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EUROPEAN QUALIFYING EXAMINATION 2018

Pre-examination

This paper comprises:

*	Instructions for answering the paper and marking scheme	2018/P/EN/1
*	Legal questions (Questions 1-10)	2018/P/EN/2-11
*	Claim analysis (Questions 11-20)	2018/P/EN/12-39
*	Annexes: calendars for 2017 and 2018 with indication of days on which at least one of the EPO filing offices is not open for the receipt of documents	2018/P/EN/40-41

Instructions for answering the paper and marking scheme

1. The pre-examination is in the form of a multiple choice paper. It comprises 20 questions in all, 10 questions relating to legal knowledge (questions 1-10) and 10 questions relating to the analysis of claims (questions 11-20). Questions must be answered by filling in the circles on the answer sheet printed on the reverse side of your personal cover sheet. The duration of this examination is four hours.

(a) Each question X has 4 separate statements, namely X.1, X.2, X.3 and X.4. For each statement X.1, X.2, X.3 and X.4 candidates must unambiguously indicate on the answer sheet whether the statement is true or false. For each statement X.1, X.2, X.3 and X.4 only one answer can be given, either true or false. Each statement within a question is to be considered independently of the other statements.

(b) To indicate that a statement X.1, X.2, X.3 or X.4 is true, the corresponding circle for “true” should be filled using a black medium soft HB pencil. To indicate that a statement X.1, X.2, X.3 or X.4 is false, the corresponding circle for “false” should be filled using a black medium soft HB pencil.

(c) If, in reply to a statement X.1, X.2, X.3 or X.4, no indication is given as to whether the statement is true or false, or if both true **and** false are indicated, then the answer to this statement will be deemed not to be correct. Accordingly, if a candidate fills or partly fills a circle they do not intend to submit as part of their answer, it is essential that any mark in that circle is fully erased.

(d) There is no possibility for submitting notes or remarks to the examiner. Any such submission will be disregarded.

2. Only one answer sheet per candidate will be available.

3. Marking

(a) Marks awarded per question
If within one question X, none or only one of the answers to the statements X.1, X.2, X.3 and X.4 is correct, then 0 marks will be awarded for this question X.
If within one question X, two of the answers to the statements X.1, X.2, X.3 and X.4 are correct, then 1 mark will be awarded for this question X.
If within one question X, three of the answers to the statements X.1, X.2, X.3 and X.4 are correct, then 3 marks will be awarded for this question X.
If within one question X, all four of the answers to the statements X.1, X.2, X.3 and X.4 are correct, then 5 marks will be awarded for this question X.

(b) Total number of marks awarded
The total number of marks awarded for the pre-examination is the sum of the marks achieved for each question, calculated as stated above.

Legal questions

Question 1

For each of the statements 1.1 – 1.4, indicate on the answer sheet whether the statement is true or false:

1.1 During opposition proceedings, an amendment to a European patent introducing subject-matter which was present only in the priority document but not in the European patent application as filed is allowable under Article 123(2) EPC.

1.2 Intermediate generalisations are never allowable under Article 123(2) EPC.

1.3 An amendment introducing subject-matter which was present only in the abstract of the application is allowable under Article 123(2) EPC.

1.4 An amendment introducing subject-matter which was present only in the claims filed in reply to a communication under Rule 58 EPC in conjunction with Rule 57(c) EPC is allowable under Article 123(2) EPC.

Legal questions

Question 2

Daniela is resident in Poland. On 13 February 2018, Daniela filed the European patent application EP-D as a first filing. The EPO noticed that the drawings mentioned in the description were evidently missing. With a communication dated 22 February 2018, the EPO invited Daniela to file the missing drawings.

For each of the statements 2.1 – 2.4, indicate on the answer sheet whether the statement is true or false:

2.1 If Daniela ignores the invitation, EP-D will be deemed to be withdrawn.

2.2 If Daniela files the missing drawings on 3 May 2018, EP-D will receive 3 May 2018 as its date of filing.

2.3 Daniela may validly file the missing drawings for EP-D on 6 June 2018, provided she pays the fee for further processing.

2.4 If an applicant is not invited by the EPO to file missing parts of the description or missing drawings, he may validly file them within two months of the date of filing.

Legal questions

Question 3

The European patent application EP-A was filed on 29 February 2016. EP-A claims priority from an earlier patent application filed in March 2015. The mention of the grant of a European patent based on EP-A was published in April 2017. An opposition against this patent was validly filed in January 2018. The only ground for opposition raised by the opponent is lack of novelty according to Article 100(a) EPC. The only document cited is the French patent application FR-B published in July 2015 and filed in January 2014. In the notice of opposition, the opponent argues that the priority claimed in EP-A is not valid.

For each of the statements 3.1 – 3.4, indicate on the answer sheet whether the statement is true or false:

3.1 The validity of the priority right as such is not a ground for opposition under Article 100 EPC.

3.2 FR-B is state of the art under Article 54(2) EPC if the priority of EP-A is not valid.

3.3 If the priority of EP-A is valid, then FR-B belongs to the state of the art under Article 54(3) EPC in view of its earlier filing date.

3.4 If the opponent raises today, 26 February 2018, an objection of lack of sufficiency of disclosure against EP-A, then this is a fresh ground for opposition.

Question 4

The examining division issued a communication informing the applicant of the text in which it intends to grant European patent EP-F. The text contains: 10 pages of description, 10 claims, amendments in the description proposed by the examining division and no drawings. The communication is dated 22 October 2017. Today is 26 February 2018.

For each of the statements 4.1 – 4.4 indicate on the answer sheet whether the statement is true or false:

4.1 The time limit for filing a reply to the communication expires on 1 March 2018.

4.2 If the applicant disagrees with the amendments in EP-F, a valid option is to pay the fee for grant and publishing, to file the required translation of the claims and to file an appeal against the decision to grant after notification of the decision to grant.

4.3 If the applicant does not agree with the amendments in EP-F, a valid option is to request reasoned amendments to the communicated text.

4.4 If third party observations are filed after the decision to grant has been notified to an applicant, the observations cannot be considered by the examining division.

Legal questions

Question 5

The international application PCT-E was filed on 10 July 2016. PCT-E claims priority from an earlier patent application filed on 29 July 2015. The international search report for PCT-E was published in November 2017.

For each of the statements 5.1 – 5.4, indicate on the answer sheet whether the statement is true or false:

5.1 One step that must be taken for validly entering the European phase with PCT-E today, 26 February 2018, is to pay the renewal fee.

5.2 The time limit for entry into the European phase with PCT-E expires on 1 March 2018.

5.3 One step that must be taken for validly entering the European phase with PCT-E today, 26 February 2018, is to pay the filing fee.

5.4 One step that must be taken for validly entering the European phase with PCT-E today, 26 February 2018, is to file the request for examination.

Legal questions

Question 6

The Mexican applicant Juana wishes to enter the European phase with the international application PCT-J today, 26 February 2018. Juana is resident in Mexico. PCT-J was filed in Spanish in August 2015, without claiming any priority. PCT-J was published in Spanish.

For each of the statements 6.1 – 6.4, indicate on the answer sheet whether the statement is true or false:

6.1 A translation of PCT-J must be filed with the EPO within two months from entry into the European phase.

6.2 If a translation of PCT-J is not filed in due time, a valid option is to request further processing.

6.3 In proceedings before the EPO Juana must be represented by a professional representative.

6.4 Juana is entitled to a reduction of the examination fee.

Question 7

The mention of the grant of European patent EP-X was published in July 2017. The single claim of EP-X is directed to a product. The patent was validated in Germany and Italy. The date of filing of EP-X is 1 March 2014.

