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Search 3: DIPSTICK AND ROD (Results 2817)
Search 4: beverage device (Results 355)
Search 5: 2 and 3 (Results 76)
Search 6: 2 and 4 (Results 16)

1) Family number: 28267051 (US2002196705A)

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Title: Appliance and an appliance drive unit

Abstract: Some embodiments of the present invention provide an apparatus for processing material adjacent to a barrier (e.g., a countertop or other surface), wherein the apparatus includes a container located on one side of the barrier and a stator located on an opposite side of the barrier. A rotor can be located within the container, and can be driven by the stator located on an opposite side of the barrier. In some embodiments, the rotor is free from mechanical connection to the stator, which can be controlled to generate a magnetic field driving the rotor within the container. A processing unit (e.g., one or more blades, whisks, brushes, or other elements) can extend from the rotor and be rotatable by rotation of the rotor. Accordingly, any number of different material processing devices can be driven by the rotor and stator when the rotor is brought into magnetic communication with the stator

Classifications:

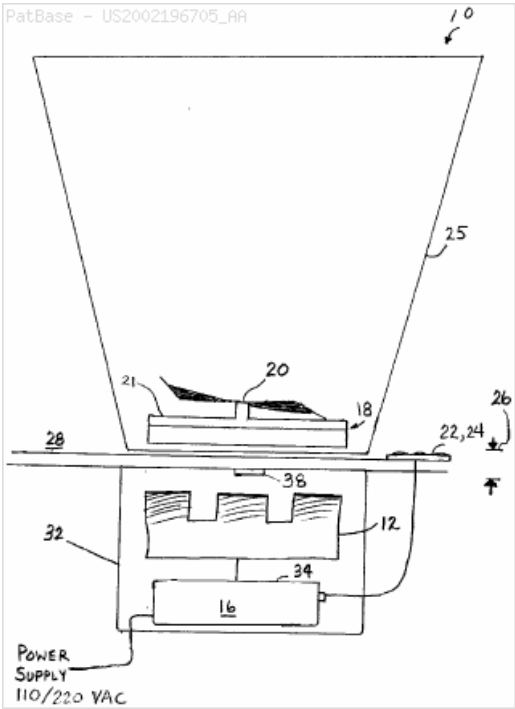
International (IPC 8-9): A47J43/046 (Advanced/Invention)

International (IPC 1-7): B01F13/08 B65D

CPC: A47J43/0465

European: A47J43/046A

US: 366/274 366/274P



Family:

Publication number	Publication date	Application number	Application date
AU2002316157 AA	20021209	AU20020316157	20020522
US2002196705 AA	20021226	US20020153156	20020522
US6712497 BB	20040330	US20020153156	20020522
WO02096761 A2	20021205	WO2002US16188	20020522
WO02096761 A3	20030424	WO2002US16188	20020522
WO02096761 C2	20040521	WO2002US16188	20020522

Priority:

US20010292640P 20010522 US20020153156 20020522 WO2002US16188 20020522

Probable Assignee: SHURFLO PUMP MFG CO INC

Assignee(s): (std): JERSEY STEVEN T ; SAVELIEV MICHAEL ; SHURFLO PUMP MFG CO INC ; SHURFLO PUMP MFG COMPANY INC

Assignee(s): SHURFLO PUMP MFG ; SHURFLO PUMP MANUFACTURING COMPANY INC ; SHURFLO PUMP MANUFACTURING CO INC ; SHURFLO LLC ; SHURFLO PUMP MANUFACTURING FA ; SHURFLO PUMP MANUFACTURING CO

Inventor(s): (std): JERSEY STEVEN T ; SAVELIEV MICHAEL

Inventor(s): STEVEN T JERSEY ; MICHAEL SAVELIEV

Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EE ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX MZ NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZA ZM ZW

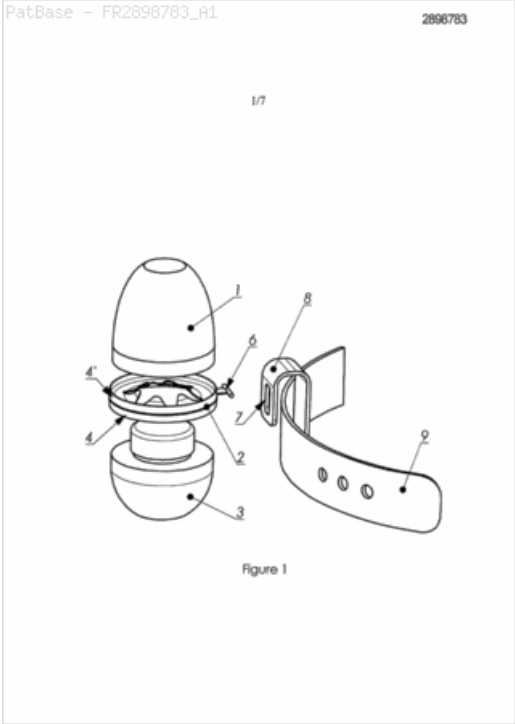
2) Family number: 38521238 (FR2898783A) © PatBase

Title: BEVERAGE E.G. SYRUP, DEVICE FOR USE WITH DISPOSABLE OR REUSABLE CUP, HAS EDGES INTENDED TO ACCOMMODATE CUP ON ONE SIDE AND CONTAINER ON ANOTHER SIDE TO FORM INTEGRAL UNIT, AND MEMBRANE WITH CIRCULAR CUTTING SPLIT IN ITS CENTER

Abstract: The device has accessories with a cup (1) and a container (3) assembled in an interdependent manner by a broad membrane (2) with double edges (4, 4') of juxtaposed gripping. The edges are intended to accommodate the cup on one side and the container on another side to form an integral unit. The membrane has a circular cutting split in its center, where the split is deformed at a passage of a cap of the container. The membrane has a T shaped spigot (6) on its outer edge, where the spigot is housed in an opening (7) of a belt clip for transporting the device directly to a person such as child.

Classifications:

International (IPC 8-9): A45F3/16 A47G19/22
B65D21/02 (Advanced/Invention);
A45F3/00 A47G19/22 B65D21/02 (Core/Invention)
CPC: A45D44/18 A45F3/18 A45F5/02 A45F5/021 A47G19/2205
European: A45F3/18 A45F5/02 A45F5/02B A47G19/22B K45D44/18 K45F5/02B



Family:

Publication number	Publication date	Application number	Application date
FR2898783 A1	20070928	FR20060002638	20060327

Priority:

FR20060002638 20060327

Probable Assignee: TALLEUX FRANCK

Assignee(s): (std): TALLEUX FRANCK

Inventor(s): (std): TALLEUX FRANCK

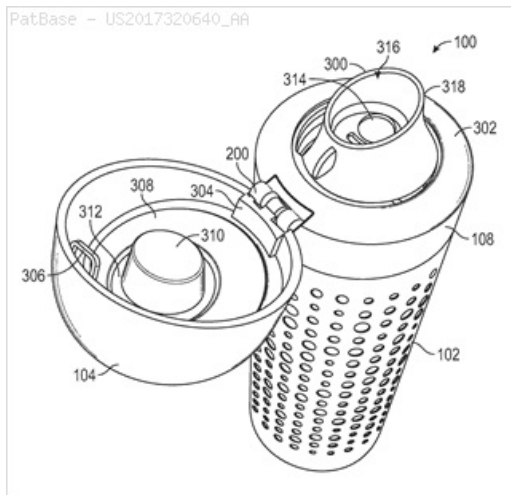
3) Family number: 67435436 (US2017320640A) © PatBase

Title: PORTABLE BEVERAGE CONTAINER

Abstract: A portable beverage container is provided. The portable beverage container may include a glass vessel having a neck; a metal outer shell configured to surround a first portion of the glass vessel; a cap configured to engage with the metal outer shell to surround a second portion of the glass vessel; and an amorphous thermoplastic spout having a neck configured to be inserted through an opening in the cap and into the neck of the glass vessel. The spout may be configured to securely engage with the cap. The cap may include a lid with an elastomeric sealing member having a knob configured to extend into a recess in the spout and a recess configured to wrap around and over a lip of the spout. The spout may be removable from the cap while the cap is engaged with the outer shell.

