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Datasheet for the decision of 11 August 2022

Case Number: T 0385/18 - 3.2.02

Application Number: 11755342.0

Publication Number: 2616117

IPC: A61M1/14, A61M1/36

Language of the proceedings: EN

Title of invention:
BLOOD TREATMENT APPARATUS WITH FLOW DIVIDER FOR LIMITING AN ELECTRICAL CURRENT

Patent Proprietor:
Gambro Lundia AB

Opponent:
Fresenius Medical Care AG & Co. KGaA

Headword:

Relevant legal provisions:
EPC Art. 54, 56, 83
RPBA 2020 Art. 13(2)
RPBA Art. 12(4)

Keyword:

Novelty - main request (no) - auxiliary request (yes)
Inventive step - auxiliary request (yes)
Sufficiency of disclosure - auxiliary request (yes)
Amendment after summons - exceptional circumstances (yes)
Late-filed evidence - admitted (yes)
Late-filed request - submitted shortly before oral proceedings - admitted (yes)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 0385/18 - 3.2.02

D E C I S I O N
of Technical Board of Appeal 3.2.02
of 11 August 2022

Appellant: (Opponent)	Fresenius Medical Care AG & Co. KGaA Else-Kröner-Strasse 1 61352 Bad Homburg (DE)
Representative:	Herrmann, Uwe Lorenz Seidler Gossel Rechtsanwälte Patentanwälte Partnerschaft mbB Widenmayerstraße 23 80538 München (DE)
Respondent: (Patent Proprietor)	Gambro Lundia AB P.O. Box 10101 220 10 Lund (SE)
Representative:	PGA S.p.A., Milano, Succursale di Lugano Via Castagnola, 21c 6900 Lugano (CH)
Decision under appeal:	**Interlocutory decision of the Opposition Division of the European Patent Office posted on 11 December 2017 concerning maintenance of the European Patent No. 2616117 in amended form.**

Composition of the Board:

Chairman	M. Alvazzi Delfrate
Members:	S. Böttcher
	Y. Podbielski

Summary of Facts and Submissions

I. The opponent filed an appeal against the interlocutory decision of the Opposition Division to maintain the patent on the basis of the main request as filed on 6 September 2017.

II. Oral proceedings before the Board took place on 11 August 2022.

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

The respondent (patent proprietor) requested that the appeal be dismissed and the patent be maintained in the form held allowable by the Opposition Division (main request), or that the patent be maintained on the basis of one of auxiliary request 1 and 2 filed with letter dated 4 August 2022.

IV. Claim 1 of the main request reads as follows.

"A blood treatment apparatus comprising:
a blood treatment unit (10),
a blood line (20) configured to extract blood from a blood source (21), pass the blood through the blood treatment unit (10) and deliver treated blood to a target vessel (22),
a fluid line (30) configured to extract electrically conductive treatment fluid from a fluid source (31), pass the treatment fluid through the blood treatment unit (10) such that the treatment fluid interacts with the blood within the blood treatment unit (10) and deliver used treatment fluid to a fluid sink (32), characterized by

a flow divider (40) arranged in the fluid line (30) and configured to separate treatment fluid in the fluid line (30) into to a first fluid section (51) and a second fluid section (53),
thereby electrically isolating the fluid sections (51, 53) such that electrical current flowing in the fluid line (30) between the fluid sections (51, 53) is limited."

Claim 1 of auxiliary request 1 reads as follows.

"A blood treatment apparatus comprising:
a blood treatment unit (10),
a blood line (20) configured to extract blood from a blood source (21), pass the blood through the blood treatment unit (10) and deliver treated blood to a target vessel (22),
a fluid line (30) configured to extract electrically conductive treatment fluid from a fluid source (31), pass the treatment fluid through the blood treatment unit (10) such that the treatment fluid interacts with the blood within the blood treatment unit (10) and deliver used treatment fluid to a fluid sink (32),
characterized by
a flow divider (40) arranged in the fluid line (30) and configured to separate treatment fluid in the fluid line (30) into to a first fluid section (51) and a second fluid section (53),
thereby electrically isolating the fluid sections (51, 53) such that electrical current flowing in the fluid line (30) between the fluid sections (51, 53) is limited,
wherein the flow divider (40) is configured to electrically isolate the first and second fluid sections (51, 53) such that the electrical current is

limited to maximum 50 µA."

