Unified Patent Court
Einheitliches Patentgericht
Juridiction unifiée du brevet

Düsseldorf Local Division
UPC_CFI_137/2025
UPC_CFI_512/2025

Decision
of the Court of First Instance of the Unified Patent Court
delivered on 6 October 2026
concerning EP 3 567 356 B1

Headnote:

If the claimant's measurements relating to a claim feature are, from the outset, unconvincing and inconclusive, the defendant's failure to provide its own measurements is irrelevant, as no specific contesting within the meaning of R. 171(2) RoP is required in such a case.

Keywords:

R. 171 (2) RoP; specific contesting; measurements

CLAIMANT/COUNTERDEFENDANT:

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DEFENDANTS/COUNTERCLAIMANTS:

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PATENT AT ISSUE:

European Patent n° EP 3 567 356 B1

PANEL/DIVISION:

Panel 2 of the Local Division in Düsseldorf

DECIDING JUDGES:

This decision is issued by Presiding Judge Dr Thom, legally qualified Judge Dr Rinken acting as judge-rapporteur, legally qualified Judge Knijff and technically qualified Judge Holz.

LANGUAGE OF THE PROCEEDINGS: English

SUBJECT OF THE PROCEEDINGS: Infringement action and counterclaim for revocation

DATE OF ORAL HEARING: 27 August 2026

SHORT SUMMARY OF THE FACTS:

1. The Parties argue about the infringement and validity of EP 3 567 356 B1 (Exhibit TW 1; hereinafter: "patent in suit"). The Claimant is the sole proprietor of the patent in suit. The patent in suit was filed in English language on 7 May 2018. The reference to the grant of the patent in suit is dated 24 February 2021.

2. The patent in suit is in force according to an extract of the register of the European Patent Office (Exhibit TW 2). No opposition against the grant of the patent in suit was filed with the European Patent Office ("EPO").

3. The patent in suit was opted-out from the UPC on 27 April 2023. This opt-out was withdrawn on 13 February 2025 (Exhibit TW 3).

4. The patent in suit is particularly in force in the UPC member states Federal Republic of Germany, French Republic and in the Italian Republic.

5. It protects a "sniffing leak detector for detecting gas leaks".

6. Claim 1 of the patent in suit reads as follows:

   "Sniffing leak detector (10) comprising a handheld device (44) with a sniffer tip probe comprising a sample gas inlet (12), a reference gas inlet (14), a gas analyzer (16), and a switching valve (20) adapted to alternatingly connect the sample gas inlet (12) to the gas analyzer (16) and the reference gas inlet (14) to the gas analyzer (16) in a gas conducting manner, such that either the gas drawn through the sample gas inlet (12) or the gas drawn through the reference gas inlet (14) is analyzed by the gas analyzer (16), characterized in that the reference gas inlet (14) is not arranged on the sniffer tip probe and thereby in a remote distance from the sample gas inlet (12), and the sniffing leak detector (10) comprises a reference gas conduit (26), which connects the reference gas inlet (14) and the switching valve (20), and further comprises a buffer chamber (40) defining a buffer volume (42), which permits to homogeneously mix gas drawn into the buffer chamber (40) through the reference gas inlet (14) with remaining gas in the buffer chamber (40)."

7. The subclaims 2, 9, 10, 11 and 12 read as follows:

   Claim 2

   "Sniffing leak detector (10) according to claim 1, further comprising a vacuum pump adapted to suck gas through either the sample gas inlet (12) or the reference gas inlet (14), and through the gas analyzer (16)."

   Claim 9

   "Sniffing leak detector (10) according to one of claims 1 to 6, wherein the buffer chamber (40) is part of the hand held device (44)."

Claim 10

"Sniffing leak detector (10) according to claim 9, wherein the hand held device (44) is formed by a housing containing the buffer chamber (40)."

Claim 11

"Sniffing leak detector (10) according to anyone of claims 1 to 10, further comprising an outlet connecting the gas analyzer (16) to the open atmosphere surrounding the sniffing leak detector (10), wherein the outlet is located at the sniffing leak detector such that the gas blown out through the outlet into the atmosphere is not drawn in through the sample gas inlet (12) or the reference gas inlet (14)."

Claim 12

"Sniffing leak detector (10) according to claim 11, wherein the hand held device (44) comprises the reference gas inlet (14) and the outlet such that the main flow directions of the gas drawn through the sample gas inlet, of the gas drawn through the reference gas inlet (14) and of the gas blown out through the outlet are different."

8. With regard to the wording of the other claims, reference is made to the patent in suit.

9. The Claimant belongs to the multinational group Inficon, which is based in Switzerland.

10. The Defendants belong to the Elitech Group. Defendant 1 is the headquarters of the group based in the USA. Defendant 1 operates the website www.elitechus.com. Via this website, Defendant 1 advertises and distributes the sniffing leak detector "METRUM" (s. photograph below). The sniffing leak detector "METRUM" is distributed by Defendant 1 to Germany, to France and to Italy.

11. Defendant 2 is a European distribution company based in London. It sells its products worldwide, including Germany, France and Italy. These products also include the "METRUM" sniffing leak detector. The Claimant purchased an exemplary product from Defendant 2 via its website. Defendant 2 delivered the product to Germany.

12. With its infringement action, the Claimant targets the product "METRUM" (the illustration below is taken from p. 13 of the Statement of Claim ("SoC")):



13. The Claimant points out that in its view, the infringement and the claims for legal consequences sought here are not limited to the exemplary product mentioned but include all sniffing leak detectors placed on the market or offered by the Defendants in the Contracting Member States named here, which are designed in accordance with the technical features relevant to the asserted patent infringement (hereinafter: "attacked embodiments").

PARTIES' REQUESTS:

Infringement action:

14. Following minor amendments in the brief dated 21 August 2026, the Claimant ultimately requests as follows:

    I. The Defendants are ordered

    1. to refrain from offering, supplying, importing or possessing for the aforementioned purposes sniffing leak detector comprising:

       a hand-held device with a sniffer tip probe comprising a sample gas inlet, a reference gas inlet, a gas analyzer and a switching valve, adapted to alternatingly connect the sample gas inlet to the gas analyzer and the reference gas inlet to the gas analyzer in a gas-conducting manner, such that either the gas drawn in through the sample gas inlet or the gas drawn through the reference gas inlet is analyzed by the gas analyzer, characterised in that the ref-

erence gas inlet is not arranged on the sniffer tip probe and thereby in a remote distance from the sample gas inlet, and the sniffing leak detector comprises a reference gas conduit, which connects the reference gas inlet and the switching valve, and further comprises a buffer chamber defining a buffer volume, which permits to homogenously mix gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber,

in the territories of the Federal Republic of Germany, the French Republic and the Italian Republic,

(direct infringement of claim 1),

in particular if

the sniffing leak detector further comprises a vacuum pump adapted to suck gas either through the sample gas inlet or the reference gas inlet, and through the gas analyzer;

(direct infringement of claim 2)

and/or

the buffer chamber of the sniffing leak detector is part of the hand-held device;

(direct infringement of claim 9)

and/or

the hand-held device of the sniffing leak detector is formed by a housing containing the buffer chamber;

(direct infringement of claim 10)

and/or

the sniffing leak detector comprises an outlet connecting the gas analyzer to the open atmosphere surrounding the sniffing leak detector, wherein the outlet is located at the sniffing leak detector such that the gas blown out through the outlet into the atmosphere is not drawn in through the sample gas inlet or the reference gas inlet;

(direct infringement of claim 11)

and/or

the hand-held device of the sniffing leak detector comprises the reference gas inlet and the outlet such that the main flow directions of the gas drawn through the sample gas inlet, of the gas drawn through the reference gas inlet and the gas blown out through the outlet are different;

(direct infringement of claim 12)

2. to provide the Claimant with information for the contracting states named in section I.1. in a list structured for each month of a calendar year and by infringing products on the extent to which the Defendants have committed the acts referred to in section I.1. since 24 February 2021, stating

   a) the origin and distribution channels of the products delivered, received or ordered since 24 February 2021 in accordance with section I.1. by naming them,

      (1) the names and addresses of suppliers and other previous owners,

      2) the names and addresses of the professional customers and the points of sale for which the products were intended,

   b) the quantities delivered, received or ordered since 24 February 2021 and the prices paid for the products referred to in section I.1, and

   c) the identity of all third parties involved in the distribution of products pursuant to section I.1. since 24 February 2021,

      whereby the information required under I. 2. a) to c)

      - are to be made available in electronic form that can be evaluated with the aid of a computer, and

      - must be proven by submission of corresponding documents, in particular invoices or, if no invoices have been issued, by corresponding order or delivery documents or customs certificates, whereby information requiring confidentiality which is not covered by the scope of the present obligation to provide information may be redacted by the Defendants at their own expense;

3. within a period of two months after service of the notification according to R. 118.8. sentence 1 RoP

   a) to recall the products in accordance with I.1. delivered since 24 February 2021 at their expense from the distribution channels by informing the third parties from whom the infringing products are to be recalled that this court has found that the products infringe the European Patent EP 3 567 356 B1, whereby the Defendants shall give the third parties a binding undertaking to reimburse the costs incurred, to bear the costs of transport, to reimburse the customs and storage costs associated with the return of the products and to take back the products;

   b) to permanently remove the products in accordance with I.1. delivered since 24 February 2021 from the distribution channels by requesting, with reference to the fact that this Court has found that the products infringe

the European patent EP 3 567 356 B1, third parties who are industrial customers, but not end users, in respect of the products referred to in point I.1. to cancel all orders relating to the products referred to in point I.1. and to provide the court and the Claimant with written proof of the measure taken within the aforementioned period of 30 days after service of the notification within the meaning of R. 118.8 sentence 1 RoP;

4. to destroy at their own expense the products referred to in I.1. in their direct or indirect possession or ownership within a period of two months after service of the notification within the meaning of R. 118.8 sentence 1 RoP;

5. to pay the Claimant an amount of EUR 120,000.00 as provisional damages.

II. The Defendants are obliged to compensate the Claimant for all damages that it has suffered and will suffer as a result of the acts described in section I.1. during the lifetime of EP 3 567 356 B1.

III. The Claimant is permitted to announce and publish the Court's decision in whole or in part in public media, in particular on the Internet, at the Defendant's expense.

IV. A penalty payment shall be imposed against the Defendants

1. up to EUR 250,000.00 for each individual case of violation of the injunction under Section I.1. and shall be paid to the Unified Patent Court;

2. up to EUR 50,000.00 for each individual day of delay, payable to the Unified Patent Court, for the fulfilment of the obligation to provide information under Section I.2. or the recall and removal claim under Section I.3. after the expiry of two months after service of the notification within the meaning of R. 118.8 sentence 1 RoP; and

3. up to EUR 50,000.00 for each individual day of delay, payable to the Unified Patent Court, for the fulfilment of the destruction claim under Section I.4. after expiry of a reasonable period of two months after service of the notification within the meaning of R. 118.8 sentence 1 RoP.

