Welcome to EPOQUE Rebuild under the Production Environment

[PATENW: SS 3] ..fi epodoc

Database: EPODOC

[EPODOC: SS 1] Cartridge and air and (compressed or pressur+)

Results in EPODOC **4.567**

[SS 2] * and pd<2013-12-04

Results in EPODOC **3.824**

[SS 3] * and (button or actuactor)

Results in EPODOC **28**

[SS 4] ..v

[EPODOC: SS 4] 2 and filling

Results in EPODOC **236**

[SS 5] * and valve

Results in EPODOC **78**

[SS 6] ..v

[EPODOC: SS 6] ..li 1-10

1/78 © EPODOC / EPO

PN - RU2480185 C1 20130427

PR - RU20110147228 20111121

AP - RU20110147228 20111121

DT - I

PA - GORDEEV VLADIMIR MIKHAJLOVICH [RU]; MAKEEV BORIS LAVROVICH [RU]

TI - MEN'S URINE BAG FOR CONSTANT WEAR

AB - FIELD: medicine.SUBSTANCE: medicine relates to urology and can be used for helping people with urine incontinence. Claimed is men's urine bag for constant wear, which includes urine catcher, means for urine catcher fixation on penis, drain tube, bag for urine collection and drain tap. Urine catcher is made from latex rubber, on upper perimetre contains open to skin surface ring-like **cartridge** with moisture-absorbing replaceable material. Drain tube is made from latex rubber at entrance to bag for urine collection contains check **valve**. Inside bag placed is sensor with signal of level of bag **filling**, which through control unit is connected with power supply. Output hole of bag is connected with output tube, made in form imitating penis shape. Regulated drain tap in form of knob is placed on tube. Inside bag for urine collection located is nozzle, connected with source of **compressed** gas. Reducer of source of **compressed air** is connected with drain tap through control unit. Catcher, drain tube from latex, bag for urine collection and output tube are connected with Velcro fasteners.EFFECT: control over device **filling**, cleanness of internal surface of bag for urine collection, convenience of device application.1 dwg

2/78 © EPODOC / EPO

PN - WO2013029526 A1 20130307

PR - CN20112326269U 20110901

AP - WO2012CN80659 20120828

DT - *; Rep

CT - |CN| ISR (A1)
CN202213315U U 20120509
[XP] (ZHUHAI PRINT RITE CO LTD);
CN201856449U U 20110608
[Y] (ZHUHAI PRINT RITE CO LTD);
CN2551456Y Y 20030521
[Y] (JIANG YUELI [CN]);
JP2007030524 A 20070208
[Y] (GEN CO LTD);
CN201645992U U 20101124
[A] (NINESTAR IMAGE CO LTD);
CN2590736Y Y 20031210
[A] (WU YUNSHEN [CN]);
CN2496653Y Y 20020626
[A] (MIAO ZEFU [CN]);
CN201728899U U 20110202
[A] (ZHUHAI NASIDA ENTPR MAN CO LTD)

CCI - B41J2/175 ; B41J2/17513 ; B41J2/17553 ; B41J2/17556

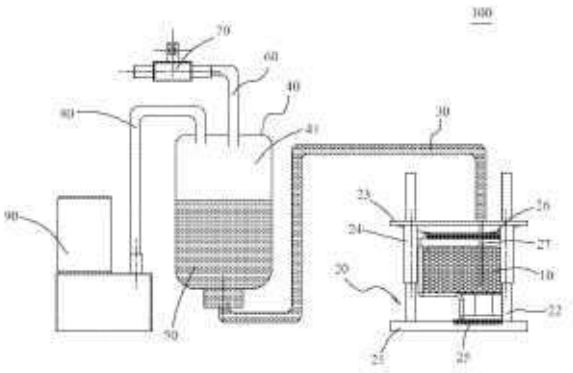


图 3 / Fig. 3

PA - PRINT RITE UNICORN IMAGE PRODUCTS CO LTD ZHUHAI [CN]; QUAN LIHUA [CN]; LI SHIQIANG [CN]; CHEN QUAN [CN]

TI - INK **CARTRIDGE** INK **FILLING** DEVICE

AB - An ink **cartridge** ink **filling** device (100) comprises a base (20) for seating an ink **cartridge** (10), an ink receptacle (40) for holding ink (50), a negative **pressure** source (90) and an ink **filling** needle (27) capable of inserting into the ink **cartridge** through the ink **filling** hole of the ink **cartridge**. The base is provided with a first sealing member (25) and second sealing member (26) respectively sealing the jet nozzle (13) and the ink **filling** hole of the ink **cartridge**; the upper end of the ink **filling** needle communicates with the ink in the ink receptacle via a first conduit (30); the space above the liquid level (41)of the ink receptacle is connected to the negative **pressure** source (90); and the space above the liquid level also communicates with the atmosphere via an **air** guide **valve** (70). The ink **filling** device utilizes negative **pressure** to fill ink, with good ink **filling** result.