V. The following documents are referred to in this decision.

D4 WO 2009/044220
D16 DIN EN 60601-1, pages 84 to 87, (July 2007)
D18 US 2004/0267183
D19 Kidney International (2006), pages 2274 to 2277, "Method for detecting the disconnection of an extracorporeal device using a patient's endogenous electrical voltages" (Mai 2006)
Annex I print out from https://elastostar.com/benefit-of-electrically-conductive-silicone-rubber-tubing-and-its-applications/
Annex II print out from https://elastostar.com/why-is-medical-grade-silicone-tubing-the-best-choice-for-healthcare-tubing/

VI. The arguments of the appellant may be summarized as follows.

Admittance of document D19

D19 was filed as a reaction to the Opposition Division's interpretation of the feature "thereby electrically isolating the fluid sections such that electrical current flowing in the fluid line between the fluid sections is limited" in the decision. The document was highly relevant and was submitted at the earliest possible time in the appeal proceedings.

D19 should therefore be admitted into the proceedings.

Admittance of the submissions dated 4 August 2022 and of annexes I and II

The test results submitted by the respondent with the letter dated 4 August 2022 should not be admitted into the proceedings since they constituted an amendment of the respondent's case made after notification of the summons to oral proceedings. Since D18 had already been on file since 2017, the tests could have been performed earlier. The preliminary opinion of the Board did not account for exceptional circumstances. The inherent characteristics of the apparatus of D18 had already been mentioned on pages 36 to 38 of the statement of grounds of appeal.

Furthermore, the link between D18 and D19 had already been established in the statement of grounds of appeal to demonstrate the common general knowledge of the person skilled in the art (pages 48 to 49) in an objection of lack of inventive step. The person skilled in the art would also use this common general knowledge to assess the question of novelty. Hence, the preliminary opinion of the Board did not contain any new argument.

Annexes I and II were not published before the filing date of the present patent. Furthermore, they were not relevant and should not be admitted either.

Main request - novelty in view of D18

Figure 6 of D18 showed a schematic view of a blood treatment apparatus with a fluid line having two valves (32 and 33) which, when operated as shown in Figures 7 and 8, separated the treatment fluid in the fluid line into a first and a second section. The valves 32 and 33 were shown as conventional clamps, which, in the closed state, completely compressed the tubing. Since the

fluid flow was interrupted by closing one of the valves, an electrical isolation was provided inherently. This was supported by D19 disclosing that a completely occluded tubing provided a high electrical resistance (page 2275, right column, last paragraph). The arrangement of D19 was similar to the one of D18 since a normal tubing set was used (page 2275, left column, lines 23 to 27).

It was not required by claim 1 that the tubing was non-conductive. Hence, any tubing had to be considered to fall under the scope of the claim. Furthermore, the patent did not mention which force was required to achieve full compression of the tubing.

The test results referred to in the submission dated 4 August 2022 showed that a standard clamp reduced the electric current to about 50 µA. According to the present patent, this could be regarded as electrically isolating.

Hence, the subject-matter of claim 1 of the main request lacked novelty in view of D18.

Admittance of auxiliary request 1

According to Article 13(2) RPBA, this request, which had been filed long after the summons to oral proceedings, should not be admitted to the proceedings.

A change in the opinion of the Board did not amount to exceptional circumstances. In the present case, in their preliminary opinion, the Board did not deviate from any interpretation of the claim expressed in the appealed decision. The late filing could not be justified by the requirement to provide experimental

data.

Auxiliary request 1 - sufficiency of disclosure

The patent did not teach how the flow divider had to be configured to electrically isolate the fluid sections such as to limit the current to maximum 50 µA. The patent did not describe a specific embodiment of the claimed apparatus. Furthermore, it was not specified at which voltage the current limit should be achieved.

Claim 1 only defined the result to be achieved.

Therefore, the invention was not sufficiently disclosed to be carried out by the person skilled in the art.

Auxiliary request 1 - novelty

From D19 it could be derived that a stationary roller of a peristaltic pump was able to limit the electrical current to maximum 50 µA. Furthermore, the experimental data filed by the patent proprietor showed that by closure of an arbitrary clamp the current could be limited to 48 µA. Hence, the feature "such that the electrical current is limited to maximum 50 µA" was inherently disclosed in D18. Therefore, the subject-matter of claim 1 of auxiliary request 1 lacked novelty.

