

3. **Beverage-ingredient capsule and capsule-based beverage production method**

EP1826148

2006-02-27

NESTEC*

2007-08-29 2007-08-29

A sealed **capsule** (1) for containing an ingredient (2) is provided with at least one essentially-rigid inner jet direction-diverting member (3, 3') being arranged close to the inner side of a face (4) of the **capsule** (1). The inner jet direction-diverting member (3, 3') is designed to divert the direction of at least a portion of a water jet (5) injected through an opening (6) produced in the face (4). The invention further proposes the dynamical profiling of inner channels in at least one face (4) of the **capsule** (1) by pressing the face (4) of the **capsule** (1) against profiling means of (12) the **beverage** production device.

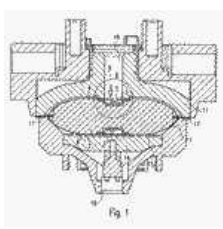
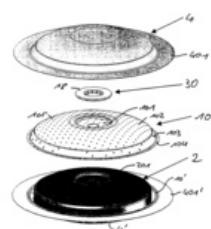
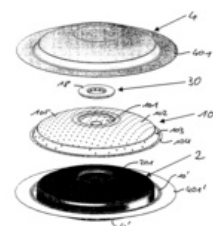
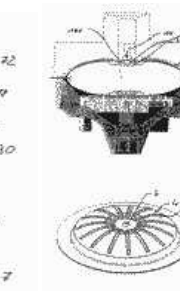
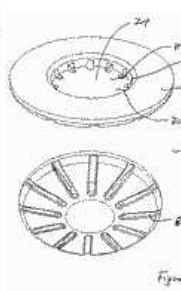
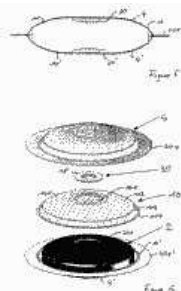
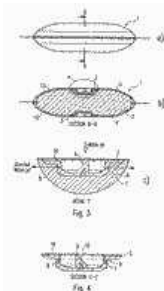


Fig. 2

4. **Capsule with reduced dripping**

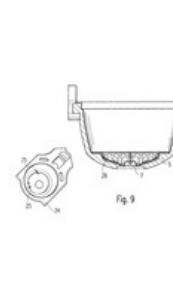
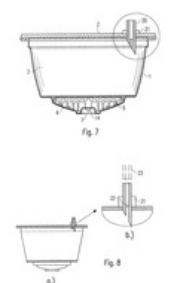
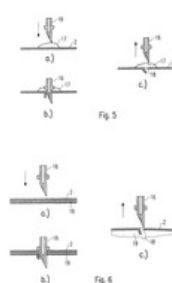
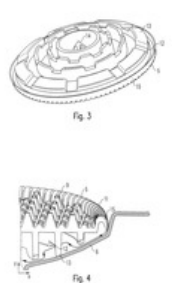
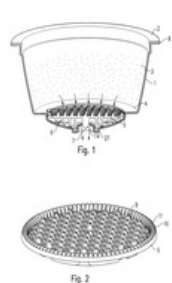
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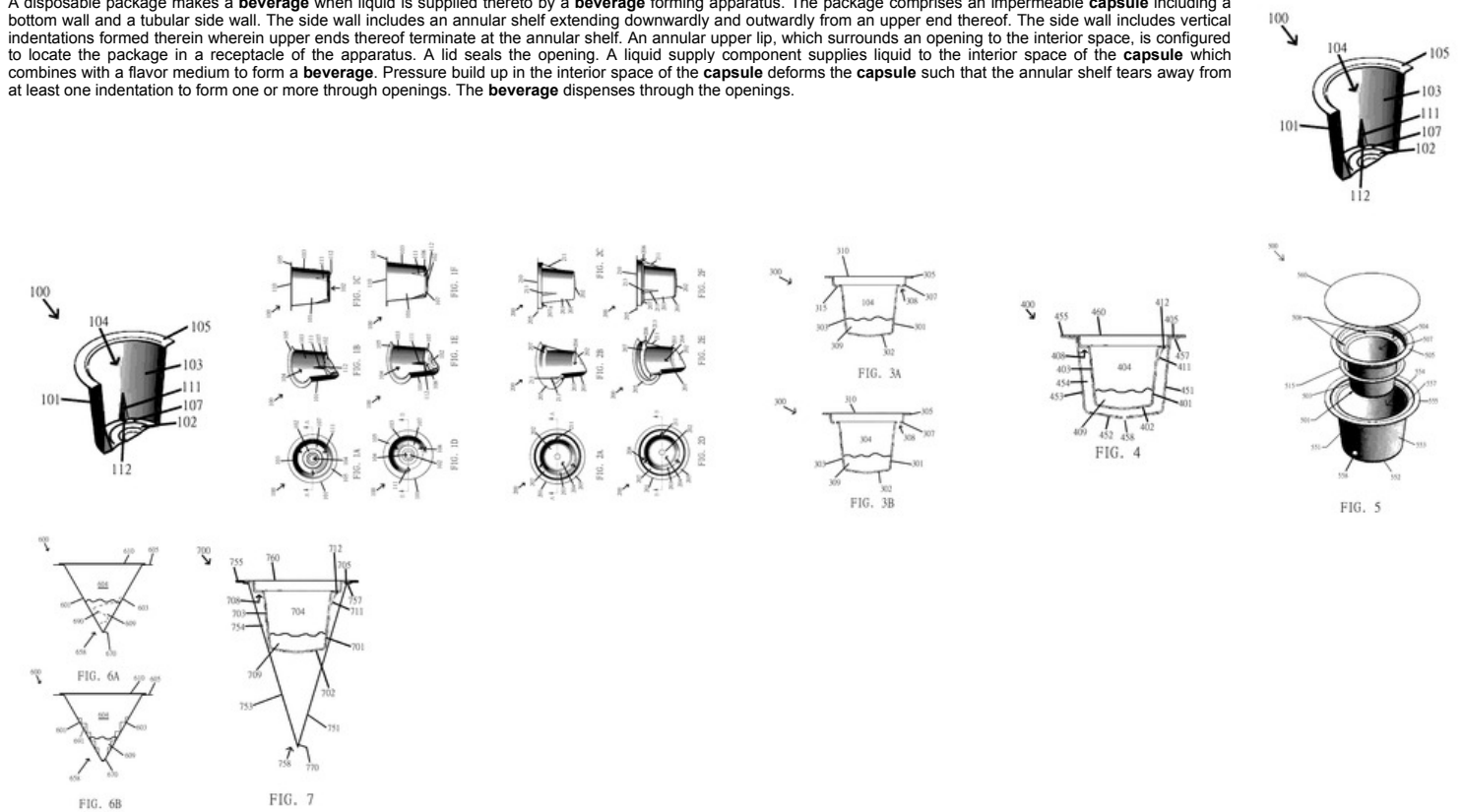
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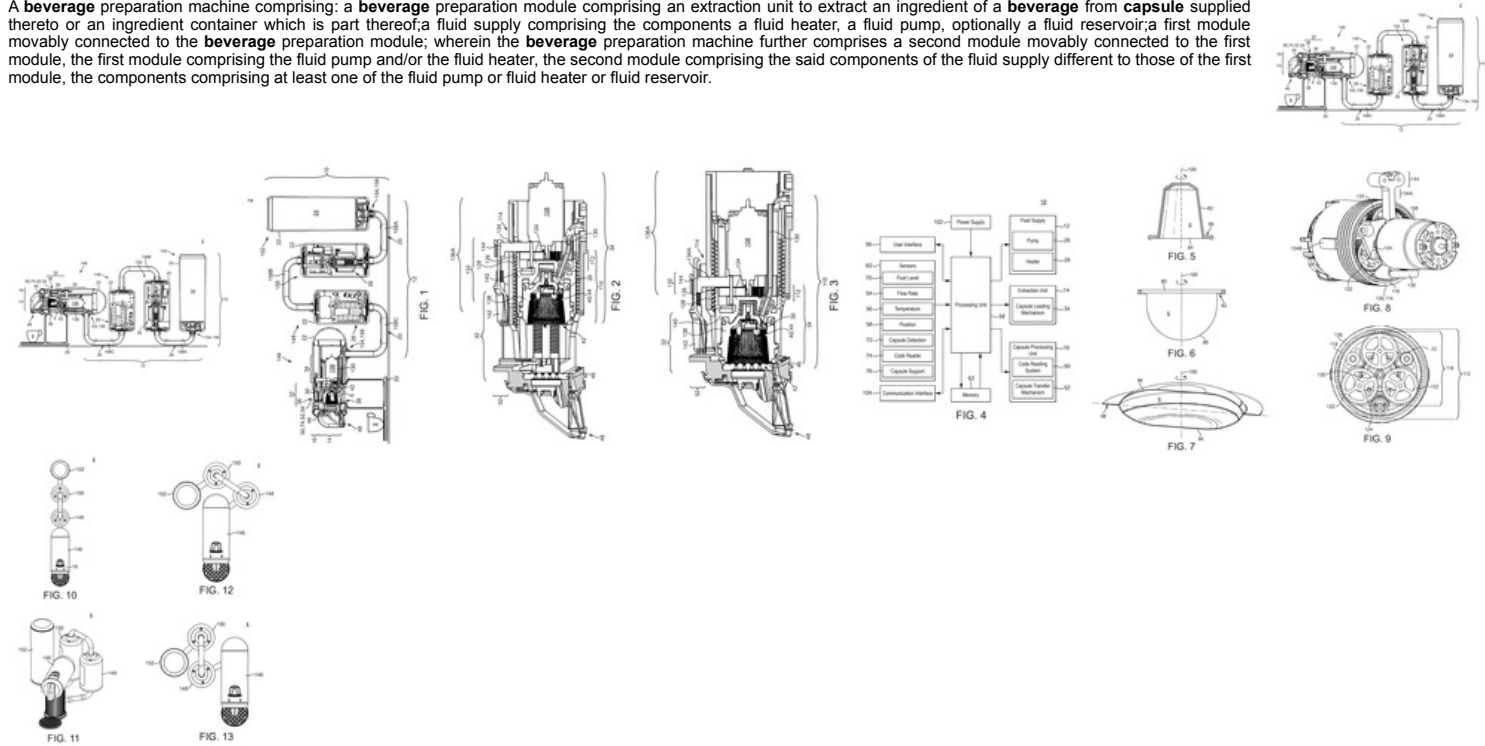
The invention relates to a **capsule** (1) containing ingredients for producing a **beverage**, wherein the ingredients are housed in a compartment (3), internal perforation means (5) are provided designed for opening the lower face (4) of the ingredient compartment (3) by having, caused by pressure inside ingredient compartment, the lower face act against the internal perforation means, the **capsule** being provided with valve means (15) arranged for selectively blocking the flow path from the lower face of the ingredient compartment to a **beverage** outlet (7) of the **capsule**.