Classifications:

International (IPC 8-9): A45F3/18 A47J27/21 A47J41/00 A47J41/02
B65D1/02 B65D21/08 B65D25/48 B65D41/00 B65D43/02 B65D43/16
B65D43/22 B65D47/08 B65D51/18 B65D51/24 B65D51/28
B65D53/02 B65D81/127 B65D81/38 B65D85/72 (Advanced/Invention)
CPC: A47J41/00 B65D1/0207 B65D25/48 B65D41/005 B65D43/16
B65D43/22 B65D47/0828 B65D53/02
US: 1/1 222/153.1

**Family:**

Publication number	Publication date	Application number	Application date
CA3023159 AA	20181102	CA20173023159	20170503
CN109561772 A	20190402	CN201780039397	20170503
CN207520051 U	20180622	CN201720487803U	20170504
EP3451877 A1	20190313	EP20170793285	20170503
JP2019520110 T2	20190718	JP20180557836T	20170503
KR102017234 B1	20190902	KR20187034322	20170503
KR20180137019 A	20181226	KR20187034322	20170503
KR20190102310 A	20190903	KR20197025159	20170503
TW201808734 A	20180316	TW20170114700	20170503
US2017320640 AA	20171109	US20170586160	20170503
US10414555 BB	20190917	US20170586160	20170503
WO17192768 A1	20171109	WO2017US30914	20170503

Priority:

US20160331911P 20160504 US20170586160 20170503 WO2017US30914 20170503

Probable Assignee: HYDROVAZE LLC

Assignee(s): (std): HYDROVAZE LLC ; STEINMANN HARDY

Assignee(s): PELLETIER JAMES STEVEN KEITH

Inventor(s): (std): STEINMANN HARDY ; PELLETIER JAMES STEVEN KEITH

Agent(s): MBM INTELLECTUAL PROPERTY LAW LLP; EPPING HERMANN FISCHER; NISHIYAMA HARUYUKI; MORGAN LEWIS AND BOCKIUS LLP; ITRI MARK J

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DJ DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KH KM KN KP KR KW KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

4) Family number: 51142604 (US2013233355A)

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Title: WASHING APPARATUS AND METHOD WITH SPIRAL AIR FLOW FOR DRYING

Abstract: An apparatus and method for washing and drying objects includes a rotating washing fluid sprayer having several nozzles to direct washing fluid, e.g., water, at an object being washed in a chamber. A drying fluid is directed at the object in the chamber to dry the object. The drying fluid, e.g., air, is directed in a spiral pattern against the object to urge washing liquid away from the object to dry the object and to push the drying liquid away from edges of the object. The air may be directed at the object simultaneously with the water to increase the energy with which the water impinges on the object and to urge dirt from the object being washed.

Classifications:

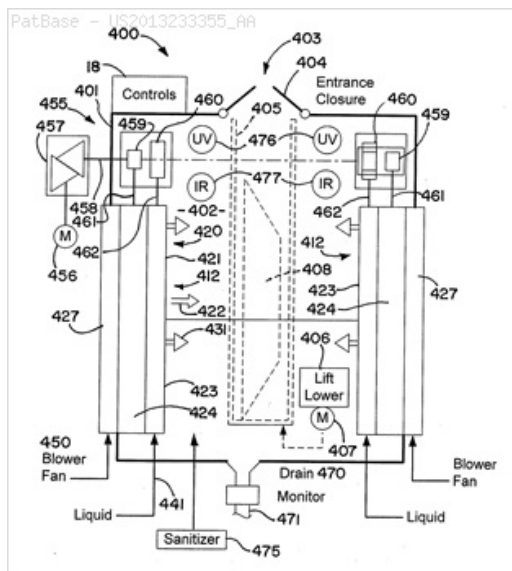
International (IPC 8-9): A47K10/48 A47L15/00 A47L15/42 A47L15/48 B08B3/00 B08B3/02 B08B5/02 (Advanced/Invention)

CPC: A47L15/48 A47K10/48 A47K2210/00 A47L15/0089

A47L15/4242 A47L15/486 B08B3/024 B08B5/02

European: A47K10/48 A47L15/00J A47L15/42F6 A47L15/48D B08B3/02C B08B5/02 K47K210/00

US: 1/1 134/26 134/30 134/95.2



Family:

Publication number	Publication date	Application number	Application date
US201323355 AA	20130912	US20110885227	20111116
US2018177377 AA	20180628	US20180902525	20180222
US9931017 BB	20180403	US20110885227	20111116
WO12068291 A1	20120524	WO2011US61051	20111116

Priority:

US20100414421P 20101116	US20110479394P 20110426	US20110510908P 20110722
US20110885227 20111116	WO2011US61051 20111116	US20130885227 20130514
US20180902525 20180222		

Probable Assignee: ALPERT MARTIN A

Assignee(s): (std): ALPERT MARTIN ; ALPERT MARTIN A ; GOODMAN MARK ; SMOOT CHARLES H

Inventor(s): (std): ALPERT MARTIN ; ALPERT MARTIN A ; GOODMAN MARK ; SMOOT CHARLES H

Agent(s): RENNER OTTO BOISSELLE AND SKLAR LLP; SKLAR WARREN A ET AL

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PE PG PH PL PT QA RO RS RU RW SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

5) Family number: 74050647 (CN109648578A)

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Title: GRAB-TYPE FULL-AUTOMATIC STIRRING AND CLEANING BEVERAGE MAKING DEVICE AND METHOD

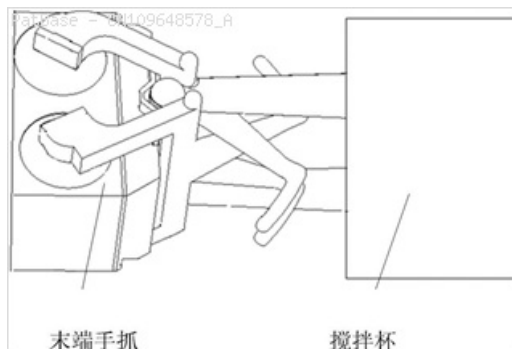
Abstract: The invention relates to a grab-type full-automatic stirring and cleaning beverage device and method. A mechanical arm performs multi-degree-of-freedom movement under the control of a mechanical arm controller; the mechanical arm performs grabbing and is electrically connected to a stirring device under the control of the mechanical arm controller; the mechanical arm controller controls the mechanical arm to drive the stirring device to be placed at each discharging point to receive materials and start stirring at the same time, and the stirring stops after the setting duration; after the receiving is completed, the mechanical arm drives the stirring device to a delivery position, and the material in the stirring device is dumped and transferred into the delivery position after the stirring stops; and the cleaning is automatically performed. By means of the device, the whole process is unattended, so that the production efficiency of target products and production efficiency per unit time are greatly improved. During the movement of the mechanical arm, simultaneous stirring or uniform stirring is achieved, so that the mixing is fully performed, and the production efficiency is improved. According to the device, high-temperature rotary washing can be carried after stirring, so that the cumbersome work of replacing a stirring cup with high frequency is avoided.

