filling catchment containing at least one opening for receiving liquid and at least one drainage orifice, the filling catchment being located within the container;
 - a draining outlet adapted to convey liquid out of the container;
 - a plugging member configured to move between a first position where the plugging member allows liquid to flow into the draining outlet and a second position where the plugging member prevents liquid from flowing through the draining outlet; and
 - a biasing member which acts to retain the plugging member in the first position unless a force is applied above a predetermined value.
2. The valve assembly according to claim 1, wherein the plugging member is positioned at least partially over the draining outlet.
3. The valve assembly according to either claim 1 or 2, wherein the movement from the first to the second position takes place in a substantially vertical direction.
4. The valve assembly according to either claim 1 or 2, wherein the movement from the first to the second position takes place in an arc-like direction.
5. The valve assembly according to claim 4, wherein at least one of the filling catchment and the plugging member are connected to a pivotable arm.
6. The valve assembly according to any one of the preceding claims, wherein the at least one drainage orifice allows the flow of liquid out of the container.
7. The valve assembly according to claim 6, wherein the flow of liquid out of the container through the drainage orifice is slower than the flow of liquid out of the container through the drainage outlet when the plugging member is in the first position.

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8. The valve assembly according to either claim 6 or 7, wherein the plugging member includes a channel connected to the drainage orifice for conveying liquid out of the container.
9. The valve assembly according to any one of the preceding claims, wherein the plugging member comprises a plug sized to fit the draining outlet.
10. The valve assembly according to claim 9, wherein the plug is at least partially hemispherical in shape.
11. The valve assembly according to claim 9, wherein the plug is at least partially frusto-conical in shape.
12. The valve assembly according to any one of claims 9 to 11, wherein the plugging member further comprises a rod that is at least partially disposed within a tube that does not move when the plugging member moves from the first to the second position or vice versa.
13. The valve assembly according to claim 12, wherein the tube is connected to a drainage enclosure which at least partially encapsulates the plugging member and at least a first end of the drainage outlet, and wherein the drainage enclosure allows fluid flow from an interior of the container to the drainage outlet.
14. The valve assembly according to any one of the preceding claims, wherein the biasing member comprises a spring.
15. The valve assembly according to any one of the preceding claims, wherein the filling catchment is at least partially frusto-conical or conical in shape.

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16. The valve assembly according to any one of the preceding claims, wherein the plugging member moves from the first position to the second position while liquid enters into the opening of the filling catchment, and returns from the second position to the first position when liquid ceases to be poured into the opening of the filling catchment.
17. The valve assembly according to any one of the preceding claims, wherein the assembly further comprises an overflow outlet which defines a maximum height of the liquid in the container.
18. The valve assembly according to claim 17, wherein the overflow outlet is adapted to be adjustable such that the maximum height that the container can be filled to can be changed by a user.
19. The valve assembly according to any one of the preceding claims, wherein the filling catchment includes a mesh or grate at least partially over the at least one drainage outlet.
20. A container capable of being filled and drained, including a valve assembly according to any one of claims 1 to 18.
21. A system for filling and draining containers, comprising:
 - a plurality of containers, each container including a valve assembly, wherein each valve assembly comprises:
 - a filling catchment containing at least one opening for receiving liquid and at least one drainage orifice, the filling catchment being located within the container;
 - a draining outlet adapted to convey liquid out of the container;
 - a plugging member configured to move between a first position where the plugging member allows liquid to flow into the draining outlet and a second position where the plugging member prevents liquid from flowing through the draining outlet; and

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a biasing member which acts to retain the plugging member in the first position
unless a force is applied above a predetermined value;
a holding tank containing a liquid;
a conduit for allowing the flow of the liquid from the holding tank to the at least one
opening of the valve assembly of at least one of the containers;
wherein no physical connection exists between the conduit and the at least one opening
to which it allows the flow of liquid to.

22. The system according to claim 21, wherein the valve assembly is an assembly according to any one of claims 1 to 19.
23. The system according to either claim 21 or 22, wherein the system is configured to allow a user to insert and/or remove containers from the system.
24. The system according to any one of claims 21 to 23, wherein each the plurality of containers are vertically arranged to allow at least one of:
conveying liquid from the drainage outlet of the associated valve assembly towards the opening of the valve assembly of another container; and/or
receiving liquid into the opening of the associated valve assembly from the drainage outlet of the valve assembly of another container.
25. The system according to claim 24, wherein at least one of the containers includes an overflow outlet which is configured so that liquid that passes through the overflow outlet is conveyed towards the opening of the valve assembly of another container.
26. The system according to claim 24 or 25, wherein the conduit allows the flow of liquid from the holding tank to the at least one opening of the valve assembly of one of the containers.
27. The system according to any one of claims 24 to 26, wherein the system is configured to allow a user to insert and/or remove containers from the system, and the system is

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arranged so that when a container is removed, liquid that would be otherwise be conveyed into that container is instead conveyed into another container located below the removed container.

28. The system according to any one of claims 21 to 27, wherein the holding tank is located below the plurality of containers.
29. The system according to any one of claims 21 to 28, further comprising a pump for conveying liquid from the holding tank to the conduit.
30. The system according to any one of claims 21 to 29, wherein the containers are trays for growing plants and the liquid is water or nutrient enriched water.
31. A method for filling and draining containers, comprising:
providing a plurality of vertically arranged containers, wherein each container includes:
a valve assembly according to any one of claims 1 to 19;
wherein each the plurality of containers are vertically arranged to allow at least one of:
conveying liquid from the drainage outlet of the associated valve assembly towards the opening of the valve assembly of another container; or
receiving liquid into the opening of the associated valve assembly from the drainage outlet of the valve assembly of another container;
conveying liquid into the opening of an uppermost container for predetermined periods at predetermined intervals so as to fill the plurality of containers.
32. The method according to claim 31, wherein each container includes an overflow outlet adapted to be adjustable so that the maximum level the container can be filled to can be changed, and the method further includes adjusting the overflow outlet to define a predetermined level that the container can be filled to.

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33. The method according to either claim 31 or 32, wherein the liquid is conveyed to the uppermost container from a holding tank.
34. The method according to claim 33, wherein the holding tank is connected to a conduit and a nozzle located to convey liquid into the uppermost container, and the liquid is conveyed at least partially by the use of a pump in fluid communication with the holding tank.
35. The method according to claim 34, wherein at least one of the predetermined times and intervals are controlled by a pump in fluid communication with the holding tank.