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#### Datasheet for the decision of 2 February 2023

Case Number: T 1529/19 - 3.2.06

09741302.5 Application Number:

Publication Number: 2361327

D06F35/00 IPC:

Language of the proceedings: EN

#### Title of invention:

A HOUSEHOLD APPLIANCE USING OZONE GAS

#### Patent Proprietor:

Arçelik Anonim Sirketi

#### Opponent:

BSH Hausgeräte GmbH

#### Headword:

#### Relevant legal provisions:

EPC Art. 123(2), 84 RPBA 2020 Art. 13(1), 11

#### Keyword:

Amendments - Main request and auxiliary requests 2 and 6 - extension beyond the content of the application as filed (yes) Remittal - (no)

Late-filed auxiliary requests - diverging versions of claims 1, 3-5 and 7 - request clearly allowable (no) 7 to 13 - diverging versions of claims

#### Decisions cited:

G 0002/10, T 0331/87, T 1852/13

#### Catchword:



# Beschwerdekammern Boards of Appeal

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Case Number: T 1529/19 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 2 February 2023

Appellant:

(Opponent)

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Representative: Menegozzi, Regina

BSH Hausgeräte GmbH

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Respondent: Arçelik Anonim Sirketi

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Decision under appeal: Interlocutory decision of the Opposition

Division of the European Patent Office posted on 25 March 2019 concerning maintenance of the European Patent No. 2361327 in amended form.

#### Composition of the Board:

Chairman M. Harrison
Members: P. Cipriano
W. Ungler

- 1 - T 1529/19

#### Summary of Facts and Submissions

- I. The appellant (opponent) filed an appeal against the interlocutory decision of the opposition division in which it found that European patent No. 2 361 327 in an amended form met the requirements of the EPC.
- II. With its response, the respondent (patent proprietor) requested that the appeal be dismissed or, in the alternative, that the patent be maintained according to one of auxiliary requests 1 to 6 filed therewith.
- III. With letter dated 17 October 2022, the opponent filed inter alia arguments regarding auxiliary requests 1 to 6.
- IV. The Board issued a summons to oral proceedings and a subsequent communication containing its provisional opinion, in which it indicated *inter alia* that the subject-matter of claim 1 of the main request and of the auxiliary requests 1 to 6 did not seem to fulfil the requirement of Article 123(2) EPC.
- V. With its letter dated 30 December 2022, the respondent filed 13 auxiliary requests, with the former auxiliary requests 1 to 6 filed with the reply to the grounds of appeal corresponding to auxiliary requests 2, 6, 8, 10, 12 and 13. The respondent further requested that the arguments in the appellant's letter filed on 17 October 2022 not be taken into account, in particular the attacks on the auxiliary requests.
- VI. Oral proceedings were held before the Board on 2 February 2023, during which the respondent filed an additional auxiliary request 7. Further, the respondent

- 2 - T 1529/19

filed a request for remittal of the case to the opposition division (see the minutes for further details).

The request for remittal reads as follows:

"Wir beantragen die Zurückverweisung in die erste
Instanz. Laut Zwischenentscheidung waren die Einwände
der Einsprechenden gemäß Art. 123(2) EPC nicht
zutreffend und das Merkmal "drawn continously" implizit
im Merkmal k) enthalten. Daher wurde im Rahmen der
Hilfsanträge nur das Merkmal "fan" eingefügt. Daher ist
eine erneute Sacherhebung in der ersten Instanz
notwendig."

At the end of the oral proceedings the requests were as follows:

The appellant (opponent) requested that the decision under appeal be set aside and the patent be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed (main request), auxiliarily that the patent be maintained in amended form on the basis of one of auxiliary requests 1 to 6 filed with letter of 30 December 2022, or that the case be remitted to the opposition division for further prosecution, or that the patent be maintained in amended form on the basis of auxiliary request 7 of 2 February 2023 or on the basis of one of auxiliary requests 7 to 13 filed with letter of 30 December 2022.

VII. Claim 1 of the main request reads as follows (with the feature breakdown as used on pages 2 and 3 of the interlocutory decision):

- 3 - T 1529/19

- "a) A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising a tub (2) wherein the washing process is performed, and
- b) an ozone generator (3) situated outside the tub (2) which generates ozone gas (03),
- c) having an air inlet (4) for the entry of the air used in producing the ozone gas and
- d) an ozone outlet (5) for the exit of the ozone gas to the outside, characterized by
- e) an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),
- f) an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen-rich air (H) in the tub (2) to the ozone generator (3),
- g) a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),
- h) a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),
- i) the first opening (10) is located above the water level of the tub (2)

- 4 - T 1529/19

- j) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),
- k) whereby a closed cycle is formed that follows the sequence of the ozone generator (3) the ozone supply line (6) the first opening (10) the tub (2) the second opening (110) air supply line (7) the ozone generator (3)."
- VIII. Claim 1 of all fourteen auxiliary requests are annexed at the end of this decision.
- IX. The respondent's arguments relevant to the present case may be summarised as follows:

Main request - Article 123(2) EPC

Feature i) and j) - position of the openings

Paragraph [0028] of the published application provided a basis for features i) and j). Any difference of feature i) to paragraph [0028] was implicitly present in claim 1.

