



New connection on: : 18-06-2018 : 16:11:08 - Last disconnection on: : 18-06-2018 : 15:02:46

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 11] ..fi EPODOC



Database: EPODOC

[EPODOC: SS 11] (cacao OR coffee) AND (box OR contain+ OR bin OR case) AND (pipe OR tube OR channel)

Results in EPODOC 1.581

[SS 12] (cacao OR coffee) AND (box OR contain+ OR bin OR case) AND (pipe OR tube OR channel) AND (sheet OR plate) AND (process+ OR benef+)

Results in EPODOC 18

[SS 13] ..v

[EPODOC: SS 13] ..li



1/18 © EPODOC / EPO

PN - [KR20180005815](#) A 20180117
PR - KR20160085935 20160707
AP - KR20160085935 20160707
DT - I
PA - JEONG JUN TAE [KR]
TI - **Coffee** Grounds Remove Drain Device
AB - The present invention relates to a drainage device for removing **coffee** grounds, which recovers **coffee** grounds **contained** in sewage water after extracting **coffee** from a **coffee** machine for extracting **coffee** by

grinding **coffee** beans, and specifically, to a drainage device, which is composed of a drainage inducing member, a filter tank, a first settling tank, a second settling tank and a third settling tank, wherein a filter tank is installed by putting the drainage inducing member and a fine filter body, a setting inducing member **processed** in a concavo-convex shape is provided in the first setting tank, a separation **plate** having a drainage hole having one drainage device body or a plurality of drainage device bodies divides the second setting tank and the third setting tank, a drainage **pipe** fastening part is installed through one side of the drainage device body, and a sealing water trap is provided therein.

2/18 © EPODOC / EPO

PN - [CN107521396](#) A 20171229
 PR - CN20171878934 20170926
 AP - CN20171878934 20170926
 DT - I
 CNOI - [B60N3/18](#)
 PA - WEIFANG IND SCHOOL
 TI - Driver drinking device
 AB - The invention belongs to the technical field of water dispensers and provides a driver drinking device. The device comprises a bearing device, an adjustment device and a flow guide device, the adjustment device comprises an adjustment buckle and an adjustment **plate**, and the flow guide device comprises a plurality of **containers**, a fixing shell and a drinking **tube**; a limit groove is formed in the fixing shell, the

adjustment buckle is located in the limit groove, and the adjustment **plate** is located on the bottom of the fixing shell through a rotation shaft and is fixedly connected with the adjustment buckle; one-way valves are arranged in the **containers**, and a telescopic bending structure is arranged on the drinking **tube**. Therefore, a driver can drink drinking water, tea water or **coffee** conveniently and quickly in the driving **process**, then the fatigue degree of the driver is lowered, and the accident is reduced.

3/18 © EPODOC / EPO

- PN - [CN206714625U](#) U 20171208
- PR - CN201621248864U 20161122
- AP - CN201621248864U 20161122
- DT - I
- PA - ZHEJIANG SHENGLU KITCHENWARE CO LTD
- TI - Novel quick punching of **coffee** device
- AB - The utility model relates to a novel quick punching of **coffee** device, including the kettle body, and set up the work **box** in kettle body below, and set up the apron in kettle body top, and set up motor and last kettle in the apron top, kettle body bottom is provided with the hot **plate**, and the upper right side that the kettle was personally experienced sth. Part of the body is provided with the water inlet, and the right side below of the kettle body is provided with the delivery port, and the left side of the kettle body is provided with looks the **pipe**, look to manage to be provided with the inductor, inside receiver, converter, controller, treater and the temperature detector of being provided with of work **box**, be provided with the master gear on the motor, going up the kettle surface and being provided with the pinion, the master gear is connected with vice gear engagement, go up the kettle and run through the apron upper surface, and go up the inside filter screen that is provided with of kettle, this novel quick punching of **coffee** device can stir the **coffee** powder of going up in the kettle, the effectual time that increases the dissolving efficiency that **coffee** turned to powder, the punching of reduction **coffee** to can be with the **coffee processing** that keeps warm.