A disposable package makes a **beverage** when liquid is supplied thereto by a **beverage** forming apparatus. The package comprises an impermeable **capsule** including a bottom wall and a tubular side wall. The side wall includes an annular shelf extending downwardly and outwardly from an upper end thereof. The side wall includes vertical indentations formed therein wherein upper ends thereof terminate at the annular shelf. An annular upper lip, which surrounds an opening to the interior space, is configured to locate the package in a receptacle of the apparatus. A liquid supply component supplies liquid to the interior space of the **capsule** which combines with a flavor medium to form a **beverage**. Pressure build up in the interior space of the **capsule** deforms the **capsule** such that the annular shelf tears away from at least one indentation to form one or more through openings. The **beverage** dispenses through the openings.

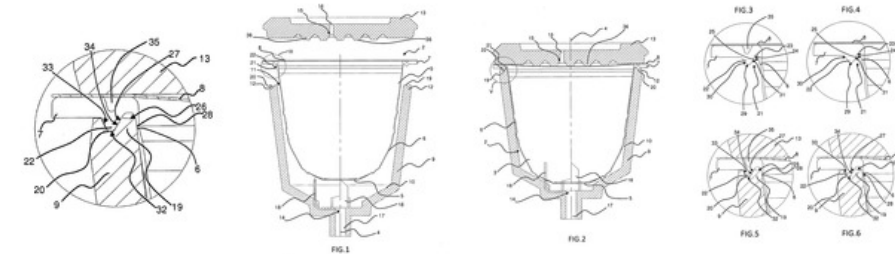
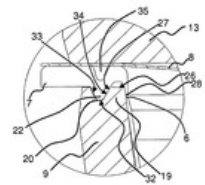


A **beverage** preparation machine comprising: a **beverage** preparation module comprising an extraction unit to extract an ingredient of a **beverage** from **capsule** supplied thereto or an ingredient container which is part thereof; a fluid supply comprising the components a fluid heater, a fluid pump, optionally a fluid reservoir; a first module movably connected to the **beverage** preparation module; wherein the **beverage** preparation machine further comprises a second module movably connected to the first module, the first module comprising the fluid pump and/or the fluid heater, the second module comprising the said components of the fluid supply different to those of the first module, the components comprising at least one of the fluid pump or fluid heater or fluid reservoir.