For each of the statements 7.1 – 7.4, indicate on the answer sheet whether the statement is true or false:

7.1 Any infringement of European patent EP-X can be dealt with under the EPC and by the EPO, provided that opposition proceedings are pending.

7.2 The patent proprietor is entitled under all circumstances to produce in Germany any matter that is covered by the claim of EP-X.

7.3 The patent proprietor is entitled under all circumstances to sell in Italy any matter that is covered by the claim of EP-X.

7.4 The renewal fees for European patent EP-X that are due in 2018 cannot be validly paid to the EPO.

Legal questions

Question 8

The international application PCT-M was filed in August 2015 without claiming priority. PCT-M was searched by the EPO as the International Searching Authority in February 2016. The International Searching Authority raised non-unity objections with respect to the subject-matter of claims 20 to 35. The applicant did not pay any additional fees. The International Searching Authority issued a partial search report covering claims 1-19. PCT-M entered the European phase today, 26 February 2018, and is referred to in the following as Euro-PCT-M. No amendments have been filed.

For each of the statements 8.1 – 8.4, indicate on the answer sheet whether the statement is true or false:

8.1 The applicant will have an opportunity to amend the claims of Euro-PCT-M, before substantive examination of Euro-PCT-M begins.

8.2 If in the application documents which are to serve as the basis of the examination of Euro-PCT-M an invention is claimed that was not searched by the EPO as the International Searching Authority, the applicant will be invited to pay a further search fee in respect of this invention.

8.3 If the applicant does not pay claims fees today, 26 February 2018, Euro-PCT-M will be deemed to be withdrawn.

8.4 If the applicant does not comment today, 26 February 2018, on the written opinion of the International Searching Authority, Euro-PCT-M will be deemed to be withdrawn.

Legal questions

Question 9

A notice of appeal was validly filed on 1 February 2018 against the decision to refuse the European patent application EP-B. The decision is dated 6 December 2017. According to the decision, claim 1 of the sole request is not novel over D1 and is not inventive over D2 in combination with the common general knowledge of the skilled person. The statement setting out the grounds of appeal has not yet been filed.

For each of the statements 9.1 – 9.4, indicate on the answer sheet whether the statement is true or false:

9.1 The statement setting out the grounds for the appeal must be filed at the latest on 6 April 2018.

9.2 On 31 January 2018 EP-B was pending.

9.3 The examining division will grant interlocutory revision, if the applicant files an auxiliary request which is clearly allowable, novel and inventive.

9.4 The examining division will grant interlocutory revision, if the applicant can convince the examining division that claim 1 of the sole request is novel over D1.

Legal questions

Question 10

The applicant of EP-S has been summoned to oral proceedings on 23 March 2018. The final date for making written submissions was 23 February 2018. On 23 February 2018, the applicant filed amended claims 1-9, that replace claims 1-10 previously on file. The amended claims 1-9 change the focus of the discussion and raise completely new issues. The applicant also informed the examining division that he will not attend the oral proceedings.

For each of the statements 10.1 – 10.4, indicate on the answer sheet whether the statement is true or false:

In the present situation, the following reaction by the examining division complies with the EPC:

10.1 The examining division performs today, 26 February 2018, an additional search and refuses today EP-S on the basis of a document found during this search.

10.2 The examining division does not admit amended claims 1-9 into the proceedings because the request is late filed under Rule 116 EPC.

10.3 The examining division holds oral proceedings for EP-S in the absence of the applicant.

10.4 The oral proceedings for EP-S are held by an examining division consisting of only one technically qualified examiner.

Claim analysis

Description of the Client's Patent Application

[001] The present invention relates to jugs or filter carriers for mounting on jugs with replaceable filter cartridges for filtering water.

[002] In such jugs or filter carriers the filtering capacity of the cartridges is subject to exhaustion, and therefore the cartridges must be replaced after a certain number of filtering cycles and/or after a predetermined period of activity of the cartridge.

[003] Jugs or filter carriers provided with counting devices are known. Typically the counting devices are installed on the lid and are incremented manually when the jug is filled thereby indicating the number of filtering cycles. A drawback of this solution lies in the fact that the counting device requires an operation to be carried out manually by the user. Furthermore, the opening of a flap on the lid also involves manual operation. Thus, filling the jug requires the use of both hands, one to hold the jug and the other to open the flap and to increment the counter.

[004] It would be desirable to provide a jug where the amount of water filtered and therefore the level of exhaustion of the filter could be determined accurately. It would be desirable if the jug were easy to manipulate when filling and also when incrementing the counter indicating the number of times water has been added to the jug.

Brief description of the drawings:

[005] Figures 1 and 2 are two schematic sectional views of a lid which can be fitted on a jug or a filtering means having a replaceable filter according to a first embodiment.

[006] In Figures 1 and 2, reference 1 indicates a jug for filtering. The jug 1 has a replaceable filter cartridge and comprises a lid 3, in which an aperture 4 is provided for the introduction of the water to be filtered.

Claim analysis

[007] On the lid 3, at the aperture 4, a blocking mechanism 5 is mounted so as to pivot on a hinge 6 between a first, closed position in which it closes the aperture 4, as shown in Figure 1, and a second, open position in which it extends into the jug, as shown in Figure 2. Although in these figures the blocking mechanism is shown to pivot in a clockwise direction towards the closed position, it would be clear to a skilled person that were the jug turned such that the handle 16 is on the left side of the figures the blocking mechanism would pivot in an anti-clockwise direction towards the closed position.

[008] The blocking mechanism 5 is secured to the lid 3 by means of a hinge 6 and comprises, on opposite sides of the axis of the hinge 6, a flap 7 that moves towards the lid 3 to close the aperture 4, and an arm 8 inclined with respect to the flap 7, such that, in the second, open position of the blocking mechanism 5 the arm 8 is brought close to the lid 3.

[009] The lid 3 comprises a biasing means associated with the blocking mechanism 5 to bias the blocking mechanism 5 towards the first, closed position. The biasing means allows the blocking mechanism 5 to pass into the jug into the second, open position under the action of the flow of water through the aperture 4. In this first embodiment shown in Figures 1 and 2, the biasing means comprises a helical spring 9. The opposing ends of the helical spring 9 are secured, respectively, to the arm 8 and to the lid 3.

[010] A counter 11 on the lid 3 comprises a display means 15 for the count value, electrically connected to a detector 12. The detector 12 is a proximity detector, with a magnet 13, fixed on the opposite end of the flap 7 from the hinge 6, and a magnetic detector 14 fixed in a corresponding position on the lid 3. The magnet 13 and the magnetic detector 14 are close together when the blocking mechanism 5 is in the first, closed position. This provides a jug that can be filled and the counter incremented without the need to use both hands.

Claim analysis

[011] As shown in Figure 2, the passage of the flow of water going into the jug 1 through the aperture 4 causes the pivoting of the blocking mechanism 5 from the first, closed position to the second, open position.

[012] The interruption of the passage of the flow of water results in the return of the blocking mechanism 5 from the open position to the closed position by the action of the helical spring 9. The magnetic detector 14 detects a change in magnetic field resulting from the magnet 13 moving towards the magnetic detector 14. The magnetic detector 14 then actuates the counter 11, increasing (or decreasing) by one unit the number indicated by the display means 15. The invention thus provides an advantage of automatically counting the filtering cycles in order to determine the level of exhaustion of the cartridge by the action of the water introduced into the jug, rather than requiring manual intervention by the user.