Auxiliary request 1 - inventive step

To limit the electrical current to maximum 50 µA did not provide any technical effect. This limit was known from the IEC 60601-1 standard as allowable value of patient leakage currents in single fault condition (D16, cl. 8.7.3 - table 3). Hence, for the person

skilled in the art, it was obvious to select this limit value.

To achieve this limit value, the person skilled in the art would consult D19, which taught that with a stationary, occluding pump roller the impedance greatly exceeded 2000 kΩ. Alternatively, the person skilled in the art would increase the pressure applied by the clamps of D18.

Hence, the subject-matter of claim 1 did not involve an inventive step.

VII. The arguments of the respondent may be summarized as follows.

Admittance of document D19

This document had been filed only with the statement of grounds of appeal and did not appear prima facie relevant. Therefore, it should not be admitted into the proceedings.

Admittance of the submissions dated 4 August 2022 and of annexes I and II

Because of the surprising and unexpected view of the Board that the subject-matter of claim 1 was anticipated by D18 since the valves shown in Figure 6 inherently provided for electrical isolation, it became necessary to provide proof that electrical isolation could not be achieved by any clamp. Furthermore, annexes I and II were filed as a reaction to the Board's statement that D18 inherently disclosed electrically isolating tubing. In their preliminary opinion, the Board for the first time

established a link between documents D18 and D19 to support its objection as to lack of novelty. Hence, there were exceptional circumstances that justified the filing of the submission of 4 August 2022 and the annexes.

Main request - novelty in view of D18

D18 did not mention the electric safety of the patient or the necessity to electrically isolate the patient.

Furthermore, electrical isolation was not achieved inherently by the configuration of Figure 6 since it was not disclosed that

i) the flow adjustment organs 32, 33 were clamps;
ii) the tube was deformable and fully made of electrically isolating material;
iii) the alleged clamps and the related tube portions interacted such that the two fluid portions were inevitably electrically isolated.

From paragraph [0126], it could only be derived that the adjustment organs 32 and 33 were valves. However, there was no direct and unambiguous disclosure that the valves were clamps.

Furthermore, the material of the tubing was not disclosed in D18. From annexes I and II it could be derived that dialysis tubing could be made from conductive silicone rubber. An electrically conductive tube in a dialysis circuit was also disclosed in D4 (paragraph [0033]).

Even if the valves in D18 were clamps, they only had to withstand the relatively low hydrostatic pressure

caused by the filled bags. Hence, it was not necessary to provide clamps that would compress the tubing sufficiently to electrically isolate the fluid sections.

The tests referred to in the submission dated 4 August 2022 revealed that even with a high performance clamp, as today conventionally used in dialysis machines, acting on a plastic tube the patient was not electrically isolated since a certain amount of current (about 50 µA) passed the closed clamp. Thus, the device with the configuration of D18, which probably did not use high performance clamps, could not be considered as inherently isolating.

D19 related to the influence of the blood pump on the resistance in a blood line of an extracorporeal circuit when measuring electrical voltages running along it. However, the rollers of a blood pump, even if they were static, could not be regarded a clamp as required by D18. Hence, D19 did not provide a disclosure to the effect that any clamp would be capable of electrically isolating a tubing.

Moreover, isolation could only be achieved when no conductive fluid was present between the two valves 32 and 33. However, in D18 there was always conductive dialysis fluid in the tube portions.

Therefore, the subject-matter of claim 1 of the main request was novel over D18.

Admittance of auxiliary request 1

In their preliminary opinion, the Board for the first time raised a novelty objection based on the assumption

that there were inherent features in D18. Due to this unexpected position of the Board, the patent proprietor had to conduct tests to disprove that a clamp inherently provided for electrical isolation. Based on the results of these tests an auxiliary request 1 was drafted, combining claim 1 with granted claim 15. By this combination, novelty over D18 was provided, and no new issues were raised.

The request should be admitted into the proceedings since the new argument by the Board amounted to exceptional circumstances justifying its filing even at this late stage of the proceedings.

Auxiliary request 1 - sufficiency of disclosure

The patent taught in paragraphs [0042], [0043] and [0050] how to implement the invention with a peristaltic pump as a flow divider. In paragraphs [0067] and [0068] it was described how an air injector could be used.