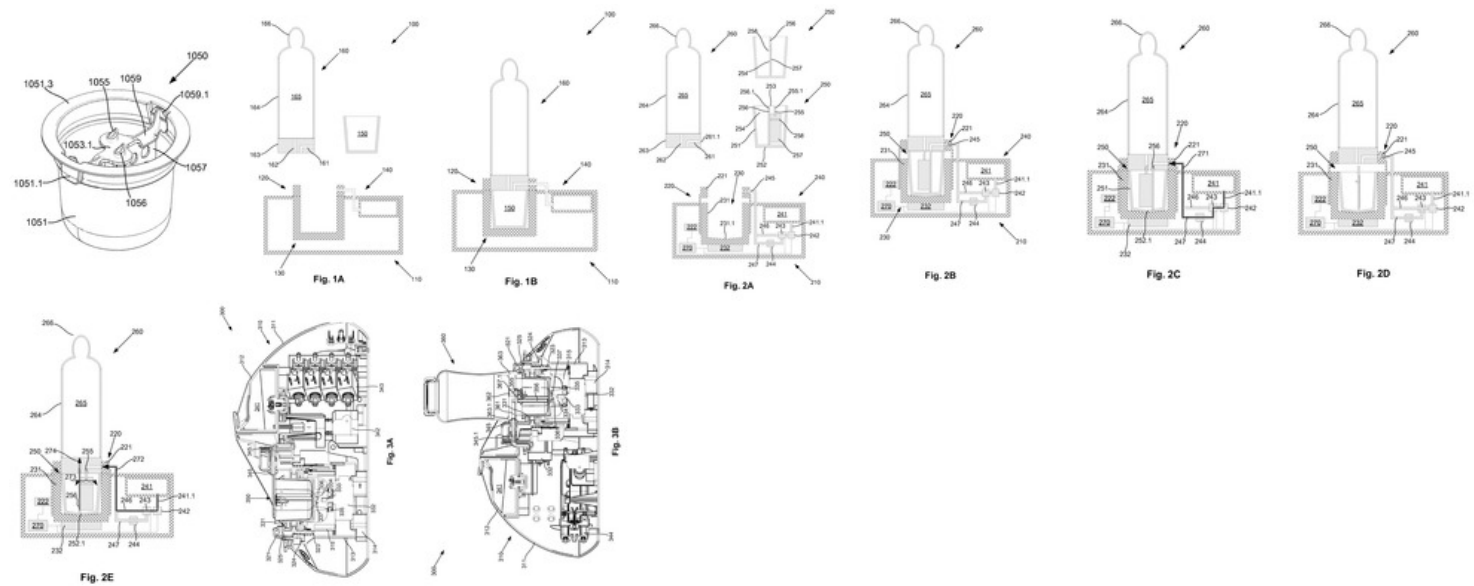
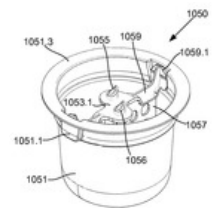
7.	System for making beverages	ITVR20120043	2012-03-14	CAFFITA SYSTEM CAFFITALY SYSTEM* CARRIE FORSYTH NAANTALI SYSTEM S P COFFEE STAR KAFFITALI SISTEM	2013-09-15 2013-09-15
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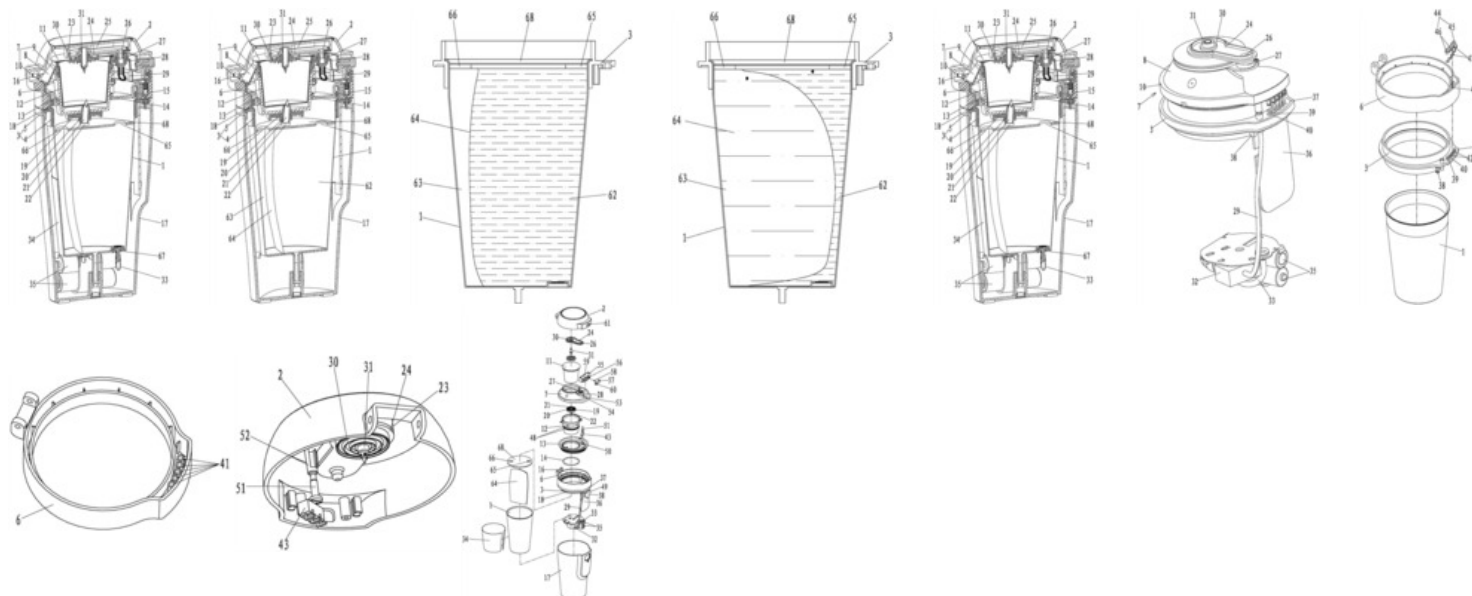
A system (1) for making beverages comprises a **capsule** (2) containing a powdered food substance which can be extracted to make a **beverage**, and a **capsule holder** (9) comprising an infeed opening (11) through which the **capsule** (2) can be inserted, delimited by an annular edge (12) at the top of which there is a projecting annular element (19) and/or respectively an annular seat (20). The **capsule** (2) comprises a body (3) comprising a lower wall (5), a lateral wall (6) and a perimetric edge (7) on which there is an annular groove (21) on whose surface there is a bottom zone (23) and, laterally positioned on opposite sides of the bottom zone, two inner lateral faces (24,25), and/or respectively there is an annular tooth (22) on whose surface there is a tip portion (29) and, laterally positioned on opposite sides of the tip portion, two outer lateral faces (30, 31). The **capsule holder** (9) and the **capsule** (2) can adopt a sealed configuration where the projecting annular element (19), inserted in the annular groove (21), is in sealed contact with at least one of the inner lateral faces (24, 25), and/or respectively the annular seat (20) receives inside it the annular tooth (22) and is in sealed contact with at least one of the outer lateral faces (30, 31).