[013] In a second embodiment (not shown) the detector is of the type with electrical contacts instead of the magnet and magnetic detector such that the relevant circuit is closed when the contacts contact each other and is open when they are distanced from each other. The counter is incremented in response to detecting a change in electric current caused by the contacts contacting each other.

[014] The third embodiment (not shown) provides an alternative detector comprising electrodes, which when immersed in a conductive liquid such as water, close a circuit which increments a counter. Thus, the counter is incremented in response to the water in the jug submerging the electrodes by reaching or exceeding a predetermined level. One problem with detectors that detect water level is that movement of the water, e.g. when the water is poured from the jug, may result in a false positive.

Claim analysis

[015] Although the first, second and third embodiments relate to a lid on a jug, in an alternative embodiment the lid may be a lid on a filter carrier. In this alternative embodiment the filter carrier comprises the lid, a reservoir for holding water, a replaceable filter cartridge and an outlet through which filtered water is output.

Drawings of the client's application

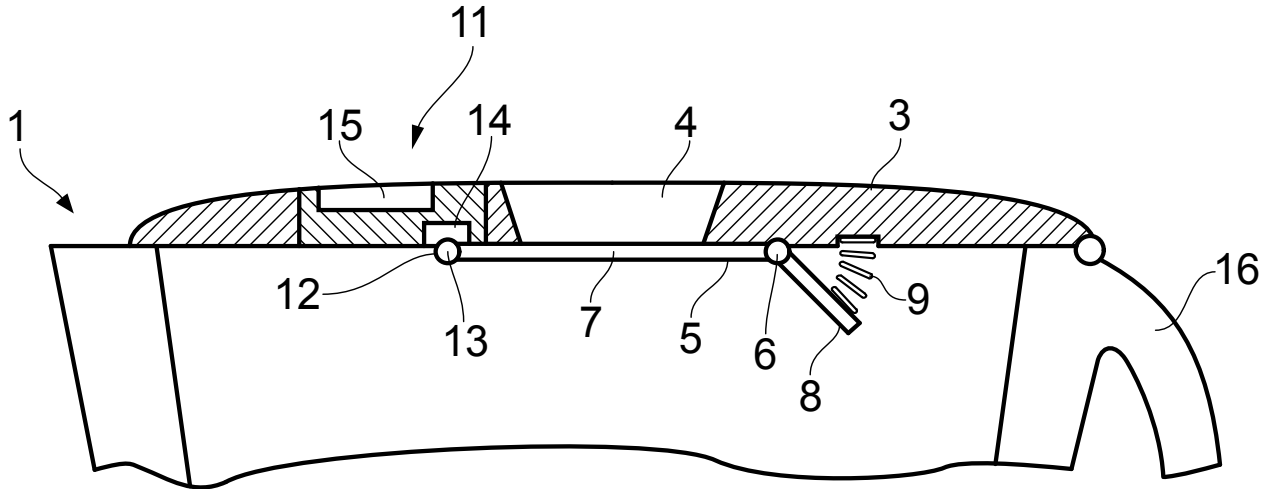

Fig. 1

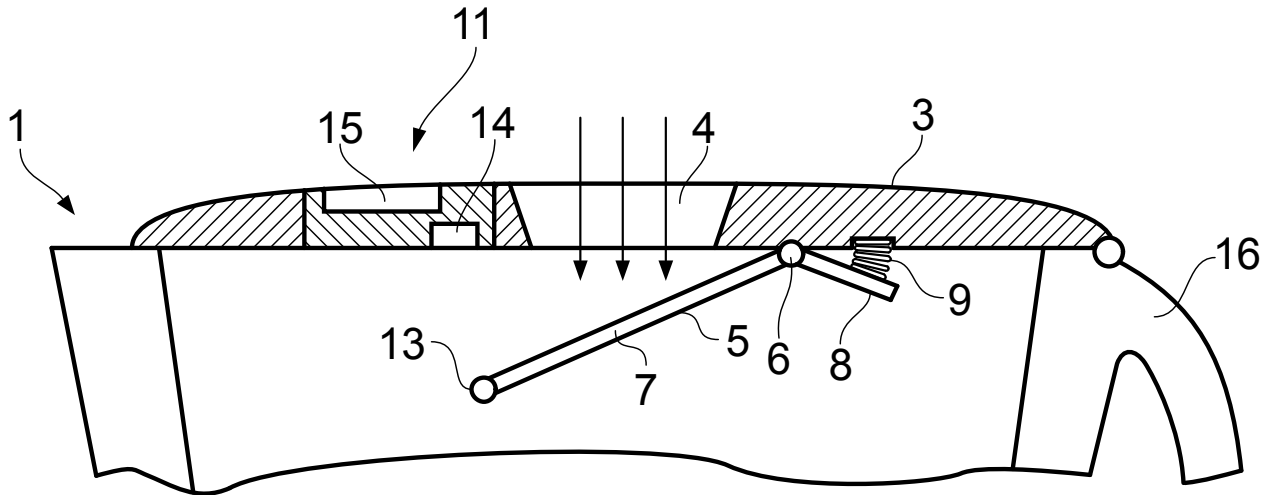

Fig. 2

Claim analysis

Document D1

[001] A jug for filtering water is provided with a counting device, typically installed on the lid, to indicate the number of filtering cycles carried out since a filter cartridge within the jug was last replaced, in order to determine the level of exhaustion of the filter cartridge. The number indicated by the device is incremented each time the user opens the lid of the jug.

[002] Figures 1 to 3 illustrate three examples of the jug according to three different embodiments. Each embodiment shows a jug 101 comprising a replaceable filter cartridge 102, a lid 103 and a counter 111. The configuration of the lid and counter is different for the three embodiments.

[003] Figure 1 shows a first embodiment with a lid 103 with a flap 105 which is manually moved to open or block an aperture 104 in the lid. In this embodiment the flap 105 is slid to open or close the aperture. When in the open position flap 105 contacts an actuator/detector 116 associated with counter 111 causing the counter 111 to increment. In this way in order to fill the jug the flap 105 is manually moved from the closed to the open position revealing aperture 104 and resulting in the automatic incrementation of the counter 111.

[004] Figure 2 shows a second embodiment where the flap 105 is manually pivoted away from the base of the jug to open aperture 104. The detector 116 detects the proximity of the flap 105 and transmits an incrementing signal to counter 111 in response to detecting the flap moving from the open to the closed position.

[005] Figure 3 shows a third embodiment where the counter 111 is manually incremented by a user pressing actuator/detector 116. Thus, a user can determine when the jug has been filled and increment the counter. In this way a record is kept of how many times the jug has been filled allowing a user to determine when it is time to replace the filter cartridge.