V. The Defendants are ordered to bear the costs.

VI. The judgement is immediately enforceable.

VII. The amount of any security, should the Court order the provision of such, shall be determined separately for each enforceable part of the decision.

15. The Defendants request to

I. dismiss the infringement action;

II. order the Claimant to bear the costs of the proceedings incurred by Defendants, the amount of which is to be determined in separate proceedings;

III. order the Claimant to pay an appropriate interim award of costs, the amount of which is established by the Court, within 14 days after service of the decision, whereby the interim award of costs is immediately enforceable.

IV. In the alternative, if the Court finds the patent in suit to be infringed,

1. Defendants are granted a grace period of 18 months before the enforcement of corrective measures;

2. Claimant is ordered to provide appropriate enforcement security for the granted claims, the amount of which to be established by the Court.

Counterclaim for revocation

16. The Defendants request:

I. The European Patent EP 3 567 356 is revoked in full with effect to the territories of all Contracting Member States in which it validates.

II. The Claimant as Counterdefendant is ordered to bear the costs of the proceedings incurred by Defendants as Counterclaimants, the amount of which is to be determined in separate proceedings.

III. The Claimant as Counterdefendant is ordered to pay an appropriate interim award of costs, the amount of which is established by the Court, within 14 days after service of the decision. The interim award of costs is immediately enforceable.

17. The Claimant requests:

I. The Defendants' Counterclaim for revocation is dismissed.

II. The Defendants are ordered to bear the costs of the proceedings.

Application to amend the patent

18. The Claimant requests, in substance:

I. In the alternative, the patent in suit is amended and upheld pursuant to R. 30 RoP based on the attached set of claims according to Exhibits TW 15 to TW 19.

II. The Defendants are ordered to bear the costs of the proceedings.

19. The Defendants request, in substance,

to dismiss the infringement action also in view of the Auxiliary requests as filed in the Application to Amend the patent in suit.

20. In a written submission dated 21 August 2026, the Claimant, in response to the Order of the judge-rapporteur pursuant to R. 110 RoP dated 5 August 2026, explained that

> "… the order in which the Claimant wishes to rely on infringement and validity is as follows:
>
> 1. Claim 1 as granted;
>
> 2. Claim 1 in the scope of Auxiliary requests I or III;
>
> 3. Dependent claims 2, 5 (as granted, in the alternative in the scope of Auxiliary request IV), 9, 10, 11 (as granted, in the alternative in the scope of Auxiliary request II) and 12;
>
> 4. Claim 1 in the scope of auxiliary request VI (see below, IV. Auxiliary request VI);
>
> 5. Dependent claims 3, 4, 6, 7, 8 and 13."

C) POINTS AT ISSUE:

Claim construction

21. The features of claim 1 are identified below with references 1 to 5 based on the claim chart of the Claimant (Exhibit TW 4).

1. Sniffing leak detector (10) comprising:

1.1 a hand-held device (44) with a sniffer tip probe comprising a sample gas inlet (12),

1.2 a reference gas inlet (14),

1.3 a gas analyzer (16) and

1.4 a switching valve (20).

2. The switching valve (20) is adapted to

2.1 alternatingly connect the sample gas inlet (12) to the gas analyzer and the reference gas inlet (14) to the gas analyzer (16) in a gas conducting manner,

2.2 such that either the gas drawn in through the sample gas inlet (12) or the gas drawn in through the reference gas inlet (14) is analyzed by the gas analyzer (16).

3. The reference gas inlet (14) is not arranged on the sniffer tip probe and thereby in a remote distance from the sample gas inlet (12).

4. The sniffing leak detector (10) comprises a reference gas conduit (26), which connects the reference gas inlet (14) and the switching valve (20).

*5. The sniffing leak detector (10) further comprises a buffer chamber defining a buffer volume (42), which permits to homogeneously mix gas drawn into the buffer chamber (40) through the reference gas inlet (14) with remaining gas in the buffer chamber (40).*Feature 1.2 *- a reference gas inlet (14) -*

22. The Claimant states that from the skilled person's point of view, the reference gas is sucked in, drawn in or at least enters the interior of the sniffing leak detector through the reference gas inlet whereby no "special opening" is required. It argues that the wording of the feature 1.2 does not further specify how the reference gas inlet is designed. In its view, this understanding is in line with the specification of the patent in suit. The Claimant criticises the Defendant's interpretation (see below) on the grounds that it remains unclear what "dedicated" or "special openings" may mean.

23. The Defendants understand feature 1.2 to require a "dedicated opening" or a "special opening".

Feature 3 *- The reference gas inlet (14) is not arranged on the sniffer tip probe and thereby in a remote distance from the sample gas inlet (12). -*

24. According to the Claimant, feature 3 is met when the reference gas inlet is not arranged at the sniffer tip probe and thus in a remote distance from the sample gas inlet. It takes the view that feature 3 does not require a maximum possible distance of the reference gas inlet and the sample gas inlet. Rather, the patent in suit provides a sniffing leak detector whereby the distance between the reference gas inlet and the sample gas inlet is larger as compared to the prior art sniffing leak detectors with the reference gas inlet arranged at the sniffer tip probe.

25. The Defendants contend as follows: This spatial separation is essential to the patent in suit's technical teaching, as it shall reduce interference from emissions localized near the probe, thereby enhancing the differentiation between sample and reference gases. Accordingly, "*remote distance*" is understood by a person skilled in the art (hereinafter: "skilled person") as a significant spatial separation, ideally as far apart as the design of the handheld device (44) allows, to prevent cross-contamination between gases entering each inlet. According to the Defendants, feature 3 further implies that the reference gas inlet (14) must constitute a dedicated component

within the sniffing leak detector (10) that sits at a fixed position on the device in remote distance from the sniffing probe. Only if the reference gas inlet is such a dedicated component, the skilled person reading the claim is able to arrange it in a remote distance from the sniffing probe as required by feature 3. Further, they state that only then the detector is able to assess the relative orientation of a leak. Finally, they take the view that only such a dedicated opening allows for a controlled entry of reference gas at the remote distance from the sample gas inlet (12).

Feature 4 - *The sniffing leak detector (10) comprises a reference gas conduit (26), which connects the reference gas inlet (14) and the switching valve (20).* -

26. The Claimant contends that the skilled person understands feature 4 without further ado in the light of the wording of the feature and in line with the specification of the patent in suit to mean that the reference gas conduit connects the reference gas inlet and the switching valve. In contrast, the reference gas conduit does not have to be a tube or sealed device.

27. The Defendants state: The reference gas conduit (26) is a dedicated, physical component that connects the reference gas inlet (14) to the switching valve (20). It is necessarily a tube or a similarly sealed device that directs the reference gas to the valve while preventing any other gases present in the device housing from mixing with the reference gas. The reference gas conduit (16) is an essential component of the device claimed by the patent in suit. According to the Defendants, it can even house a reference gas filter (36) and must be physically connected to the buffer chamber (40) which stores and homogeneously mixes the reference gas. Additionally, they point out that the patent description highlights that the reference gas conduit (26), along with other conduits and components such as the sample gas conduit (24), are *contained* within the housing (46) of the handheld device (44).

Feature 5 - *The sniffing leak detector (10) further comprises a buffer chamber defining a buffer volume (42), which permits to homogeneously mix gas drawn into the buffer chamber (40) through the reference gas inlet (14) with remaining gas in the buffer chamber (40).* -

28. The Claimant submits: While subclaim 5 stipulates specific requirements with regard to the design of the buffer chamber, main claim 1 only requires that the sniffing leak detector “comprises” a buffer chamber. Given that - in Claimant’s view -, it is obvious for the person skilled in the art that the buffer chamber pursuant to feature 5 is not designed as a structurally separate component with boundaries. Further, the Claimant argues that based on the wording, the skilled person assumes that the buffer chamber defines a buffer volume, which permits to homogeneously mix gas drawn into the buffer chamber through the reference gas inlet with the remaining gas in the

buffer chamber. In the Claimant's view this does not mean that the buffer chamber must be designed in a way that ensures perfect homogeneously mixing of the reference gas being drawn in with the remaining gas. According to the Claimant, in contrast, feature 5 is not about permitting a perfect air flow free of flow-obstructing.

29. The Defendants argue as follows: The buffer chamber (40) pursuant to feature 5 is intended to stabilize and homogenize the gases drawn into the chamber through the reference gas inlet (14) by mixing them with the remaining gas within the buffer volume (42) defined by the buffer chamber (40). This functional requirement dictates, in their view, that the buffer chamber (40) must be (*i*) either a completely empty hollow body or contain only structural components that enhance the homogeneous gas mixing, and (*ii*) must be a spatially separate and distinct compartment within the overall housing of the sniffing leak detector (10). To serve its purpose, the buffer chamber (40) must be devoid of obstacles that impede the flow and homogeneous mixing of the reference gas. They point out the necessity to keep the buffer chamber (40) free from any air flow-obstructing components, which also follows from the claim language with respect to the buffer volume (42) created within the buffer chamber (40). According to the Defendants, the person skilled in the art understands the term "*chamber*" to indicate a spatially separate and distinct compartment within the sniffing leak detector (10), distinct from the general housing of the handheld device (44). The general housing is no distinct buffer chamber. It can also not realize the purpose of the dedicated buffer chamber, as it (also) contains a multitude of other components that would obstruct and prevent the controlled, homogeneous mixing of the reference gas that is the main purpose of the buffer chamber.

30. With regard to the parties' arguments concerning the claim construction of the subclaims, reference is made to the written submissions.

Attacked embodiment(s)

31. The Claimant takes the view, that the requirements pursuant to R. 13.1 lit. l) RoP are met. The Claimant argues it did precisely specify the attacked embodiment on p. 13 of the complaint, namely the sniffing leak detector METRUM. Further, it emphasises on the fact that the complaint is not limited to the sniffing leak detector METRUM but includes all sniffing leak detectors placed on the market or offered by the Defendants in the Contracting Member States named, which realize the technical features of the asserted claims. The Claimant thinks that it cannot cull all infringing embodiments out of the Defendants' portfolio.