The arrangement of the openings "at separate points from each other such that they are close to the opposite side walls or corners of the household appliance" was not structurally and functionally linked to feature j), so this did not need to be included in claim 1.

The expression "close to the opposite side walls or corners" in the foregoing arrangement was vague and did not limit the claim. It was therefore not necessary to include it.

- 5 - T 1529/19

Feature k) "closed cycle"

A "closed cycle" meant that the indicated sequence was mandatory and that there were no further inflows or outflows.

This cyclic arrangement was originally disclosed by paragraph [0025] but was already implicit from the features c) to h) of claim 1.

The presence of a fan was also already implicit from the wording of the claim and a fan was not essential as it was the subject of a dependent claim.

As to the oxygen-rich air being drawn *continuously* to be converted into ozone gas, this was implicit from the fact that feature k) defined a closed cycle.

Auxiliary requests 1-6 - Article 13(1) RPBA 2020 and Article 123(2) EPC

The subject-matter of claim 1 of auxiliary requests 2 and 6 fulfilled the requirement of Article 123(2) EPC for the same reasons as the main request. No specific argument was made as to why auxiliary requests 1 and 3-5 should be admitted after the Board indicated that these requests would not overcome the objections to the preceding requests.

Request for remittal of the case to the opposition division

The case should be remitted to the opposition division. It was only with the preliminary opinion of the Board that it became clear that the addition of the feature

- 6 - T 1529/19

"fan" to the auxiliary requests was not enough to overcome the objections made under Article 123(2) EPC.

Admittance of auxiliary request 7 filed on 2 February 2023

Auxiliary request 7 should be admitted into the proceedings. The expression "to embody" prima facie did not introduce a clarity problem into claim 1. In addition, the feature "the tub being in the horizontal position" in claim 1 was amended with regard to the original feature from granted dependent claim 5 only in order to improve readability without there being a change of sense, i.e. it was not a real amendment.

Admittance of auxiliary requests 7 to 13 filed with letter of 30 December 2022

The respondent did not provide any specific arguments regarding why any of auxiliary requests 7 to 13 filed with letter of 30 December 2022 should be admitted.

X. The appellant's arguments relevant to the present case may be summarised as follows:

Main request - Article 123(2) EPC

Features i) and j)

Paragraph [0028] of the application as filed, upon which features i) and j) were seemingly based, disclosed that the openings were at the upper half of the tub and arranged at separate points from each other.

- 7 - T 1529/19

The level of water in a washing machine did not necessarily fill to at least half of the tub such that the definition "above the maximum level of wash water in the tub" as defined in feature j) did not necessarily imply that the openings were situated in the upper half of the tub.

The arrangement of the openings "at separate points from each other such that they are close to the opposite side walls or corners of the household appliance" was not implicit in the wording of claim 1 and was structurally and functionally linked to feature j), as paragraph [0031] also attested. It had been inadmissibly omitted from claim 1.

#### Feature k)

Paragraph [0025] disclosed that the fan blew ozone gas into the tub (2) and drew air from inside the tub (2) continuously. This had also been inadmissibly omitted from claim 1.

That the cycle is a "closed cycle" did not imply that the fan was not required in the cycle. In addition, all the embodiments of the description comprised a fan to provide the gas flow such that there was no reason to believe that the fan was somehow not required or in some way not essential to the disclosure.

A closed cycle did not imply that the air was drawn continuously, e.g. it could be drawn intermittently in bursts.

Auxiliary requests 1 to 6 - Admittance and Article 123(2) EPC

- 8 - T 1529/19

None of the amendments to claim 1 in auxiliary requests 1 to 6 overcame the objections under Article 123(2) EPC to claim 1 of the main request. Auxiliary requests 1 and 3 to 5 should therefore not be admitted into the proceedings and auxiliary requests 2 and 6 were not allowable.

Respondent's request for remittal of the case to the opposition division

There were no special circumstances that justified a remittal of the case to the opposition division.

Admittance of auxiliary request 7 filed on 2 February 2023

Auxiliary request 7 was late-filed and some of the amendments made to claim 1 of the request were not clear under Article 84 EPC or not occasioned by a ground of opposition. It should not be admitted.