Classifications:

International (IPC 8-9): A47J43/046 B08B3/02 B25J11/00

B25J15/10 (Advanced/Invention)

CPC: B25J11/0045 A47J43/046 B08B3/02 B25J15/10



Family:

Publication number	Publication date	Application number	Application date
CN109648578 A	20190419	CN201910019402	20190109

Priority:

CN201910019402 20190109

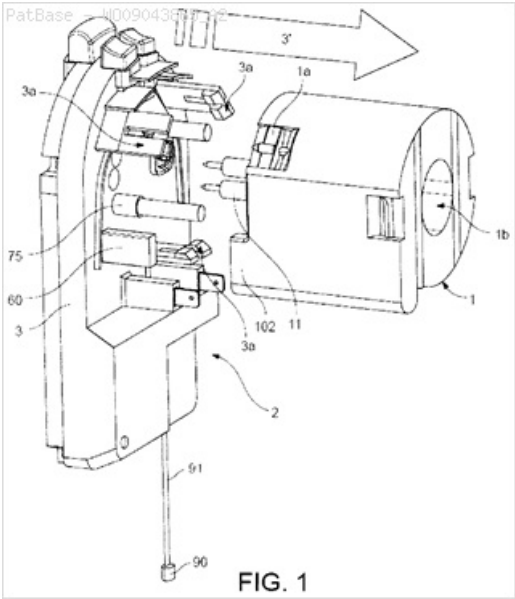
Probable Assignee: BEIJING RES INST OF PRECISE MECHATRONIC CONTROLS
Assignee(s): (std): BEIJING RES INST OF PRECISE MECHATRONIC CONTROLS
Assignee(s): BEIJING RESEARCH INST OF PRECISE MECHATRONIC CONTROLS ; BEIJING INST OF PRECISION MECHANICAL AND ELECTRICAL CONTROL EQUIPMENT
Inventor(s): (std): DENG SONGBO ; XIN DONGSHENG ; WANG YAN ; LI KE ; WANG HAO

6) Family number: 71244895 (WO09043865A2) © PatBase

Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

Abstract: An in-line heating device(1, 2, 3, 4) for a liquid food or beverage preparation machine in which liquid is circulated through the heating deviceand then guided into a brewing chamber. This heating device comprises: a thermoblock with a metal mass (1) that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding said liquid circulating through said mass, the mass being arranged to accumulate heat and to supply heat to the liquid; and one or more electric components (60,70,75) that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board (4) and/or a flex- print (4) arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board and/or flex-print, in particular via rigid connector pins or blades or rigid plug and socket members.

Classifications:
International (IPC 8-9): A47J31/54 (Advanced/Invention); A47J31/44 (Core/Invention)
CPC: H01R12/718 F24H1/105 A47J31/542 A47J31/545 F24H1/101 F24H9/2028 H05K1/18 H05K3/306 H05K2201/10151 H05K2201/10166 H05K2201/10181 H05K2201/10189 H05K2201/10424 H05K2201/105 H05K2201/2036 A47J31/407 A47J31/441 H01H37/52



Family:

Publication number	Publication date	Application number	Application date
AT513498 E	20110715	AT20080804952T	20081001
DE602008007830 D1	20110811	DE200860007830T	20081001
EP2211670 A2	20100804	EP20080804952	20081001
EP2211670 B1	20110622	EP20080804952	20081001
ES2366876 T3	20111026	ES20080804952T	20081001
PL2211670 T3	20111130	PL20080804952T	20081001
PT2211670 T	20110704	PT20080804952T	20081001
WO09043865 A2	20090409	WO2008EP63128	20081001
WO09043865 A3	20090618	WO2008EP63128	20081001

Priority:

EP20070117853	20071004	EP20080154918	20080422	EP20080156704	20080522
WO2008EP63092	20080930	EP20080804952	20081001	WO2008EP63128	20081001

Probable Assignee: NESTEC SA

Assignee(s): (std): ETTER STEFAN ; GAUDENZ URS ; GAVILLET GILLES ; HODEL THOMAS ; KOLLEP ALEXANDRE ; MOERI PETER ; MOSER RENZO ; PREISIG PETER ; SCHWAB ROBIN ; NESTEC SA
Assignee(s): NESTEC S A
Inventor(s): (std): ETTER STEFAN ; GAUDENZ URS ; GAVILLET GILLES ; HODEL THOMAS ; KOLLEP ALEXANDRE ; MOERI PETER ; MOSER RENZO ; PREISIG PETER ; SCHWAB ROBIN ; MA RI PETER
Inventor(s): PETER PREISIG ; ALEXANDRE KOLLEP ; URS GAUDENZ ; STEFAN ETTER ; GILLES GAVILLET ; THOMAS HODEL ; ROBIN SCHWAB ; PETER MOERI ; RENZO MOSER
Agent(s): MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; SCHNYDER FRANK SIMON; SCHNYDER FRANK
Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

7) Family number: 71244896 (WO09130099A1) © PatBase

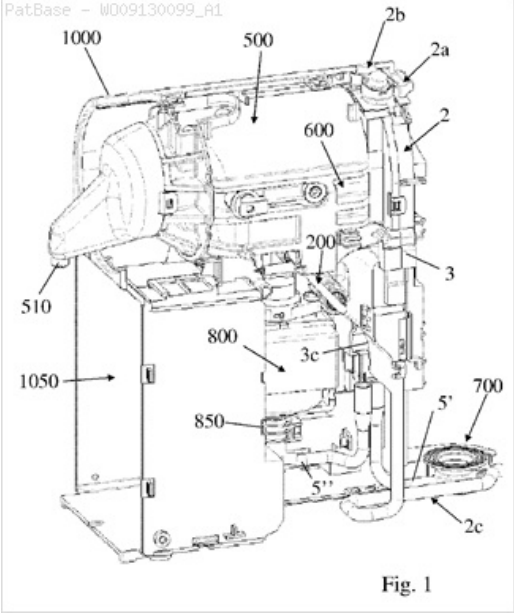
Title: MODULAR ASSEMBLY OF A BEVERAGE PREPARATION MACHINE

Abstract: A process for manufacturing a beverage preparation machine comprises the following steps: (I) providing a group of components a) to f) that include: a) a brewing unit (500) for receiving an ingredient of said beverage and for guiding an

incoming flow of liquid through said ingredient to a beverage outlet (510); b) an in-line heater (600) for heating said flow of liquid to be supplied to the brewing unit; c) pump (800) for pumping said liquid through said in-line heater; d) one or more fluid connecting members (5,200) for guiding said liquid from a source of liquid, such as a tank of liquid, to the beverage outlet; e) an electric control unit (2) for receiving instructions from a user via an interface (2a,2b) and for controlling the in-line heater and the pump; and f) one or more electric sensors (70,95) for sensing at least one operational characteristic and for communicating such characteristic(s) to the control unit; (II) connecting components a) to f) for assembling said beverage machine. The connecting of components a) to f) comprises pre-assembling at least two or three modules (500,600,2;5,800;2,800;200,600;200,800), each module being fully automatically assembled from at least two components of said components a) to f), the components of the fully automatically preassembled modules being so configured to be automatically seizable, orientable, positionable and fully connectable to each other in one or more automatic assembly steps.

