

1 Claims

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3 1. A system for dispensing a beverage into a container, the system comprising:
4 at least one dispenser unit, the at least one dispenser unit comprising
5 a dispenser head, wherein the dispenser head comprises:
6 at least one fluid port;
7 a moveable seal member which is configured to form a sealing barrier between at
8 least a portion of the container and the dispenser head.

9

10 2. The system as claimed in claim 1 wherein the at least one fluid port
11 is a beverage outlet and/or pressure port.

12

13 3. The system as claimed in claim 1 or 2 comprising at least one support member
14 configured to contact, hold, position and/or support the container.

15

16 4. The system as claimed in claim 1 or 2 wherein at least one support member is
17 configured to contact, hold, position and/or support the container at the mouth, lip
18 and/or rim of the container.

19

20 5. The system as claimed in claim 2 wherein at least one support member is
21 configured to contact, hold, position and/or support the container at the base or
22 side of the container.

23

24 6. The system as claimed in any of claims 3 to 5 wherein the at least one support is
25 configured to position and/or align the container with the moveable seal member to
26 ensure an effective seal.

27

28 7. The system as claimed in any of claims 3 to 6 wherein the at least one support
29 member is shaped and/or dimensioned to allow an inner, outer and/or upper
30 surface of the mouth, lip and/or rim of the container to rest on the support member
31 when the container is loaded or positioned in the dispenser unit.

32

33 8. The system as claimed in any preceding claim wherein the moveable seal member
34 is configured to be movable between a first condition in which the seal member is
35 spaced from the container and a second condition in the sealing member is in
36 contact with at least a portion of the container to form a sealing barrier.

- 1
- 2 9. The system as claimed in any preceding claim wherein the at least a portion of the
- 3 container is the mouth, lip and/or rim of the container.
- 4
- 5 10. The system as claimed in any preceding claim wherein the sealing member is
- 6 configured to contact, grip and/or clamp an inner, outer or upper surface of the
- 7 mouth, lip and/or rim of the container.
- 8
- 9 11. The system as claimed in any preceding claim wherein the seal member comprises
- 10 a sealing element made from a material selected from the group comprising
- 11 silicone, rubber, plastic or resin.
- 12
- 13 12. The system as claimed in any preceding claim wherein the seal member is
- 14 configured to move in a substantially vertical direction.
- 15
- 16 13. The system as claimed in any preceding claim comprising a screen, door and/or
- 17 splashguard configured to isolate the container from the user during dispensing of
- 18 the beverage.
- 19
- 20 14. The system as claimed in any preceding claim wherein the container is selected
- 21 from the group comprising drinking vessels, bottles, mugs, cups, jugs, glasses,
- 22 beakers, tumblers and/or tankards.
- 23
- 24 15. The system as claimed in any preceding claim wherein the container is made from
- 25 a range of materials including hard or soft plastic, glass, ceramic, cardboard, paper,
- 26 waxed paper and/or foam.
- 27
- 28 16. The system as claimed in any preceding claim wherein the beverage is dispensed
- 29 into the container in less than 5 seconds.
- 30
- 31 17. The system as claimed in any preceding claim wherein beverage is a carbonated
- 32 and/or fizzy beverage.
- 33
- 34 18. The system as claimed in any preceding claim wherein beverage is an alcoholic or
- 35 non-alcoholic.
- 36
- 37

- 1 19. The system as claimed in any preceding claim wherein the at least one pressure
2 port is connected to at least one pressure source.
3
- 4 20. The system as claimed in claim 19 wherein the at least one pressure source is a
5 gas supply is selected from the group comprising: an inert gas, air, carbon dioxide
6 and/or a mixture of gases.
7
- 8 21. The system as claimed in any preceding claim wherein the pressure port is
9 configured to create a pressure differential between the interior and exterior of the
10 container.
11
- 12 22. The system as claimed in any preceding claim wherein the seal member is
13 configured to maintain a pressure differential between the interior and exterior of
14 the container during the dispensing of the beverage to prevent oxidation or
15 contamination of the beverage.
16
- 17 23. The system as claimed in any preceding claim wherein the beverage outlet is
18 connected to a dip tube
19
- 20 24. The system as claimed in any preceding claim wherein the beverage outlet is
21 connected to a nozzle.
22
- 23 25. The system as claimed in any preceding claim wherein the seal member and/or
24 dispenser head is movable relative to the at least one support member.
25
- 26 26. The system as claimed in any preceding claim comprising a plurality of support
27 members.
28
- 29 27. The system as claimed in any preceding claim wherein the first support member is
30 configured to contact and/or hold the container at the mouth, lip and/or rim of the
31 container and a second support member is configured to contact and/or hold a side
32 and/or base of the container.
33
- 34 28. The system as claimed in any preceding claim wherein a valve is connected to the
35 at least one fluid port and is configured to operation between a first valve condition
36 where the fluid port is a pressure port and a second valve condition where the fluid
37 port is a beverage outlet.