Admittance of auxiliary requests 7 to 13 filed with letter of 30 December 2022

Auxiliary request 7 filed with letter of 30 December 2022 was not convergent with auxiliary request 7 filed on 2 February 2023. None of the requests 7 to 13 should be admitted.

#### Reasons for the Decision

1. Main request - Article 123(2) EPC

- 9 - T 1529/19

- 1.1 The subject-matter of claim 1 of the main request does not fulfil the requirement of Article 123(2) EPC.
- 1.2 Claim 1 of the main request was amended to define *inter*alia that
  - i) the first opening (10) is located above the water level of the tub (2)
  - j) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),
  - k) whereby a closed cycle is formed that follows the sequence of the ozone generator (3) the ozone supply line (6) the first opening (10) the tub (2) the second opening (110) air supply line (7) the ozone generator (3)

#### Features i) and j)

1.3 The respondent argued that paragraph [0028] of the published application provided a basis for features i) and j) but that the arrangement of the openings being situated at the upper half of the tub need not be defined in claim 1 as this was implied by the wording of claim 1. In a washing machine at the priority date, the maximum level of wash water was supposed to fill at least half of the tub and the claim already defined in feature i) that the first opening (10) is located above the water level of the tub.

The Board does not accept this argument. The maximum level of wash water in the tub depends of the wash programs and possibly even on the amount of laundry in the drum and it is not a property of the washing

- 10 - T 1529/19

machine, let alone being such that the maximum level of water necessarily was only up to half the level of the tub. The respondent also did not provide any evidence that at the priority date it was the case that the tub of a washing machine was necessarily filled with water up to half its height.

1.4 The respondent also argued that the arrangement of the openings "at separate points from each other such that they are close to the opposite side walls or corners of the household appliance" was not structurally and functionally linked to feature j).

According to the respondent, feature j) restricted the <a href="vertical">vertical</a> position of the first and second openings such that it was not necessary for the ozone gas to surpass the water pressure column when being supplied to the tub. On the other hand, the being "arranged at separate points from each other" simply related to the <a href="horizontal">horizontal</a> spacing and contributed to prolonging the contact duration of the ozone gas with the items to be washed (see paragraph [0031]).

In addition, the respondent argued that the contact duration could also be influenced by several other effects besides the distance of the openings (e.g. rotation of the drum, orientation of the openings) and that, for example, paragraph [0029] also taught that the ozone gas reached into the drum independently from the arrangement of the openings "at separate points from each other".

The Board does not find these arguments persuasive. Paragraph [0028] discloses that the openings are positioned not only above the maximum level of wash water in the tub but also *inter alia* in the upper half

- 11 - T 1529/19

of the tub as well as at separate points from each other. The skilled person reading the description understands that all of these relate to the physical arrangement of the openings in the tub such that they are all structurally related.

In addition, as the openings are positioned above the water level and do not feed the ozone directly to the water, the distance between the openings also avoids the ozone being drawn almost immediately into the second opening before it contacts the items being washed. As explained also in paragraph [0031] ("reabsorption...is prevented"). There is thus also a functional relationship between the vertical and the horizontal arrangement of the openings.

Paragraph [0029] describes the cycle without mentioning the separation between the openings but the skilled person reading the description understands that this paragraph is only a detailed description of the flow of the ozone gas in the embodiment comprising a cylindrically shaped tub arranged in the horizontal position and having perforations. This paragraph does not broaden or contradict the teaching of paragraph [0031] explained above. The Board notes that paragraph [0031] alludes to "the above embodiments" (plural) such that the skilled person would understand that the effects disclosed apply not only to the embodiment of paragraph [0030] (a tub in the shape of a rectangular prism) but also to the embodiment in paragraphs [0028] and [0029] (a cylindrically shaped tub).

1.5 The arrangement of the openings "at the upper half of the tub" and "at separate points from each other such that they are close to the opposite side walls or corners of the household appliance" is therefore

T 1529/19

structurally and functionally linked to features i) and j). There is no disclosure in the application as filed which omits these features.

- 12 -

#### Feature k)

1.6 The respondent argued that the skilled person would interpret the word "cycle" as an arrangement and not - as argued by the appellant - as a succession of process steps. It also argued that the cyclic arrangement of feature k) was originally disclosed by paragraph [0025] but was also implicit from the features c) to h) of claim 1 and that paragraph [0029] provided an additional disclosure. Further, the additional components and process features defined in this paragraph [0025] did not alter this cyclic arrangement. A "closed cycle" meant that there were no further steps, inflows or outflows. Therefore, feature k) could be separated from the remaining disclosure in paragraph [0025].