Classifications:

International (IPC 8-9): A47J31/36 A47J31/44 (Advanced/Invention);
A47J31/44 (Core/Invention)
CPC: A47J31/3676 A47J31/3623 A47J31/4403 A47J2201/00
Y10T29/49904



Family:

Publication number	Publication date	Application number	Application date
DE602009038213 D1	20160616	DE200960038213T	20090323
EP2278900 A1	20110202	EP20090735685	20090323
EP2278900 B1	20160427	EP20090735685	20090323
WO09130099 A1	20091029	WO2009EP53368	20090323

Priority:

EP20080154918	20080422	EP20080156704	20080522	EP20080157066	20080528
EP20080160340	20080714	WO2008EP60463	20080808	WO2008EP63092	20080930
WO2008EP63128	20081001	EP20090735685	20090323	WO2009EP53368	20090323

Probable Assignee: NESTEC SA

Assignee(s): (std): GAVILLET GILLES ; HODEL THOMAS ; KOLLEP ALEXANDRE ; LANG MARKUS ; MEIER MICHAEL ; MOERI PETER ; MOSER RENZO ; PREISIG PETER ; SCHENK RUDOLF ; SCHWAB ROBIN ; NESTEC SA ; AEMISEGGER STEVE ; BUEHLER LEO ; ETTER STEFAN ; GAUDENZ URS

Assignee(s): NESTEC S A

Inventor(s): (std): SCHWAB ROBIN ; SCHENK RUDOLF ; PREISIG PETER ; MOSER RENZO ; MOERI PETER ; MEIER MICHAEL ; LANG MARKUS ; KOLLEP ALEXANDRE ; HODEL THOMAS ; GAVILLET GILLES ; GAUDENZ URS ; ETTER STEFAN ; BUEHLER LEO ; AEMISEGGER STEVE

Agent(s): MITSCHERLICH PATENT U RECHTSANWAELTE PARTMBB; SCHNYDER FRANK SIMON; SCHNYDER FRANK

Designated states: AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LA LC LI LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PG PH PL PT RO RS RU SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

8) Family number: 71244909 (EP2218375A2)

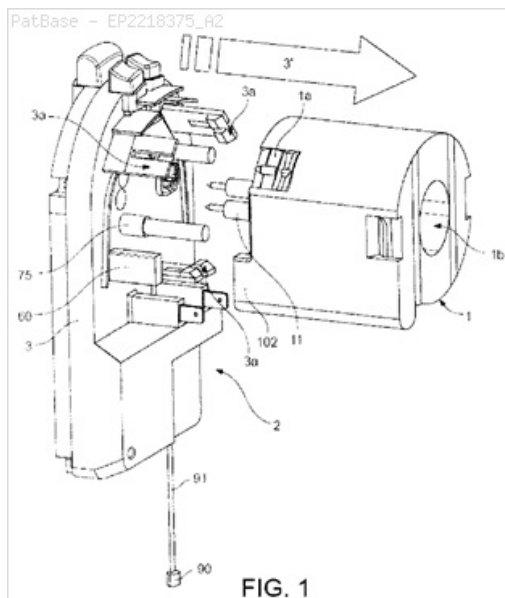
© PatBase

Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

Abstract: An in-line heating device (1,2,3,4) for a liquid food or beverage preparation machine in which liquid is circulated through the heating device and then guided into a brewing chamber. This heating device comprises: a thermoblock with a metal mass (1) that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding said liquid circulating through said mass, the mass being arranged to accumulate heat and to supply heat to the liquid; and one or more electric components (60,70,75) that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board (4) and/or a flex-print (4') arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board and/or flex-print, in particular via rigid connector pins or blades or rigid plug and socket members.

Classifications:

International (IPC 8-9): A47J31/36 (Advanced/Invention)
CPC: A47J31/542 A47J31/545 F24H1/101 F24H9/2028 H05K1/18
H05K3/306 H05K2201/10151 H05K2201/10166 H05K2201/10181
H05K2201/10189 H05K2201/10424 H05K2201/105 H05K2201/2036
A47J31/407 A47J31/441 H01H37/52



Family:

Publication number	Publication date	Application number	Application date
DE602008044670 D1	20160721	DE200860044670T	20081001
EP2218375 A2	20100818	EP20100163041	20081001
EP2218375 A3	20140730	EP20100163041	20081001
EP2218375 B1	20160608	EP20100163041	20081001
ES2587335 T3	20161024	ES20100163041T	20081001
PT2218375 T	20160727	PT20100163041T	20081001

Priority:

EP20070117853	20071004	EP20080154918	20080422	EP20080156704	20080522
WO2008EP63092	20080930	EP20080804952	20081001	EP20100163041	20081001

Probable Assignee: NESTEC SA

Assignee(s): (std): NESTEC SA

Assignee(s): NESTEC S A

Inventor(s): (std): RENZO MOSER ; PETER MOERI ; ROBIN SCHWAB ; THOMAS HODEL ; GILLES GAVILLET ; STEFAN ETTER ; URS GAUDENZ ; ALEXANDRE KOLLEP ; PETER PREISIG ; KOLLEP ALEXANDRE ; HODEL THOMAS ; GAUDENZ URS ; ETTER STEFAN ; MOSER RENZO ; MOERI PETER ; PREISIG PETER ; GAVILLET GILLES ; SCHWAB ROBIN

Inventor(s): MOERI PETER 3272 ; SCHWAB ROBIN 8057 ; ETTER STEFAN 3122 ; HODEL THOMAS 6332 ; KOLLEP ALEXANDRE 1095 ; PREISIG PETER 9100 ; GAVILLET GILLES 1670 ; GAUDENZ URS 8620 ; MOSER RENZO GUEMMENEN

Agent(s): SCHNYDER FRANK SIMON ; SIVIER DAMIEN ; ISERN JORGE

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

9) Family number: 71244910 (EP2218376A2)

© PatBase

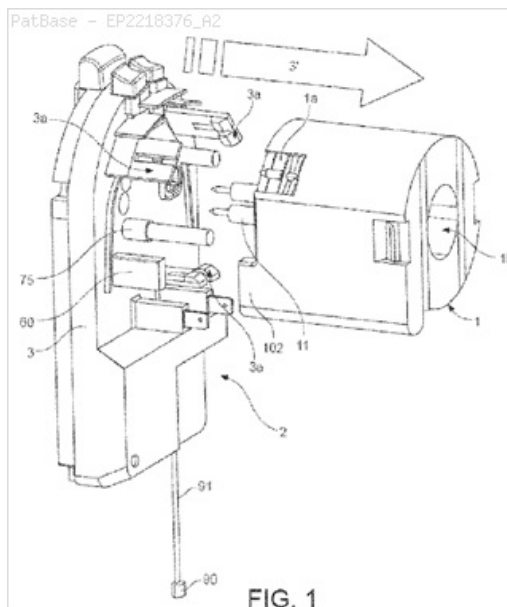
Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

Abstract: An in-line heating device (1,2,3,4) for a liquid food or beverage preparation machine in which liquid is circulated through the heating device and then guided into a brewing chamber. This heating device comprises: a thermoblock with a metal mass (1) that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding said liquid circulating through said mass, the mass being arranged to accumulate heat and to supply heat to the liquid; and one or more electric components (60,70,75) that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board (4) and/or a flex-print (4') arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board and/or flex-print, in particular via rigid connector pins or blades or rigid plug and socket members.