32. The Defendants argue as follows: Claimant's allegation of infringement is unfounded, as it has failed to define precisely which of the Defendant's products constitute the attacked embodiments. Accordingly, the infringement action is to be dismissed due to a lack of substantiation. The single product within Defendants' portfolio specified and contested by the Claimant as infringing, the METRUM (of which the Defendants

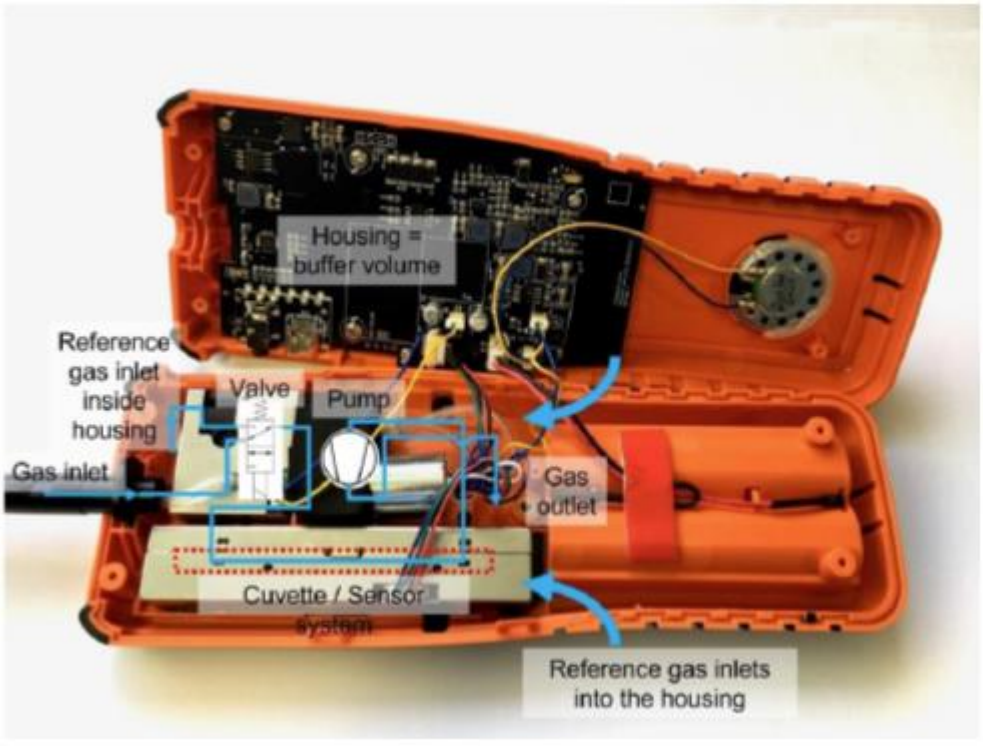
have provided a physical device along with the Statement of Defense, Exhibit D 2), does not operate as alleged by the Claimant.

Infringement

Claim 1

Feature 1.2

33. The Claimant states that the attacked embodiment comprises a reference gas inlet in the sense of feature 1.2 (which is not contested by the Defendants as such, whereby they deny the realization of feature 3 which also refers to the reference gas inlet; s. below): The attacked embodiment has lateral slits (approximately) at the center of its housing. Through these lateral slits, reference gas is sucked in and thus enters the interior of the housing (cf. measurement results, submitted as Attachment TW 7). The following figure is taken from p. 18 of the Reply to the Statement of Defence in which the Claimant highlighted the alleged reference gas inlets with blue arrows:



34. The Claimant emphasises it is not their position that the lateral notches at the lower end of the housing are reference gas inlets. Rather, it is their position that the lateral slits on the sides of the housing, i.e. where the housing halves meet, are the reference gas inlets, and that through these slits, reference gas enters the interior of the housing, as – in Claimant's view - can be seen in the Claimant's measurement results (Attachment TW 7). As a result, the Claimant also does not consider the so labelled "Reference gas inlet inside housing" to meet feature 1.2. According to the Claimant,

the Defendants‘ denial of “both the existence and relevance” of the measurements the Claimant has carried out (Attachment 7), is not well substantiated but “made into thin air“, which is inadmissible in Claimant’s view.

35. The Defendants submit that feature 1.2 is not fulfilled since the attacked embodiment does not comprise „special“ or „dedicated“ openings.

Feature 3

36. The Claimant takes the view that feature 3 is met: The reference gas inlets are arranged at both sides at (approximately) the center of the housing of the METRUM and thus are in a remote distance from the sample gas inlet, which is arranged at the sniffer tip probe of the bendable gooseneck. According to the Claimant, as a result, the reference gas inlet is not arranged on the sniffer tip probe.

37. The Defendants allege that the attacked embodiment does not comprise a reference gas inlet (12) in a remote distance from the sample gas inlet as per feature 3, as there are no dedicated air intake holes on. Rather, the reference gas slowly permeates into the interior through gaps or seams on the outside of the housing, i.e. from minimal openings on all sides of the device at the same time. This form of reference gas intake does not allow *to assess the relative orientation of a leak through which target gas escapes* and is therefore - in the Defendant’s view - completely inconsistent with the inventive concept of the patent in suit. The slits on the side of the attacked embodiment are merely ergonomic features designed to provide a comfortable grip for the operator. Moreover, these slits are sealed, with no special opening to allow surrounding gas into the device. In the Defendants’ view, from the perspective of product design, it would be illogical to use these slits as reference gas inlets: They are exactly at the part of the handheld device where the operator would hold the device. Furthermore, the Defendants argue that the Claimant fails to provide any details and evidence concerning her alleged measurements which they dispute both, the existence and relevance of these measurements.

Feature 4

38. According to the Claimant, feature 4 is also implemented in the attacked embodiment: The reference gas inlets (lateral slits at the center of the housing) are connected via the interior housing to the reference gas inlet of the valve block inside the housing and thus to the switching valve. Therefore, the reference gas conduits run from the sides at the center of the housing through the inside of the housing to the reference gas inlet of the valve block.

39. The Defendants state that feature 4 is not implemented, as shown in the image of the opened attacked embodiment, the device does not include a conduit that connects the slits on the side, which purportedly function as reference gas inlets (14) into the housing, to the metallic block, and which the Claimant argues to be a switching valve (20).

Feature 5

40. With regard to feature 5 the Claimant states as follows: The attacked embodiment comprises a buffer chamber defining a buffer volume, which permits to homogeneously mix gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber. Feature 5 does not require a "spatially separate component" (cf. above). Moreover, the Claimant argues that the Defendants confuse the housing and the interior of the housing of the attacked embodiment: The interior of the housing of the attacked embodiment forms a buffer chamber that defines a buffer volume. This buffer chamber defining a buffer volume enables homogeneous mixing of the aspirated reference gas with the remaining gas inside the housing. According to the Claimant, the Defendants do not realize the difference between airflow and homogeneously mixing.

41. The Claimant argues that the measurements results (Exhibit TW 11) clearly show that the interior of the housing of the attacked embodiment causes a significant delay between a test gas occurrence outside the housing and a signal detecting the test gas. That means, when a test gas as the reference gas enters the inside of the housing through the refence gas inlets, it is not directly led to the switching valve through the reference gas conduit. Therefore, the reference gas sucked into the interior of the housing is not directly drawn to the reference gas inlet of the switching valve. Rather, the reference gas is drawn in, the reference gas is spreading and is homogeneously mixed with the gas remaining in the buffer chamber before it enters the reference gas inlet of the switching valve.

42. The Defendants submit as follows: The does not include a buffer chamber (40) for homogeneously mixing drawn in reference gas with remaining reference gas as claimed in feature 5. The Claimant's allegation that the housing of the attacked embodiment could serve as the buffer chamber (40) is erroneous, since the buffer chamber has to be a spatially separate component, whereas the housing of the attacked embodiment merely serves as the housing for the handheld device. Further, the attacked embodiment does not allow for a homogeneous mixing of gases. Finally, the Defendants explicitly dispute the validity of the alleged measurements presented by Claimant in support of her „infringement theory".

43. With regard to the parties' arguments concerning the infringement of the subclaims, reference is made to the written submissions.

Legal consequences

Recall, removal and destruction

44. The Claimant argues: With regard to the requests for recall, removal and destruction it did precisely specify the attacked embodiments, namely the sniffing leak detectors having the same technical features relevant to the asserted patent infringement as

the sniffing leak detector METRUM. The Defendants have access to infringing products within the UPC Contracting Member States. Defendant 2 operates the website https://www.elitecheu.de/ . On this website, Defendant 2 states that the Defendants have a branch office in Italy (cf. Exhibit TW 14).

45. The Defendants hold that Claimant's requests for recall, removal and destruction of allegedly infringing products already fail to specify which attacked embodiments beyond the METRUM device purportedly infringe the patent in suit. Further, the request for destruction is unfounded as the Claimant failed to show that Defendants, as entities based in third states, have any allegedly infringing products in their possession within the relevant UPC Contracting Member States.

Interim award of damages

46. The Claimant considers itself to be entitled to claim an interim award of damages pursuant to R. 119 RoP in the amount of EUR 120.000,00 covering the expected costs of the procedure for the award of damages and compensation.

47. The Defendants contend: The Claimant has not presented any facts nor submitted any evidence in this regard, which would justify granting an interim award of damages. In particular, as regards the claimed amount of EUR 120,000.00, Claimant has also not substantiated on which basis it anticipates costs in this amount for subsequent proceedings; the mere assertion of a rough estimate is not sufficient.

Publication of a decision (Art. 80 UPCA)

48. The Claimant argues to be entitled to a publication of the decision pursuant to Art. 80 UPCA as it faces the risk that the Defendants will leave the European market and thus escape from enforcement.

49. The Defendants submit: If the Court granted other corrective measures, Claimant's interests would already be satisfied.

Interim award of costs claimed by the Defendants:

50. The Defendants argue: Pursuant to Rule 150.2 RoP, the Court may order an interim award of costs to the Defendants, having already incurred significant legal fees and exallegations, especially by preparing the present counterclaim for revocation.

51. According to the Claimant, the Defendants have not presented such facts that would justify an interim award of costs. Given that Elitech is a multinational global manufacturer having branch offices worldwide and selling its products worldwide, it is in Claimant's view not plausible that they require an interim award of costs.

Grace period claimed by the Defendants:

52. The Defendants submit that a grace period would allow them to prepare and file an appeal or, alternatively, to pursue a licensing agreement with Claimant before Claimant begins to enforce the decision, thereby facilitating a more equitable resolution of the dispute.

53. The Claimant holds that it is not appropriate to grant a grace period in favor of the Defendants.

Enforcement security, R. 118.8, R. 352.1 RoP

54. The Defendants argue: If the Court were to erroneously conclude that the patent in suit is infringed, the UPC Court of Appeal would likely overturn the first instance decision.

55. According to the Claimant, the Defendants failed to present why an enforcement security pursuant to R. 118.8, R. 352.1 RoP should be necessary. The Claimant states, there is no risk that the Claimant will evade enforcement of potential compensation claims by the Defendants, since she is based in Germany.