The Board does not find these arguments persuasive. Whilst a cycle does not necessarily need to be made of process steps and can be described by apparatus at a station, the skilled person would understand that a closed cycle is an endless cycle in which after the last step/component of the sequence there is a return to the first step/component. The description of a sequence of components in paragraph [0025] as a closed cycle does not override the fact that it is also directly and unambiguously disclosed that there is a fan to blow ozone gas into the tub and simultaneously draw the air from inside the tub into the ozone generator, and that such drawing occurs continuously.

- 13 - T 1529/19

Further, whilst features c) to h) do define the arrangement of components of the household appliance that forms the cycle, they do not define that a closed cycle is formed, as explained above. The skilled person reading paragraph [0029] would also understand that this paragraph describes the specific embodiment of a washing machine comprising a cylindrically shaped tub arranged in the horizontal position and a drum having perforations thus relating to the disclosure starting in paragraph [0028]. The skilled person reading the description thus understands that paragraph [0029] belongs to the disclosure of a different embodiment (other than paragraph [0025]) of a household appliance.

1.7 The respondent argued that the presence of a fan was already implicit from the wording of the claim and a fan was anyway not essential as it was the subject of a dependent claim.

The Board does not accept these arguments and cannot see why a fan would be implicit from the wording of the claim. Merely having a closed cycle following a sequence does not make a fan implicit. For example, even the rotation of the drum itself causes a (albeit smaller) pressure variation that would create a flow of ozone gas such that the presence of a fan is not immediately seen as necessary for the skilled person reading the claim.

As to the proprietor's argument that the fan was not "essential", the Board finds that this is not the relevant standard for assessing whether an amendment fulfils the requirement of Article 123(2) EPC. As an aside, it may be added that this would also contradict the respondent's previous argument. In its decision G 2/10, and summarising long standing case law of the

- 14 - T 1529/19

Boards of Appeal, the Enlarged Board of Appeal found that the test to be applied is whether the skilled person would, using common general knowledge, regard the claimed subject-matter as explicitly or implicitly, but directly and unambiguously, disclosed in the application as filed (Reasons 4.5.4). This is commonly referred to as the "gold standard" (Reasons 4.3).

The proprietor has not provided any reasons as to why the Board should deviate from this test such that any other test can only assist in answering this question, but not substitute it. In this sense, the so-called "essentiality test" according to T 331/87 was found to be potentially in contradiction with the "gold standard" (see e.g. T 1852/13, Reasons 2.2.3) and the Board also does not see a reason to use it.

1.8 The respondent further argued that the oxygen-rich air being drawn continuously to be converted into ozone gas was implicit from the fact that feature k) defined a closed cycle.

This argument is also not persuasive. As argued by the appellant, a closed cycle does not need to run continuously and can be operated intermittently, e.g. by operating the fan only in certain periods. However, paragraph [0025] only provides a basis for a closed cycle whereby the oxygen-rich air is drawn continuously to be converted into ozone gas.

- 2. Auxiliary requests 1 to 6 Article 13(1) RPBA 2020 and Article 123(2) EPC
- 2.1 Auxiliary requests 2 and 6 were filed with the reply to the grounds of appeal.

- 15 - T 1529/19

2.2 The respondent requested that the arguments from the appellant's letter filed on 17 October 2022, in particular the attacks on the auxiliary requests filed with the reply to the grounds of appeal, came almost three years after the reply to the grounds of appeal and were late-filed.

However, whilst the arguments regarding the auxiliary requests from the appellant were filed as an amendment to its appeal case, the Board itself has a duty ex officio (under Article 114(1) EPC) to conduct an examination of the auxiliary requests not least based on the arguments, facts and evidence already on file, at least in order to determine whether the auxiliary requests 1 to 6 filed with the reply to the grounds of appeal (now corresponding to auxiliary requests 2, 6, 8, 10, 12 and 13 filed with letter of 30 December 2022) overcome the objections put forward for the main request in the grounds of appeal.

The Board therefore sees no reason not to examine ex officio whether the amendments made to claim 1 of auxiliary requests 2 and 6 overcome the objections put forward in regard to the main request and thus whether the subject-matter of these claims fulfils the requirement of Article 123(2) EPC.

- 2.3 Auxiliary requests 1 and 3 to 5 were filed by the respondent with letter of 30 December 2022, i.e. after the reply to the grounds of appeal, and constitute an amendment to the respondent's appeal case.
- 2.4 Article 13(1) RPBA 2020 stipulates that any amendment to a party's appeal case may be admitted only at the Board's discretion. This discretion is to be exercised in view of, inter alia, the current state of the

- 16 - T 1529/19

proceedings, whether the amendment is detrimental to procedural economy, the suitability of the amendment to resolve the issues which were admissibly raised and whether the party has demonstrated that any such amendment, prima facie, overcomes the issues raised by another party in the appeal proceedings or by the Board and does not give rise to new objections.