Classifications:

International (IPC 8-9): A47J31/36 (Advanced/Invention)

CPC: A47J31/542 A47J31/545 F24H1/101 F24H9/2028 H05K1/18 H05K3/306 H05K2201/10151 H05K2201/10166 H05K2201/10181 H05K2201/10189 H05K2201/10424 H05K2201/105 H05K2201/2036 A47J31/407 A47J31/441 H01H37/52



Family:

Publication number	Publication date	Application number	Application date
EP2218376 A2	20100818	EP20100163051	20081001
EP2218376 A3	20140730	EP20100163051	20081001
EP2218376 B1	20170215	EP20100163051	20081001
ES2623861 T3	20170712	ES20100163051T	20081001
PT2218376 T	20170424	PT20100163051T	20081001

Priority:

EP20070117853	20071004	EP20080154918	20080422	EP20080156704	20080522
WO2008EP63092	20080930	EP20080804952	20081001	EP20100163051	20081001

Probable Assignee: NESTEC SA

Assignee(s): (std): NESTEC SA

Assignee(s): NESTEC S A

Inventor(s): (std): SCHWAB ROBIN ; GAVILLET GILLES ; PREISIG PETER ; MOERI PETER ; MOSER RENZO ; ETTER STEFAN ; GAUDENZ URS ; HODEL THOMAS ; KOLLEP ALEXANDRE ; PETER PREISIG ; ALEXANDRE KOLLEP ; URS GAUDENZ ; STEFAN ETTER ; GILLES GAVILLET ; THOMAS HODEL ; ROBIN SCHWAB ; PETER MOERI ; RENZO MOSER

Agent(s): SCHNYDER FRANK SIMON; SIVIER DAMIEN; SACROUG OLIVIER; ISERN JORGE

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

10) Family number: 71244911 (EP2225974A2)

© PatBase

Title: BEVERAGE PREPARATION MACHINE

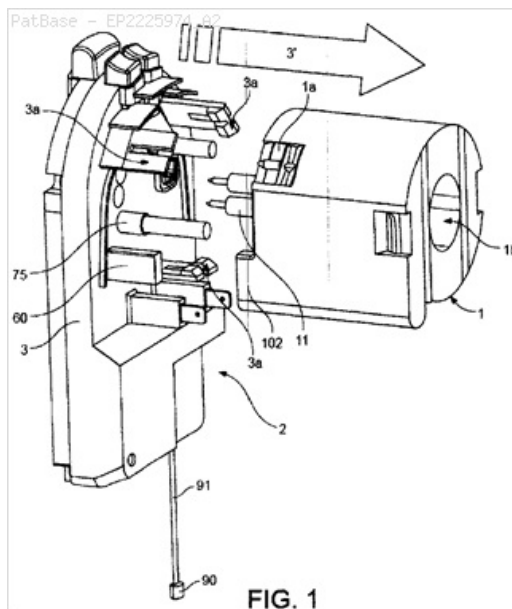
Abstract: An in-line heating device (1,2,3,4) for a liquid food or beverage preparation machine in which liquid is circulated through the heating device and then guided into a brewing chamber. This heating device comprises: a thermoblock with a metal mass (1) that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding said liquid circulating through said mass, the mass being arranged to accumulate heat and to supply heat to the liquid; and one or more electric components (60,70,75) that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board (4) and/or a flex-print (4') arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board and/or flex-print, in particular via rigid connector pins or blades or rigid plug and socket members.

Classifications:

International (IPC 8-9): A47J31/36 A47J31/54

F24H1/00 (Advanced/Invention)

CPC: A47J31/542 A47J31/545 F24H1/101 F24H9/2028 H05K1/18 H05K3/306 H05K2201/10151 H05K2201/10166 H05K2201/10181 H05K2201/10189 H05K2201/10424 H05K2201/105 H05K2201/2036 A47J31/407 A47J31/441 H01H37/52



Family:

Publication number	Publication date	Application number	Application date
EP2225974 A2	20100908	EP20100163040	20081001
EP2225974 A3	20140730	EP20100163040	20081001
EP2225974 B1	20170621	EP20100163040	20081001

Priority:

EP20070117853	20071004	EP20080154918	20080422	EP20080156704	20080522
WO2008EP63092	20080930	EP20080804952	20081001	EP20100163040	20081001

Probable Assignee: NESTEC SA

Assignee(s): (std): NESTEC SA

Assignee(s): NESTEC S A

Inventor(s): (std): SCHWAB ROBIN ; GAVILLET GILLES ; PREISIG PETER ; MOERI PETER ; MOSER RENZO ; ETTER STEFAN ; GAUDENZ URS ; HODEL THOMAS ; KOLLEP ALEXANDRE

Agent(s): SCHNYDER FRANK SIMON; SIVIER DAMIEN; SACROUG OLIVIER

Designated states: AL AT BA BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK TR

11) Family number: 71244919 (US2010218684A)

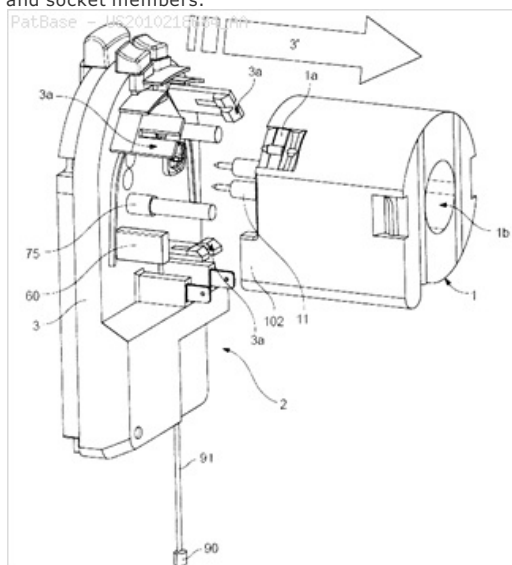
© PatBase

Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

Abstract: An in-line heating device for a liquid food or beverage preparation machine in which liquid is circulated through the heating device and then guided into a brewing chamber. This heating device includes a thermoblock with a metal mass that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding the liquid circulating through the mass, with the mass arranged to accumulate heat and to supply heat to the liquid; and one or more electric components that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board or a flex-print arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board or flex-print, in particular via rigid connector pins or blades or rigid plug and socket members.