4/18 © EPODOC / EPO

- PN - [CN107042203](#) A 20170815
- PR - CN2017166201 20170206
- AP - CN2017166201 20170206
- DT - I

CNOI	- B07B1/28 ; B07B4/08 ; B07B9/00 ; B07B11/06
PA	- ZHENGZHOU LANSAN COFFEE MACHINERY TECH CO LTD
TI	- Air feeding type coffee bean stone removing machine
AB	- The invention discloses an air feeding type coffee bean stone removing machine comprising a support, a feeding assembly and a storage bucket. The feeding assembly and the storage bucket are supported on the support through fixing pieces. The feeding assembly comprises a filling bag, a feeding suction pipe and a screening mechanism arranged between the filling bag and the feeding suction pipe . The screening mechanism is composed of an impurity storage box and a screening mesh. The upper end of the feeding suction pipe communicates with the storage bucket. A lower end port of the feeding suction pipe is located over the screening mesh. The storage bucket is of a splitting type structure and comprises a bucket body, a bucket cover and a draught fan. The bucket body is provided with a feeding through hole, an inserting opening, a discharging pipe and a handle plate . The draught fan is provided with an inlet pipe and an outlet pipe . The structure is simple, by means of the characteristic of combining an air conveying method and a screening method of the feeding assembly of the air conveying type coffee bean stone removing machine, in the suction process of coffee beans to be subjected to stone removing, heavy impurities contained in

the **coffee** beans to be subjected to stone removing are collected by the impurity storage **box** through the screening mesh, light impurities are collected by a dust collecting bag through the feeding suction **pipe** and the storage bucket, and while the **coffee** beans falls into the storage bucket due to self weight. The air conveying type **coffee** bean stone removing machine has the advantages of being rapid in stone removing and high in stone removing rate.

5/18 © EPODOC / EPO

- PN - [CN106500077](#) A 20170315
- PR - CN20151558386 20150906
- AP - CN20151558386 20150906
- DT - I
- PA - TIANJIN XIANGTAI STRIP STEEL CO LTD
- TI - Multifunctional candlestick
- AB - The invention provides a multifunctional candlestick, which comprises a candlestick base, a candlestick column, a telescopic rotation arm, a recovery **processing** device, a heat transfer **pipe** and a heating **plate**. The candlestick base is composed of two cylinders which are connected from up to down and the height of the candlestick base is about 8 to 10 centimeters. The bottom of the lower candlestick base is hollow. The candlestick base is provided with the telescopic rotation arm and the recovery **processing** device. The telescopic rotation arm is composed of two sections. The heating **plate** is arranged on the telescopic rotation arm. One end of the heating **plate** is connected with the heat transfer **pipe**. An incense **box** or a **coffee** pot can be placed on the heating **plate**. The recovery **processing** device is a round **container**. One end of the recovery **processing** device is connected with the heat transfer **pipe**. The candlestick column is arranged on the recovery **processing** device. The candlestick column is conical in shape. Candles can be inserted on the candlestick column. The invention has the advantages of being simple in operation, diverse in functions, realizable in energy conservation and environmental protection and other advantages.

6/18 © EPODOC / EPO

- PN - [CN205751033U](#) U 20161130
- PR - CN20162420297U 20160511
- AP - CN20162420297U 20160511
- DT - I
- PA - GUANGZHOU MACAS ELECTRONIC TECH CO LTD
- TI - Take automation of fingerprint authentication to sell **coffee** machine

AB - The utility model discloses a take automation of fingerprint authentication to sell **coffee** machine, which comprises an outer shell, add the feed **bin**, fingerprint identification window and touch -sensitive screen, the shell lower part is provided with the feed **bin**, it connects the material window to add above -mentioned being provided with of feed **bin**, connect the material to be provided with anti -overflowing **plate** below the window, anti -overflowing **plate** one side is provided with the roof, be provided with material receiving **pipe** above the roof, it generates the window to be provided with the two -dimensional code above the material receiving **pipe**, the two -dimensional code generates window one side and is provided with the information display window, information display window one side is provided with the fingerprint identification window, install the touch -sensitive screen above the fingerprint identification window, touch -sensitive screen internally mounted has information **processor**, information **processor** externally mounted has the WIFI receiver. **Beneficial** effect lies in: utilizing fingerprint authentication discernment, supplementing with money through the cell -phone, need not cash purchase, very big convenience of customers purchases, has simplified the software and hardware of vending machine equipment end simultaneously, and has had dual authentication, effectively avoids the fingerprint to recognize the existence of false rate.