Validity / Counterclaim for Revocation

56. The Defendants contest the validity of main claim 1 and all subclaims 2 to 13 of the patent in suit. In their counterclaim for revocation, the Defendants raise the following reasons for invalidity of the patent in suit:

- added subject matter (Art. 123(2) EPC): allegedly inadmissible amendment of originally filed claims 1, 5 and 11 (originally filed description: Exhibit CC11) in response to the extended European Search Report (cf. Exhibit CC10A and CC10B);

- lack of novelty of claim 1 over CC1 (US 6,085,576) and/or over CC2 (EP 3 208 591 A1), Art. 138 (1) a, 54 EPC;

- lack of inventive step of claim 1 over the combination of CC3 (WO 02/48686 A2) with CC4 (WO 00/55603 A1) and CC3 with CC1, respectively, as well as over CC5 (US 2015/0308916 A1) alone, Art 138 (1) a, 56 EPC;

- lack of novelty or at least lack of inventiveness of subclaims 2 to 13 in view of the prior art (CC1 to CC9).

57. The Claimant considers the patent in suit to be valid. In the event that the Court considers the opposite, the Claimant requests, in the alternative, that the patent in suit is upheld based on its Auxiliary requests.

GROUNDS OF THE DECISION

58. Both the infringement action and the counterclaim for revocation are admissible; however, neither of them is successful on the merits.

A. Admissibility

I. Infringement action

59. The infringement action is admissible.

60. In particular, the UPC has international jurisdiction and competence pursuant to Art. 31, Art. 32 (1) (a), Art. 33 (1) (a) UPCA.

61. Furthermore, the Defendants - rightfully - did not file a preliminary objection within the one month period stipulated in R. 19.1 RoP. Therefore, both the jurisdiction of the Unified Patent Court and competence of the Düsseldorf Local Division are deemed to be accepted, R. 19.7 RoP.

II. Counterclaim for revocation

62. There are also no concerns regarding the admissibility of the counterclaim for revocation of the Defendants. In particular, the competence of the LD Düsseldorf of the UPC follows from Art. 33 (3) UPCA.

B. Relevant person skilled in the art

63. Whereas the Claimant does not provide any definition of the skilled person, according to the - convincing – Defendants' submissions the skilled person is an engineer specialized in gas detection technology, familiar with the design and operation of leak detection systems, especially experienced in the construction and use of analytical devices for environmental monitoring or industrial safety.

C. Scope of the patent in suit

I. Technical background to the invention

64. The technical teaching of the patent in suit relates to a sniffing leak detector used for the detection of gas leaks.

65. According to para. [0002] of the patent in suit (hereinafter: paras without a citation refer to the patent in suit) refers to sniffer leak detection, as described in WO 02/48686 A2, as a method of gas detection. Sniffing leak detectors utilizing gas modulation technique typically comprise a sample gas inlet, through which the gas to

be analyzed (sample gas) is sucked, as well as a reference gas inlet through which gas from the surrounding atmosphere (reference gas) is sucked in as a reference for comparison. The gas inflow is a result of a pressure difference typically caused by a vacuum pump within the sniffing leak detector.

66. Para. [0003] mentions WO 02/48686 A2 and WO 2009/098302 A1 which disclose to locate the sample gas inlet and the reference gas inlet both on the distal tip of the sniffer tip probe which itself is part of a handheld device (hand piece) to operate the sniffing leak detector.

67. The gas modulation valve connects the sample gas inlet and the reference gas inlet to a gas analyzer (para. [0004]). The sample gas inlet is connected to the gas modulation valve via a sample gas conduit. The reference gas inlet is connected to the gas analyzer via a reference gas conduit. The switching valve switches between the sample gas conduit and the reference gas conduit and thereby connects either of the sample gas inlet and the reference gas inlet to the gas analyzer. Thereby, the gas analyzer is provided with the gas being sucked in through either the sample gas inlet or the reference gas inlet, depending on the switching state of the gas modulation valve.

68. Further, para. [0005] introduces WO 02/48686 A2 which discloses an infrared gas analyzer having a sample cuvette comprising an inlet through which the gas to be analyzed is sucked in, and an outlet for discharging the gas out of the cuvette. An infrared light source and an infrared detector are located on opposing sides of the cuvette, such that the infrared radiation is radiated through the gas contained within the cuvette.

69. The sniffer leak detectors of the type described above are - as para. [0006] emphasizes - specially adapted to achieve a high sensitivity. The switching between the sample gas inlet and the reference gas inlet occurs in order to subtract the amount of target gas which is present in the reference gas in the surrounding atmosphere, from the measurement signal obtained from the sample gas. The target gas is the gas which is to be identified within the gas sample, i.e. the gas escaping through a possible leak which is to be detected.

70. As para. [0007] points out, in sniffing leak detection, it is not only desirable to provide for a high sensitivity in order to be able to identify small amounts of target gas within a gas sample. In addition, it is also desirable to allow for a quick orientation within a large area where a leak is assumed to be present. Accordingly, it is desirable to achieve a signal allowing for a fast and rough assessment or estimation of the direction and distance of an assumed leak in relation to the sniffer tip probe or in relation to the operator of the sniffing leak detector. According to the patent in suit, in general, the latter is not sufficiently possible by increasing the sensitivity of the sniffing leak detectors.

71. EP 2 270 457 A1 - as mentioned in para. [0008] - discloses a sniffing leak detector with a sample gas inlet and a reference gas inlet arranged on a sniffer tip probe and US 5,258,050 discloses a leak detection system for separating a lighter gas from heavier gases (para. [0009]).

72. Para. [0010] declares that the object of the invention is to provide a sniffing leak detector which allows a fast assessment of the relative direction and/or distance of an assumed leak in relation to the sniffing leak detector or its operator.

73. To solve this technical problem, the patent in suit proposes a sniffing leak detector according to independent claim 1 which can be broken down in the form of a feature breakdown with regard to Exhibit TW1, as already mentioned above. The Court has no concerns about using it as basis for further claim construction.

II. Claim Construction

1. Legal framework

74. In accordance with Art. 69 (1) EPC and the Protocol on its interpretation, a patent claim is not only the starting point, but the decisive basis for determining the scope of protection of a European patent. The interpretation of a patent claim does not depend solely on the strict, literal meaning of the wording used. Rather, the description and the drawings must always be used as explanatory aids for the interpretation of the patent claim and not only to resolve any ambiguities in the patent claim. However, this does not mean that the patent claim merely serves as a guideline and that its subject-matter also extends to what, after examination of the description and drawings, appears to be the subject-matter for which the patent proprietor seeks protection (Court of Appeal, UPC_CoA_335/2023, Decision of 26 February 2023 in conjunction with Decision of 11 March 2024 – NanoString v 10x Genomics; UPC_CoA_1/2024, Order of 13 May 2024 – VusionGroup v Hanshow; UPC_CoA_768/2024, Order of 30 April 2025 – Insulet v EOFlow, UPC_CoA_405/2024, 19 June 2025 – Alexion/Amgen; UPC_CoA_579/2025, Order of 7 November 2025 – OTEC/STEROS). Rather, Art. 69 EPC and its Protocol establish a primacy of the claims. The underlying legal principle is legal certainty.

75. These principles for interpreting a patent claim apply both to the question of patent infringement and to the question of validity. The understanding of a claim by the skilled person must be consistent for all purposes of the evaluation of infringement and validity (Court of Appeal, UPC_CoA_335/2023, Order of 26 February 2024 – NanoString v 10x Genomics).

2. Case at hand

Feature 1.2

76. Feature 1.2 claims a “reference gas inlet”.

77. The Claimant argues rightfully that any inlet admitting reference gas to flow into the sniffing leak detector is a “reference gas inlet” in the sense of feature 1.2. Contrary to the Defendants’ view feature 1.2 does not require a “dedicated opening / dedicated physical component” or a “special opening” which serves as a reference gas inlet.

78. The wording of feature 1.2 does not further specify how the reference gas inlet has to be designed, in particular, it does not stipulate any requirements with regard to the form and size of the reference gas inlet. Thus, the skilled person recognizes that the reference gas inlet is merely meant to let in reference gas into the sniffing leak detector. Against this background, the wording of the feature 1.2 (without prejudice to the additional requirements regarding the reference gas inlet resulting from feature 3, s. below) indicates that any inlet suitable for allowing gas to flow into the sniffing leak detector is sufficient.

79. Paras. [0002] ("…*a reference gas inlet through which gas from the surrounding atmosphere (reference gas) is sucked*…) and [0004] (… *gas analyzer is provided with the gas being sucked in trough either …or the reference gas inlet*…), which form part of the general section of the description of the patent in suit, support this functional approach. In particular, the patent in suit does not criticise the state of the art with regard to the prior art reference gas inlets as such.

80. The following paras. - providing a similar wording like [0002] and [0004] - support the functional approach with regard to the interpretation of "reference gas inlet": [0012], [0013], [0014] and [0018], whereby the latter states that "gas is drawn through the reference gas inlet at a certain volume flow."

81. Thus, a reference gas inlet in the sense of feature 1.2 (merely) requires that the reference gas is sucked in, drawn in or at least enters the interior of the sniffing leak detector through the reference gas inlet. Therefore, feature 1.2 does not require a "special opening" pp. for fulfilling the technical function of the reference gas inlet.

82. The Defendants' view according to which feature 1.2 requires a reference gas inlet being distinct from other device components is not convincing either. The skilled person knows that one component of a patented device can serve various technical functions. The patent in suit gives no grounds to make an exception to this principle. As far as the Defendants base their contrary conclusion on Figures 1 and 2 of the patent in suit, this approach violates the principle that examples of implementation and figures are, in general, not suitable for limiting the technical teaching of a broadly defined claim to a specific embodiment.

83. The Defendants' comment according to which the use of ambient air as reference gas is standard practice in gas detection systems and does not add any novel or inventive aspect to the claimed invention, does not take into account, as claim construction must not take into account whether or not the patent lacks patentability or not. Rather, the interpretation must be based on the criteria set out in Article 69 EPC.

<u>Feature 3</u>

84. Feature 3 stipulates that the reference gas inlet (14) is not arranged on the sniffer tip probe and thereby in a remote distance from the sample gas inlet (12).

a) No necessity of a maximum possible distance of the reference gas inlet and the sample gas inlet

85. Feature 3 does not require a maximum possible distance of the reference gas inlet and the sample gas inlet.

86. Firstly, it is to be noted that the wording of feature 3 does not require such a maximum possible distance but gives - on the one hand - a negative definition ("not arranged on the sniffer tip") and - on the other hand - states that the reference gas inlet "thereby [is arranged] in a remote distance from the sample gas inlet (12)."