3/78 © EPODOC / EPO

PN - **CN202485879U** U 20121010

PR - CN2012233850U 20120203

AP - CN2012233850U 20120203

DT - I

PA - FORTUNE MATE TECHNOLOGY LTD

TI - Device for detecting tightness of toner **cartridge** through **pressure** method

AB - A device for detecting tightness of a toner **cartridge** through a **pressure** method is provided. A structure of the device is that an **air** compressor is connected with a long gas pipe which is used for conveying gas produced by the **air** compressor. A common

reducing **valve**, a precise reducing **valve** and a solenoid **valve** are sequentially installed on the gas pipe, and then the gas pipe is connected onto a channel on a three-way pipe. Other channels of the three-way pipe are respectively connected with a gas **pressure** meter and a power **filling** port of a toner **cartridge** to be detected. The solenoid **valve** is connected with a solenoid **valve** controller to cut off gas or enable the gas to enter the solenoid **valve**. The device is utilized to detect the tightness of the toner **cartridge**, the tightness of the toner **cartridge** can be judged without adding carbon powder, the detecting process is simple, and waste of the carbon powder cannot be caused.

4/78 © EPODOC / EPO

PN - KR20110092569 A 20110818

PNFP - KR101068248B B1 20110928

PR - KR20100012055 20100209

AP - KR20100012055 20100209

DT - I

PA - (A)
ECOTIS CO LTD [KR]

TI - (A)
AN AUTOMATIC **CARTRIDGE** TONER REFILLER WHICH HAS SENSING BARS

AB - (A)
PURPOSE: A device for automatically **filling** a **cartridge** having a sensing bar is provided to automatically fill a constant amount of lacked toner by sensing the weight reducing amount of a toner refill storing tank as a sensing bar. CONSTITUTION: A black toner refill storage tank(133) stores the toner which is refillable. An **air pressuring** pump(101) generates compression **air** to enable a toner stored ins the black toner refill storing tank inside the black toner **cartridge**(173). A 3-way **valve**(111) controls the flow of an **air** flow supplied in the compression **air** pump. A first connection hose(141) connects the black toner refill storing tank and the black toner **cartridge**. A second connection hose(157) connects the 3-way **valve** and the black toner refill storing tank. A control unit(105) controls a toner transmission by controlling the **air** compression pump and the 3-way **valve**. An input/output unit(103) inputs the command of a user to the control unit and outputs the state of the control unit.

5/78 © EPODOC / EPO

PN - US2011146836 A1 20110623

PNFP - US8511350 B2 20130820

PR - US20090655037 20091222

AP - US20090655037 20091222

DT - *; Rep

CT - || STSE (B2)
US5100241 A 19920331 [ ] (CHAN KWAN HO [CA])
US5601107 A 19970211 [ ] (MOORE EPITAXIAL INC [US])
US6257714 B1 20010710 [ ] (HEWLETT PACKARD CO [US])
US6494348 B2 20021217 [ ] (SULZER CHEMTECH AG [CH])
US6598766 B1 20030729 [ ] (SULZER CHEMTECH AG [CH])