7/18 © EPODOC / EPO

PN - [KR20160089266](#) A 20160727

PNFP - KR101645320B B1 20160812

PR - KR20150008501 20150119

AP - KR20150171570 20151203

DT - I

CT - || STSE (A)
[JP2004357667](#) A 20041224 [] (MIKAMI TOSHIKAZU);
[KR20110009977](#) A 20110131 [] (KIM IN CHUL [KR]);
[KR20130040079](#) A 20130423 [] (GASTEC KOREA CO LTD [KR]);
[KR200467579Y](#) Y1 20130621 []

PA - (A)
Y WON COPORATION CO LTD [KR]; KIM BEOM YEON [KR]

TI - (A)
PORTABLE **COFFEE** ROASTING MACHINE

- (B1)
Portable **coffee** roasting machine

AB - (A)
The present invention relates to a portable **coffee** roasting machine. More particularly, a **process** of roasting conducted inside the **coffee** roasting machine can be observed with a user's eyes through a drum having a heat resistant glass **tube**. Also, roasting is stably conducted in the portable **coffee** roasting machine by introducing an external air inside the drum through a separation **plate** installed to be separated from a front cover, and by discharging chaff and smoke out of the drum. The portable **coffee** roasting machine comprises: a main body; a stand; a chaff **bin**; and a funnel.

8/18 © EPODOC / EPO

PN - [CN203970114U](#) U 20141203
 PR - CN20142336864U 20140623
 AP - CN20142336864U 20140623
 DT - I
 PA - NINGBO BESTT ELECTRIC APPLIANCE CO LTD
 TI - Capsule **coffee** machine
 AB - The utility model discloses a capsule **coffee** machine, which comprises a **coffee** machine body, wherein a water storage **box** and a heating device are arranged in the **coffee** machine body, a water pump and a solenoid valve are arranged between the water storage **box** and the heating device through a soft **pipe**, the front end of the heating device is connected with a piston through a piston sealing ring, a prepare pressure spring plug and a piston prepare pressure spring, a rear baffle **plate** is arranged in the **coffee** machine body, a **coffee** outlet nozzle is arranged on the rear baffle **plate**, a capsule clamp is arranged between the **coffee** outlet nozzle and the piston in the **coffee** machine body, the water pump, the solenoid valve and the heating device are connected with a controller, the heating device is connected with a temperature sensor, the heating device comprises a front heating body and a rear heating body, and a heating **pipe** is cast in the front heating body. The capsule **coffee** machine has the **beneficial** effects that the capsule **coffee** machine is practical, low in production cost and convenient to use, can simply and rapidly make out **coffee** by being matched with an existing **coffee** capsule, is simple in structure, and is suitable to be used in families or offices.

9/18 © EPODOC / EPO

PN - [CN103829803](#) A 20140604
 PNFP - CN103829803B B 20160525
 PR - CN20121475951 20121121
 AP - CN20121475951 20121121
 DT - I
 CT - || STSE (A)
[DE60002820T](#) T2 20031224 [A] (F I S A S P A [IT])
 [A]
[CN203016697U](#) U 20130626 [R] (JOSEPH DERIAUD)
 [R]
[CN202525930U](#) U 20121114 [A] (SHENGLI XUE)
 [A]
[CN202122491U](#) U 20120125 [A] (NINGBO SUNLIGHT ELECTRICAL APPLIANCE CO LTD)
 [A]
[CN1575705](#) A 20050209 [A] (TUOLI ELECTRONIC CO LTD ZHUHAI [CN])
 [A]
 PA - (A)
 JOSEPH DELEO
 TI - (A)
 Capsule **coffee** machine with double water paths
 AB - (A)