87. Secondly, in paras. [0003] and [0008] the patent in suit refers to state of the art (WO 02/48686 A2, WO 2009/098302 A1 and EP 2 270 457 A1) and states: According to the state of the art, the sample gas inlet and the reference gas inlet were both arranged on the distal tip of the sniffer tip probe**.** In contrary, the patent in suit teaches the skilled person that not only a high sensitivity to even identify small amounts of target gas within the sample gas is desirable, but also a rough and fast assessment or estimation of the direction and distance of an assumed leak within a large area. In this context, para. [0007] states:

> "*In sniffing leak detection, it is not only desirable to provide for a high sensitivity in order to be able to identify small amounts of target gas within a gas sample. In addition, it is also desirable to allow for a quick orientation within a large area where a leak is assumed to be present. In other words, it is desirable to achieve a signal allowing for a fast and rough assessment or estimation of the direction and distance of an assumed leak in relation to the sniffer tip probe or in relation to the operator of the sniffing leak detector. In general, this is not sufficiently possible by increasing the sensitivity of the sniffing leak detectors*."

88. Furthermore, the patent in suit criticises the prior art sniffing leak detectors having arranged the sample gas inlet and the reference gas inlet both at the sniffer tip probe not allowing for a fast and rough assessment within a large area, as follows:

> Para. [0014]
>
> *"The effect of the above described characterizing features is that the amount of target gas present in the reference gas is considerably lower than the amount of target gas present in the sample gas, provided that the sample gas inlet is closer to a leak to be detected than the reference gas inlet. This is due to the larger distance between the reference gas inlet and the sample gas inlet as compared to the above described prior art sniffing leak detectors, where the sample gas inlet and the reference gas inlet are close to each other and both located on the sniffer tip. …"*
>
> Para. [0016]
>
> *"In other words, a large distance between two points of measurement, i.e. between the sample gas inlet and the reference gas inlet, allows for a higher resolution in locating a leak in a three-dimensional space. If the*

two points of measurement are located next to each other, such as in the prior art sniffing leak detectors, the relative orientation of the leak cannot be assessed. Further, the buffer chamber stabilizes the target gas concentration within the reference gas by homogenous mixing of the reference gas. Functionally, this is a low-pass filter in the time domain for the detection of target gas and therefore eliminates local fluctuation."

89. Against this background, the Defendants' reasoning that the target gas must not dilute the reference gas at all in order to ensure the "purity" of the reference gas, is not convincing. Contrary to their view, para. [0014] shows that there is always a certain amount of target gas that has already entered the atmosphere and thus is drawn in through the reference gas inlet. The skilled person recognizes that, otherwise, the comparison of the sample gas and reference gas carried out by the gas analyzer could not work.

90. Therefore – as evidenced by para. [0016] -, at least, any distance between the reference gas inlet and the sample gas inlet that is larger as compared to the prior art sniffing leak detectors (cf. paras. [0013], [0014] and [0016]) is sufficient.

91. It follows from the wording of feature 3 ("… and thereby in a remote distance from the sample gas inlet") and also from para. [0014] and [0016] that it is sufficient when the reference gas inlet is not arranged at the sniffer tip probe. Whenever this requirement is fulfilled, the consequence is that a quick orientation within a large area is achieved, since the amount of target gas present in the reference gas is considerably lower than the amount of target gas present in the sample gas, provided that the sample gas inlet is closer to the leak than the reference gas inlet (cf. para. [0014]).

92. At least, it is not necessary to place the reference gas inlet at a position that is most far apart from the sample gas inlet.

<u>bb) no requirement of a "dedicated or special reference gas inlet"</u>

93. Due to the above explained requirements with regard to the remote distance of the reference gas inlet (14) and the sample gas inlet (12), the skilled person recognizes that also feature 3 (cf. above with regard to feature 1.2) does not stipulate any requirements regarding the form, size pp. of the reference gas inlet.

94. In particular, it is - in general - not permissible to infer from the technical function of the reference gas inlet that there are corresponding restrictions, such as requirements like a "dedicated" or a "special" reference gas inlet. As far as the description shows (cf. paras. [0013], [0014]) the technical effect of the taught spatial separation of reference gas inlet and sniffer tip probe and of the remote distance between reference gas inlet and sample gas inlet in paras. [0014], [0015] and [0016], the skilled person recognizes: Any reference gas inlet not arranged on the sniffer tip probe and <u>thereby</u> in a remote distance from the sample gas inlet already represents a sufficient improvement regarding this distance compared with the state of the art. Thus, neither a maximum distance between reference gas inlet and sample gas inlet

is mandatory, nor a dedicated/special design. Further, the description provides various different solutions (cf. paras. [0024], [0025] and [0026]).

95. Insofar as Defendants rely on Fig. 1 and 2 and/or other merely preferred embodiments taught in the patent specification to support their assumptions, this approach is once more not permissible due to the above already mentioned legal reasons.

Feature 4

96. According to feature 4, the sniffing leak detector (10) comprises a reference gas conduit (26), which connects the reference gas inlet (14) and the switching valve (20).

97. The "reference gas conduit" is to be interpreted as the complete gas-conducting path from the reference gas inlet to the switching valve, whereby it is not limited to a tube or pipe in the narrow sense but encompasses any structure capable of conducting gas along this path.

98. The Defendants considering the reference gas conduit to be a "dedicated physical component" which is "necessarily a tube or similarly sealed device" are mistaken in their assumption, since they, again, rely on merely exemplary embodiments, which cannot limit the scope of the patent in suit (such as Fig. 1 and Fig. 2 and paras. [0018], [0032], [0033] and [0035]). The wording of feature 4 does not further specify the design of the reference gas conduit.

99. The Defendants' approach according to which the patent in suit aims to avoid dilution of reference gas and sample gas is flawed due to the same reasons already presented with regard to feature 3. Insofar the Defendants try to base their contrary interpretation on a functional point of view, the following has to be noted: The reference gas conduit has to provide a connection between the reference gas inlet and the switching valve. If the reference gas conduit is selected by the switching valve, the reference gas is being sucked through the reference gas inlet into the gas analyzer (cf. para. [0004]). To fulfil this technical purpose, any design is sufficient which allows the reference gas conduit to provide the gas analyzer with the reference gas. In particular, it is not mandatory to design the reference gas conduit in the shape of a tube or sealed device. Insofar as the Defendants argue that the reference gas must not be diluted by sample gas, reference is made to the elaborations regarding feature 3.

Feature 5

100. Finally, feature 5 stipulates the following technical requirements: The sniffing leak detector (10) further comprises a buffer chamber defining a buffer volume (42), which permits to homogeneously mix gas drawn into the buffer chamber (40) through the reference gas inlet (14) with remaining gas in the buffer chamber (40).

101. The term “buffer chamber defining a buffer volume” requires a physical enclosure of sufficient volume to retain a quantity of gas ("remaining gas") with which newly drawn-in reference gas is mixed.

102. The term "to homogeneously mix" requires the buffer chamber to achieve a sufficiently uniform gas mixture, such that short-term fluctuations in target gas concentration are averaged out over time, thereby acting as a temporal low-pass filter.

103. Claim 1 does not prescribe a specific buffer volume, mixing mechanism or physical realisation of the buffer chamber. Any chamber that achieves the purpose of homogeneous mixing of incoming reference gas with the gas already present in the buffer chamber meets these requirements. In particular, a component distinct from the housing defining boundaries is not mandatory, as it is sufficient that the sniffing leak detector „comprises“ (inter alia) a buffer chamber.

104. The Defendants’ contrary view, according to which the buffer chamber is an empty hollow body only containing components which enhance the homogeneous gas mixing and a spatially separate compartment within the overall housing of the sniffing leak detector which is distinct from the housing itself, is flawed.

105. The claim requires a physical chamber that defines/circumscribes/encloses (cf. [0013]) a buffer volume. It has to be located within the reference gas conduit, and situated between the reference gas inlet and the switching valve.

106. Firstly, Defendants’ narrow interpretation is not in line with the wording of feature 5 merely stipulating a buffer chamber defining a buffer volume permitting homogeneously mixing of the gas being drawn into the buffer chamber through the reference gas inlet with the remaining gas in the buffer chamber. Insofar as the Defendants state that the wording not merely requires a “buffering” but a “buffer chamber” that defines a buffer volume, this may support their claim for a certain spatial distinctiveness of the buffer chamber, but not for a completely empty hollow body and for a separate component within the overall housing of the sniffing leak detector. Any components within the buffer chamber that do not support the gas mixing are irrelevant for the suitability for the purposes of the patent provided that they do not impede the flow of gas to such an extent that the objective of the invention can no longer be achieved.

107. Secondly, the functional purpose of the buffer chamber is fulfilled when it is designed in a way that permits said homogeneously mixing. It is not mandatory that a perfect homogeneously mixing of the reference gas being drawn in with the remaining gas is ensured. Thus, the scope of feature 5 is not limited to completely empty hollow bodies or such bodies that contain only structural components that enhance the homogeneous mixing. This depends on the individual case, and in particular on the specific arrangement of the components that do not support gas mixing.

108. Subclaim 5 supports the latter interpretation:

“Sniffing leak detector (10) according to anyone of claims 1 to 4, wherein the buffer chamber (40) comprises a buffer chamber inlet connected to the reference

gas inlet (14) and a buffer chamber outlet connected to the switching valve (20), wherein the buffer chamber outlet is offset to the buffer chamber inlet with regard to the buffer chamber inlet."

109. The skilled person recognizes that subclaim 5 provides for a buffer chamber designed as a structurally separate component with boundaries which is also illustrated in Fig. 2 of the patent in suit as an example for a preferred embodiment as defined by subclaim 5:

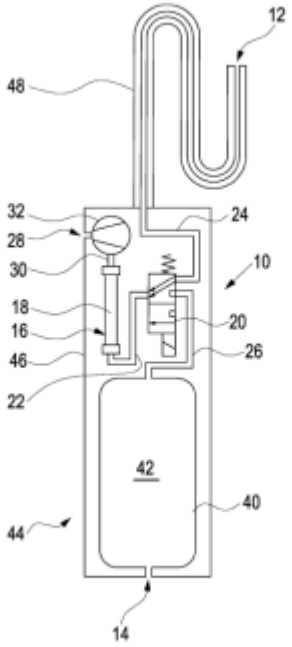


Fig. 2

110. Since subclaims do not narrow the scope of a main claim but the scope of the main claim is broader than the scope of the subclaim(s), the skilled person infers from subclaim 5 that the main claim 1 is not limited to a structural separate component with boundaries.

111. Insofar as the Defendants contend that the buffer chamber has to be an empty hollow body, devoid of obstacles that impede the flow and homogeneous mixing of the reference gas with the remaining gas, their approach is not persuasive: The skilled person recognizes that merely a buffer chamber is stipulated which defines a buffer volume, which permits to homogeneously mix gas drawn into the buffer chamber through the reference gas inlet with the remaining gas in the buffer chamber.