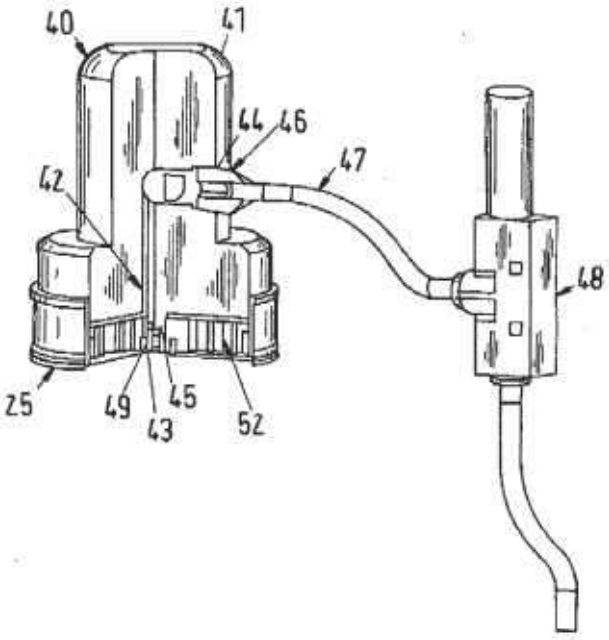
- || R141 (A1)
US5100241 A [ ];
US5601107 A [ ];
US6257714 B1 [ ];
US6494348 B2 [ ];
US6598766 B1 [ ]

CCI - B05C17/00553 ; B05C17/00579

PA - (B2)
TURNER HAYDEN [US]; SULZER MIXPAC AG [CH]

TI - (A1 B2)
Piston setting device and method

AB - (A1)
A system comprises a piston setting device and a **cartridge** comprising a piston and a **cartridge** chamber which can be filled by a **filling** mass. The **cartridge** chamber further comprises a closeable outlet opening for the discharge of the **filling** mass whereby the **filling** mass is storable in said **cartridge** chamber when the outlet opening is closed and the piston is inserted into the **cartridge** chamber. The piston comprises a first piston part which rests in sealed manner against the **cartridge** wall and a second piston part,



which forms venting **valve** comprising a **valve** plug together with the first piston part, wherein said **valve** plug opens when a **pressure** is exerted on the side of the piston opposite to the **filling** mass by a piston setting device. Furthermore a piston setting device is provided, wherein the piston setting device comprises a housing, a conduit arranged in said housing, said conduit having a first end and a second end, said first end comprising an attachment element connectable to a vacuum source and said second end comprising a plunger, said plunger being connectable to a **valve** plug of the piston for opening said **valve** plug when said piston setting device is attached to said piston. Furthermore the invention relates to a piston setting device and a method for setting a piston in a **cartridge** by means of said piston setting device.

- (B2)
The system for **filling** a **cartridge** employs a piston setting device that has a plunger for moving the venting **valve** of the piston to an open position and a conduit for venting the **air** from the opened **valve** under the influence of a vacuum source connected to the conduit via an attachment device.

6/78 © EPODOC / EPO

PN - RU2009117634 A 20101120

PNFP - RU2449908 C2 20120510

PR - DE20061048071 20061011

AP - RU20090117634 20070804

DT - I

CCI - B60T17/004 ; B60T17/02

PA - (C2)
VABKO GMBKH [DE]

TI - (C2)
COMPRESSED AIR FEED SYSTEM AND METHOD

AB - (C2)
FIELD: transport. ^ SUBSTANCE: invention relates to automotive **compressed air** supply systems. In determining parameters of **compressed** supply system, circuits (26, 28, 30, 32, 34, 36, 38) of **compressed air** using equipment are filled. **Pressure** increase rate is defined in, at least, one circuit (28, 30, 32) of **compressed air** using equipment with due allowance for compressor rpm, **air**-drier **cartridge** recovery is carried after **filling**, at least, one circuit (28, 30, 32). Note here that time of preset **pressure** drop or **pressure** gradient is defined. Amount of **air** required for regeneration is defined from **pressure** drop, regeneration time and know diameter of restrictor washer (108) to determine volume of, at least, one tank to compute compressor output from tank volume and **pressure** increase rate or **filling** rate. Proposed system comprises braking system circuits, pickups and electronic control device. **Compressed air** consuming devices are supplied via multicircuit protective **valve** with several valves. **Air** drier may be used for **air** preparation at various transport facilities. ^ EFFECT: reduced power consumption. ^ 32 cl, 3 dwg

