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Datasheet for the decision of 16 December 2022

Case Number: T 2027/21 - 3.3.05

16701467.9 Application Number:

Publication Number: 3250513

IPC: C02F1/00

Language of the proceedings: ΕN

Title of invention:

VALVE, VALVE ACTUATING DEVICE, CARTRIDGE AND ADAPTER FOR A LIQUID TREATMENT SYSTEM

Applicant:

BRITA SE

Headword:

Valve for liquid treatment system/Brita

Relevant legal provisions:

EPC Art. 84, 123(2), 111(1) RPBA 2020 Art. 13(2)

Keyword:

Claims - clarity - main request, auxiliary requests 1-3 (no, definition by reference to another entity) - auxiliary request 4 (yes)

Amendments - auxiliary request 4 - allowable (yes)

Amendment after summons - taken into account (yes)

Appeal decision - remittal to the department of first instance (yes)

Decisions cited:

T 2429/17

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 2027/21 - 3.3.05

DECISION
of Technical Board of Appeal 3.3.05
of 16 December 2022

Appellant: BRITA SE

(Applicant) Heinz-Hankammer-Straße 1 65232 Taunusstein (DE)

Representative: van Lookeren Campagne, Constantijn August

Meissner Bolte Patentanwälte Rechtsanwälte Partnerschaft mbB

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 14 May 2021 refusing European patent application No. 16701467.9 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman G. Glod

Members: S. Besselmann

S. Fernández de Córdoba

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Summary of Facts and Submissions

- I. tThe appellant's (applicant's) appeal is against the examining division's decision to refuse European patent application No. 16 701 467.9.
- II. Claims 1 and 8 of the main request relate to a valve for regulating a flow of liquid through a channel in a wall of a cartridge seat of a liquid treatment system, and to a device for actuating this valve, respectively, and read as follows:
 - "1. Valve for regulating a flow of liquid through a channel in a wall of a cartridge seat of a liquid treatment system, the valve including at least: a valve body (15) defining at least one port; and at least one movable valve component (16), movable with respect to the valve body (15), the at least one movable valve component (16) including

a regulating part for selectively obstructing a flow of liquid through the at least one port and an actuating part for engaging a valve actuating device when inserted into the cartridge seat,

the regulating part being movable with respect to the valve body (15) to block the port to a degree depending on its position, characterised in that

the actuating part includes a member of each of at least one pair of a spiral contour and a part for engaging the spiral contour and is comprised in a mechanism for converting linear motion of a valve actuating device of which a section includes the other members of the at least one pair into rotary motion of the at least one movable valve component (16)."

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"8. Device for actuating a valve according to any one of claims 1-5, which device includes a section for engaging the actuating part of the movable valve component (16),

wherein the section is insertable in an axial direction through an opening for admitting liquid to the valve, and

wherein the section is comprised in the mechanism for converting linear motion of the actuating device in axial direction into rotary motion of the movable valve component (16) and includes a member of each of the at least one pair of a spiral contour and a part for engaging a spiral contour."

III. The examining division decided that the subject-matter of claims 1, 8, 13 and 14 of the main request was not clear (Article 84 EPC). The examining division found inter alia that independent claim 8, directed to a device for actuating a valve, was fundamentally unclear because the whole claim was formulated with reference to the valve that was not part of it; the technical nature of the claimed device was thus unknown (point II.21 of the impugned decision).

According to the impugned decision, then-pending auxiliary requests 1-16 did not fulfil the requirements of clarity either.

IV. With the statement of grounds of appeal, the appellant defended the main request dealt with by the examining division and filed auxiliary requests 1-6. In reply to the board's preliminary opinion (Article 15(1) RPBA 2020), by letter dated 1 December 2022, the appellant filed new auxiliary requests 1-4, 7, 9 and 10 and renumbered previous auxiliary requests 1, 2 and 4 as auxiliary requests 5, 6 and 8, respectively.

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- V. Oral proceedings took place on 16 December 2022 by videoconference. During the oral proceedings, the appellant filed new auxiliary requests 1-4, replacing auxiliary requests 1-4 on file.
- VI. Independent claim 1 is the same in auxiliary requests 1-4 and reads as follows:
 - "1. Valve for regulating a flow of liquid through a channel in a wall of a cartridge seat of a liquid treatment system, the valve including at least: a valve body (15) defining at least one port; and at least one movable valve component (16), movable with respect to the valve body (15),

the at least one movable valve component (16) including a regulating part for selectively obstructing a flow of liquid through the at least one port and an actuating part for engaging a valve actuating device when the valve actuating device is inserted into the cartridge seat,

the regulating part being movable with respect to the valve body (15) to block the port to a degree depending on its position, characterised in that

the actuating part includes a member of each of at least one pair of a spiral contour and a part for engaging the spiral contour and is comprised in a mechanism for converting linear motion in axial direction of a valve actuating device into rotary motion of the at least one movable valve component (16) about the axis or a parallel axis, and in that a section of the valve actuating device included in the mechanism includes the other members of the at least one pair and is insertable in axial direction through an opening of the valve for admitting liquid to the

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valve, the mechanism including the parts for engaging a spiral contour and including the spiral contours."