112. Defendants´ reference to subclaims 6 and 13 is not convincing: Keeping in mind that the scope of main claim 1 is broader than those of the subclaims the technical teaching of main claim 1 is not limited to a buffer chamber comprising a "swirling mechanism" (subclaim 6) and/or an additional absorber (subclaim 13). All the more, the Defendants' reasoning is flawed insofar as they refer to purely preferred embodiments described in paras. [0023] and [0034].

113. Moreover, the Defendants' contrary view lacks persuasiveness as they seem to confuse air flow and homogeneously mixing. The technical teaching of feature 5 is not about permitting a perfect air flow free of flow-obstructing.

114. Para. [0014] explains the technical function of the homogeneous mixing ("*the buffer chamber provides a low-pass filter for the single component resulting from the amount of target gas present in the reference gas, because the amount of target gas in the reference gas is averaged over time due to the mixing within the buffer chamber*."). The skilled person recognizes that a low-pass filter allows slow, gradual changes and suppresses brief, sudden ones; to serve this purpose, the buffer chamber mixes incoming gas with the remaining gas already present, so that short spikes are averaged out over time. If short pulses or small amounts of target gas are sucked in through the reference gas inlet, these small amounts will be diluted within the buffer chamber, and only the diluted gas mixture is analyzed, rather than a larger amount of target gas present during a short amount of time. According to para. [0016], the buffer chamber stabilizes the target gas concentration within the reference gas by homogeneous mixing of the reference gas.

115. With respect to a preferred embodiment para. [0018] states: "*Preferably, the ratio of the buffer volume within the buffer chamber and the volume flow per second of the gas drawn through the reference gas inlet is at least 1 and at maximum 10000. For example, the volume flow can typically be 1sccs (standard cubic centimeter per second) while the buffer volume ranges between 1ccm (cubic centimeter) and 10 liters.*" The skilled person infers from para. [0018] that claim 1 in its entirety is not limited to this technical solution.

116. The latter also applies to paras. [0020], [0021] seq., [0023], [0024], [0025], [0026] and [0038] disclosing various structural means which support homogeneous mixing and several embodiments for alternative physical realizations of the buffer chamber.

117. However, the skilled person realizes with regard to the requirement of the buffer chamber defining a buffer volume, which <u>permits to homogeneously mix</u> gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber, the following:

118. The term "homogeneously mix" requires the buffer chamber to achieve a sufficiently uniform gas mixture, such that short-term fluctuations in target gas concentration are averaged out over time. The patent in suit describes two respective different technical effects of the characterising features 3 (reference gas inlet in remote distance from the sample gas inlet) and 5 (buffer chamber with a buffer volume which permits to homogeneously mix the reference gas with the remaining gas) of claim 1 in paras. [0013] to [0016]. These paragraphs clearly indicate by phrases like “in addition” and “further” that each of these features achieves its own technical effect:

Para [0013];

“…In addition, a reference gas line which connects the reference gas inlet and the switching valve comprises a buffer chamber circumscribing a buffer volume. The buffer chamber is adapted to homogenously mix gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber. Remaining gas means gas which is already present within the buffer chamber when the gas drawn in through the reference gas inlet enters the buffer chamber.”

Para. [0014]:

"In addition, the buffer chamber provides a low-pass filter for the single component resulting from the amount of target gas present in the reference gas, because the amount of target gas in the reference gas is averaged over time due to the mixing within the buffer chamber. The mixing within the buffer chamber achieves a homogenous gas mixture being analyzed by the gas analyzer. If short pulses or small amounts of target gas are sucked in through the reference gas inlet, these small amounts will be diluted within the buffer chamber, and only the diluted gas mixture is analyzed, rather than a larger amount of target gas present during a short amount of time."

Para. [0016]:

"…Further, the buffer chamber stabilizes the target gas concentration within the reference gas by homogenous mixing of the reference gas. Functionally, this is a low-pass filter in the time domain for the detection of target gas and therefore eliminates local fluctuation."

119. The combination of these two separately technical effects provides, according to the patent in suit, a sniffing leak detector which allows a fast assessment of the relative direction and/or distance of an assumed leak in relation to the sniffing leak detector or its operator.

D. Counterclaim for revocation

120. The admissible counterclaim for revocation is unfounded with regard to main claim 1.

121. Against this background, regarding the dependent subclaims 2 to 13 no decision is required for lack of Defendants' legal interests, since the counterclaim for revocation is already unsuccessful with respect to the independent patent claim 1, to which said dependent patent claims (in-)directly refer back and which therefore has a scope of protection that also encompasses the said dependent patent claims (cf. CoA, decision of 17 February 2026, UPC_CoA_302/2025).

I. No Added subject matter (Art. 123 (2) EPC)

1. Legal framework

122. There is added subject matter if the claim as granted contains subject-matter that extends beyond the content of the application as filed. In order to ascertain whether there is added matter, the Court must thus first ascertain what the skilled person would derive directly and unambiguously using his common general knowledge and seen objectively and relative to the date of filing, from the whole of the application

as filed, whereby implicitly disclosed subject-matter, i.e. matter that is a clear and unambiguous consequence of what is explicitly mentioned, shall also be considered as part of its content. The assessment of added matter cannot be restricted to only those parts of the original application which the patent proprietor indicated as a basis for an amended claim during the examination proceedings at the EPO, since a proper understanding of these parts also requires an assessment of their content in the context of the disclosure of the application as a whole (CoA, decision of 14 February 2025, UPC_CoA_382/2024; CoA, decision of 5 November 2025, UPC_CoA_762/2024 and UPC_CoA_773/2024).

123. The assessment of whether there is added matter is a question of law to be decided on the basis of the facts brought forward by the parties. The facts are the relevant claims and the application as filed. Since the test is whether the relevant claims have basis in the application as a whole, the Court is allowed to look at the entire document (CoA, decision of 25 November 2025, UPC_CoA_528/2024).

2. Case at hand

a) main claim 1

124. The objections put forward by the Defendants do not support the conclusion of added subject matter with regard to claim 1 as granted.

aa) First amended feature:

125. The first amended feature ("not arranged on the sniffer tip probe" / "arranged in a remote distance from the sniffer tip probe" and changing of the reference point for the "remote distance" from "the sniffer tip probe" to "the sample gas inlet (12)") does not violate Art. 123(2) EPC.

126. During the examination proceedings before the EPO the original wording of claim 1 has been amended as follows:

"…the reference gas inlet (14) is not arranged ~~in a remote distance from~~ on the sniffer tip probe and thereby in a remote distance from the sample gas inlet (12)…".

(1) negative definition "not arranged on the sniffer probe"

127. Page 3 of the application as originally filed states as follows:

"The sniffing leak detector of the invention is characterized in that the reference gas inlet is arranged in a remote distance from the sniffer tip probe. This means, that the reference gas inlet is not arranged on the sniffer tip probe."

128. The cited passage leaves no reasonable doubt that the respective negative definition is expressly disclosed as an explanation of the original positive formulation.

(2) "remote distance" from "the sniffer tip probe" to "the sample gas inlet (12)."

129. The same applies to changing of the reference point for the "remote distance" from "the sniffer tip probe" to "the sample gas inlet (12)."

130. Page 3 of the application as originally filed states:

"Thereby, a larger distance between the sample gas inlet and the reference gas inlet as compared to the above described prior art sniffing leak detectors is achieved."

131. This passage is a sufficient base for the reformulation of the reference point from "sniffer tip probe" to "sample gas inlet (12)". Therefore, the amended wording of feature 3 is directly and unambiguously derivable from the application as originally filed.

bb) Second amended feature

132. The original wording of the respective so-called "second amended feature" ("defining" / "circumscribing" and "adapted to" / "permits to") reads as follows:

"a reference gas conduit (26), which connects the reference gas inlet (14) and the switching valve (20), comprises a buffer chamber (40) adapted to homogeneously mix gas drawn into the buffer chamber (40) through the reference gas inlet (14) with the remaining gas in the buffer chamber (40)"

133. It has been amended during the examination proceedings before the EPO as follows:

"the sniffing leak detector (10) comprises a reference gas conduit (26), which connects the reference gas inlet (14) and the switching valve (20), and further comprises a buffer chamber (40) ~~adapted~~ defining a buffer volume (42), which permits to homogeneously mix gas drawn into the buffer chamber (40) through the reference gas inlet (14) with the remaining gas in the buffer chamber (40)".

(1) "circumscribing" / "defining"

134. Insofar as the Defendants object to the word "*defining*" used in claim 1 as granted to violate Art 123(2) EPC, claiming that page (hereinafter: p.) 3 of the original description (Exhibit CC11) uses only the word "circumscribing" ("*… and the switching valve comprises a buffer chamber circumscribing a buffer volume…)*, their objection fails.

135. This follows from the content of p. 9 (whereby the Claimant erroneously - presumably inadvertently - refers to p. 8) of the originally filed description (Exhibit CC11) which already contains the following sentence:

"The reference gas conduit 26 contains a buffer chamber 40 defining a buffer volume 42."

136. Hence, the "defining" amendment is disclosed in the application as originally filed.

(2) <u>"adapted to" / "permits to"</u>

137. Replacing the wording "*adapted to*" by the wording "*permits to*" does not result in added subject-matter of claim 1 as originally filed.

138. If one were to compare the wording in isolation, one might be led to think that the meaning of "adapted to" refers to a common means-plus-function feature, whereas the term "permits to" requires an eligibility and not a designated configuration to implement a function and may therefore be broader than "adapted to". In this context, the Defendants argue that the grammatical shift from the restrictive participle "adapted to" to the open-ended predicate "permits to" dissolves the structural-functional link and replaces precise technical limitations with abstract capability language. However, this purely grammatical approach is not convincing.

139. The skilled person reading the application as a whole immediately understands that the buffer chamber is provided precisely for the purpose of achieving homogeneous mixing (low-pass filtering / averaging of the target gas concentration). The expressions "adapted to" and "which permits to" are technically synonymous in the light of the original application.

140. Both terms describe the same functional capability of the buffer chamber. No new technical information is presented. The claim does not introduce any new structural feature, nor does it broaden or narrow the technical teaching beyond what was originally disclosed. Looking at the overall aim of the invention (enabling a remote reference gas measurement with stabilised/homogenised reference signal for directional leak assessment), the skilled person would clearly and unambiguously derive that the buffer chamber must be capable of performing this mixing function. The slight change in wording is therefore covered by the original application.

141. Thus, applying the UPC Court of Appeal's standard (direct and unambiguous derivability from the whole application, including implicit disclosure, assessed in a technical rather than purely linguistic manner), the reformulation in claim 1 does not introduce added subject-matter. Rather, the change remains fully within the content of the application as filed.