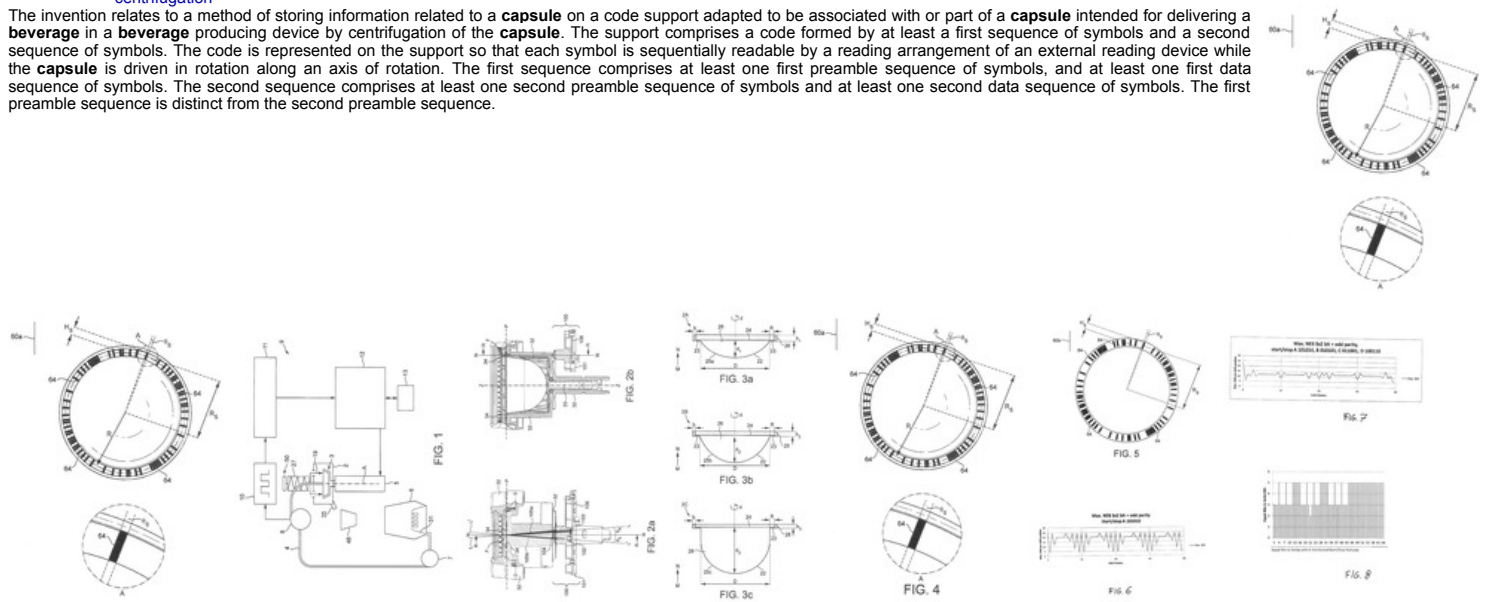
8.	A capsule for a beverage dispensing apparatus	WO2014122260	2013-02-07	NUTRICIA*	2014-08-14 2014-08-14
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A **capsule** (550) for use in apparatus for dispensing liquid **beverage**, the **capsule** including at least one **capsule** side wall (551), a **capsule** base (552) and a **capsule** lid (553) defining a **capsule** cavity containing concentrated **beverage** and first (555) and second (556) **capsule** conduits wherein the first **capsule** conduit extends from proximate the lid and terminates remote from the **capsule** base allowing fluid to be supplied to the **capsule** away from the **capsule** base and the second **capsule** conduit extends substantially along a length of the **capsule** and terminates adjacent the **capsule** base allowing fluid to be dispensed from the **capsule** via the second **capsule** conduit.

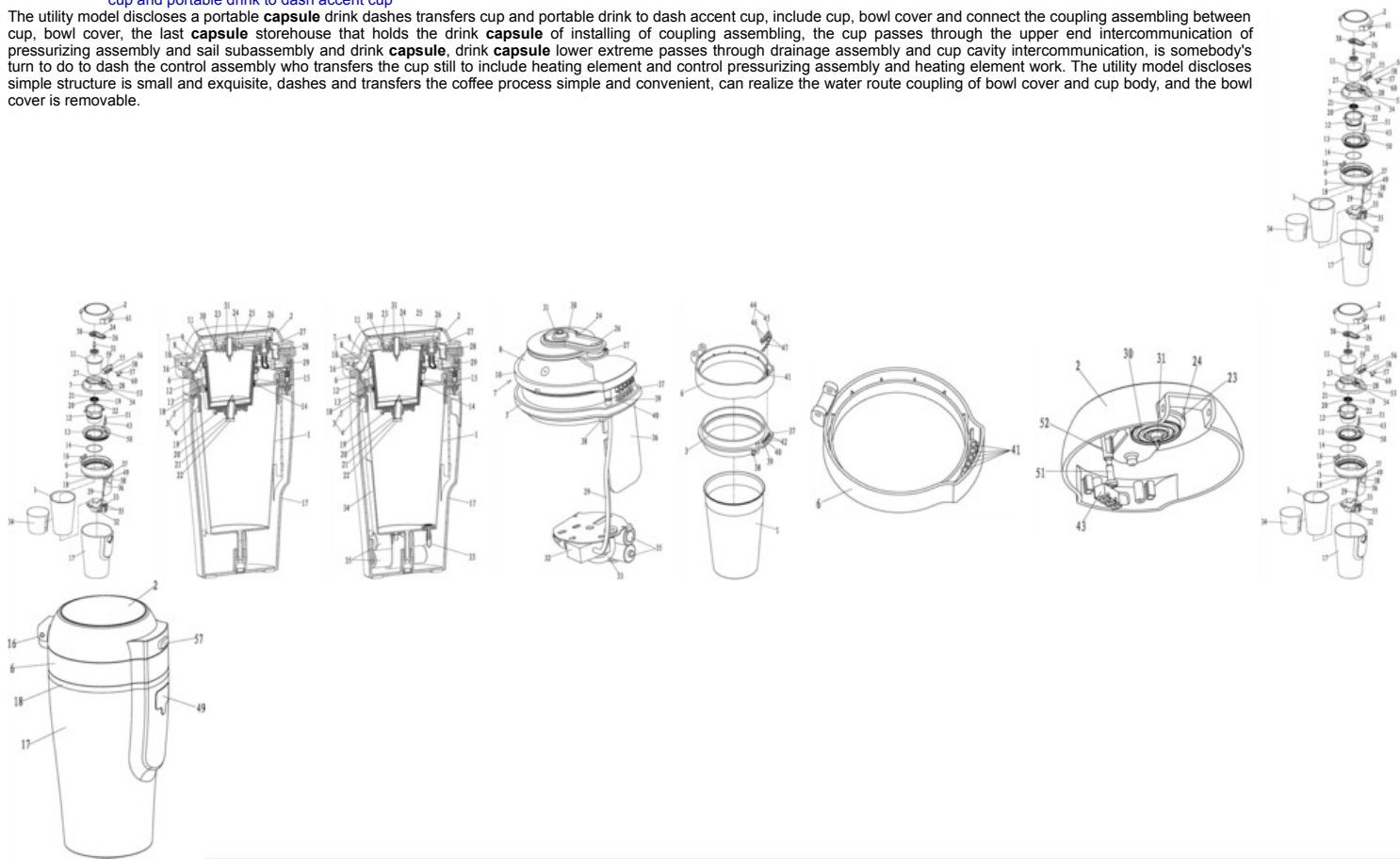


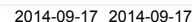


The invention relates to a method of storing information related to a **capsule** on a code support adapted to be associated with or part of a **capsule** intended for delivering a **beverage** in a **beverage** producing device by centrifugation of the **capsule**. The support comprises a code formed by at least a first sequence of symbols and a second sequence of symbols. The code is represented on the support so that each symbol is sequentially readable by a reading arrangement of an external reading device while the **capsule** is driven in rotation along an axis of rotation. The first sequence comprises at least one first preamble sequence of symbols, and at least one first data sequence of symbols. The second sequence comprises at least one second preamble sequence of symbols and at least one second data sequence of symbols. The first preamble sequence is distinct from the second preamble sequence.