Suitable test configurations for measuring the leak current were described in paragraphs [0046] and [0049]. Paragraph [0050] further disclosed how to adjust the occluding force exerted by the pump rollers in order to obtain a certain maximum current.

Hence, the person skilled in the art was given sufficient information to be able to carry out the invention.

Auxiliary request 1 - novelty

The feature "such that the electrical current is limited to maximum 50 µA" was not inherently disclosed

in D18. The impedance value achieved by closing a fluid line depended on the actual setting of the closing means. The setting of D19 and of the experimental tests was completely different from the setting of the system of D18. It could not be derived from D18 that closure of the valves 32, 33 resulted in the electrical current being limited to maximum 50 µA.

Consequently, the subject-matter of claim 1 was novel over D18.

Auxiliary request 1 - inventive step

Starting from D18, the objective technical problem to be solved was not only to provide a blood treatment apparatus that fulfilled the IEC 60601-1 standard, but to proactively protect the patient against hazards.

The solution to this problem, as claimed in claim 1, was not rendered obvious by the prior art. The person skilled in the art would not consult D19 since this document disclosed a different setting using a stationary roller of a peristaltic pump.

Hence, the subject-matter of claim 1 involved an inventive step.

Reasons for the Decision

1. Subject-matter of the invention

The invention relates to a blood treatment apparatus (Figure 1) comprising a blood treatment unit 10, a blood line 20 and a treatment fluid line 30. In the

treatment fluid line, a flow divider 40 (in Figure 1 the peristaltic pump 141) is arranged which is configured to separate fluid in the fluid line into a first fluid section 51 and a second fluid section 53. Thereby the fluid sections 51 and 53 are electrically isolated such that electrical current flowing in the fluid line 30 between the sections is limited.

As an alternative to the peristaltic pump, the flow divider can be an arrangement of two clamps or valves (Figures 4 and 5), a drip chamber 143 (Figure 3), or an air injector 142 (Figure 6).

According to paragraph [0011] of the patent, electrically isolating the fluid sections may be understood as preventing a predetermined current from flowing between the fluid sections of the treatment fluid that is conveyed within the fluid line and that is normally electrically conductive. This predetermined current must not be zero but may not exceed a value that is harmful for a patient. The electrical isolating of the fluid sections reduces the risk of a patient being subjected to electrical shock if an electrical failure occurs. The flow divider does not necessarily interrupt the fluid flow, but merely separates fluid sections while allowing fluid transport in the fluid line.

2. Admittance of document D19

D19, which has been filed by the appellant with the statement of grounds of appeal (SGA), is an article in the journal Kidney International. It was used by the appellant to argue against the Opposition Division's reasoning on sufficiency of disclosure (SGA, page 29). It was also used as evidence of the knowledge of the

person skilled in the art in the inventive step attack starting from D18 (SGA, page 49).

D19 describes how electric current in a dialysis fluid tubing line is limited by a peristaltic pump in case that the tubing is compressed by one stationary roller or by one or more moving rollers (page 2275, right column, last paragraph). Thus, the filing of D19 elaborates on submissions made in the first instance and can be regarded as a reaction to the Opposition Division's interpretation of claim 1, in particular with regard to the feature "thereby electrically isolating the fluid sections such that electrical current flowing in the fluid line between the fluid sections is limited".

Therefore, the Board does not hold this document inadmissible (Article 12(4) RPBA 2007).

3. Admittance of the submissions dated 4 August 2022 and of annexes I and II

With its letter of 4 August 2022 and in reply to the Board's preliminary opinion expressed in its communication under Article 15(1) RPBA, the respondent filed test results on the electric behaviour of a conventional clamp currently used in dialysis machines in open and closed configuration (pages 11-19 of that letter). They further filed annexes I and II, relating to the electrical properties of conventional tubing.

These filings constitute an amendment of the respondent's appeal case, which is subject to the provisions of Article 13(2) RPBA, according to which such amendments shall, in principle, not be taken into account unless there are exceptional circumstances,

which have been justified with cogent reasons.

The Board, in its communication under Article 15(1) RPBA, held the view that the valves disclosed in D18 inherently provided for electrical isolation, since they were configured to completely compress a plastic tube. The Board also noted that the isolating characteristics could be compared to those of a stationary roller of a peristaltic pump, and referred to D19 (page 2275, right column, last paragraph), stating that the compression caused by one stationary roller of a peristaltic pump increased the resistance in the fluid line to far more than 2000 kΩ, which could be regarded as electrically isolating in terms of the present patent.