142. The wording "adapted to" does not imply a purposeful structural configuration for mixing, whereas "permits to" merely requires that mixing is possible. In particular, this conclusion can be drawn from the following passage in the original application (p. 5/6 of Exhibit CC11; cf. now para. [0020] of the patent in suit):

> *"An <u>off-set of the buffer chamber inlet and the buffer chamber outlet</u> with regard to the main gas flow direction through the buffer chamber inlet <u>permits to mix</u> reference gas entering the buffer chamber through the*

buffer chamber inlet with gas which is already present within the buffer chamber, before the gas escapes through the buffer chamber outlet." (highlighting by underlining added by the Court)

143. The skilled person recognizes immediately and unambiguously that according to the cited passage of the application as filed the off-set - which is a preferred embodiment of the means for supporting the homogeneous mixing - permits the mixing. Thus, it is, at least for the off-set sufficient that it permits the homogeneous mixing so that a respective adaption is not mandatorily required.

144. Although the cited passage does not explicitly mention the buffer chamber as such with respect to the wording "permits", the skilled person understands that the respectively mentioned inner and outer gas inlets are parts of the buffer chamber. Thus, it is a clear and unambiguous consequence of what is explicitly mentioned in p. 5/6 of the originally filed application being that also the buffer chamber does not require a specific adaption for homogenous mixing. Against this background, it is sufficient that the buffer chamber "permits" it.

II. Novelty

145. The technical teaching of claim 1 of the patent in suit is novel.

1. Legal framework

146. The assessment of novelty within the meaning of Art. 54 (1) EPC requires that the disclosure of the prior publication must be considered as a whole. It depends on whether the subject-matter of the patent at issue with all its features is directly and unambiguously disclosed in the citation (UPC CoA, order of 25 September 2024, UPC_CoA_182/2024, Ortovox v. Mammut, paras. 150 – 171).

147. In addition, the disclosure also may be implicit when a person skilled in the art would objectively consider such disclosure as necessarily implied in the explicit content of a prior-art document or would arrive, inevitably and without any reasonable doubt, at the result falling within the scope of the claim by applying the teaching of the prior-art document (see e.g. LD Paris, 10 April 2026, UPC_CFI_1594/2025, SharkNinja v. roupe SEB, and LD Düsseldorf, 28 January 2025, UPC_CFI_355/2023, FujiFilm v. Kodak).

2. Case at hand

a) Novelty over CC1

148. The prior art pursuant to CC1 does not disclose a buffer chamber in the sense of feature 5.

149. Unsuccessfully the Defendants allege that Claimant's written submissions regarding the infringement on the one hand (any space within a housing theoretically enabling a mixing or time-delay effect can qualify as a buffer chamber) and regarding the counterclaim for revocation on the other hand (filters are always physical filtering elements, never simply empty cavities or mixing volumes) contradict each other. It should be noted that the Claimant, in this respect, merely relies on the Defendants' interpretation as a secondary argument, whereas Claimant's primary argument remains that a buffer chamber is any volume permitting homogeneous gas mixing.

150. Regardless of any alleged contradiction in the Claimant's submissions, the blank filter 436 in CC1 cannot be considered as a buffer chamber in the sense of feature 5.

151. With regard to the interpretation of the term "buffer chamber" reference is made to the claim construction of feature 5: It requires a physical enclosure of sufficient volume to retain a quantity of gas ("remaining gas") with which newly drawn-in reference gas is mixed, whereby due to the term "homogeneously mixing" the buffer chamber has to achieve a sufficiently uniform gas mixture such that short-term fluctuations in target gas concentration are averaged out over time, thereby functioning as a temporal low-pass filter.

152. The burden of presentation and proof with regard to the facts from which the lack of validity of the patent is derived and other circumstances favourable to the invalidity or revocation lies with the claimant in a revocation action (Art. 54 and 65(1) UPCA, R. 44(e)-(g), 25.1(b)-(d) RoP). Even though proof of certain facts, if contested, may be required, the assessment of the relevant facts and circumstances is a question of law (UPC Coa_464/2024 et. al., Decision of 25 November 2025, Headnote 6, Meril v. Edwards). The same applies to a counterclaimant for revocation.

153. Against this legal background, the Defendants have failed to present facts from which could be derived that CC1 discloses a "buffer chamber":

154. The Defendants could not rebut the Claimant's following submission, which accounts against the Defendants. The Claimant defends claim 1 stating that a "blank filter" - in CC1: filter 436 - is a filter used to achieve a zero reference by filtering out interfering components contained in the gas.

155. CC1 discloses in this context (column 6, lines 35-44 with respect to figure 4 which is presented below):

> *"FIG. 4 shows a diagram of an embodiment of the subsystems of e-nose device 100. The upper half of FIG. 4 shows an electrical subsystem 410 and the lower half shows a (i.e., substantially mechanical) subsystem 412 that processes test samples. Within subsystem 412, a test sample is received via a nose 430 and provided to a manifold 440. Similarly, a reference or background sample is received via an intake port 432 and provided through a filter 436 to manifold 440. Filter 436 can be a blank filter, a carbon filter, or others."*

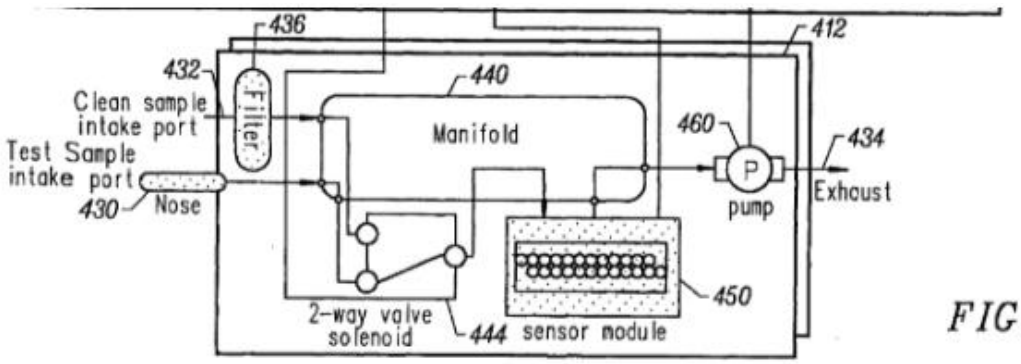


FIG. 4

156. The above cited passage of CC1 merely discloses various types of filters (blank filter, carbon filter, or others) but does not disclose any facts that indicate that those components are suitable for homogeneous gas mixing.

157. The same applies to Figures 6a, 6b and 6c and the related description providing further explanation regarding the "filter". However, CC1 overall discloses that there is a filter, in one embodiment a blank filter, but fails to disclose that there is no filter as stipulated by the Defendants. Filtering out interfering components contained in the gas is different from "homogeneous mixing" in the sense of the patent in suit.

158. Insofar as the Defendants allege that a blank filter is an empty filter/volume, this is not decisive at all. That approach is not feasible, since it is not compatible with the above presented claim construction of feature 5.

bb) Novelty over CC2

159. Further, the granted claim 1 is novel over CC2.

160. CC2 discloses a vacuum bell probe for detecting leaks in underground gas pipes which has a flexible suction cup with a suction opening and a soft seal ring that allows the probe to seal against the ground surface. This allows to generate a vacuum inside the probe. Gas escaping from a leak is drawn through the ground surface into the probe and then conveyed to a gas detector. Further, the system embodiment includes a vacuum pump, an exhaust outlet open to atmosphere, a reference gas inlet, and a switching valve that selectively connects the probe/exhaust path or the reference gas inlet to the gas detector.

161. In any case, the corresponding challenge to novelty fails, as CC2 does not disclose a buffer chamber as well. Insofar as the Defendants allege that the filter in the reference gas conduit 122 is a "buffer chamber" in the sense of feature 5, this approach fails for the same reasons as the one for CC1: A filter does not allow homogeneous gas mixing in the sense of feature 5.

III. Inventive step

162. The patent is based on an inventive step (Art. 56 EPC).

1. Legal framework

163. According to the case law of the Court of Appeal, the approach taken by the Unified Patent Court when establishing inventive step is as follows (see UPC_CoA_464/2024, Decision of 25 November 2025, Headnotes 4 – 13, para. 128 – 136 – Meril v. Edwards; UPC_CoA_528/2024, Decision of 25 November 2025, Headnotes 10 – 22, para. 122 – 138 ff. – Amgen v. Sanofi; UPC_CoA_473/2025 et. al., Decision of 13 July 2026, Headnote 6 – Fujifilm Corp. v. Kodak GmbH et. al.).

164. It first has to be established what the object of the invention is, i.e. the objective problem. This must be assessed from the perspective of the skilled person, with its common general knowledge, as at the application or priority date (also referred to as the relevant date) of the patent. This must be done by establishing what the invention adds to the state of the art, not by looking at the individual features of the claim, but by comparing the claim as a whole in context of the description and the drawings, thus also considering the inventive concept underlying the invention (the technical teaching), which must be based on the technical effect(s) that the skilled person on the basis of the application understands is (are) achieved with the claimed invention.

165. In order to avoid hindsight, the objective problem should not contain pointers to the claimed solution.

166. The claimed solution is obvious when at the relevant date the skilled person, starting from a realistic starting point in the state of the art in the relevant field of technology, wishing to solve the objective problem, would (and not only: could) have arrived at the claimed solution.

167. The relevant field of technology is the field relevant to the objective problem to be solved as well as any field in which the same or similar problem arises and of which the person skilled in the art of the specific field must be expected to be aware.

168. A starting point is realistic if the teaching thereof would have been of interest to a skilled person who, at the relevant date, wishes to solve the objective problem. This may for instance be the case if the relevant piece of prior art already discloses several features similar to those relevant to the invention as claimed and/or addresses the same or a similar underlying problem as that of the claimed invention. There can be more than one realistic starting point and the claimed invention must be inventive starting from each of them.

169. The skilled person has no inventive skills and no imagination and requires a pointer or motivation that, starting from a realistic starting point, directs it to implement a next step in the direction of the claimed invention. As a general rule, a claimed solution must be considered not inventive / obvious when the skilled person would take the next step prompted by the pointer or as a matter of routine, and arrive at the claimed invention. If there is no pointer to combine a reasonable starting point with another document, a motivation to take the next step in the direction of the

invention cannot be derived from the content of such a combination document itself. Failing a motivation for the skilled person to consult a document it will not become aware of its content, and it cannot be concluded that the skilled person would implement the missing feature disclosed therein

170. The claimed solution is obvious if the skilled person would have taken the next step in expectation of finding an envisaged solution of his technical problem. This is generally the case when the results of the next step were clearly predictable, or where there was a reasonable expectation of success.