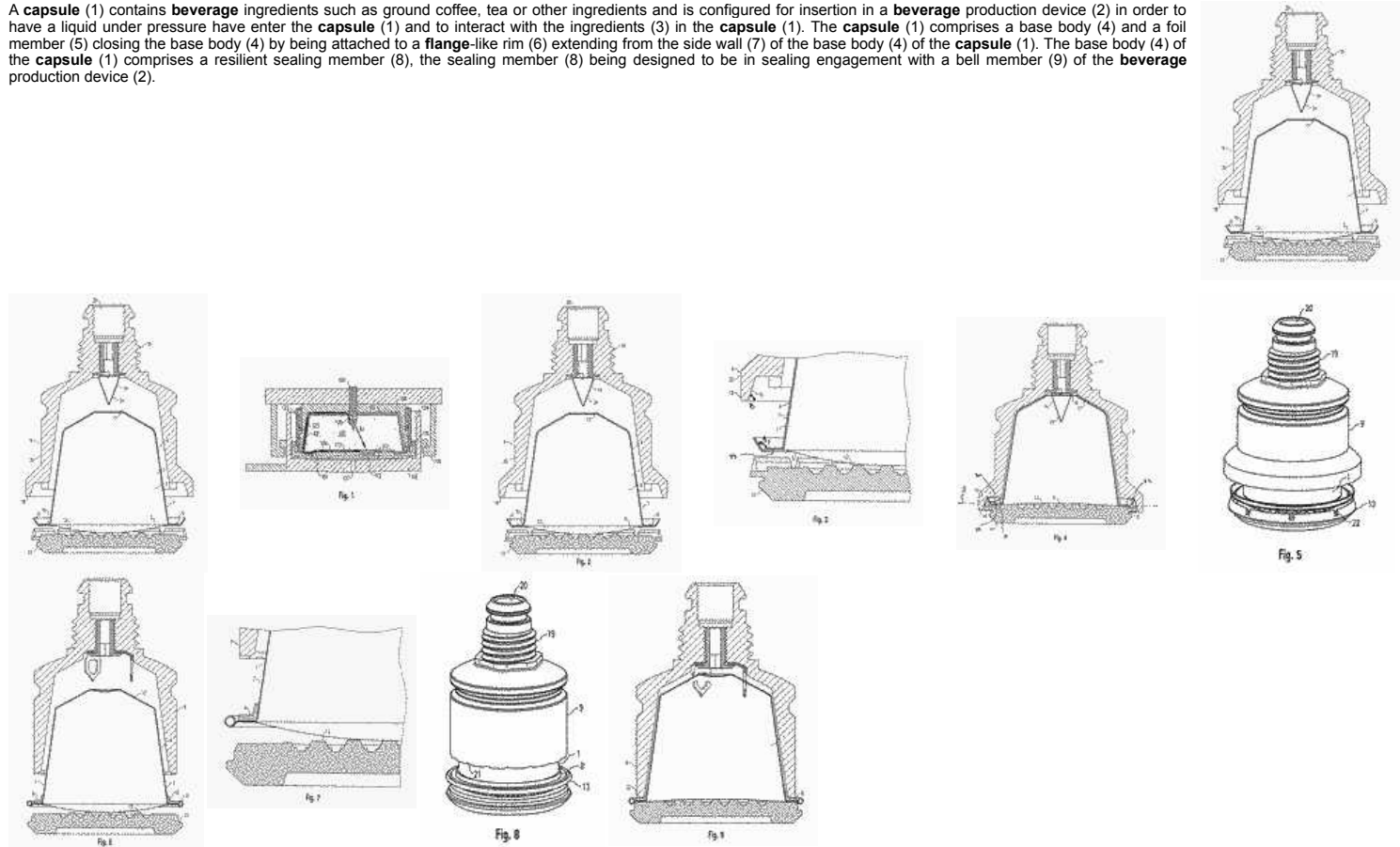


The utility model discloses a portable **capsule** drink dashes transfers cup and portable drink to dash accent cup, include cup, bowl cover and connect the coupling assembling between cup, bowl cover, the last **capsule** storehouse that holds the drink **capsule** of installing of coupling assembling, the cup passes through the upper end intercommunication of pressurizing assembly and sail subassembly and drink **capsule**, drink **capsule** lower extreme passes through drainage assembly and cup cavity intercommunication, is somebody's turn to do to dash the control assembly who transfers the cup still to include heating element and control pressurizing assembly and heating element work. The utility model discloses simple structure is small and exquisite, dashes and transfers the coffee process simple and convenient, can realize the water route coupling of bowl cover and cup body, and the bowl cover is removable.