The Board agrees with the respondent that these considerations extended beyond the appellant's argument, put forward in the statement of grounds of appeal. In fact, the appellant argued that closing the valves of D18 limited the current flowing in the fluid line to a certain degree (page 35, last paragraph of the SGA) and that any reduction of the electric current had to be considered as electrically isolating in the sense of the claim (page 21, paragraph 5 of the SGA).

The appellant further referred to D19 as evidence of the knowledge of the person skilled in the art with regard to the isolating characteristics of a peristaltic pump with moving rollers. However, they did not establish the link between D19 and D18 leading to the conclusion that complete closure of a fluid line, either by a static pump roller or by a clamp, inherently resulted in an electrical isolation of the fluid line. The introduction of this link for the first time by the Board in its communication under Article

15(1) RPBA amounts to exceptional circumstances justifying the late filing of the experimental test results and the annexes I and II.

Consequently, the test results and the annexes I and II are admitted into the proceedings.

4. Main request - novelty in view of D18

D18 relates to an extracorporeal blood treatment device having a blood line (6) and a treatment fluid line (80) through which dialysis liquid is passed through the blood treatment unit (2) and delivered to a drain (9) (Figure 6). Two valves (32, 33) are arranged in the fluid line which are opened and closed intermittently, as described in paragraphs [0126] to [0129] in connection with Figures 7 and 8.

Since D18 does not explicitly disclose which type of valve is used, the Board is convinced that conventional clamps are used. In Figures 6 to 8, the valves are depicted as clamps which act on the fluid line tubing.

The Board does not agree with the respondent that the clamps of D18 were not compressed sufficiently to electrically isolate the fluid sections. It is clear that the clamps are configured to interrupt the fluid flow completely since it has to be ensured that all of the fluid flows into one of the bags (11, 12) when the respective downstream valve is closed.

In the Board's view, when completely compressing a plastic tube, the clamps inherently provide for electrical isolation. The pressure exerted to completely interrupt the flow and, as a consequence, the isolating characteristics can be compared to those

of a stationary roller of a peristaltic pump. As disclosed in D19 (page 2275, right column, last paragraph), the compression caused by one stationary roller of a peristaltic pump increases the resistance in the fluid line to far more than 2000 kΩ, which can be regarded as electrically isolating in terms of the present patent.

On 4 August 2022, the respondent submitted results of experimental tests performed with a conventional clamp on a plastic tube of a dialysis machine. It was shown that closure of the clamp reduced the electric current in a first test from about 2460 µA (at 120 V, 60 Hz) to about 51 µA, and in a second test from about 4760 µA (at 230 V, 50 Hz) to about 50 µA (page 15, last paragraph, to page 17, first paragraph). Contrary to the respondent, the Board considers the tested clamp/ tubing to be electrically isolating in the sense of the patent. According to claim 14 of the patent, the limitation of the current to maximum 500 µA is already regarded as isolating.

The Board does not share the respondent's view that the tubing used in D18 for the drain line 80 could be conductive and that therefore the closing of the clamps could not result in an electrical isolation of the fluid sections. Although electrically conductive tubing or tubing parts were known before the priority date of the patent, such tubing was used in dialysis circuits only for special purposes, for instance to provide a grounding device as described in D4 (paragraph [0033]). In D18, no such purpose, which would require an electrically conductive tubing, is mentioned. The standard material for tubing lines for dialysis circuits is a non-conductive plastic material, and there is no reason to consider that the drain line in

D18 is made from another material.

Moreover, the Board does not concur with the respondent that isolation is only achieved when no conductive fluid is present between the two valves 32 and 33. In the embodiment of Figure 4 of the patent, there is also conductive fluid between the flow stoppers 36 and 37.

Hence, the arrangement of valves 32 and 33 acting on plastic tubing 80 in D18 inherently provides for electrical isolation when at least one of the clamps is closed, and thus qualifies as a flow divider according to claim 1. The subject-matter of claim 1 of the main request thus lacks novelty over D18.

5. Admittance of auxiliary request 1

Auxiliary request 1 was filed by the respondent on 4 August 2022 together with the test results and annexes I and II. Claim 1 of this request is a combination of claims 1 and 15 of the patent as granted.