Drawings of D1

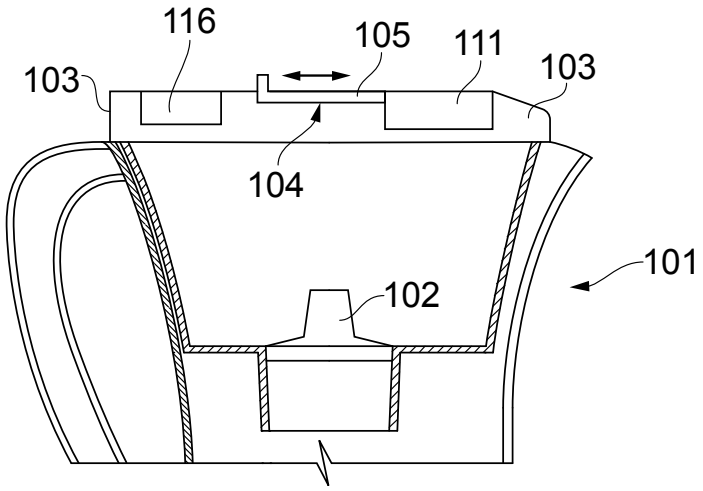

Fig. 1

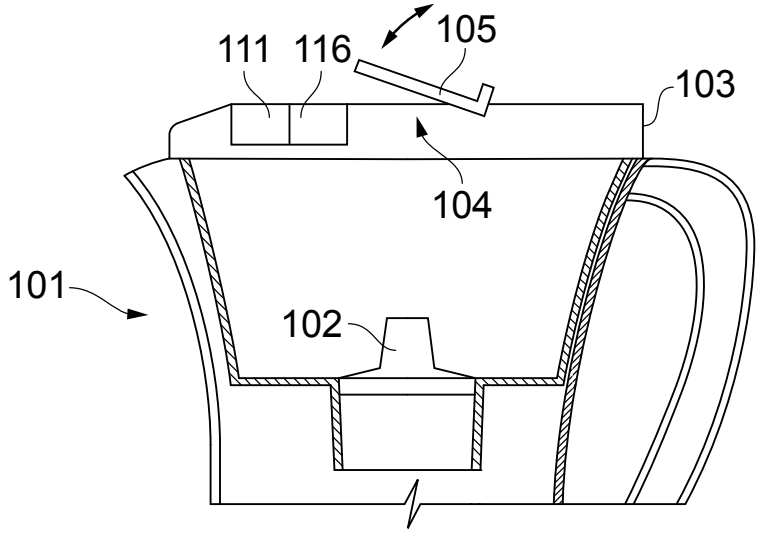

Fig. 2

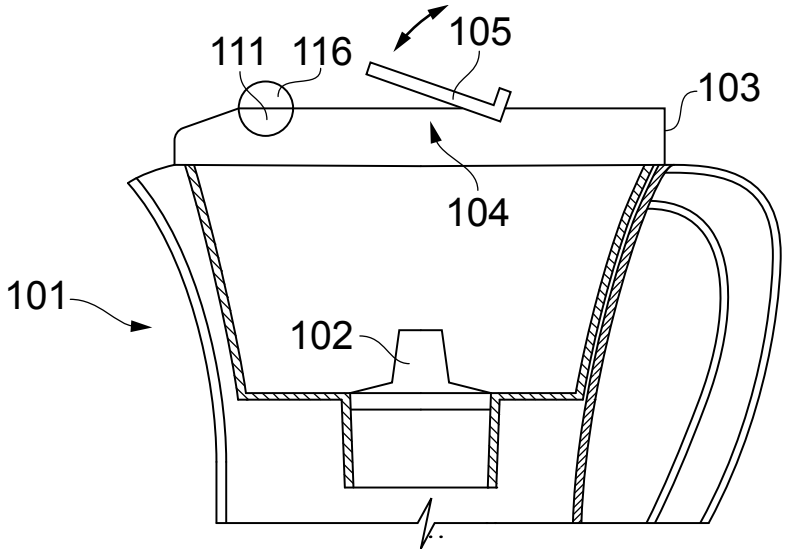

Fig. 3

Claim analysis

Document D2

[001] A water-purification jug having a filter cartridge that is subject to exhaustion is disclosed. A need has emerged to provide a system which can indicate to the user the moment at which it is necessary to replace the exhausted cartridge.

[002] It is known, for example, to provide counting means associated with a removable lid of the jug, for counting the number of lid-opening and lid-closure cycles. This measurement clearly lacks reliability since it is in no way correlated with a direct measurement of the amount of water introduced into the jug.

[003] An object of the invention is to provide a jug in which the amount of water treated by the filter cartridge is accurately determined.

[004] Brief description of the drawings:
Figure 1a is a schematic, side elevational and sectioned view of a lid on top of a filter jug formed in accordance with a first embodiment;
Figure 1b shows the same embodiment as Figure 1a, with the aperture closed;
Figure 2 is a view similar to Figures 1a and 1b of a lid on a filter jug formed in accordance with a second embodiment.

[005] The jug 201 comprises a container 217 being closed by a removable lid 203. The lid 203 has a conduit 204 for the introduction of water to the jug 201.

[006] Figures 1a and 1b show a first embodiment. The jug 201 comprises a detector 212 for measuring the flow of water introduced into the jug 201 through the conduit 204 and a counter 211 for counting signals received from the detector.

[007] The detector 212 comprises a turbine wheel 213 comprising blades 213a extending radially across the cross-section of the conduit 204.

Claim analysis

[008] A magnet on one or more blades 213a of the turbine wheel 213 is detected by a magnetic detector associated with the flexible guide 214. The counter 211 counts the number of times the one or more blades 213a of the turbine wheel 213 contact the flexible guide 214.

[009] The blade closes the conduit each time that it contacts the flexible guide. Thus, the flexible guide and blade act as a blocking means for blocking the conduit. When the counter value indicates that the total amount of water introduced to the jug is such that the current filter cartridge is exhausted, use of the filter can be prevented by the rotation of the turbine wheel being stopped in a position where a blade is in contact with the flexible guide. This is shown in Figure 1b, while Figure 1a shows the conduit open.

[010] Figure 2 schematically shows a second embodiment where there is no flexible guide and where the blades of the turbine wheel mechanically increment a counter 211 by connecting with an actuator/detector 216. In this case there is no way of blocking the entry of water when the filter cartridge is exhausted.