The amendments made are summarised below.

- 2.5 Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that it further defines that the first opening and the second opening (110) are situated "at the upper half of the tub (2)".
- 2.6 Claim 1 of auxiliary request 2 differs from claim 1 of the auxiliary request 1 in that it further defines that the first opening and the second opening (110) are "arranged at separate points from each other such that they are close to the opposite side walls or corners of an household appliance (1) exterior body (G)".
- 2.7 Claim 1 of auxiliary request 3 differs from claim 1 of the main request in that the claim is restricted to a washing machine having a cylindrically shaped tub with the tub being the horizontal position and in that the first opening and the second opening are situated at the upper half of the tub and arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G).
- Claim 1 of auxiliary request 4 differs from claim 1 of auxiliary request 3 in that "the first opening (10) and the second opening (110) are situated on the upper wall of the tub (2)."

- 17 - T 1529/19

- 2.9 Claim 1 of auxiliary request 5 differs from claim 1 of auxiliary request 3 in that "at least one fan (8) blows the ozone gas into the tub (2) from the ozone supply line (6) and/or draws the air (H) from the tub (2) into the ozone generator (3)".
- 2.10 Claim 1 of auxiliary request 6 adds both the amendments of claim 1 of auxiliary requests 4 and 5.
- 2.11 No claim 1 of any of the requests above defines that the oxygen-rich air is drawn continuously to be converted into ozone gas as disclosed in paragraph [0025] of the published application. As explained above under points 1.6 and 1.8, paragraph [0025] only provides a basis for a closed cycle whereby the oxygenrich air is drawn continuously to be converted into ozone gas. The respondent has also not provided any other basis or any further argument specific to claim 1 of any of auxiliary requests 1 to 6 that could alter the Board's reasoning given for claim 1 of the main request above. Also, although not itself decisive, it should not go unmentioned that in the Board's provisional opinion (see item 1.3), the Board had already stated what it considered to be directly and unambiguously disclosed.
- 2.12 Since prima facie the requirement of Article 123(2) EPC is not fulfilled, the Board exercised its discretion under Article 13(1) RPBA 2020 not to admit auxiliary requests 1 and 3 to 5 into the proceedings.
- 2.13 In addition, the amendments to claim 1 of auxiliary requests 2 and 6 do not overcome the objections explained above which are prejudicial to claim 1 of the main request, since they evidently do not contain all

- 18 - T 1529/19

the omitted features which are necessary to conform to the actual disclosure. The respondent did not argue further on this. The subject-matter of claim 1 of each of auxiliary requests 2 and 6 thus does not fulfil the requirement of Article 123(2) EPC. Auxiliary requests 2 and 6 are therefore not allowable.

- 3. Request for remittal of the case to the opposition division
- 3.1 The respondent's request for remittal reads as follows:

  "Wir beantragen die Zurückverweisung in die erste
  Instanz. Laut Zwischenentscheidung waren die Einwände
  der Einsprechenden gemäß Art. 123(2) EPC nicht
  zutreffend und das Merkmal "drawn continously" implizit
  im Merkmal k) enthalten. Daher wurde im Rahmen der
  Hilfsanträge nur das Merkmal "fan" eingefügt. Daher ist
  eine erneute Sacherhebung in der ersten Instanz
  notwendig."

The Board translates this in the language of proceedings approximately as follows "We request remittal to the first instance. According to the interlocutory decision, the objections under Art. 123(2) EPC were not relevant and the feature "drawn continuously" was implicitly contained in feature k). Only the feature "fan" was thus introduced into the auxiliary requests. Therefore a renewed consideration at first instance was necessary."

3.2 According to Article 11 RPBA 2020, the Board shall not remit a case to the department whose decision was appealed for further prosecution, unless special reasons present themselves for doing so.

- 19 - T 1529/19

3.3 In the present case the Board cannot identify any special reasons. Considering that the aim of the appeal proceedings is to review the decision under appeal in a judicial manner (cf. Article 12(2) RPBA 2020) and in view of the appellant's main request to set aside the decision and revoke the patent, it is the primary task of the Board to review the requests, facts, objections, arguments and evidence on which the decision under appeal was based.

This consequently includes the review of the conclusion of the opposition division that claim 1 of the main request does not relate to subject-matter which extends beyond the content of the application as filed, and, more specifically feature k) (see point 11.2 of the decision, paragraph bridging pages 6 and 7).