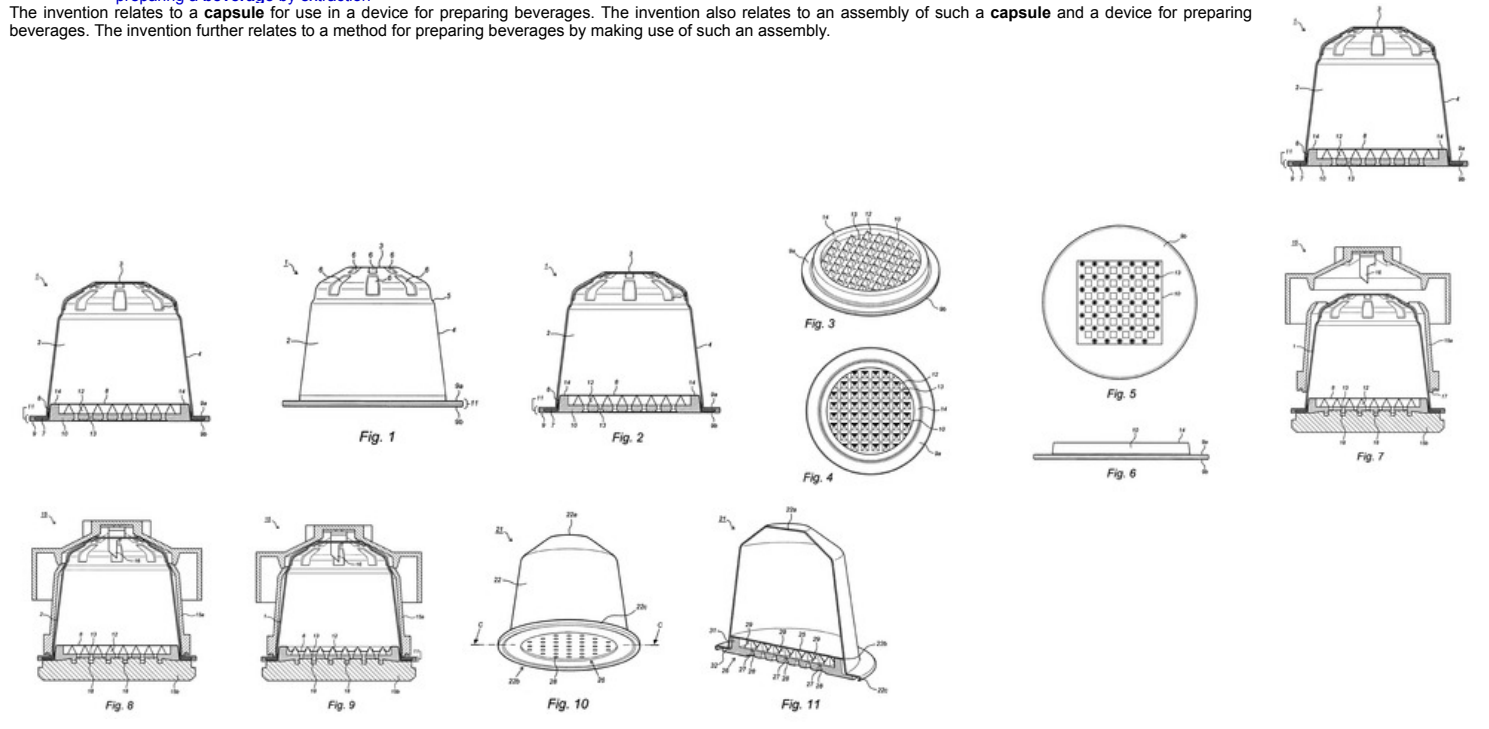


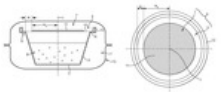
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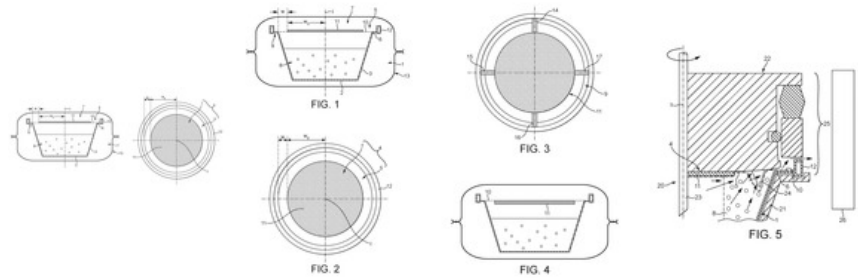
A **capsule** (1) contains **beverage** ingredients such as ground coffee, tea or other ingredients and is configured for insertion in a **beverage** production device (2) in order to have a liquid under pressure have enter the **capsule** (1) and to interact with the ingredients (3) in the **capsule** (1). The **capsule** (1) comprises a base body (4) and a foil member (5) closing the base body (4) by being attached to a **flange**-like rim (6) extending from the side wall (7) of the base body (4) of the **capsule** (1). The base body (4) of the **capsule** (1) comprises a resilient sealing member (8), the sealing member (8) being designed to be in sealing engagement with a bell member (9) of the **beverage** production device (2).



The invention relates to a **capsule** for use in a device for preparing beverages. The invention also relates to an assembly of such a **capsule** and a device for preparing beverages. The invention further relates to a method for preparing beverages by making use of such an assembly.

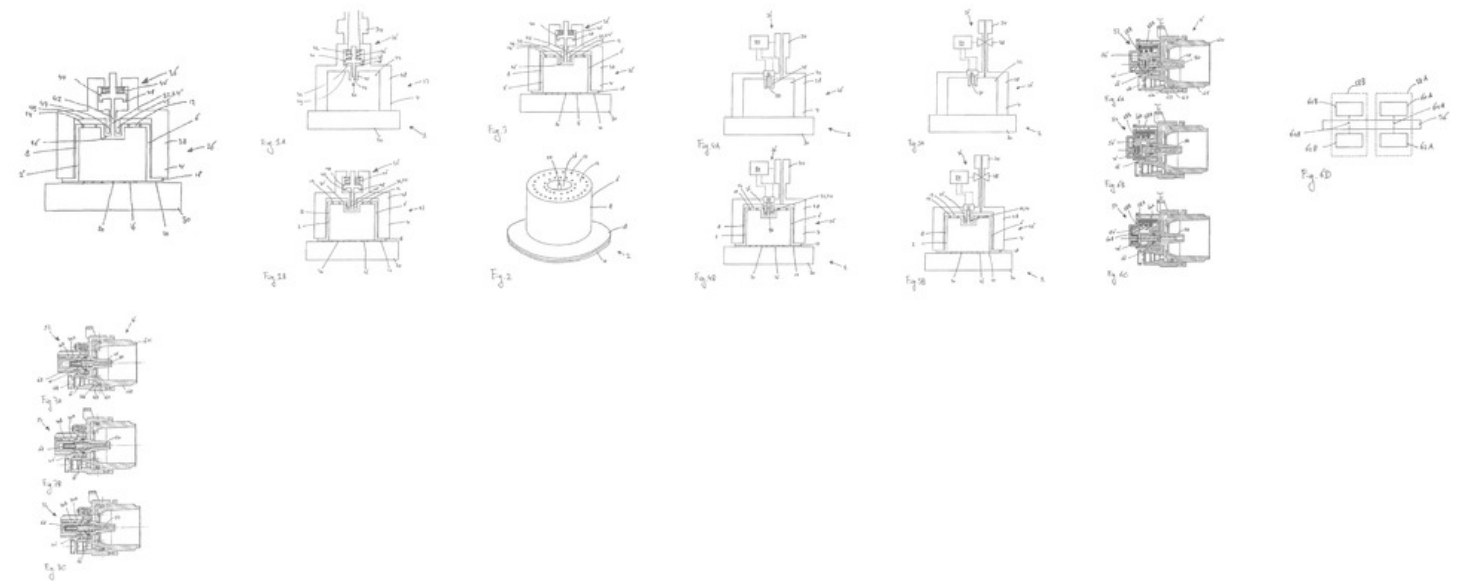
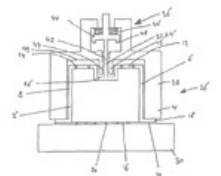


17.	Capsule for the preparation of a beverage by centrifugation and method of preparation using such capsule	CA2824174	2012-01-10	NESTEC*	2012-08-02 2012-08-02
Capsule (1) for the preparation of a beverage in a centrifugal brewing device by feeding liquid in the capsule and rotating the capsule (1) along a rotational axis "I" in the device to produce centrifugal forces on the liquid and forcing a beverage out of the capsule, wherein the capsule (1) comprises containment walls containing beverage ingredients; said containment walls comprising a bottom wall (2), a widening sidewall (3) and a top wall (4), said top wall (4) comprising at least one liquid-impervious area (7) and at least one liquid-pervious and beverage filtering area (5); wherein the liquid-pervious and beverage filtering area (5) is peripherally positioned on the top wall (4) relative to the liquid-impervious area (7) and wherein the liquid-pervious and beverage filtering area is made of a porous flexible material which is extensible at least in axial direction and has a tensile elongation of at least 250, preferably at least 300% (DIN EN 29073-3).					
					