Drawings of D2

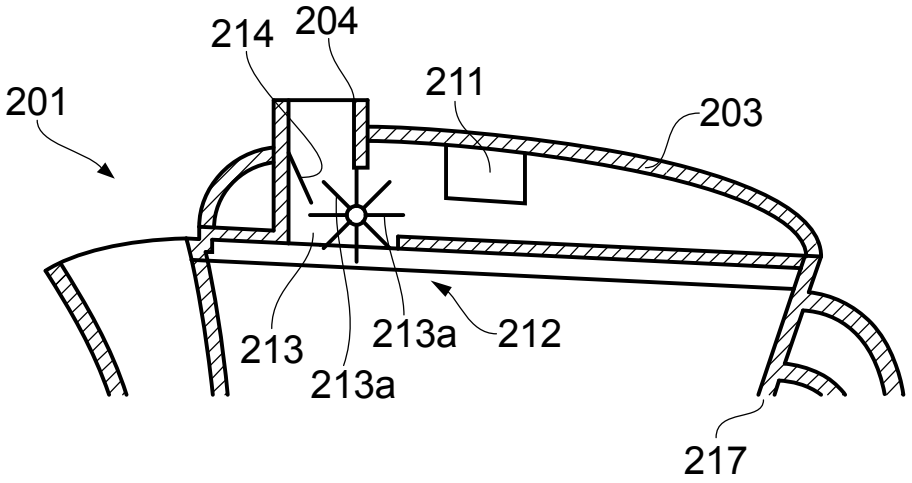

Fig. 1a

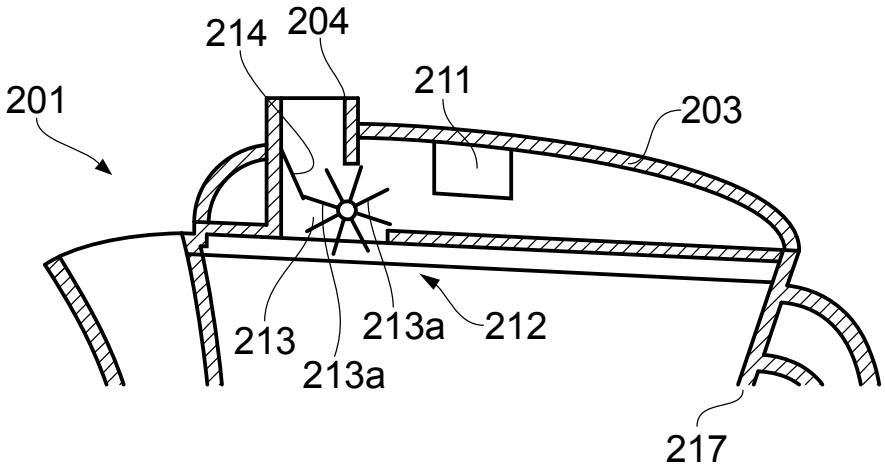

Fig. 1b

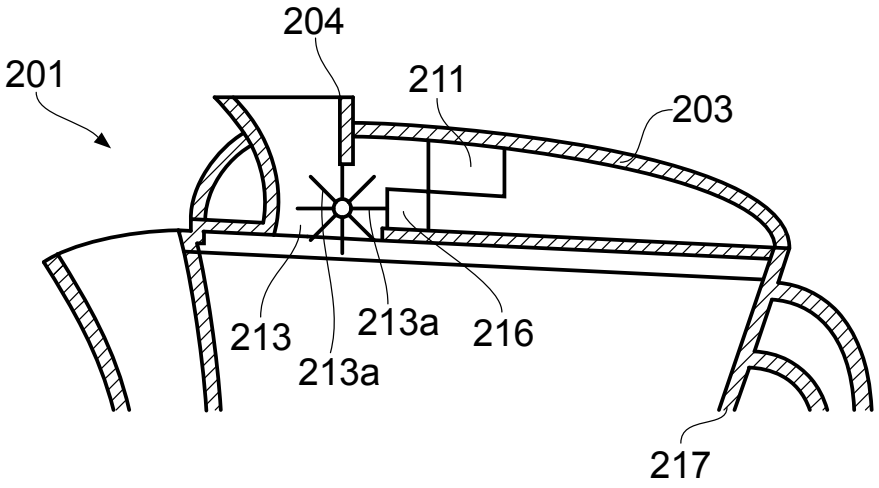

Fig. 2

Claim analysis

Question 11

For Question 11, assume that claims I.1 and I.2 were filed with the client's patent application and that documents D1 and D2 were cited in the Search Report as prior art:

I.1 A jug for filtering water, comprising:

- a lid;
- an aperture provided through the lid;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position;

characterised by a counter configured to automatically increment in response to the blocking mechanism moving from the open to the closed position.

I.2 A jug according to claim I.1, wherein the blocking mechanism is pivotable in an anti-clockwise direction from the closed to the open position.

For each of the statements 11.1 – 11.4 indicate on the answer sheet whether the statement is true or false.

11.1 All of the embodiments of the application are covered by the scope of claim I.1.
11.2 Claim I.1 is novel over the first embodiment of D1.
11.3 Claim I.2 is novel over the second embodiment of D1.
11.4 Claim I.1 is novel over the second embodiment of D2.

Claim analysis

Question 12

For Questions 12 to 15, assume claims II.1 to II.4 were filed with the client's patent application and that documents D1 and D2 were cited in the Search Report:

II.1 A jug for filtering water, comprising:
- a lid;
- an aperture provided through the lid;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position;

characterised by a counter configured to automatically increment in response to water being added to the jug.

II.2 A jug according to claim II.1, further comprising a detector configured to detect the blocking mechanism moving from the open to the closed position, the counter configured to increment in response to a signal received from the detector.

II.3 A jug according to any of the preceding claims, further comprising a detector configured to detect a level of water within the jug exceeding a predetermined level, the counter configured to increment in response to a signal received from the detector.

II.4 A jug according to any of the preceding claims, further comprising a biasing means associated with the blocking mechanism for urging the blocking mechanism into the closed position as a rest position and for allowing its passage into the open position under the action of the flow of water introduced into the jug through the aperture.

Claim analysis

For each of the statements 12.1 – 12.4 indicate on the answer sheet whether the statement is true or false.

12.1 Claim II.1 is novel over the second embodiment of D2.

12.2 Claim II.1 is in the correct two-part form with respect to the third embodiment of document D1.

12.3 Claim II.1 is in the correct two-part form with respect to the first embodiment of document D2.

12.4 Claim II.1 does not meet the requirements of Article 84 EPC as it simply claims a solution to a problem and not the technical features that provide this solution.

Question 13

For each of the statements 13.1 – 13.4 indicate on the answer sheet whether the statement is true or false.

13.1 The dependency of claim II.3 is correct.

13.2 Claim II.2 is novel over the first embodiment of document D2.

13.3 Claim II.4 is novel over the first embodiment of document D2.

13.4 The first embodiment of the application is covered by the scope of claim II.2.

Claim analysis

Question 14

In response to objections raised during examination assume the claims II.1 to II.4 are amended as follows:

III.1 A jug for filtering water, comprising:

- a lid;
- an aperture provided through the lid;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position; ~~characterised by~~
- a detector for detecting water being added to the jug;
- a counter configured to ~~automatically~~ increment in response to a signal received from the detector detecting water being added to the jug.

III.2 A jug according to claim III.1, ~~further comprising~~ wherein ~~a~~ the detector is configured to detect water being added to the jug by detecting the blocking mechanism moving from the open to the closed position~~, the counter configured to increment in response to a signal received from the detector~~.

III.3 A jug according to ~~any preceding~~ claim III.1, ~~further comprising~~ ~~a~~ wherein the detector is configured to detect a level of water within the jug ~~exceeding~~ reaching a predetermined level~~, the counter configured to increment in response to a signal received from the detector~~.

III.4 A jug according to any preceding claim, further comprising a biasing means associated with the blocking mechanism for urging the blocking mechanism into the closed position as a rest position and for allowing its passage into the open position under the action of the flow of water introduced into the jug through the aperture.

Claim analysis

For each of the statements 14.1 – 14.4 indicate on the answer sheet whether the statement is true or false.

14.1 The amendment made to claim III.3 of replacing the feature of “exceeding a predetermined level” with “reaching a predetermined level” meets the requirements of Article 123(2) EPC.

14.2 Claim III.2 is novel over D1.

14.3 The amendment made to claim III.2 of deleting the feature of “the counter configured to increment in response to a signal received from the detector” meets the requirements of Article 123(2) EPC.

14.4 Claim III.3 is novel over D2.

Question 15

For each of the statements 15.1 – 15.4 indicate on the answer sheet whether the statement is true or false.

15.1 There is basis in the application as filed for amending claim III.1 to replace the feature “water” with the feature “liquid”.

15.2 It would be allowable under Article 123(2) EPC to exclude a detector comprising a turbine from the scope of claim III.1 using a disclaimer.

15.3 The third embodiment of the application is covered by the scope of claim III.2.

15.4 The claim set would meet the requirement of Article 54 EPC with respect to document D1 if claim III.1 were amended to include the features of claim III.4.

Claim analysis

Question 16

For question 16 assume that the following claims IV.1 and IV.2 were filed with the application and that document D1 is the only cited document.

IV.1 A jug for filtering water, comprising:

- a lid;
- an aperture provided through the lid for the filling of the jug;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position;
- a counter on the lid, the counter being configured to automatically count a number of times the blocking mechanism is displaced between the closed and open positions;

characterised in that the blocking mechanism is displaced under the action of the flow of water into the jug.