The fact that the Board comes to a different conclusion than the opposition division regarding the objection under Article 123(2) EPC is therefore a possible outcome resulting from the appeal proceedings, which should also be taken into account by the respondent, and thus in the present case cannot constitute special reasons for a remittal.

- 3.4 The respondent argued that it was only with the preliminary opinion of the Board that it became clear that the addition of the feature "fan" was not enough.
- 3.4.1 The Board does not accept this argument. The appellant had quite evidently maintained its argument, which it had made in the opposition proceedings, on page 8 of its grounds of appeal, continuing to argue that feature k) including the feature "drawn continuously" from paragraph [0025] was not included in feature k) which had been added to claim 1. The appellant even

- 20 - T 1529/19

underlined certain missing features (including "drawn continuously") in its transcription of paragraph [0025].

- 3.4.2 The Board finds thus that there was thus no reason for the respondent not to have understood the objection at this point. The Board's negative preliminary reassessment of the opposition division's conclusion of whether feature k) fulfilled the requirement of Article 123(2) EPC has thus not altered the legal and factual framework of the case, since all the facts and arguments had already been laid out during the opposition proceedings and in the grounds of appeal.
- of the appeal proceedings to review the decision under appeal in a judicial manner (see Article 12(2) RPBA 2020), there is also no absolute right to have every issue decided at two instances such that even if there were a necessity for the respondent to file a new request with its reply to the grounds of appeal or during the appeal proceedings, this does not lead necessarily to a remittal to the first instance.

The foregoing notwithstanding, it should also not be overlooked that the Board had already found auxiliary requests 2 and 6 not allowable and had not admitted auxiliary requests 1, and 3 to 5 into the proceedings. Remitting the case back to the opposition division at this particular point in the appeal proceedings is thus anyway unsuitable as the Board had concluded on the issues relevant to the matter.

3.6 In summary, the Board finds that remittal of the case to the department of first instance is not appropriate.

- 21 - T 1529/19

The respondent's request for remittal is therefore refused.

- 4. Admittance of auxiliary request 7 filed on 2 February 2023
- 4.1 Auxiliary request 7 was filed on 2 February 2023 during the oral proceedings in an amendment to the respondent's appeal case.
- Having been filed after its complete appeal case, the admittance of auxiliary request 7 is also at the discretion of the Board under Article 13(1) RPBA 2020. Although Article 13(2) RPBA 2020 applies also to this case, the Board restricted its considerations to Article 13(1) RPBA 2020. As set out therein, the Board's discretion shall therefore be exercised inter alia in view of whether the party has demonstrated that any such amendment, prima facie, overcomes the issues raised by another party in the appeal proceedings or by the Board and does not give rise to new objections.
- 4.3 Claim 1 of auxiliary request 7 filed on 2 February 2023 defines inter alia the cylindrically shaped tub being in the horizontal position and that the at least one fan is embodied to draw continuously the oxygen-rich air (H) to be converted into ozone gas.
- As objected by the appellant, the expression "the at least one fan is embodied to draw continuously the oxygen-rich air (H) to be converted into ozone gas" is prima facie not clear since the skilled person does not understand in the context of the amendment what the verb "to embody", which is usually used in the sense of "to represent", might mean when used in the passive

- 22 - T 1529/19

tense and in what way the fan is necessarily structured to draw the oxygen rich air continuously.

5. In addition, in response to the appellant's argument, the respondent argued that the feature "the tub being in the horizontal position" in claim 1 had been amended with regard to the original definition in granted dependent claim 5 ("the cylindrically shaped tub in the horizontal position") allegedly in order to improve readability without there being any real change of sense.

However, according to Rule 80 EPC, the claims may be amended, provided that the amendments are occasioned by a ground for opposition under Article 100 (even if that ground has not been invoked by the opponent). Even on a prima facie basis, an improvement of readability does therefore not render such an amendment allowable as it is not responsive to a ground of opposition. Whether there is also a change of sense does therefore not need to be considered.

- 5.1 Since at least the above amendments are not admissible or introduce a lack clarity in claim 1 of auxiliary request 7 filed on 2 February 2023, the Board exercised its discretion under Article 13(1) RPBA 2020 not to admit auxiliary request 7 filed on 2 February 2023 into the proceedings.
- 6. Admittance of auxiliary requests 7 to 13 filed with letter of 30 December 2022
- 6.1 During the oral proceedings before the Board, the respondent appended the auxiliary requests 7 to 13 filed with letter of 30 December 2022 to the auxiliary

- 23 - T 1529/19

request 7 filed on 2 February 2023. For simplicity, the Board has retained their original numbering.