Classifications:

International (IPC 8-9): A01K63/06 A47J A47J31/40 A47J31/44 A47J31/54 A47J31/56 F24H1/10 F24H9/20 G01F1/00 H01H37/52 H05B3/78 H05K1/00 H05K1/18 H05K3/30 (Advanced/Invention); A47J31/54 A47J31/56 (Advanced/Non-invention); A47J31/44 F24H1/10 G01F1/00 H05K1/00 (Core/Invention); A47J (Subclass/Invention)
CPC: A47J31/58 A47J31/36 F24H1/142 H01R12/728 H01R13/111 A47J31/542 A47J31/545 F24H1/101 F24H9/2028 H05K1/18 H05K3/306 H05K2201/10151 H05K2201/10166 H05K2201/10181 H05K2201/10189 H05K2201/10424 H05K2201/105 H05K2201/2036 A47J31/407 A47J31/441 H01H37/52
US: 1/1 174/254 392/496 73/861 99/288



Family:

Publication number	Publication date	Application number	Application date
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AU2008306946 AA	20090409	AU20080306946	20081001
AU2008306946 BB	20141204	AU20080306946	20081001
BRPI0818291 A2	20150414	BR2008PI18291	20081001
CA2701678 AA	20090409	CA20082701678	20081001
CA2701678 C	20160112	CA20082701678	20081001
CN101883512 A	20131016	CN200880119033	20081001
CN101883512 A	20101110	CN200880119033	20081001
CN101883512 B	20131016	CN200880119033	20081001
HK1145791 A1	20110916	HK20100112185	20101229
HK1145791 A1	20110506	HK20100112185	20101229
HK1145791 B	20110916	HK20100112185	20101229
IL204830 A0	20101130	IL20100204830	20100406
JP2010540135 T2	20101224	JP20100527437T	20081001
JP5404631 B2	20140205	JP20100527437T	20081001
KR20100065201 A	20100615	KR20107009875	20081001
MX2010003566 A1	20100430	MX20100003566	20081001
RU2010117242 A	20111110	RU20100117242	20081001
RU2477068 C2	20130310	RU20100117242	20081001
US2010218684 AA	20100902	US20080681362	20081001
US8573116 BB	20131105	US20080681362	20081001
US9439533 BB	20160913	US20130038966	20130927
ZA201003079 A	20111026	ZA20100003079	20100503

Priority:

EP20070117853 20071004 EP20080154918 20080422 EP20080156704 20080522
WO2008EP63092 20080930 WO2008EP63128 20081001 US20100681362 20100401
US20130038966 20130927

Probable Assignee: NESTEC SA

Assignee(s): (std): ETTER STEFAN ; GAUDENZ URS ; GAVILLET GILLES ; NESTEC SA ; MOERI PETER ; MOSER RENZO ; HODEL THOMAS ; KOLLEP ALEXANDRE ; NESTEC SA ; NESTEC S A ; PREISIG PETER ; SCHWAB ROBIN

Assignee(s): DES PRODUITS NESTLE SA SOC ; NESTEC S A

Inventor(s): (std): GAVILLET GILLES ; ETTER STEFAN ; PREISIG PETER ; MORI PETER ; GAUDENZ URS ; MOSER RENZO ; HODEL THOMAS ; SCHWAB ROBIN ; KOLLEP ALEXANDRE ; PETER PREISIG ; ALEXANDRE KOLLEP ; URS GAUDENZ ; STEFAN ETTER ; GILLES GAVILLET ; PETER MORI ; ROBIN SCHWAB ; THOMAS HODEL ; RENZO MOSER ; MOERI PETER ; MOZER RENTSO ; SHVAB ROBIN ; PREJSIG PETER ; RI PETER M ; EHTTER SHTEFAN ; KOLLE ALEKSANDR ; GAUDENTS URS ; MERI PETER ; KHODEL TOMAS ; GAVILLE ZHIL ; PRESIG PETER

Inventor(s): GAVILLE ZHIL' ; PETER M RI ; KHODEL' TOMAS ; PETER MOERI

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; BORDEN LADNER GERVAIS LLP; ZHONGZI IP; WINSTON AND STRAWN LLP,PATENT DEPARTMENT; WINSTON AND STRAWN LLP PATENT DEPARTMENT; WINSTON AND STRAWN LLP; K AND L GATES LLP

12) Family number: 71244920 (US2011041696A)

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Title: MODULAR ASSEMBLY OF A BEVERAGE PREPARATION MACHINE

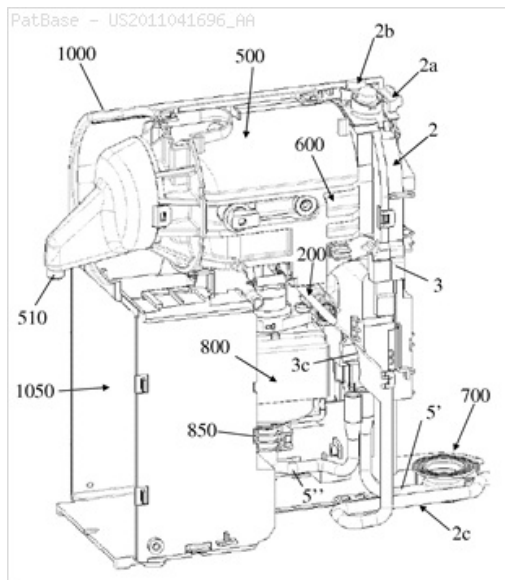
Abstract: A process for manufacturing a beverage preparation machine by providing a group of components a) to f), with the components including a brewing unit for receiving an ingredient of the beverage and for guiding an incoming flow of liquid, through the ingredient to a beverage outlet; b) an in-line heater for heating the flow of liquid to be supplied to the brewing unit; c) a pump for pumping the liquid through the heater; d) one or more fluid connecting members for guiding the liquid from a source of liquid to the beverage outlet; e) an electric control unit for receiving instructions from a user via an interface and for controlling the heater and pump; and f) one or more electric sensors for sensing at least one operational characteristic of the brewing unit, the heater, the pump, a liquid reservoir, an ingredient collector, a flow of the liquid, a pressure of the liquid and a temperature of the liquid, and for communicating the characteristic(s) to the control unit. Components a) to f) for assembling the beverage machine are connected by pre-assembling at least two or three modules, with each module being fully automatically assembled from at least two of components a) to f), wherein the components of the fully automatically preassembled modules are configured to be automatically seizable, orientable, positionable and fully connectable to each other in one or more automatic assembly steps.

Classifications:

International (IPC 8-9): A47J A47J31/00 A47J31/047 A47J31/32 A47J31/36 A47J31/44 B67D1/08 B67D1/10 (Advanced/Invention); A47J31/44 (Core/Invention)

CPC: A47J31/3676 A47J31/3623 A47J31/4403 A47J2201/00 Y10T29/49904

US: 29/469 99/281 99/288 99/302R



Family:

Publication number	Publication date	Application number	Application date
AU2009240123 AA	20091029	AU20090240123	20090323
AU2009240123 BB	20150625	AU20090240123	20090323
BRPI0910773 A2	20150929	BR2009PI10773	20090323
CA2716756 AA	20091029	CA20092716756	20090323
CN102014710 A	20110413	CN200980113965	20090323
CN102014710 B	20131113	CN200980113965	20090323
CN103505057 A	20140115	CN201310483303	20090323
HK1152632 A1	20120309	HK20110106898	20110705
JP2011518015 T2	20110623	JP20110505445T	20090323
RU2010147366 A	20120527	RU20100147366	20090323
RU2497429 C2	20131110	RU20100147366	20090323
US2011041696 AA	20110224	US20090989072	20090323
US8850957 BB	20141007	US20090989072	20090323