7/78 © EPODOC / EPO

PN - **CN201561256U** U 20100825

PR - CN20092133363U 20090702

AP - CN20092133363U 20090702

DT - I

PA - SHENZHEN TERCA TECHNOLOGY CO LTD

TI - **Pressure** type automatic butter **filling**-up device

AB - The utility model relates to a **pressure** type automatic butter **filling**-up device.
The **pressure** type automatic butter **filling**-up device provides a structure for effectively automatically **filling** the lubricating grease at fixed times with fixed quantities into parts in machines and vehicles in need for lubrication maintenance with features of small installation volume and simple, convenient installation. The **pressure** type automatic butter **filling**-up device comprises an **air** compressor; an **air** delivery pipe connected with the **air** compressor; a **cartridge**, wherein two ends of the **cartridge** are fastened by fixing elements and sleeved with a front cover of a seal ring, a back cover; a rodless piston sleeved into the inner cavity of the **cartridge**; a control box fixed on the front cover; a control **valve** communicated with the **cartridge** by the front cover; wires for connecting the control box with other parts; an **air** outlet arranged on the front cover; a joint for connecting with the **air** inlet tube; a joint arranged on the back cover and connected with an oil charging pie and perforating through the cover surface; an oil nozzle arranged on the back cover and perforating through the cover surface; a signal switch for indicating the exhaust information of the butter and a whole control circuit.

8/78 © EPODOC / EPO

PN - **EP2216180** A2 20100811

PNFP - EP2216180 A3 20101201

- EP2216180 B1 20120509

PR - DKBA200900030U 20090209

AP - EP20100388001 20100209

DT - *; Rep

CT - || STSE (A3)
EP1142713 A2 20011010 [X] (SEIKO EPSON CORP [JP])
[X] 1,2
* paragraphs [0025] - [0027]; figures 1, 2 *
* paragraphs [0059] , [0 66] , [0 77]; figures 10b-12 *;
EP1920933 A2 20080514 [X] (CANON KK [JP])
[X] 1,2
* paragraph [109n]; figure 19 *;
EP0753411 A2 19970115 [X] (CANON KK [JP])
[X] 1,2
* column 2, line 36 - line 52; figure 1 *;
US5980030 A 19991109 [X] (FUJII TAKEO [JP])
[X] 1,2
* figure 1 *;
DE19702283 A1 19980806 [X] (HOFFMANN JOSEF [DE])
[X] 1,2
* abstract *;
EP2127886 A1 20091202 [XP] (SEIKO EPSON CORP [JP])
[XP] 1,2
* paragraphs [0037] , [0 38] , [0 78]; figure 4 *;
US5343226 A 19940830 [X] (NIEDERMEYER JOHN F [US], et al)
[X] 1
* column 4, line 42 - column 5, line 4 *

CCI - B41J2/17509 ; B41J2/17566

PA - (A2 A3 B1)
MASYTEC AS [DK]

TI - (A2 A3 B1)
A system for supplying ink to a printing machine

AB - (A2)
An automatic ink **filling** system for printing machines, where a pipe (3) has a plurality of inlet openings (4) and outlet openings (5), said inlet openings (4) being connected with a base member (6) of an ink case, in which case an ink **cartridge** (20) with ink is disposed, while an **air** hose (8) is connected at the cover (7) of the ink case via a magnetic **valve** (9), which is in turn connected with a level sensor (11) via a control, so that **compressed air** may be supplied to the ink in the **cartridge** (20), whereby it is pressed out through the outlet opening (5) and down into the ink chamber (21).

PN - **RU2373068** C1 20091120

PR - KR20060025095 20060318; KR20070026343 20070316

AP - RU20080132508 20070317

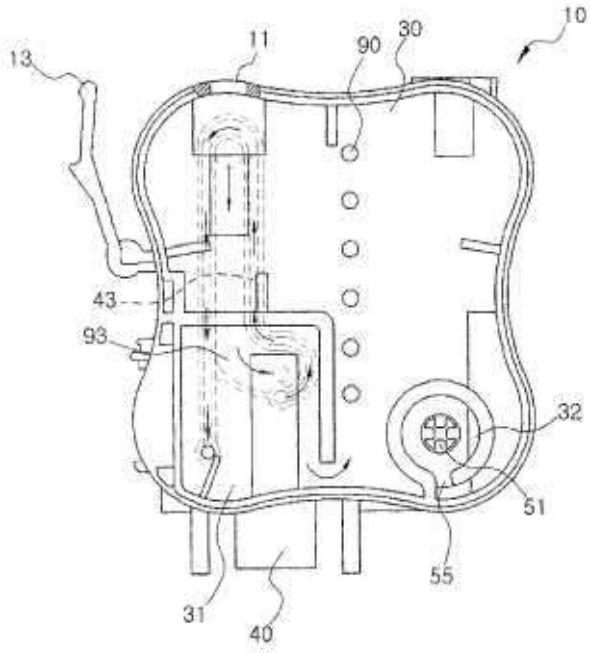
DT - I

CCI - **B41J2/17513** ; **B41J2/1752** ; **B41J2/17553** ; **B41J2/17556**

PA - INKTEK KO LTD [KR]