- 6.2 The sequence of the auxiliary requests selected by the respondent leads to an evident lack of convergency in the subject-matter of the requests. Although not decisive, this possible consequence was already explained to the respondent by the Chairman during the oral proceedings when auxiliary request 7 of 2 February 2023 was filed.
- 6.3 Whilst claim 1 of auxiliary request 7 filed on 2 February 2023 is limited to a washing machine comprising inter alia at least one fan (8) which blows the ozone gas into the tub from the ozone supply line (6) and simultaneously draws the air (H) from the tub (2) into the ozone generator (3), claim 1 of auxiliary request 7 filed with letter of 30 December 2022 is directed to a household appliance being a washing machine or a washing machine and dryer, the latter covering a wider range of machines than auxiliary request 7 filed during the oral proceedings. In addition, none of the auxiliary requests 7 to 13 filed with letter of 30 December 2022 defines at least one fan which blows the ozone gas into the tub from the ozone supply line and simultaneously draws the air from the tub into the ozone generator, which had already been included in auxiliary request 7 of 2 February 2023 in regard to the Board's provisional opinion in item 1.3 where it was stated what was directly and unambiguously disclosed.

Admittance of such requests would have the effect of the Board and parties having to consider subject-matter broader than that included in the higher ranking auxiliary request 7 filed on 2 February 2023. - 24 - T 1529/19

- 6.4 Such a change made after a party has presented its complete case runs counter to the requirement for procedural economy as set out in Article 13(1) RPBA 2020.
- Accordingly, the Board exercised its discretion under Article 13(1) RPBA 2020 not to admit auxiliary requests 7 to 13 filed with letter of 30 December 2022 into the proceedings.
- 7. In the absence of any request in the proceedings on the basis of which the patent can be maintained, the patent must be revoked.

#### Order

#### For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The patent is revoked.

- 25 - т 1529/19

The Registrar:

The Chairman:



D. Grundner M. Harrison

Decision electronically authenticated

- 26 - T 1529/19

#### **AUXILIARY REQUEST 1**

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

wherein the household appliance (1) comprises at least one fan (8) which blows the ozone gas into the tub (2) from the ozone supply line (6) and draws the air (H) from the tub (2) into the ozone generator (3), whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereby the oxygen-rich air (H) is drawn continuously to be converted into ozone gas.

- 27 - T 1529/19

#### **AUXILIARY REQUEST 2**

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated at the upper half of the tub (2) so as to stay above the maximum level of wash water in the tub (2),

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) - the first opening (10) - the tub (2) - the second opening (110) - air supply line (7) - the ozone generator (3).

- 28 - T 1529/19

#### **AUXILIARY REQUEST 3**

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated at the upper half of the tub (2) so as to stay above the maximum level of wash water in the tub (2),

wherein the household appliance (1) comprises at least one fan (8) which blows the ozone gas into the tub (2) from the ozone supply line (6) and draws the air (H) from the tub (2) into the ozone generator (3), whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereby the oxygen-rich air (H) is drawn continuously to be converted into ozone gas.

- 29 - T 1529/19

#### **AUXILIARY REQUEST 4**

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated at the upper half of the tub (2) so as to stay above the maximum level of wash water in the tub (2), arranged at separate points from each other,

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3).

- 30 - T 1529/19

#### **AUXILIARY REQUEST 5**

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated at the upper half of the tub (2) so as to stay above the maximum level of wash water in the tub (2), arranged at separate points from each other,

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereby the oxygen-rich air (H) is drawn continuously to be converted into ozone gas.

- 31 - T 1529/19

#### AUXILIARY REQUEST 6

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3).

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated at the upper half of the tub (2) so as to stay above the maximum level of wash water in the tub (2), arranged at separate points from each other such that they are close to the opposite side walls or corners of an household appliance (1) exterior body (G),

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3).

- 32 - T 1529/19

## Claim 1 of auxiliary request 7 filed on 2 February 2023 AUXILIARY REQUEST 7

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a <u>cylindrically shaped</u> tub (2) wherein the washing process is performed, <u>the</u> tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

wherein the household appliance (1) comprises at least one fan (8) which blows the ozone gas into the tub (2) from the ozone supply line (6) and simultaneously draws the air (H) from the tub (2) into the ozone generator (3), whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereinby the at least one fan (8) is embodied to draw the oxygen rich air (H) is drawn continuously the oxygen-rich air (H) to be converted into ozone gas,

the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to

the opposite side walls or corners of the exterior body (G).