Independent claim 7 of auxiliary request 1 relates to a device for actuating a valve and reads as follows:

"7. Device for actuating a valve according to any one of claims 1-4, which device includes a section for engaging the actuating part of the movable valve component (16),

wherein the section is insertable in axial direction through an opening of the valve for admitting liquid to the valve, and

wherein the section is comprised in the mechanism for converting linear motion of the actuating device in axial direction into rotary motion of the movable valve component (16) about the axis or a parallel axis and includes a member of each of the at least one pair of a spiral contour and a part for engaging a spiral contour."

In so far as it refers back to claim 1, an identical claim directed to a *device for actuating a valve* is present in auxiliary requests 2 and 3 (claim 6 in those requests).

- VII. Auxiliary request 4 does not include a corresponding device claim. Further to claim 1 set out above (point VI.), there are four dependent claims relating to particular embodiments of the valve and a reservoir including the valve.
- VIII. The appellant's arguments where relevant to the present decision may be summarised as follows.

Main request, auxiliary requests 1-3

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The application was directed to a distributed invention. It was permissible to claim separate but cooperating articles — in this case the valve and the valve actuating device. The claimed mechanism was obtained by the co-operation between the valve and the device and involved one or more pairs of co-operating parts, each pair comprising a spiral contour and at least one part for engaging the spiral contour. One member of each pair was comprised in a section of the valve actuating device, the other in the actuating part of the movable valve component.

This was specified in the respective device claims (claim 8 of the main request; claim 7 of auxiliary request 1; claim 6 of auxiliary requests 2 and 3), which therefore contained all the essential features of the device for actuating a valve. The device was for actuating a valve according to claim 1 and thus had to be specifically adapted to it. The invention did not reside in the exact shape or dimension of the valve or the valve actuating device, which consequently did not need to be specified. The device had a section for engaging the actuating part of the movable valve component. This section was functionally defined because it had to be insertable through an opening for admitting liquid to the valve. It accordingly had to have an elongated shape and be free-standing so that it could pass through the opening unobstructed.

It was easy to determine whether a device was encompassed by the device claim in these requests because the device had to co-operate with the valve, which was clearly defined in claim 1, in order to provide the specified mechanism and thus actuate the

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valve, enabling the flow of liquid. It was readily apparent that a toothpick would be unsuitable.

Auxiliary request 4

Auxiliary request 4 did not contain a claim directed to a device for actuating the valve.

The appellant's arguments regarding the other claims are reflected in the reasons for the decision.

IX. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the main request filed with the statement of grounds of appeal or, alternatively, on the basis of one of auxiliary requests 1-4 filed during oral proceedings before the board, one of auxiliary requests 5, 6, and 8 submitted as auxiliary requests 1, 2 and 4 with the statement of grounds of appeal, or one of auxiliary requests 7, 9 and 10 submitted with the letter dated 1 December 2022.

Reasons for the Decision

Auxiliary request 1

- 1. The question of admissibility pursuant to Article 13(2) RPBA 2020 does not need to be addressed since the request is not allowable for the reasons set out below.
- 2. Clarity (Article 84 EPC)
- 2.1 The application at issue relates to a distributed invention in which the valve and the valve actuating

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device form interrelated products. Claim 1 is directed to the *valve* as such, which is defined by reference to another entity, namely the *valve actuating device* (*device*). Claim 7 is directed to the *device* as such, which is defined by reference to the *valve* as the other entity.

- 2.2 In this case, the reference to the *valve* according to claim 1 as the other entity provides no clear definition of the claimed *device*.
- 2.2.1 A given device is encompassed by claim 7 if the requirements of this claim are fulfilled when it cooperates with a theoretical valve within the scope of claim 1. Thus, claim 7 encompasses any given device if a suitable co-operating valve within the scope of claim 1 is conceivable.
- 2.2.2 The device according to claim 7 includes a section for engaging a part belonging to the valve, i.e. for engaging the actuating part of the movable valve component of the valve. That section of the device includes a member of each of the at least one pair of a spiral contour and a part for engaging a spiral contour.

Whether a part, e.g. a protrusion, may engage a spiral contour depends predominantly on the design of the spiral contour, which is a feature of the theoretical valve. In this regard, claim 1 merely specifies that the spiral contour is to form a pair with the part for engaging the spiral contour, which amounts to a circular definition and places no clear structural limitation on the part for engaging the spiral contour.