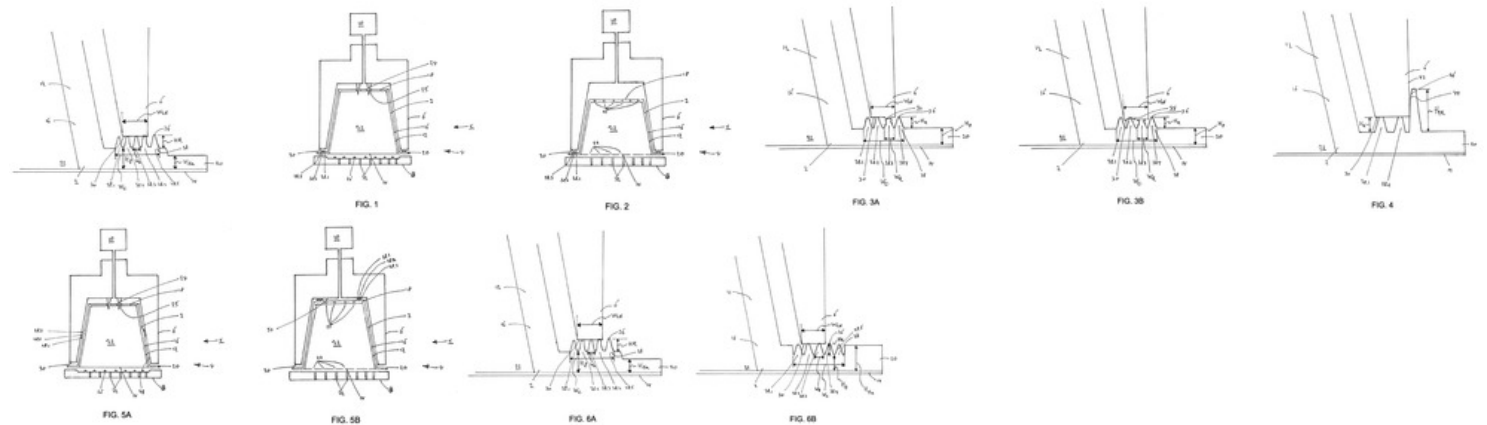
18.	Brewing device for preparing a food product	ITFI20100178	2010-08-13	CO EXECUTIVE DOW NIN KURAKE BE BAD BUOY DOUWE EGBERTS* KONINKLEJKE DAUVE EGBERTS PHILIPS PHILIPS ELECTRONICS* SARA LEE	2012-02-14 2012-02-14
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The brewing device comprises: - a frame (11) whereon an insertion area (21) for a **capsule** (C) towards a brewing position (P) is defined, - a brewing chamber (13, 1) defined by a first chamber portion (13) and a second chamber portion (14), slidably arranged in a sliding area (12) defined by said frame (11), said chamber portions (13, 14) being sliding both one with respect to the other and with respect to said frame (11) between a closed position and an open position and viceversa, - ducts (14B, 13B), respectively for supplying a brewing fluid in the chamber (13, 14) and for outletting the brewed product from the chamber itself, - a pair of opposed guiding channels (19) for inserting from the top the **capsule** (C) in the fixed brewing position (P) with respect to said frame (11), - at least one member (20) for supporting the **capsule** (C) in said brewing position (P).



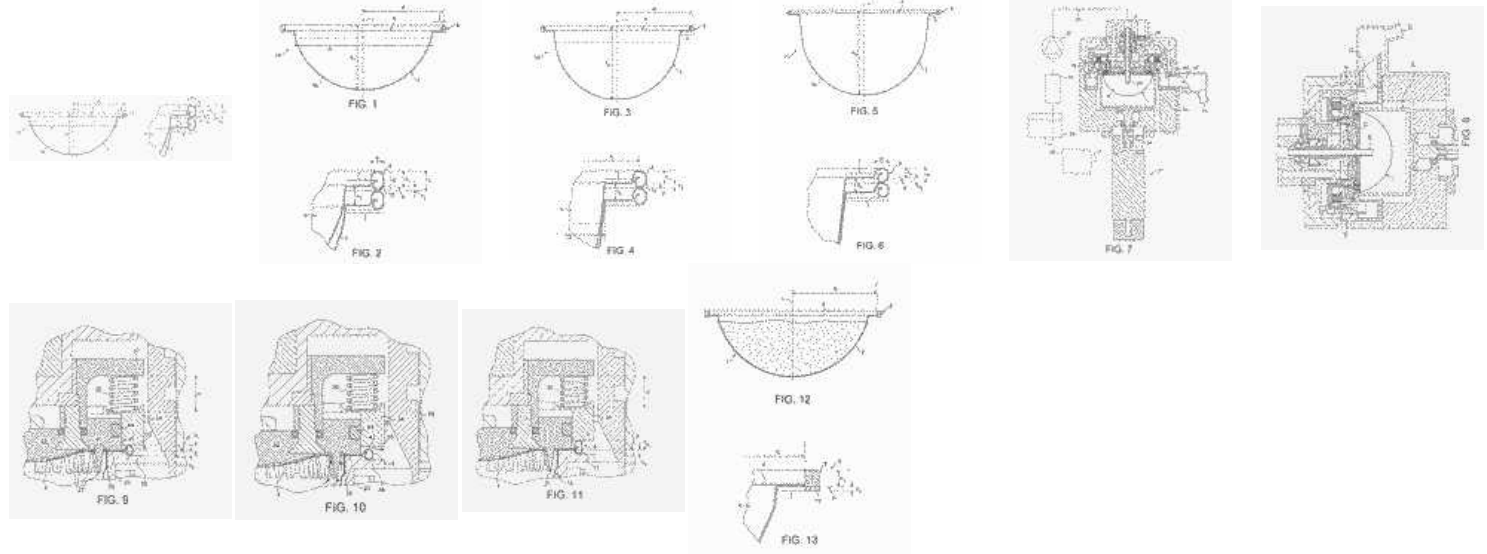
19.	Capsule, system and method for preparing a predetermined quantity of beverage suitable for consumption	WO2010128844	2009-12-30	CO EXECUTIVE DOW NIN KURAKE BE BAD BUOY DOUWE EGBERTS* KONINKLEJKE DAUVE EGBERTS KONINKURAKE DOW EGBERT BEE BUOY SARA LEE	2010-11-11	2010-11-11
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A **capsule** for preparing a predetermined quantity of **beverage** suitable for consumption using an extractable product, by means of a **beverage** brewing device comprising a receptacle for receiving the **capsule**. The **capsule** comprises a cup comprising a circumferential wall, a bottom closing the circumferential wall at a first end, and a lid in use connected to the cup at a second end of the circumferential wall opposite the bottom. The wall, bottom and lid, in use, enclose an inner space comprising the extractable product. At least a portion of a surface of the **capsule** conceived to, in use, interact with the receptacle is provided with at least one projection for forming a sealing engagement with the receptacle.