- 33 - T 1529/19

## Auxiliary request 7 filed on 30 December 2023 AUXILIARY REQUEST 7

1. A household appliance (1) being a washing machine or a washing machine and dryer, the household appliance (1) comprising

a tub (2) wherein the washing process is performed,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated at the upper half of the tub (2) so as to stay above the maximum level of wash water in the tub (2), arranged at separate points from each other such that they are close to the opposite side walls or corners of a household appliance (1) exterior body (G),

wherein the household appliance (1) comprises at least one fan (8) which blows the ozone gas into the tub (2) from the ozone supply line (6) and draws the air (H) from the tub (2) into the ozone generator (3), whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereby the oxygen-rich air (H) is drawn continuously to be converted into ozone gas.

- 34 - T 1529/19

#### AUXILIARY REQUEST 8

A household appliance (1) being a washing machine, the household appliance
 comprising

a cylindrically shaped tub (2) wherein the washing process is performed, the tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3),

the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G).

- 35 - T 1529/19

#### **AUXILIARY REQUEST 9**

A household appliance (1) being a washing machine, the household appliance
 comprising

a cylindrically shaped tub (2) wherein the washing process is performed, the tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

wherein the household appliance (1) comprises at least one fan (8) which blows the ozone gas into the tub (2) from the ozone supply line (6) and draws the air (H) from the tub (2) into the ozone generator (3), whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereby the oxygen-rich air (H) is drawn continuously to be converted into ozone gas,

the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G).

- 36 - T 1529/19

#### AUXILIARY REQUEST 10

A household appliance (1) being a washing machine, the household appliance
 comprising

a cylindrically shaped tub (2) wherein the washing process is performed, the tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas  $(O_3)$ , having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3),

wherein the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G),

the first opening (10) and the second opening (110) are situated on the upper wall of the tub (2).

- 37 - T 1529/19

#### **AUXILIARY REQUEST 11**

1. A household appliance (1) being a washing machine, the household appliance (1) comprising

a cylindrically shaped tub (2) wherein the washing process is performed, the tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

wherein the household appliance (1) comprises at least one fan (8) which blows the ozone gas into the tub (2) from the ozone supply line (6) and draws the air (H) from the tub (2) into the ozone generator (3), whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3), whereby the oxygen-rich air (H) is drawn continuously to be converted into ozone gas,

wherein the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G),

the first opening (10) and the second opening (110) are situated on the upper wall of the tub (2).

- 38 - T 1529/19

#### **AUXILIARY REQUEST 12**

A household appliance (1) being a washing machine, the household appliance
 comprising

a cylindrically shaped tub (2) wherein the washing process is performed, the tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas  $(O_3)$ , having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2),

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) - the first opening (10) - the tub (2) - the second opening (110) - air supply line (7) - the ozone generator (3),

the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G),

wherein at least one fan (8) blows the ozone gas into the tub (2) from the ozone supply line (6) and/or draws the air (H) from the tub (2) into the ozone generator (3).

- 39 - T 1529/19

#### **AUXILIARY REQUEST 13**

A household appliance (1) being a washing machine, the household appliance
 comprising

a cylindrically shaped tub (2) wherein the washing process is performed, the tub (2) being in the horizontal position,

an ozone generator (3) situated outside the tub (2) which generates ozone gas (O<sub>3</sub>), having an air inlet (4) for the entry of the air used in producing the ozone gas and an ozone outlet (5) for the exit of the ozone gas to the outside,

an ozone supply line (6) with one end connected to the ozone outlet (5) and the other end to the tub (2), for delivering the ozone gas from the ozone generator (3) to the tub (2),

an air supply line (7), with one end connected to the air inlet (4) and the other end to the tub (2), for the feedback of oxygen - rich air (H) in the tub (2) to the ozone generator (3),

a first opening (10) for entry of the ozone gas delivered from the ozone supply line (6) into the tub (2),

a second opening (110) to pass the air (H) from the tub (2) into the air supply line (7) by leaving the tub (2),

the first opening (10) is located above the water level of the tub (2) wherein the first opening (10) and the second opening (110) are situated so as to stay above the maximum level of wash water in the tub (2).

whereby a closed cycle is formed that follows the sequence of the ozone generator (3) - the ozone supply line (6) – the first opening (10) - the tub (2) – the second opening (110) - air supply line (7) - the ozone generator (3),

the first opening (10) and the second opening (110), situated at the upper half of the tub (2), arranged at different points from each other such that they are close to the opposite side walls or corners of the exterior body (G),

wherein the first opening (10) and the second opening (110) are situated on the upper wall of the tub (2),

wherein at least one fan (8) blows the ozone gas into the tub (2) from the ozone supply line (6) and/or draws the air (H) from the tub (2) into the ozone generator (3).