IV.2 A filter carrier for fitting onto a jug, the filter carrier comprising:

- a reservoir for holding water;
- a filter cartridge that is replaceable when exhausted;
- a lid, an aperture provided through the lid for the filling of the jug via the reservoir and filter cartridge;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position;
- a counter on the lid arranged to signal the level of exhaustion of the cartridge in dependence on the cycles of filling of the jug, the counter being configured to automatically count the number of times the blocking mechanism is displaced between the closed and open positions;

characterised in that the blocking mechanism is displaced under the action of the flow of water into the jug.

Claim analysis

Assuming for this question the claims are considered to be new and inventive, for each of the statements 16.1 – 16.4 indicate on the answer sheet whether the statement is true or false.

16.1 Claims IV.1 and IV.2 fulfil the requirements of Rule 43(2) EPC because they relate to inter-related products.

16.2 Claims IV.1 and IV.2 fulfil the requirements of Rule 43(2) EPC because they relate to different uses of an apparatus.

16.3 A valid argument for claims IV.1 and IV.2 lacking unity of invention is that claim IV.1 does not comprise a filter cartridge.

16.4 Claims IV.1 and IV.2 have a common special technical feature with respect to D1.

Claim analysis

Document D3

[001] A container lid with an opening for filling the container, the opening being provided with a movable closing element, is disclosed. Such container lids are used on all sorts of containers for liquids, particularly for beverages, such as jugs for boiling water, or water filters in order to protect the contents of the container.

[002] Container lids without an opening for filling protect the contents against contamination but need to be completely removed to fill the container. Removing and reapplying the container lid is disadvantageous because time is required and manipulation is awkward and furthermore, the attachment means are subjected to unnecessary wear.

[003] Figure 1a shows a vertical section through a container lid with the closing mechanism in the closed position according to an embodiment; and
Figure 1b shows the lid shown in Figure 1a with the closing mechanism in the position of partial opening; and
Figure 1c shows the lid shown in Figure 1a with the closing mechanism in the position of opening.

[004] A container lid 301 is provided that has an opening 304 for filling and a blocking or closing mechanism 305 for closing the opening 304, the closing mechanism 305 being mounted on the lid and adapted to rotate around an axis. The closing mechanism 305 is in the closed position at rest (Fig. 1a) where it blocks the opening 304 and moves from this rest position into the open position only when liquid 319 is poured into a cup 305a associated with the closing mechanism 305 (Fig. 1b, 1c). The impact provided by the liquid 319 moves the closing mechanism 305 into an open position. When the filling operation is completed, the closing mechanism 305 rotates automatically to the closed position under the action of a counterweight 309 which acts as biasing means. In this way, closing of the opening is ensured, when not being filled, without manual intervention by the user.

Drawings of D3

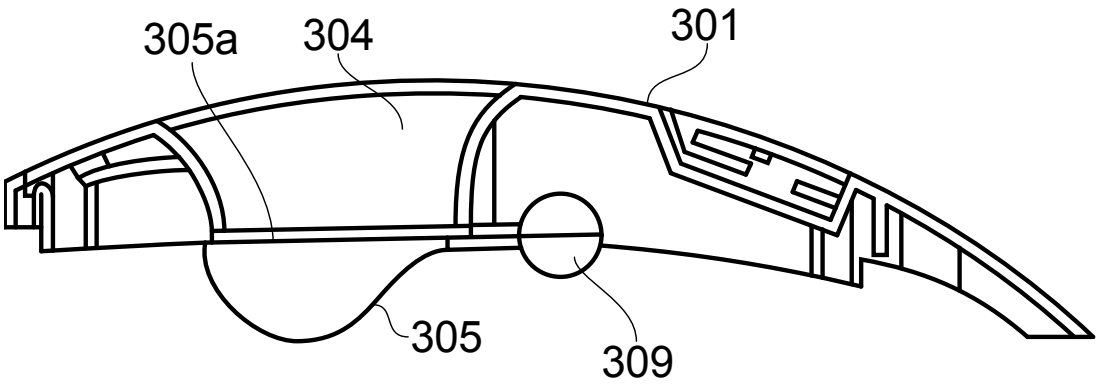

FIG. 1a

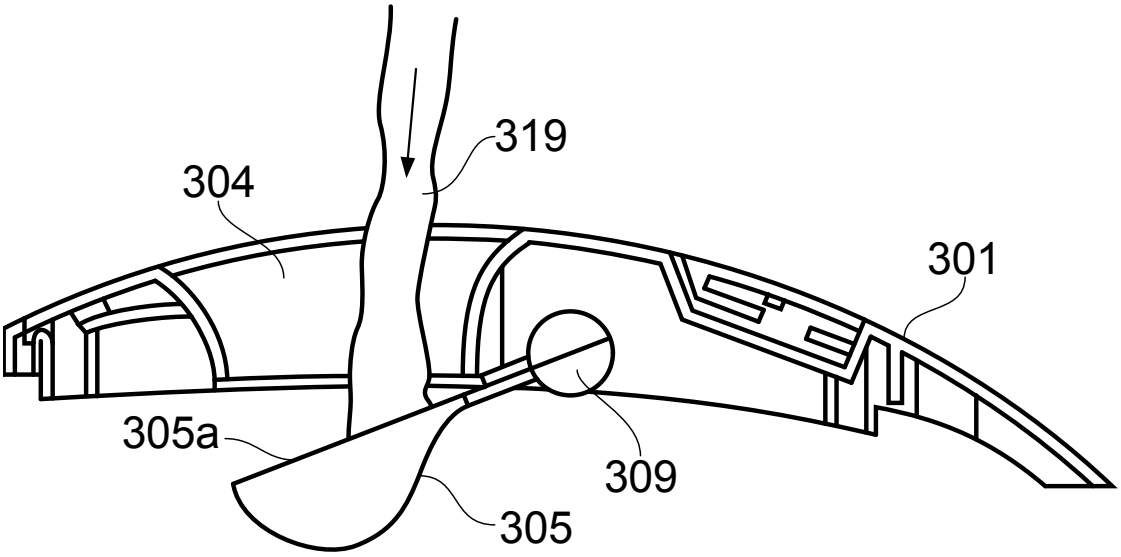

FIG. 1b

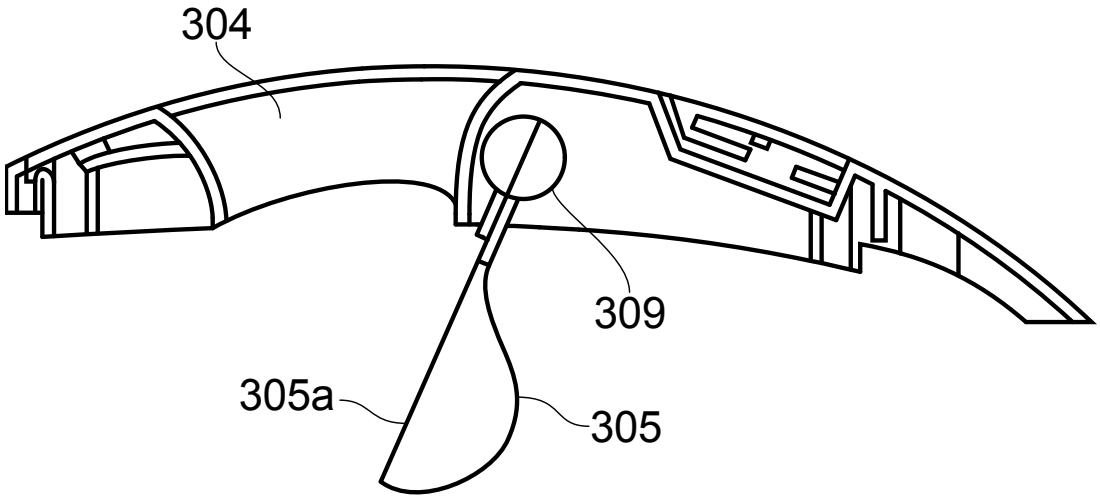

FIG. 1c

Claim analysis

Question 17

Consider for questions 17 and 18 that the following claims were filed with the application and that in addition to documents D1 and D2 the document D3 was cited in the search report

V.1 A jug for filtering water, comprising:

- a lid;
- an aperture provided through the lid for the filling of the jug;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position;
- a detector for detecting the number of times water is added to the jug;
- a counter configured to increment in response to a signal received from the detector;
- a biasing means associated with the blocking mechanism for biasing the blocking mechanism towards the closed position as a rest position;

characterised in that the blocking mechanism is configured to pivot towards the base of the jug when moving from the closed to the open position and in that the biasing means is configured to allow the blocking mechanism to move into the open position under the action of the flow of water introduced into the jug through the aperture.