Priority:

EP20080154918 20080422 EP20080156704 20080522 EP20080157066 20080528
EP20080160340 20080714 WO2008EP60463 20080808 WO2008EP63092 20080930
WO2008EP63128 20081001 WO2009EP53368 20090323

Probable Assignee: NESTEC SA

Assignee(s): (std): ETTER STEFAN ; GAUDENZ URS ; NESTEC SA ; NESTEK S A ; HODEL THOMAS ; LANG MARKUS ; GAVILLET GILLES ; MEIER MICHAEL ; KOLLEP ALEXANDRE ; MOERI PETER ; MOSER RENZO ; NESTEK SA ; PREISIG PETER ; SCHWAB ROBIN ; SCHENK RUDOLF ; AEMISEGGER STEVE ; BUEHLER LEO

Assignee(s): DES PRODUITS NESTLE SA SOC ; NESTEC S A

Inventor(s): (std): SHVAB ROBIN ; GAUDENTS URS ; PREJSIG PETER ; MOZER RENTSO ; KHODEL TOMAS ; KOLLE ALEKSANDR ; EHMIZEGGER STIV ; MAJER MIKHAHL ; BJULER LEO ; SHENK RUDOL F ; EHTTER SHTEFAN ; GAVILLE ZHIL ; LEO BUEHLER ; PETER MOERI ; MOERI PETER ; BUEHLER LEO ; ROBIN SCHWAB ; GILLES GAVILLET ; ALEXANDRE KOLLEP ; STEFAN ETTER ; URS GAUDENZ ; PETER PREISIG ; MARKUS LANG ; RUDOLF SCHENK ; STEVE AEMISEGGER ; THOMAS HODEL ; RENZO MOSER ; MICHAEL MEIER ; SCHWAB ROBIN ; AEMISEGGER STEVE ; GAUDENZ URS ; MEIER MICHAEL ; LANG MARKUS ; SCHENK RUDOLF ; PREISIG PETER ; BUHLER LEO ; GAVILLET GILLES ; ETTER STEFAN ; MORI PETER ; HODEL THOMAS ; KOLLEP ALEXANDRE ; MOSER RENZO

Inventor(s): PETER MORI ; LEO BUHLER

Agent(s): SHELSTON IP; SHELSTON IP PTY LTD; ZHONGZI IP; WINSTON AND STRAWN LLP,PATENT DEPARTMENT; WINSTON AND STRAWN LLP PATENT DEPARTMENT; WINSTON AND STRAWN LLP

13) Family number: 71244930 (IN02381DN2010A)

© PatBase

Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

Abstract: An in-line heating device (1,2,3,4) for a liquid food or beverage preparation machine in which liquid is circulated through the heating device and then guided into a brewing chamber. This heating device comprises: a thermoblock with a metal mass (1) that incorporates an inlet, an outlet and a heating chamber extending therebetween to form a passage for guiding said liquid circulating through said mass, the mass being arranged to accumulate heat and to supply heat to the liquid; and one or more electric components (60,70,75) that are rigidly secured onto or into the thermoblock and that are connected to a printed circuit board (4) and/or a flex-print (4) arranged to control the thermoblock. The electric components are rigidly connected to the printed circuit board and/or flex-print, in particular via rigid connector pins or blades or rigid plug and socket members.

Classifications:

International (IPC 8-9): A47J31/54 (Advanced/Invention)

Family:

Publication number	Publication date	Application number	Application date
IN02381DN2010 A	20110204	IN2010DN02381	20100407

Priority:

EP20070117853 20071004 WO2008EP63128 20081001

Probable Assignee: NESTEC S A

Assignee(s): NESTEC S A

Inventor(s): ETTER STEFAN ; GAUDENZ URS ; GAVILLET GILLES ; HODEL THOMAS ; KOLLEP ALEXANDRE ; MORI PETER ; MOSER RENZO ; PREISIG PETER ; SCHWAB ROBIN

14) Family number: 48392936 (US2011050431A)

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Title: BEVERAGE CONTAINERS WITH DETECTION CAPABILITY

Abstract: Methods and systems described herein include individual-use beverage containers including sensors and methods of their use. Beverage containers include: a vessel body configured to hold a beverage; and at least one sensor associated with the vessel body, the at least one sensor including a sensor configured to detect one or more substance in a fluid. Systems include: at least one beverage container including at least one sensor configured to detect one or more substance in fluid; and at least one external device including at least one port configured for communication with the at least one sensor. Methods include: detecting one or more substance within fluid with at least one sensor integral to a beverage container; and interfacing one or more of the at least one sensor with an external device.

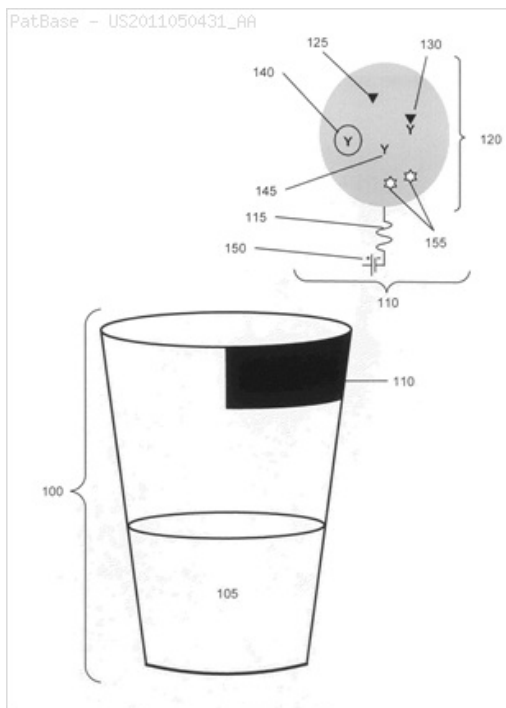
Classifications:

International (IPC 8-9): A47G19/22 A61B5/00 A63F9/24 G01N31/00 G01N33/00 G01N33/14 G01N33/48 G01N33/487 G01N33/53 G01N33/566 G06Q10/00 G06Q50/00 G06Q50/24 G08B21/00 G16H10/60 (Advanced/Invention)

CPC: G07F17/32 G07F17/3202 G07F17/3206 A61B5/0002 A61B5/00 A61B5/411 G01N33/14 G06Q50/24 A47G19/2227 Y10T436/163333 Y02A90/22 Y02A90/26

European: A47G19/22B6 A61B5/00 A61B5/00B A61B5/41B

G01N33/14 G06Q50/24 G07F17/32 G07F17/32C G07F17/32C2B
US: 220/705 220/705S 340/603 340/603P 340/618 340/620 422/68.1
 422/68.100S 435/7.1 435/7.100P 435/7.100S 436/104 436/104P
 436/501 436/501S 463/40 463/40S 702/19 702/19S 702/22 705/2
 705/3 705/3P 73/426 73/61.43 73/61.430S 99/285



Family:

Publication number	Publication date	Application number	Application date
US2011050431 AA	20110303	US20090584364	20090902
US2011053173 AA	20110303	US20100657166	20100113
US2011053283 AA	20110303	US20090584054	20090828
US2011054938 AA	20110303	US20090584055	20090828
US8810417 BB	20140819	US20090584054	20090828
US8898069 BB	20141125	US20090584055	20090828
US9024766 BB	20150505	US20090584364	20090902