The invention discloses a capsule **coffee** machine with double water paths. The machine comprises a capsule fixing cavity, a capsule sealing cover **plate** and a tee-joint valve. The capsule fixing cavity is of a cavity structure with an opening in one end and is used for **containing coffee** capsules, a first connecting plug is arranged on the capsule fixing cavity, an abut-joint opening which can be in sealing abut joint with the opening of the capsule fixing cavity is formed in the capsule sealing cover **plate**, a second connecting inserting head is arranged on the capsule sealing cover **plate**, a first end opening of the tee-joint valve is communicated with a water inlet, a second end opening of the tee-joint valve is communicated with a first water inlet **pipe**, a third end opening of the tee-joint valve is communicated with a second water inlet **pipe**, the first connecting inserting head can be selectively inserted in a first **coffee** outlet hole in one side of the capsule fixing cavity or the first water inlet **pipe**, and meanwhile the second connecting inserting head can be selectively inserted in the second water inlet **pipe** or a second **coffee** outlet hole in one side of the capsule sealing cover **plate**. According to the machine, the double water paths are arranged in the **coffee** machine, capsule **coffee** of different factories and in different water inlet and outlet directions can be **processed** in the single **coffee** machine, the universality for manufacturing the capsule **coffee** is higher, and the machine is convenient to use and saves cost.

10/18 © EPODOC / EPO

PN - [CN202143585U](#) U 20120215
 PR - CN20112238939U 20110707
 AP - CN20112238939U 20110707
 DT - I
 PA - SHENZHEN XINUO COFFEE MACHINE CO LTD
 TI - Brewing device of **coffee** maker
 AB - The utility model discloses a brewing device of a **coffee** maker. A **coffee** maker body comprises a water storage **box**, a heater and a water pump, water in the water storage **box** is conveyed to the heater for heating by the water pump, a detachable brewing device is also installed on the **coffee** maker body, a clamping assembly is installed in a brewing device main body, a first check valve and a first spring are fixedly connected on the clamping assembly together by a fixing **plate**, a second check valve, a second spring and a water outlet nozzle are fixedly connected with a capsule popping **plate** together, and the clamping assembly and the capsule popping **plate** clamp **coffee** capsules to brew **coffee**. The brewing device is detachable so as to be **beneficial** to clean, brewed power slag can not enter a **channel** slit so as to avoid blocking, so that the **coffee** can be dissolved sufficiently, the taste is sweeter, the volume of a product is small, the carrying of the product is convenient, the structure of the product is simple and the manufacturing cost of the product is low.

11/18 © EPODOC / EPO

PN - [CN201256891Y](#) Y 20090617
 PR - CN20082200870U 20080922
 AP - CN20082200870U 20080922
 DT - I
 PA - FOSHAN SANSHUI SYNTHETIC ELECT [CN]

- TI - Pulverizing and extruding device of **coffee** bean
- AB - The utility model belongs to the technical field of a beverage preparing device of a **coffee** grinding machine or a baking device and solves the problem of the prior **coffee** bean grinding device that the collected **coffee** bean powder protrudes from the middle and easily drop out from a filtering **container** when blown by wind after taken out, or wobbled in the operation **process** or slightly vibrated. A **coffee** bean grinding and extruding device comprises a grinder (1) and a **box** body (2), wherein the **box** body (2) is connected to one side of a powder outlet (3) of the grinder (1), one side of the **box** body (2) is provided with a powder inlet (4), the powder outlet (3) is higher than the powder inlet (4), a connecting **channel** (5) is connected between the powder outlet (3) and the powder inlet (4), a discharge hole (7) is arranged at the bottom of the **box** body (2), and a pressure **plate** (6) capable of sliding along the wall surface up and down is arranged inside the **box** body (2). The **coffee** bean powder can be pressed in the **box** body so that the **coffee** bean powder inside the filtering **container** is not easy to scatter.

12/18 © EPODOC / EPO

- PN - [US6279458](#) B1 20010828
- PR - US19990385274 19990830
- AP - US19990385274 19990830
- DT - *
- CT - [US3100434](#) A []; [US3619561](#) A [];
[US3869968](#) A []; [US4039771](#) A [];
[US4200039](#) A []; [US4565121](#) A []
- CCI - [A47J31/0573](#) ; [A47J31/4457](#) ; [A47J31/4475](#)
- TI - Rapid brew automatic **coffee** maker
- AB - An automatic, household drip-type **coffee** making machine with a main housing for receiving and holding a carafe or decanter, and having an method and apparatus for rapidly heating water to form an infused beverage such as **coffee**. The speed brewing system has an automatic water level sensing system with a float **box**, a lever and a micro-switch, which detects the level of water in the water tank and when the water reaches a pre-selected level, activates a water heater located within a water bladder, heating the water bladder to a temperature sufficient to vaporize the water passing into the water bladder. The water vapor condenses along a water outlet **tube** while still retaining sufficient heat to brew an infused beverage. The heated water (condensed water vapor) reaches a shower nozzle **plate** and is dispensed through the shower nozzle **plate** into a filter basket which **contains** a filter and material for making an infused beverage such as regular or decaffeinated **coffee**. The brewing **process** commences inside of the filter basket and infused beverage drips into the decanter or carafe, as is common in automatic drip-type **coffee** making devices. Towards the end of the brewing **process**, the amount of water remaining in the water tank is gradually reduced, and at a pre-selected level, the float **box** will return to its original position, which will release a trigger on the micro-switch, causing the electric circuit to open and shut off the power to the device, thus concluding the entire brewing cycle.