V.2 A jug according to claim V.1, wherein the detector is able to detect water within the jug reaching a predetermined level.

Claim analysis

Consider for this question that document D1 corresponds to the closest prior art and discloses the preamble of claim V.1, but not the characterising portion.

For each of the statements 17.1 – 17.4 indicate on the answer sheet whether the statement is true or false.

17.1 A technical effect of the features of the characterising portion of claim V.1 is that the blocking mechanism can open automatically in response to a flow of water.

17.2 A valid objective technical problem addressed by claim V.1 with respect to D1 can be formulated as how to provide a jug that is easy to manipulate when filling.

17.3 A valid argument as to why D3 would not be combined with D1 is that D3 is directed to a lid that is not used with a filtering device.

17.4 A valid objective technical problem addressed by claim V.1 with respect to D1 can be formulated as how to provide a blocking mechanism for a filter lid that only opens in response to a flow of water.

Claim analysis

Question 18

For question 18, assume that document D1 is the closest prior art for claim V.2 and the distinguishing features are the following:

1) the blocking mechanism is configured to pivot towards the base of the jug when moving from the closed to the open position;
2) the biasing means is configured to allow the blocking mechanism to move into the open position under the action of the flow of water introduced into the jug through the aperture; and
3) the detector is able to detect water within the jug reaching a predetermined level.

For each of the statements 18.1 – 18.4 indicate on the answer sheet whether the statement is true or false.

18.1 A technical effect of distinguishing feature 3) is that an indication of an amount of water in the jug is provided.

18.2 A valid formulation for an objective technical problem with respect to document D1 for distinguishing feature 3) might be how to more accurately determine the number of times water is added to a jug.

18.3 A valid formulation for an objective technical problem for distinguishing feature 3) might be how to provide a detector for detecting water being added to a jug that can only generate a signal for incrementing a counter in response to water being added to the jug.

18.4 For the assessment of inventive step of claim V.2 it is a valid argument that none of the documents D1, D2 or D3 disclose a water level detector.

Claim analysis

Document D4

[001] A water filter jug with a replaceable cartridge is disclosed.

[002] Fig. 1 is a schematic view in cross-section of a filter jug according to an embodiment of the invention and
Fig. 2 shows a further view of the filter jug being filled.

[003] Fig. 1 shows a filter jug 401. Lid 403 is provided with a flap 405 which blocks an aperture 404 of the jug 401. The flap 405 is moved inwards around a hinge under the action of a user's hand or the insertion of a tap 430 (see Fig. 2). The flap 405 is biased to return to a closed position when the hand or tap are removed.

[004] Counting means to count the filtering cycles performed are provided in order to determine the level of exhaustion of filter cartridge 402. The counting means comprise a floating level indicator. This floating level indicator comprises a float 413 as well as proximity detectors 414a, 414b, 414c, 414d, 414e, 414f, 414g which detect the position of the float.

[005] Detector 414g, which is used to detect a condition in which the filter jug is completely empty (reference level) is located close to the bottom of the filter jug, while the other detectors are located at higher positions.

[006] During use, water is added to chamber 417a and flows through filter cartridge 402. As the water level in the filter jug 401 rises the float 413 is displaced from detector 414g to a higher detector. Each detector generates a counting signal in response to detecting the float and the counting signals generated are then summed by a calculating unit 411 which generates a display indicating the level of exhaustion of the cartridge.