TI - INKJET PRINTER **CARTRIDGE**AND ITS INK REFILL METHOD

AB - FIELD: printing. ^ SUBSTANCE: ink printer **cartridge** contains a case fabricated with a specific form and having an opening for **filling**, on the one side of the case, a **filling** container, which is filled with ink, inside of the case, there is an outlet container connected with a **filling** cavity, an ink outlet coupled with the ejection container by pumping ink through the channel, the **air** container connected with the **filling** container, in order to blow **air** through the channel of **air** transport, **air** intake **valve** installed in **air** container, **air** intake channel, taking outside **air** in the **air** intake **valve**, blocking the film, fixed on the one case side, lid, installed on the other side of the casing, and part of **pressure** regulatory on one surface of the outer case, communicating with the **filling** container. ^ EFFECT: ink **cartridge** allows to increase space for ink, maintain the **pressure** inside, remove the **air** bubbles and has improved quality. ^ 8 cl, 12 dwg



PN - **RU2374078** C1 20091127

PR - KR20060028147 20060328; KR20060098833 20061011

AP - RU20080132507 20070328

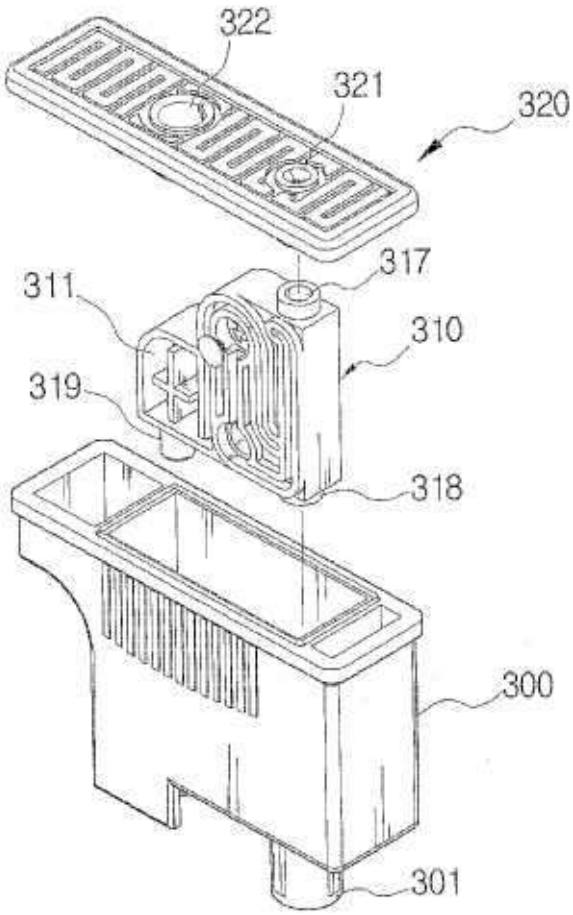
DT - I

CCI - **B41J2/17513** ; **B41J2/17553** ; **B41J2/17556**

PA - INKTEK KO LTD [KR]

TI - INK **CARTRIDGE** FOR PRINTER

AB - FIELD: information technologies. ^ SUBSTANCE: invention is related to ink **cartridge** for printer. Ink **cartridge** for printer comprises body, having open surface and specified shape to receive ink inside, cover connected to body to define required space and chamber device comprising **filling** chamber, having vessel for reception of some ink in body, drain chamber connected to **filling** chamber, channel of ink transfer for movement of ink received in **filling** chamber, into drain chamber, channel of **air** intake for direction of **air** inside **cartridge**, **valve** of **air** suction for selective passage of directed **air** and **valve** of **pressure** control for control of internal body **pressure**. ^ EFFECT: **cartridge** provides for protection against ink leakage into head, their stable and fast feeding to produce high quality of printing and reduced costs for **cartridge** manufacturing. ^ 16 cl, 16 dwg



[SS 6]