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The further requirement following from claim 1, namely that the parts for engaging a spiral contour and the spiral contours be comprised in a mechanism for converting linear motion in the axial direction of a valve actuating device into rotary motion of the at least one movable valve component about the axis or a parallel axis, also depends predominantly on the design of the theoretical valve, in particular the movable valve component and its actuating part; it does not imply any clear structural requirements of the actuating device.

Likewise, whether the section of any given device is insertable in the axial direction through an opening of a valve for admitting liquid to the valve depends on the design of the theoretical valve; claim 1 does not imply any limitations in this regard. There is consequently no clear criterion to assess whether a section of a given device would be sufficiently small, elongated, free-standing or unobstructed to be insertable through an opening.

- 2.2.3 The group of potential devices thus includes any object which can be held manually and moved downwards and which, for example, has a section with a tip or a projection that can conceivably enter a (spiral) groove of suitable width and depth. Within this vast group it is impossible to clearly identify those that are encompassed by claim 7, i.e. those for which a suitable co-operating valve within the broad scope of claim 1 is conceivable.
- 2.2.4 An example in this regard is a simple toothpick. It was not contested that the toothpick could be subjected to linear motion (i.e. held and moved downwards) and would

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be insertable in the axial direction through an opening of a theoretical valve.

To assess whether the toothpick would be encompassed by claim 7, it thus needs to be determined whether a valve according to claim 1 (for instance a valve similar to those illustrated in the application under consideration; see Figures 26-31) is conceivable in which the tip of the toothpick could engage the spiral contour (e.g. a spiral groove) of the actuating part of the movable valve component, i.e. in a manner such that an axial motion (pushing) of the toothpick (which may be tilted) is converted into rotary motion of the movable valve component, thus actuating the valve.

- 2.2.5 The appellant was of the opinion that the valve would jam if a toothpick were used and that only insufficient rotary movement and thus hardly any liquid flow would be obtained. In its opinion, a toothpick was not a suitable device for actuating the valve; the part engaging the spiral contour had to project sideways and be rounded.
- 2.2.6 However, claims 1 and 7 do not specify any features regarding the specific shape of the spiral contour, such as in the case of a spiral groove its shape, width or depth. Consequently they do not imply any corresponding structural features of the part engaging the spiral contour. The axial movement needed to actuate the valve to a certain extent depends on the design of the valve. Claim 1 does not exclude the possibility that only a small amount of liquid flows after actuating the valve, or that a valve may eventually jam.

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- 2.2.7 The appellant did not indicate any clear criterion or structural feature on the basis of which it could be decided whether a given device fell within the scope of claim 7.
- 2.3 In conclusion, referring to the valve according to claim 1 as the other entity provides no clear definition of the claimed device. The requirements of Article 84 EPC are not met and this request is not allowable.

Auxiliary requests 2 and 3

3. Claim 6 in auxiliary requests 2 and 3 is identical to claim 7 in auxiliary request 1, in so far as it refers back to claim 1. Consequently the same considerations apply.

The requirements of Article 84 EPC are not met and auxiliary requests 2 and 3 are not allowable.

Therefore, the question of admissibility pursuant to Article 13(2) RPBA 2020 need not be addressed.

Main request

4. The same considerations regarding lack of clarity apply to device claim 8 of the main request. This claim is even more vague because the opening is not specified as being the opening of the valve, nor is it specified that the rotary motion of the movable valve component is about the axis or a parallel axis. While the section includes a member of each of at least one pair of a spiral contour and a part for engaging the spiral contour, their function is not specified and they are

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not described as being elements of the mechanism. The mechanism is defined by reference to its intended purpose only, i.e. converting linear motion of a valve actuating device into rotary motion of the at least one movable valve component. Furthermore, claim 8 refers back to a valve claim 1, which is also broader than the corresponding claim in auxiliary requests 1-3.

The requirements of Article 84 EPC are not met, so the main request is not allowable.

Auxiliary request 4

- 5. Article 13(2) RPBA 2020
- 5.1 These claims were filed during oral proceedings before the board. Thus, the provisions of Article 13(2) RPBA 2020 apply.

Under Article 13(2) RPBA 2020 any amendment is, in principle, not to be taken into account unless there are exceptional circumstances, which have been justified with cogent reasons by the party concerned.

5.2 Auxiliary request 4 corresponds to auxiliary request 4 filed on 1 December 2022, with features having been rearranged in the claim for clarification purposes. In this case, the fact that the board had raised new objections in its communication pursuant to Article 15(1) RPBA 2020, beyond those that were part of the impugned decision, can be considered exceptional circumstances. The amendments are not very complex and several claims have been deleted. This request overcomes all the objections raised by the board without giving rise to fresh objections under Articles

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123(2) and 84 EPC, these being the only objections under discussion in the current appeal proceedings, so a remittal on the basis of this request can be envisaged (see below).