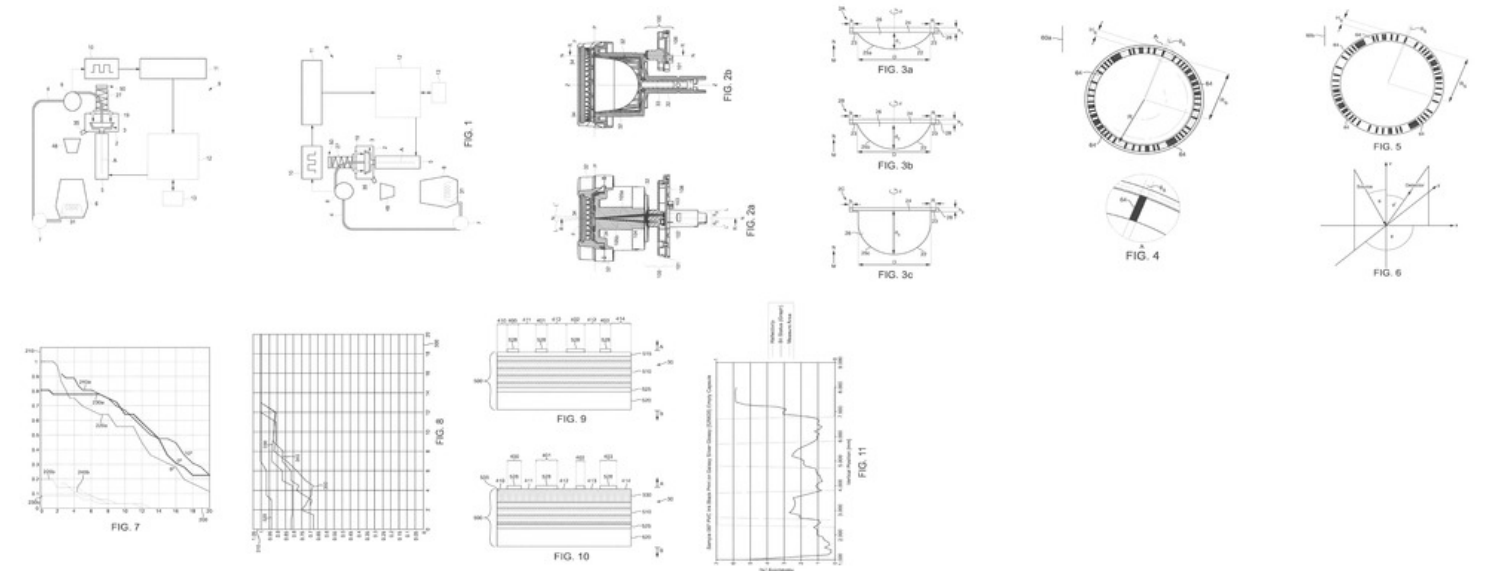


20.	Capsule and system for preparing a beverage by centrifugation in a beverage production device	WO2011092301	2011-01-28	NESTEC*	2011-08-04	2011-08-04
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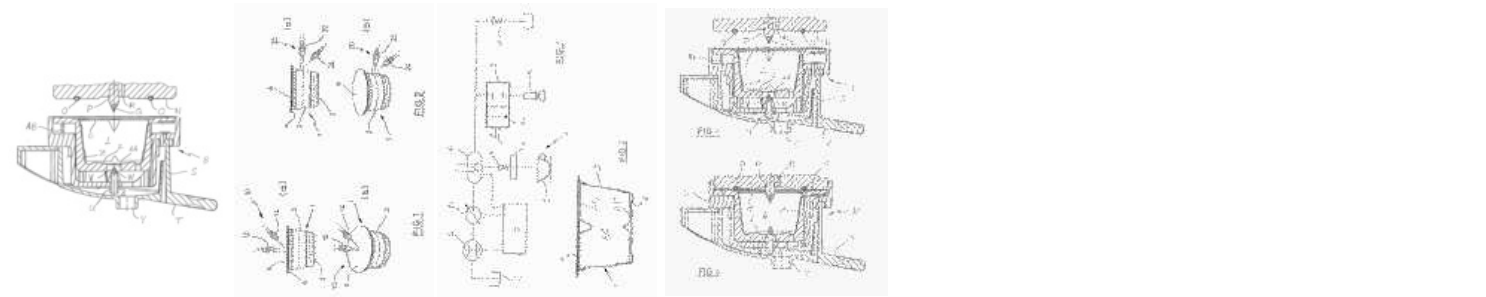
The present invention relates to a **capsule** (1A) designed for insertion in a centrifugal **beverage** production device for preparing a **beverage** from a substance contained in the **capsule** by introducing liquid in the **capsule** and passing liquid through the substance using centrifugal forces. The **capsule** comprises a body (2) comprising a bottom end and an open end, spaced apart in the axial direction, an upper wall (4) for covering the body at its open end, along a direction transverse to the axial direction, an enclosure (6) between the body and upper wall containing a predetermined amount of **beverage** substance. The **capsule** further comprises an annular pressure-setting ring (8) configured for adjusting the backpressure in the **beverage** production device. The pressure-setting ring provides an improved coffee in-cup quality. The invention also relates to a set of capsules comprising pressure-setting rings of different dimensions for setting different backpressure when engaged in a centrifuging **beverage** production device.



An optically readable code support (30) to be associated with or be part of a **capsule** intended for delivering a **beverage** in a **beverage** producing device, the support comprising at least one sequence of symbols represented on the support so that each symbol is sequentially readable by a reading arrangement of an external reading device while the **capsule** is driven in rotation along an axis of rotation, wherein the symbols are essentially formed of a succession of light reflective surface portions (610-615) and light absorbing surface portions (600-604); said light absorbing surface portions providing a lower light- reflective intensity than the light-reflective surface portions, wherein the code support comprises at least one base layer (500) extending continuously at least along said sequence of symbols, wherein the light-absorbing surface portions are roughened surface portions having a higher rugosity (Rz) than the light-reflective surface portions.



Portion-capsules or cartridges (1) have different types of coffee. A **beverage** machine is designed to brew hot coffee using the cartridges. The machine has a pressurized-water pump, a cartridge **holder** (B) which is designed to receive a cartridge, and an electronic controller. The cartridges have respective cartridge covers (6) that are provided with color codes that differ from one another. The machine has a color sensor that detects the color coding of each cartridge cover and the electronic controller selects a program that is based on the color coding to operate the machine. An independent claim is included for a **beverage** machine.



23.

Capsule and method for preparing a beverage such as coffee from said capsule

Capsule for the preparation of a **beverage** in **beverage** preparation device comprising: a cup-shaped body (12) comprising a cavity containing a **beverage** ingredient and a **flange**-like rim extending outwardly from the base of said body, a delivery wall (13) connected to the **flange**-like rim, characterized in that the **flange**-like rim is formed of is a polymer material chosen in grade having a Vicat softening point (ISO 10350) between about 30 and 100°C, preferably between 40 and 90°C or apolymer chosen in grade comprising a glass transition temperature (Tg) between 30 and 80 °C, preferably between 40 and 60 °C.

WO2011061126

2010-11-12

NESTEC*

2011-05-26 2011-05-26

24.

Support and capsule for preparing a beverage by centrifugation, system and method for preparing a beverage by centrifugation

The invention relates to an optically readable code support to be associated with or part of a **capsule** indented for delivering a **beverage** in a **beverage** producing device by centrifugation of the **capsule**. The support comprises at least one sequence of symbols represented on the support so that each symbol is sequentially readable by a reading arrangement of an external reading device while the **capsule** is driven in rotation along an axis of rotation. The symbols are at least partly formed of surfaces arranged to reflect mainly diffusively, in any direction forming an angle comprised between 3° and 10° with respect to a normal of said surface, any incoming beam of light with an incoming direction forming an angle comprise between 0 and 10° with respect to a normal of said surface.

CA2855723

2012-11-11

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A capsule for use in a brewing device is provided, the capsule comprising: a body part, which defines a cavity, a lid which is attached to the body part and which closes the cavity, the lid having lines of weakness which define an opening region having an area of from 75 mm² to 300mm²; and tea material enclosed within the cavity, wherein at least 75% by weight of the tea material particles have a size of from 2 to 10mm. A method of preparing a tea-based beverage in a brewing device using the capsule is also provided.