Drawings of D4

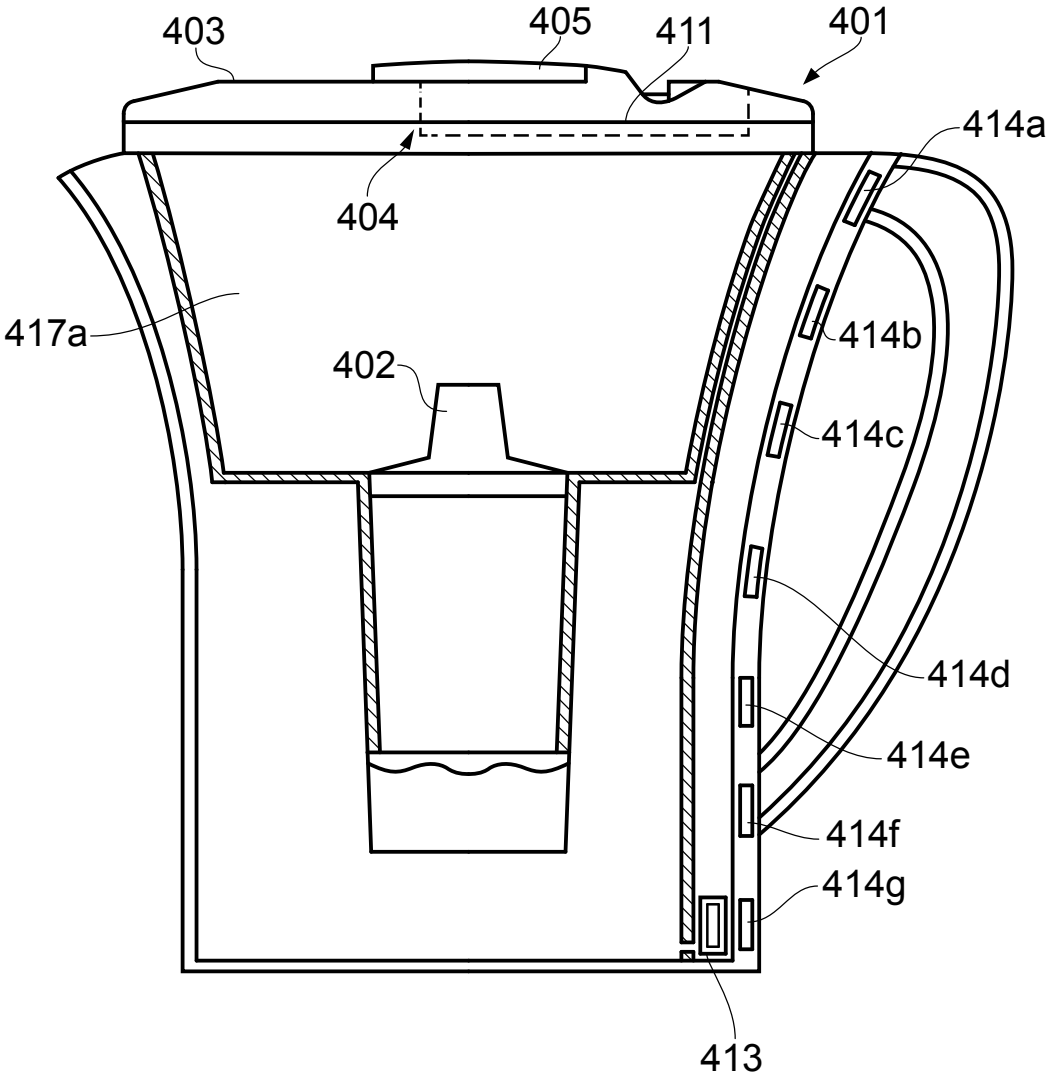

Fig. 1

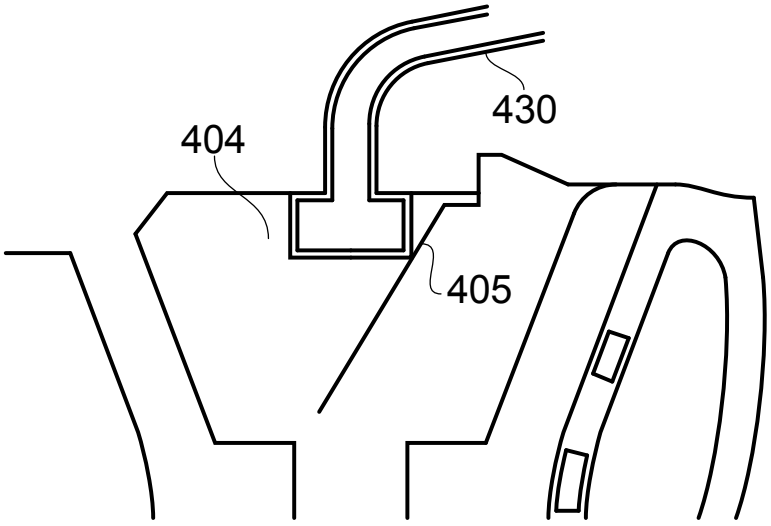

Fig. 2

Claim analysis

Question 19

For questions 19 and 20 assume that claim VI.1 was filed with the application, the prior art cited is documents D1 to D4 and that the claim is in the two-part form with respect to D4.

VI.1 A jug for filtering water, comprising:

- a lid;
- an aperture provided through the lid for the filling of the jug;
- a blocking mechanism mounted on the lid at the aperture and displaceable between a closed position, in which it closes the aperture, and an open position in which it pivots around a hinge towards the base of the jug;
- a biasing means for biasing the blocking mechanism towards the closed position and allowing it to open under an external force such as that supplied by water being added to the jug;
- a detector;
- a counter configured to increment in response to a signal received from the detector;

characterised in that the detector is configured to detect the blocking mechanism moving from the open to the closed position.

Claim analysis

For each of the statements 19.1 – 19.4 indicate on the answer sheet whether the statement is true or false.

19.1 A valid argument for document D4 being considered to be the closest prior art to claim VI.1 is that D4 is the only prior art document that comprises a water level detector.

19.2 A valid argument for document D4 being considered to be the closest prior art to claim VI.1 is that only document D4 addresses the same technical problem as claim VI.1, namely improvement of the accuracy of a means for detecting the level of exhaustion of a filter.

19.3 A valid argument for document D4 being considered to be the closest prior art to claim VI.1 is that D4 is the only document that discloses a jug that has a blocking mechanism that moves into an open position by pivoting towards the base of the jug.

19.4 If one considered document D4 to be the closest prior art, a valid objective technical problem could be formulated as how to provide a jug that can be filled without the need to manually move the lid.

Claim analysis

Question 20

For question 20 assume that:

a) document D4 is the closest prior art and discloses the preamble of claim VI.1; and

b) the objective technical problem is how to provide an alternative means of determining the level of exhaustion of a water filter cartridge.

For each of the statements 20.1 – 20.4 indicate on the answer sheet whether the statement is true or false.

A valid argument as to why …

20.1 … the skilled person starting from document D4 and faced with the objective technical problem would not consider the teaching of D1 is that D1 provides a less accurate means of determining the level of exhaustion of a filter.

20.2 … claim VI.1 is inventive over a combination of document D4 and the third embodiment of D1 is that even if the skilled person were to consider incorporating the lid of the third embodiment onto the jug of D4 to solve the objective technical problem, he would not arrive at a jug according to claim VI.1.

20.3 … claim VI.1 lacks an inventive step, is that the skilled person starting from document D4 and faced with the objective technical problem would replace the lid of D4 with the lid of D2 as this provides an alternative means for measuring the level of exhaustion of a filter and would thereby arrive at a jug according to the subject-matter of claim VI.1.

20.4 … the skilled person starting from document D4 and faced with the objective technical problem would not consider the teaching of D3 is that D3 does not teach a means for detecting the level of exhaustion of a filter.

Annex 1

2017

JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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Tage / Days / Jours		München Munich	Den Haag The Hague La Haye	Berlin
Heilige Drei Könige - Epiphany – Epiphanie	06.01.2017	x		
Karfreitag - Good Friday - Vendredi Saint	14.04.2017	x	x	x
Ostermontag - Easter Monday - Lundi de Pâques	17.04.2017	x	x	x
Nationalfeiertag - National Holiday - Fête nationale	27.04.2017		x	
Maifeiertag - Labour Day - Fête du Travail	01.05.2017	x	x	x
Tag der Befreiung - Liberation Day - Journée de la Libération	05.05.2017		x	
Christi Himmelfahrt - Ascension Day - Ascension	25.05.2017	x	x	x
Pfingstmontag - Whit Monday - Lundi de Pentecôte	05.06.2017	x	x	x
Fronleichnam - Corpus Christi - Fête-Dieu	15.06.2017	x		
Mariä Himmelfahrt - Assumption Day – Assomption	15.08.2017	x		
Nationalfeiertag - National Holiday - Fête nationale	03.10.2017	x		x
Allerheiligen - All Saints' Day – Toussaint	01.11.2017	x		
1. Weihnachtstag – Christmas Day - Jour de Noël	25.12.2017	x	x	x
2. Weihnachtstag - Boxing Day - Lendemain de Noël	26.12.2017	x	x	x

Annex 2

2018

JANUARY

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FEBRUARY

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MARCH

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APRIL

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MAY

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JUNE

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JULY

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AUGUST

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SEPTEMBER

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OCTOBER

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NOVEMBER

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DECEMBER

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Tage / Days / Jours		München Munich	Den Haag The Hague La Haye	Berlin
Neujahr - New Year's Day - Nouvel An	01.01.2018	x	x	x
Karfreitag - Good Friday - Vendredi Saint	30.03.2018	x	x	x
Ostermontag - Easter Monday - Lundi de Pâques	02.04.2018	x	x	x
Nationalfeiertag - National Holiday - Fête nationale	27.04.2018		x	
Maifeiertag - Labour Day - Fête du Travail	01.05.2018	x	x	x
Christi Himmelfahrt - Ascension Day - Ascension	10.05.2018	x	x	x
Pfingstmontag - Whit Monday - Lundi de Pentecôte	21.05.2018	x	x	x
Fronleichnam - Corpus Christi - Fête-Dieu	31.05.2018	x		
Mariä Himmelfahrt - Assumption Day - Assomption	15.08.2018	x		
Nationalfeiertag - National Holiday - Fête nationale	03.10.2018	x		x
Allerheiligen - All Saints' Day - Toussaint	01.11.2018	x		
Heiliger Abend - Christmas Eve - Veille de Nöel	24.12.2018	x	x	x
1. Weihnachtstag - Christmas Day - Jour de Noël	25.12.2018	x	x	x
2. Weihnachtstag - Boxing Day - Lendemain de Noël	26.12.2018	x	x	x
Silvester - New Year's Eve – Saint-Sylvestre	31.12.2018	x	x	x