- 1 29. The system as claimed in any preceding claim wherein the base support member is
2 removably mountable on the dispenser.
3
- 4 30. The system as claimed in any preceding claim comprising a plurality of base
5 support members of differing dimensions and/or shapes are provided to adjust the
6 height and/or position of a container in the dispenser.
7
- 8 31. The system as claimed in claim 29 or claim 30 wherein the base support member is
9 made of a transparent, translucent or semi-opaque material.
10
- 11 32. The system as claimed in any preceding claim comprising a control unit configured
12 to control the pressurising of the container through the at least one pressure port
13 and the dispensing of beverage under counterpressure.
14
- 15 33. The system as claimed in any preceding claim comprising sensors to monitor
16 beverage dispenser performance to allow 'real-time' adjustment of dispensing
17 parameters selected from the group including flow rates, pumping rates,
18 flow/pumping times, container threshold counter-pressures and cooler parameters
19 such as temperature.
20
- 21 34. The system as claimed in any preceding claim wherein the control unit is
22 programmed to actuate safety locks to prevent access and/or release of the
23 container during dispensing.
24
- 25 35. A system for dispensing a beverage into a container, the system comprising:
26 a support frame comprising a plurality of dispenser units;
27 wherein each dispenser unit comprises
28 a dispenser head comprising a beverage outlet and at least one pressure port; and
29 a moveable seal member which is configured to form a sealing barrier between at
30 least a portion of the container and the dispenser head.
31
- 32 36. A method of dispensing a beverage into a container, the method comprising:
33 providing a beverage dispenser system comprising
34 at least one dispenser unit, the at least one dispenser unit comprising
35 a dispenser head, wherein the dispenser head comprises:
36 at least one fluid port; and

- 1 a seal member;
2 moving the seal member to contact at least a portion of the container to form a
3 sealing barrier between the dispenser head and the container;
4 pressurising an interior volume of the container with a pressurised fluid and
5 pumping the beverage into the interior volume of the container through the at least
6 one fluid port.
7
- 8 37. The method as claimed in claim 36 comprising forming a differential pressure
9 between an internal and external volume of the container when a sealing barrier
10 between the dispenser head and the container is formed.
11
- 12 38. The method as claimed in claim 36 or claim 37 comprising increasing the pressure
13 in the container above atmospheric pressure prior to pumping the beverage into the
14 container.
15
- 16 39. The method as claimed in any of claims 36 to 38 comprising dispensing the
17 beverage under counterpressure.
18
- 19 40. The method as claimed in any of claims 36 to 39 comprising venting or removing
20 pressurised fluid from the interior volume of the container while the beverage is
21 pumped into the container or after the beverage has been pumped into the
22 container.
23
- 24 41. The method as claimed in any of claims 36 to 40 wherein the at least a portion of
25 the container is the mouth, lip and/or rim of the container.
26
- 27 42. The method as claimed in any of claims 36 to 41 wherein the seal member is
28 lowered onto at least a portion of the container.
29
- 30 43. The method as claimed in any of claims 36 to 42 wherein the sealing member
31 contacts, grips and/or clamps an inner, outer or upper surface of the mouth, lip
32 and/or rim of the container.
33
- 34 44. The method as claimed in any of claims 36 to 43 comprising holding the container
35 stationary throughout the formation of the seal, pressurising of the container and/or
36 pumping of the beverage.

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2 45. The method as claimed in any of claims 36 to 44 comprising reducing an internal
3 pressure of the container to atmospheric pressure during or after pumping the
4 beverage into the container.
5
6 46. The method as claimed in any of claims 36 to 45 comprising moving the seal
7 member away from the rim, upper edge or inner edge of the container to break the
8 sealing barrier between the dispenser head and the container after the beverage is
9 pumped into the container.
10
11 47. The method as claimed in any of claims 36 to 46 comprising dispensing the
12 beverage into the container in less than 5 seconds.
13
14 48. The method as claimed in any of claims 36 to 47 comprising supporting the
15 container at the mouth, lip, rim, side and/or base of the container.
16
17 49. The method as claimed in any of claims 36 to 48 comprising moving the dispenser
18 head to contact the seal member with a rim, upper edge or inner edge of the
19 container to form a sealing barrier between the dispenser head and the container.
20
21 50. A method of dispensing a carbonated or fizzy beverage into a plurality of
22 containers, the method comprising:
23 providing a beverage dispenser system comprising
24 plurality of dispenser units, wherein each dispenser unit comprises
25 a dispenser head, wherein the dispenser head comprises:
26 at least one fluid port; and
27 a seal member;
28 mounting a first container on a first dispenser unit;
29 moving the seal member to contact at least a portion of the first container to form a
30 sealing barrier between the dispenser head and the first container;
31 pressuring an interior volume of the first container with a gas; and
32 pumping the beverage into the interior volume of the first container through the at
33 least one fluid port.
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