13/18 © EPODOC / EPO

- PN - [KR970007939B](#) B1 19970519

PR - KR19940018221 19940727
 AP - KR19940018221 19940727
 DT - I
 PA - CHO JAE CHUN [KR]
 TI - **COFFEE MAKER**
 AB - A **coffee** maker is provided, which is capable of immediately obtaining **coffee** proper to a user's taste by simple and easy manipulation and always maintaining clean state by facilitating cleaning work of a filter tub, a **processing** grinding tub and a **coffee** pot. If **coffee** is **contained** in a filter tub(31), a driving switch(34) is turned off to stop driving of a motor(6) and to forwardly rotate a snowflake(27), i.e., a grip of a support tub(28) which supports the filter tub(31) so as to place the support tub(28) at an upper portion of the **coffee** pot(23). Then, a heater switch(35) disposed in a left top of a main body(1) of the **coffee** maker is turned on, the heater(17) is heated and at the same time a check valve(36) is open so that water in a water tank(15) is passed through the heater(17) and sent to a hot water supply **pipe**(19). The water sent to the hot water supply **pipe** is extruded to the filter tub(31) through a nozzle(18) to filter **coffee** of particle state. The filtered **coffee** is **contained** in the **coffee** pot(23) through a plurality of trumpet shaped filter holes(32) of a stainless filter net **plate**(33). Thus, **coffee** is immediately made by the same body(1).

14/18 © EPODOC / EPO

PN - [JPH0595836](#) A 19930420
 PR - JP19910264435 19911014
 AP - JP19910264435 19911014
 DT - I
 CT - || STSE (A)
[JPH02274208](#) A 19901108 [] (NAKANO ENG KK, et al);
[JPH0339114](#) A 19910220 [] (MATSUSHITA ELECTRIC IND CO LTD)
 FI - A47J31/00&302; A47J31/043; A47J31/047; A47J31/52
 FT - 4B004/AA12; 4B004/BA31; 4B004/BA32; 4B004/BA33; 4B004/BA35; 4B004/CA01; 4B004/CA24; 4B104/AA22; 4B104/BA15; 4B104/BA19; 4B104/BA23; 4B104/BA43; 4B104/BA53; 4B104/BA66; 4B104/BA69; 4B104/BA79; 4B104/BA80; 4B104/BA82; 4B104/CA21; 4B104/CA30; 4B104/DA35; 4B104/DA50; 4B104/EA09; 4B104/EA20; 4B104/EA29; 4B104/EA33
 PA - MATSUSHITA ELECTRIC IND CO LTD
 TI - **COFFEE BREWER**
 AB - PURPOSE:To enable **coffee** having the predetermined density to be tasted by finding density information from electric conductivity information on brewed **coffee** liquid, feeding back the information in such a way as realizing an initially set density condition, and then determining remaining brewing conditions. CONSTITUTION:When a brewing **process** starts, electric power is supplied to a heater 9 and water in a water vessel 4 is heated via a heating **plate** 8, thereby causing the water to start boiling. As the water in the vessel 4 is heated, the internal steam pressure thereof rises and hot water flows through a connecting **pipe** 2 up to a brewing vessel 1. Ground beans and the hot water contact with each other in the vessel 1, thereby performing **coffee** brewing. In

this **case**, the electric conductivity of brewed **coffee** liquid at a brewing **process** is measured by a current measurement section 14 via a power supply section 13, an electrode 12, a lead wire 12a and another electrode 11a, and the measurement information is sent to an operation section 15. This section 15 converts the conductivity information into density information, and sends this information to a control section 16. Upon receipt of the density information, the control section 16 controls power supply to the heater 9 for the density to agree to the level set in an operation section.