Priority:

US20090584054 20090828 US20090584055 20090828 US20090584364 20090902
 US20100657166 20100113

Probable Assignee: GEARBOX LLC

Assignee(s): (std): SEARETE LLC ; WOOD JR LOWELL L ; SWEENEY ELIZABETH A ; TEGREENE CLARENCE T ; JUNG EDWARD K Y ; HOOD LEROY E ; INV SCIENCE FUND LLC ; INVENTION SCIENCE FUND I LLC

Assignee(s): INVENTION SCIENCE FUND LLC ; GEARBOX LLC ; SEARETE LLC A LIABILITY OF STATE OF DELAWARE CORP LTD ; JUNG EDWARD KY

Inventor(s): (std): HOOD LEROY E ; WOOD JR LOWELL L ; SWEENEY ELIZABETH A ; TEGREENE CLARENCE T ; JUNG EDWARD K Y ; LEUTHARDT ERIC C ; HYDE RODERICK A

Inventor(s): JUNG EDWARD KY

Agent(s): DORSEY AND WHITNEY LLP

15) Family number: 71244940 (US2014020563A)

© PatBase

Title: HEATING DEVICE WITH AN INTEGRATED THERMOBLOCK FOR A BEVERAGE PREPARATION MACHINE

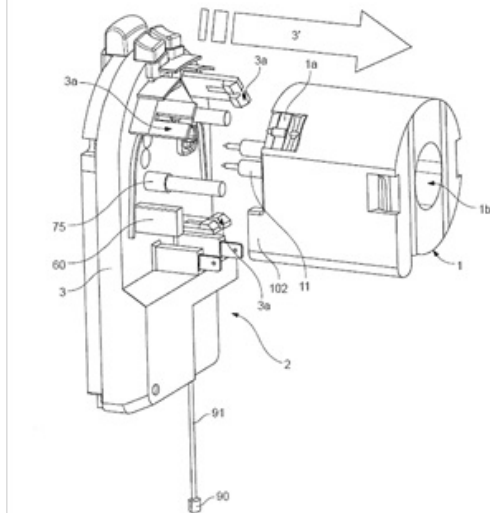
Abstract: A combination of a flow meter and printed circuit board or flex-print for a liquid food or a beverage preparation machine, which board or flex-print is rigidly connected to the flow meter. This combination is used in a liquid food or beverage preparation machine that includes an in-line heating device in which machine liquid is circulated through the heating device and then guided into a brewing chamber that includes a capsule or pod housing for brewing a food or beverage ingredient supplied into the brewing chamber.

Classifications:

International (IPC 8-9): A47J31/40 A47J31/44 A47J31/54 F24H1/10 F24H9/20 H01H37/52 H05K1/18 H05K3/30 (Advanced/Invention)

CPC: A47J31/542 A47J31/545 F24H1/101 F24H9/2028 H05K1/18 H05K3/306 H05K2201/10151 H05K2201/10166 H05K2201/10181 H05K2201/10189 H05K2201/10424 H05K2201/105 H05K2201/2036 A47J31/407 A47J31/441 H01H37/52

US: 337/1 417/410.1 99/280 99/281 99/295 99/300

**Family:**

Publication number	Publication date	Application number	Application date
US2014020563 AA	20140123	US20130039404	20130927
US2014022044 AA	20140123	US20130038966	20130927
US2014026759 AA	20140130	US20130039320	20130927
US10413115 BB	20190917	US20130039320	20130927
US10413116 BB	20190917	US20130039404	20130927

Priority:

EP20070117853	20071004	EP20080154918	20080422	EP20080156704	20080522
WO2008EP63092	20080930	WO2008EP63128	20081001	US20100681362	20100401
US20130039404	20130927	US20130038966	20130927	US20130039320	20130927

Probable Assignee: DES PRODUITS NESTLE SA SOC**Assignee(s):** (std): NESTEC SA ; NESTLE SA**Assignee(s):** DES PRODUITS NESTLE S A SOC ; DES PRODUITS NESTLE SA SOC ; NESTEC S A**Inventor(s):** (std): GAVILLET GILLES ; GAUDENZ URS ; MOERI PETER ; SCHWAB ROBIN ; ETTER STEFAN ; MOSER RENZO ; HODEL THOMAS ; PREISIG PETER ; KOLLEP ALEXANDRE ; MORI PETER**Agent(s):** K AND L GATES LLP**16) Family number: 42003970 (US2002023457A)**

© PatBase

Title: Self-contained liquid storage, delivery, and automatic fill apparatus and method

Abstract: A self-contained liquid storage, delivery, and automatic fill apparatus and method for a semi-frozen or chilled liquid beverage machine having a bowl to contain semi-frozen beverage. The apparatus includes a housing having at least one refrigerated storage cavity in the housing for receiving a bulk storage container of liquid beverage. The housing includes a planar surface, the planar surface adapted to support the beverage machine thereon. A fluid conduit is provided for passing the beverage from the bulk storage container to the beverage machine.

Classifications:**International (IPC 8-9):** A23G9/04 A23G9/28

B67D1/00 (Advanced/Invention)

International (IPC 1-7): A23G9/00 A23G9/22 A23G9/28 B65B1/04

B67D1/00 B67D5/62

CPC: A23G9/045 A23G9/28 A23G9/283 B67D1/0016 B67D1/0875

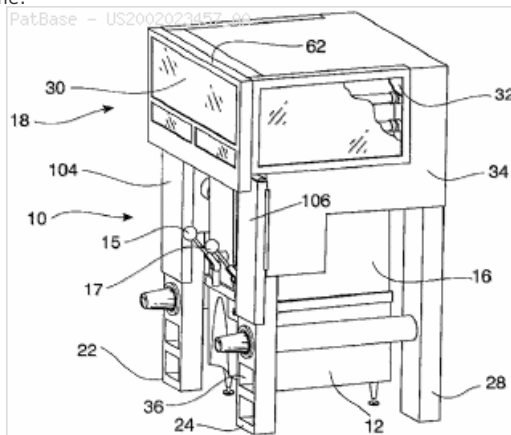
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US: 141/18 141/196 141/2 141/82 141/95 222/129.1 222/146.6

62/342 62/342P 62/389 62/391 62/391S 623/890

**Family:**

Publication number	Publication date	Application number	Application date
US2002023457 AA	20020228	US20010814081	20010321
US6434966 BA	20020820	US20010814081	20010321
US6460580 BA	20021008	US20000650586	20000830
WO0125135 A1	20010412	WO2000US25539	20000918

Priority:

US19990156976P	19991001	US20000650586	20000830	US20010814081	20010321
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Probable Assignee: KAN PAK LLC

Assignee(s): (std): KAN PAK L L C

Assignee(s): KAN PAK LLC ; M AND I MARSHALL AND ISLEY BANK ; STEINBACHER JAMES A ; WEBSTER BANK ; BMO
HARRIS BANK NA ADMINISTRATIVE AGENT AS ; COHLMIA DENNIS J ; CUNHA JAMES P ; HOCKENBURY
JOEL D

Inventor(s): (std): COHLMIA DENNIS J ; STEINBACHER JAMES A ; CUNHA JAMES P ; HOCKENBURY JOEL D

Designated states: AT BE CA CH CY DE DK ES FI FR GB GR IE IT JP LU MC MX NL PT SE