For the same reasons as the test results and annexes I and II, the filing of auxiliary request 1 constitutes a legitimate response to the new argument raised by the Board in the communication under Article 15(1) RPBA. As mentioned at point 3 above, that amounted to exceptional circumstances.

The Board does not concur with the appellant that the respondent should have filed auxiliary request 1 immediately after the communication under Article 15(1) RPBA had been issued. It is considered appropriate to first perform the experimental tests and then to limit the claim on the basis of the test results in an

attempt to overcome the novelty objection.

Therefore, auxiliary request 1 is admitted into the proceedings.

6. Auxiliary request 1 - sufficiency of disclosure

Claim 1 of auxiliary request 1 provides a limit value of 50 µA for the leakage current. The appellant alleges that the patent does not give sufficient information on how a flow divider has to be configured to achieve this value.

The patent describes several possible variants of the flow divider, for instance a peristaltic pump (paragraph [0021]). At paragraphs [0042] and [0043] the person skilled in the art is presented with further information concerning the configuration of the pump. A test configuration for measuring the leakage current and for verifying that the claimed limit value is achieved is shown in Figure 2a and described in paragraphs [0046] and [0050]. At paragraph [0054] it is mentioned that the power supply is typically a conventional current source. From this, the person skilled in the art can derive the voltage at which the current limit should be achieved.

Hence, the person skilled in the art is given sufficient teachings and instructions to be able to carry out the invention.

The appellant further argued that claim 1 only defined the result to be achieved. This objection concerns the clarity of the claim and has no bearing on the issue of sufficiency of disclosure. However, lack of clarity is

not a ground for opposition.

7. Auxiliary request 1 - novelty

In claim 1 of auxiliary request 1 the feature "such that the electrical current is limited to maximum 50 µA" has been added.

In the Board's view, it cannot be derived from D19 that the occlusion of a tubing by a stationary clamp of a peristaltic pump in any case limits the leakage current to this maximum value. The mentioned impedance value of 2000 kΩ rather allows a current of about 115 µA (at 230 V).

Furthermore, in the experimental tests performed by the patent proprietor a specific clamp was used which cannot be compared to the clamps used in D18.

Hence, the Board does not agree with the appellant that any closed clamp will limit the current to 50 µA. The impedance of a closed fluid line rather depends on the particular setting of the closing means.

Moreover, it is true that the IEC 60601-1 standard defines an allowable value of 50 µA of patient leakage current in extracorporeal blood treatment apparatuses (D16, table 3). Even if this limit value might also apply to the apparatus of D18, it cannot be derived from this requirement that the clamps 32, 33 have to be configured such that this limit value is never exceeded.

Consequently, the feature "such that the electrical current is limited to maximum 50 µA" is not disclosed in D18. The subject-matter of claim 1 is novel over

D18.

8. Auxiliary request 1 - inventive step

D18 discloses a fluid line with two clamps 32, 33 which inherently act as a flow divider that electrically isolates the fluid sections.

The subject-matter of claim 1 differs from the apparatus of D18 in that the flow divider is configured "such that the electrical current is limited to maximum 50 µA". With this limit value, the isolation level required by the IEC 60601-1 (table 3 of D16) can be achieved.

Since D18 does not discuss at all the use of the clamps for electrical isolation the common general knowledge would not lead the person skilled in the art to the claimed solution.

The Board does not concur with the appellant that the person skilled in the art would either consult D19 or increase the pressure exerted by the clamps to limit the leakage current to 50 µA. D19 deals with the isolation properties of a stationary roller compared to one or more moving rollers. However, it relates to a method for detecting the disconnection of a device using a patient endogenous voltages. Hence, it does not teach or suggest to increase the occlusion pressure to exceed a certain impedance value and thereby to limit the leakage current.

Hence, the person skilled in the art was not prompted by D19 or its common general knowledge to configure the flow divider of D18 such that the electrical current is limited to maximum 50 µA. The subject-matter of claim 1

of auxiliary request 1 involves an inventive step.

9. Conclusion

From the above considerations, it follows that none of the objections raised by the opponent prejudices the maintenance of the contested patent on the basis of the claims of auxiliary request 1.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the opposition division with the order to maintain the patent in amended form on the basis of claims 1-18 of auxiliary request 1 filed with letter dated 4 August 2022, and a description and figures to be adapted thereto.

The Registrar: The Chairman:

D. Hampe M. Alvazzi Delfrate

Decision electronically authenticated