15/18 © EPODOC / EPO

- PN - [GB1190981](#) A 19700506
- PR - US19660543108 19660418; US19670626652 19670217
- AP - GB19670014483 19670330
- DT - **
- CCI - [D04H1/4291](#) ; [D04H1/4334](#) ; [D04H1/435](#) ; [D21H5/20](#)
- CCA - [Y10S428/91](#) ; [Y10T428/2913](#) ; [Y10T428/2969](#) ; [Y10T428/298](#)
- PA - DEXTER CORP [US]
- TI - **Sheet** Material of Improved Tear Strength
- AB - 1,190,981. Paper; non woven fabric. DEXTER CORP. 30 March, 1967 [18 April, 1966; 17 Feb., 1967], No. 14483/67. Headings D1R and D2B. An unshrunk non-woven fibrous structure is formed from a mixture of synthetic, organic, thermoplastic, cold-drawable fibres and a binder which consists of resins, synthetic resins, synthetic rubbers, conventional papermaking fibres or mixtures of conventional paper-making fibres with resins. synthetic resins or synthetic rubbers, and is bonded by a non-heatbonding **process**. The cold-drawable fibres are undrawn, have a substantially constant order of molecular orientation along individual fibre lengths, and an ultimate elongation of more than 200 per cent. They may be of polymers, such as polyamides, acrylics, polyethylene terephthalate, polyvinylidene chloride, polyethylene and polypropylene, and may be crimped or twisted. The **sheet** has good tear strength, and when it is torn the torn edges are bridged by the elongation of the previously undrawn fibres. The papermaking fibres may be a conventional cellulosic pulp, or mixtures of cellulosic fibres and drawn, man-made fibres of composition .the same as or different from that of the undrawn fibres, and may be beaten or unbeaten. The other binder, if any, may be applied uniformly or in spots. In the Examples: (1) kraft woodpulp is beaten and divided into two parts, drawn nylon fibres are added to one and undrawn "nylon fibres to the other, and the two then made into sheets; (2) kraft woodpulp is beaten, drawn and undrawn nylon fibres are added in varying proportions to portions of the pulp, sheets are made and dried and then impregnated with cross-linked polyvinyl alcohol and dried; (3) Example 2 is repeated, but butadiene-acrylonitrile latex is used in place of the polyvinyl alcohol; (4) Example 3 is repeated, but using an acrylic latex; (5) Example 4 is repeated, but using mixtures of drawn and undrawn nylon fibres in various proportions (6) webs are made by air-laying undrawn nylon fibres only and drawn nylon fibres only and bonded with the self-cross-linking acrylic latex of Example 4; (7) furnishes as in Example 1 **contain** an epichlorohydrin-polyamide wet-strength resin, are formed into sheets, dried and impregnated with the acrylic latex of Example 4; ,(8) kraft pulp is beaten and divided into two .parts, drawn polypropylene fibres are added to one and undrawn polypropylene fibres to the other, handsheets are made from

both and treated with toluene solutions of an acrylic ester resin; and (9) Example 8 is repeated with polyester fibres in place of polypropylene. The materials may be used as base sheets for stencils, or for tapes, as interlinings, or as towels, wash cloths, wiping or dust cloths, headrest covers, table cloths, aprons, diapers, or disposable sheets, pillowcases and dressing gowns, as carpet backings, bookbindings, electric insulation, reinforcing layers for plastics film, imitation leather, clothing, aisle runners, tarpaulins, tents, curtains and draperies, upholstery, food wrapping, **pipe** wrappings, tea or **coffee** bags.