- 5.3 The request is therefore to be taken into account.
- 6. Article 123(2) EPC
- 6.1 Claim 1 is based on original claim 1 in conjunction with passages of the application as originally filed on page 4, lines 20-21 (when the valve actuating device is inserted into the cartridge seat), page 4, lines 17-19 (the regulating part being movable with respect to the valve body to block the port to a degree dependent on its position), page 4, lines 25-31 (comprised in a mechanism for converting linear motion in axial direction of a valve actuating device into rotary motion of the at least one movable valve component about the axis or a parallel axis) and page 8, line 10 and the last sentence on page 22 (the mechanism including the parts for engaging a spiral contour and including the spiral contours). Furthermore, claim 1 is based on claim 8 interpreted in the light of the application as a whole (a section of the valve actuating device included in the mechanism includes the other members of the at least one pair and is insertable in axial direction through an opening of the valve for admitting liquid to the valve), in view also of the fact that the opening is consistently disclosed as being the opening for admitting liquid to the valve (page 18, last paragraph; page 20, lines 1-2 and 10-11; page 22, line 2 and page 23, line 27).

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- 6.2 Claim 2 corresponds to claim 2 as originally filed. Claim 3 is based on claim 4 as originally filed, with the clarification that the port is provided in the valve seat (page 11, lines 14-16 of the application as originally filed). Claim 4 is based on claim 6 as originally filed, with the clarification that the cartridge seat includes the valve, in line with claim 1, and with the indication that the axial direction is with respect to a reference axis corresponding to or parallel to the axis of rotation of the at least one movable valve component (page 14, lines 24-29 of the application as originally filed). Claim 5 is based on claim 7 as originally filed with clarifications of the references of certain terms, on the basis of the application as a whole, and with the additional indication of the cartridge seat part projecting with respect to at least a section of the chamber wall (page 16, lines 23-25).
- 6.3 The board is satisfied that the requirements of Article 123(2) EPC are met.

7. Article 84 EPC

- 7.1 Claim 1 is directed to a *valve* which includes a movable valve component having an actuating part for engaging a valve actuating *device*. The device does not form part of the claimed valve and is not claimed as such.
- 7.2 The valve provides the intended function of regulating a flow of liquid by co-operating with the device. This function is provided via a mechanism for converting linear motion in the axial direction of a valve actuating device into rotary motion of the at least one movable valve component about the axis or a parallel

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axis. As structural features, the mechanism includes the parts for engaging a spiral contour and the spiral contours.

It is furthermore specified that the actuating part (of the movable valve component of the valve) includes a member of each of at least one pair of a spiral contour and a part for engaging the spiral contour. A section of the valve actuating device includes the other members of the at least one pair.

- 7.3 The expression "a member of each of at least one pair of a spiral contour and a part for engaging the spiral contour" might be ambiguous on its own. However, in the context of the claim at issue, it refers to one member of each pair, there being at least one pair. This is clear from the claim as a whole, which also refers to "the other members of the at least one pair".
- 7.4 The claim as currently worded thus specifies the technical features of the actuating part that engage the valve actuating device.
- 7.5 As indicated, the functional requirement in conjunction with the structural features of the valve, in particular of the part included in the mechanism, is specified in the claim.

On this basis, the skilled person can determine whether a given valve is encompassed by the claim. Even though the intended function is obtained in co-operation with a corresponding actuating device, the essential structural elements for implementing the intended function are those of the valve. The skilled person would have no difficulty determining whether a

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corresponding actuating device may be provided for a given valve.

Consequently, in this case, referring to a valve actuating device as another entity does not impose any unclear or undefined requirements on the claimed valve, and does not lead to lack of clarity.

- 7.6 No objections in the impugned decision concerned the subject-matter of the remaining claims 2-5. The board sees no reason to raise any either.
- 7.7 The claims consequently meet the requirements of Article 84 EPC.
- 8. Remittal
- 8.1 The impugned decision dealt solely with the requirements of Article 84 EPC. The claims were amended during the appeal proceedings, so the examining division never dealt with the current claims.
- 8.2 In view of the primary object of the appeal proceedings to review the decision under appeal in a judicial manner (Article 12(2) RPBA 2020), the circumstances of this case, in which the examining division has not decided on novelty or inventive step, qualify as a special reason for remittal under Article 11 RPBA 2020.
- 8.3 The case is therefore to be remitted to the examining division for further prosecution (Article 111(1) EPC).

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Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the examining division for further prosecution.

The Registrar:

The Chairman:



C. Vodz G. Glod

Decision electronically authenticated