16/18 © EPODOC / EPO

PN - [DE102007006268](#) B3 20080529

PR - DE20071006268 20070208

AP - DE20071006268 20070208

DT - *; Rep

CT - || STSE (B3)
[DE10156887](#) C1 20030417 [] (GIMBORN PROBAT WERKE [DE]);
[DE2341099](#) C2 19820923 [];
[DE2103281](#) C3 19810910 []

CCI - [A23N12/10](#)

PA - GIMBORN PROBAT WERKE [DE]

TI - Device for roasting **coffee** beans, comprises roasting **container** formed by rotor bowl and lid device, driving device for rotating rotor bowl, air heater, recirculation device, guide blades, and gap formed between the bowl and the lid device

AB - The device for roasting **coffee** beans, comprises a roasting **container** (1) formed by a rotor bowl (2) and a stationary lid device (3), a driving device for rotating the rotor bowl relative to the lid device around an axis, an air heater (5) connected over a supply **channel** with the roasting **container** and arranged above the rotor bowl, a recirculation device connected with the additional channels (6, 7) and/or the supply **channel**, guide blades arranged in the lid device, a gap formed between the rotor bowl and the lid device, and a mold produced from **sheet** metal. The device for roasting **coffee** beans, comprises a roasting **container** (1) formed by a rotor bowl (2) and a stationary lid device (3), a driving device for rotating the rotor bowl relative to the lid device around an axis, an air heater (5) connected over a supply **channel** with the roasting **container** and arranged above the rotor bowl, a recirculation device connected with the additional channels (6, 7) and/or the supply **channel**, guide blades arranged in a lid interior of the lid device, a gap formed between the rotor bowl and the lid device, a mold produced from **sheet** metal, and a filler **tube** led by the mold. The heater and the supply **channel** are component of the lid device with vertical axis. The supply **channel** is vertically arranged in the area of a lid opening, through which the hot air enters into the roasting **container**, and is axis-symmetrically arranged to the rotor axis of the rotor bowl. The supply **channel** is circularly surrounded by additional channels, by which the exhaust airflow is conducted. The recirculation device has regulation flaps to supply **process** exhaust airflow to different supply **channel**. The regulation flap is arranged in an inlet connection piece of the heater. The multi-walled rotor bowl is formed and has an inner bowl produced from **sheet** metal. The exchangeable inner bowl is surrounded by a double-walled insidely insulated outer bowl. The mold is intended in a head area of the roasting **container**. The mold is connected with the lid device and

has an interval for lid interior for the formation of an exhaust **channel** for **process** exhaust airflow. The truncated cone shaped exhaust **channel** has a circular cross section and is connected with one of the additional **channel**. The lid device has a discharge opening, which is arranged in the area of the guide blades. The discharge opening is connected over an outlet **channel** with a fluidized bed cooler. An independent claim is included for a procedure for operating a device for roasting **coffee** beans.

17/18 © EPODOC / EPO

- PN - [DE2843483](#) A1 19800424
- PR - DE19782843483 19781005
- AP - DE19782843483 19781005
- DT - *; Rep
- CCI - [A47J31/20](#) ; [A47J31/007](#)
- PA - SCHMITZER WILBERT
- TI - Multi-purpose beverage maker for high quality drinks - has A or B selector to include drawing time when making tea
- AB - The machine can be set for use in making either tea (A) or **coffee** (B) whereupon the desired amount of water can be brought to the required temp. (maximum boiling) in the heating **container** (1). A temp. -dependent valve (2) regulates the rate of flow of the water according to program (A) or (B) whereupon the water is fed via a telescopic **tube** (3) into the filter unit (5A) and then into the beverage **container** (6) set on the hot **plate** (7). For making tea a lift mechanism (4) automatically stops the drawing **process** after a preset time by bringing the filter unit (5A) into position (II) to sound the alarm. The water-heating **container** (1) can be made of a fireproof glass whereupon the heating conductor can be cast in the glass.

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- PA - SUEDEDEUTSCHEMETALLWERKEGMBH
- TI - Electric filter **coffee** maker - has preliminary brewing **process** providing concentrated **coffee** extract for subsequent dilution
- AB - **Coffee** machine **contains** a small secondary boiling vessel (7) which is mounted in the main boiling vessel (2) and is provided with a preliminary brewing overflow **pipe** (11) so that in the first stage only enough brew water is supplied to just over the ground **coffee** with the result that all the aromatic substances are extracted from the grains at the earliest possible moment. At the end of the preprogrammed brewing and extraction time the **coffee** extract obtained is then diluted by adding the remaining brew water until the finished **coffee** drink is prepared. The two boiling vessels (2, 7) are connected together by an opening (8) in the secondary vessel which can be closed by a slide **plate** (9). The contents of the two vessels (2, 7) can be in the ratio of 1:6 with a common heating unit (6) being used.

[SS 13]