2. Case at hand

171. Taking into account all the objections raised by the Defendants, claim 1 does not lack an inventive step.

a) Starting from CC3 combined with CC4

172. As CC3 (filed by the same patent applicant) is mentioned as prior art in para. [0002] of the patent in suit, it is not doubtful that it can be considered as a realistic starting point for the skilled person.

173. The objective technical problem of the patent in suit aligns with the problem described in para. [0010] of the patent in suit.

174. However, it should be noted that the Defendants have failed to present any pointer or motivation for the skilled person to combine CC3 and CC4 (cf. mn. 223 CCR). In accordance with the CoA case law set out above, the challenge to the inventive step fails from the outset based on that reason alone.

175. Apart from that, the combination of CC3 and CC4 does not disclose all features of claim 1. In particular, said combination does not disclose a buffer chamber in the sense of feature 5:

176. Regarding the “buffer chamber” of claim 1, the Defendants do not persuasively refer to Figure 2 of CC3 and the chamber 29 / intermediate volume 25:

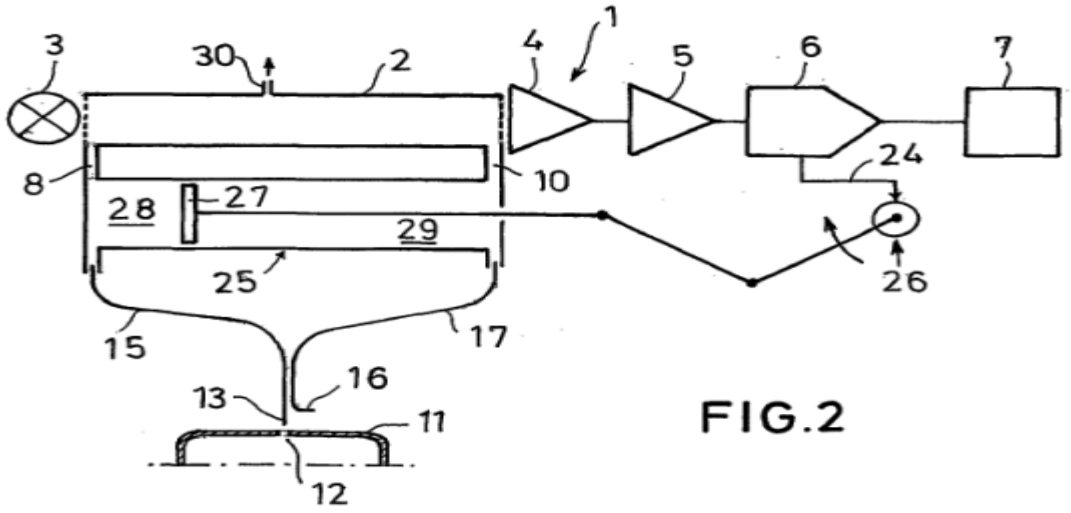


FIG.2

177. Chamber 29 may provide a volume in which reference gas is drawn, however, not a volume pursuant to feature 5, since it does not retain "remaining gas" with which newly drawn-in reference gas is homogeneously mixed (CC3 reads: “vollständigerer Gasaustausch”, cf. p. 8, 3rd paragraph to p. 9, 1st para of CC3).

b) Starting from CC3 combined with CC1

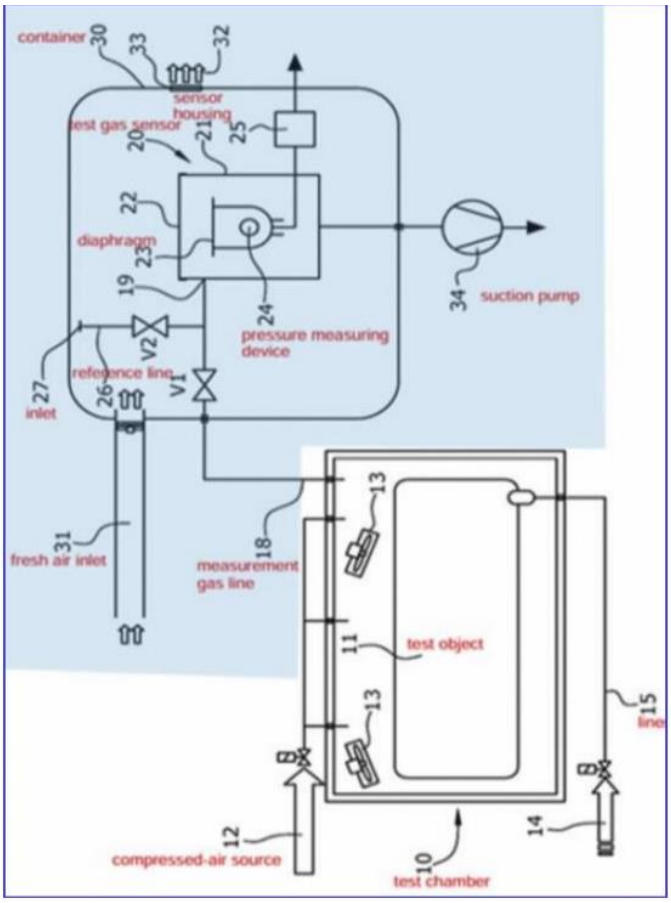
178. It follows from the former explanations that neither CC3 nor CC1 disclose a buffer chamber in the sense of feature 5. Thus, the same applies for their combination.

179. Apart from that, once again the Defendants` submissions lack providing any pointer or motivation for the skilled person to consider a combination of CC3 and CC1.

c) Starting from CC5

180. Insofar as the Defendants argue that CC5 discloses all features of claim 1 except the hand-held device, this is unconvincing. CC5 does not disclose a buffer chamber in the sense of feature 5. Therefore, a combination of CC5 with CC1, CC2, CC4 (or even common general knowledge) does not lead to claim 1 of the patent in suit.

181. In contrast to Defendants’ view, the container 30 (cf. figure 5 of CC5: references in red added by the Defendants) cannot be considered as a buffer chamber:



182. The Container 30 of CC5 does not meet the requirements with regard to the technical function of a „buffer chamber“ in the sense of feature 5:

183. Para. [0019] of CC5 states that "the entire test gas sensor 20, including the associated gas-carrying components […] is arranged in a closed container 30". The skilled person recognizes that the container 30 provides an enclosing housing around the sensor, but not a defined volume situated within the reference gas line.

184. Apparently, container 30 works by fresh-air overpressure. At least, para. [0019] and [0023] of CC5 indicate this interpretation ("*this container has a fresh air inlet 31, to which pressurized fresh air is fed ... a pressure that is higher than the ambient pressure is always maintained in the interior of the container 30"; "gas from the surroundings cannot penetrate the container*“).

185. Whereas the container 30 is designed to keep target gas out and to flush away any gas that penetrates, precisely so that "contaminations of the ambient air with test gas cannot adulterate the measurement" (para. [0024] of CC5), the buffer chamber of feature 5 is designed to take target gas in, to mix it homogeneously and to dilute it over time (see under „Claim construction“ above). The patent in suit intends some target gas to be drawn into the reference line, so that the leak can be better located. Hence, this is the opposite of what container 30 of CC5 is meant to achieve.

186. Thus, starting from CC5, the skilled person would not have had any reason to convert the protective, over-pressurised housing / container 30 into an in-line mixing volume that deliberately admits and homogenizes target gas.

187. Last but not least, it should be noted once again that the Defendants have failed to provide any pointer or motivation for the skilled person.

E. Auxiliary requests / amendments

188. Since claim 1 of the patent in suit is valid, the question of the admissibility and merits of the Claimants' Auxiliary requests / amendments is not relevant for the decision.

F. Infringement

189. The infringement claim is to be dismissed since the attacked embodiment does not infringe the patent in suit.

I. Attacked embodiment(s)

190. Insofar as the parties are in dispute as to whether embodiments other than METRUM have been sufficiently made the subject matter of the claim by the Claimant, the following has to be noted (UPC_CFI_63/2024, Local Division Munich, Decision of 11 March 2026, Headnote - Network System Technologies v. Qualcomm):

191. The "attacked embodiment" is regularly determined by the factual design of a certain product or a process with regard to the features of the invoked patent claim as asserted in the statement of Claim. This can be a specific product determined, for example, by its product name, product sheet and technical design. However, the attacked embodiment may also comprise all products that generally have the technical features specified by the Claimant, which allegedly realise the technical teaching of the patent claim. This may also include products unknown to the Claimant or, in the case of an injunction, future products insofar as they essentially correspond to the features of the product presented by the Claimant in his Statement of Claim, which he considers decisive for the patent infringement. In such a case, it is usually sufficient if the Claimant has exemplified the infringement on a sample of the attacked embodiment.

192. Thus, the infringement claim of the case at hand is not limited to the expressly attacked embodiment METRUM, but comprises all products that generally have the technical features specified by the Claimant, which allegedly realise the technical teaching of the patent claim 1 (and subclaims).

II. No infringement of claim 1

193. The attacked embodiment does not meet the requirements of claim 1 of the patent in suit.

194. At least, feature 5 is not fulfilled. Although the attacked embodiment may comprise a buffer chamber defining a buffer volume, it does not feature one that permits to homogeneously mix gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber.

195. In this context, it can be assumed in the Claimant's favour - without further examination - that its following assumptions are correct: The lateral slits approximately at the center of the housing of the attacked embodiment, i.e. where the housing halves meet, may be reference gas inlets in the sense of features 1.2 and 3 of claim 1 and the patent in suit may permit a plurality of reference gas inlets despite the singular „reference gas inlet" according to the wording of claim 1.

196. Further, the entrance of the valve of the attacked embodiment device may be regarded as a reference gas conduit in the sense of feature 4.

197. Furthermore (see already above regarding claim construction), a „buffer chamber" in the sense of feature 5 merely requires a physical enclosure of sufficient volume to retain a quantity of gas ("remaining gas") with which newly drawn-in reference gas is mixed. The claim does not prescribe a specific buffer volume, mixing mechanism or physical realisation of the buffer chamber. Any chamber that achieves the homogeneous mixing of incoming reference gas with the gas already present meets these requirements. In particular, a component distinct from the housing defining boundaries is not mandatory, as it is sufficient that the sniffing leak detector „comprises" (inter alia) a buffer chamber. Against this background, the housing of the sniffing leak detector – e.g. the housing of the attacked embodiment - may be considered as a „buffer chamber with a buffer volume".

198. However, despite the stated assumptions and findings in favor of the Claimant, it cannot be judicially determined that said buffer chamber with a buffer volume permits to homogeneously mix gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber.

199. Even taking into account the Claimant's measurements according to Exhibits TW 7 and TW 11, the Claimant has failed to provide a conclusive pleading with regard to the stipulated homogeneously mixing. In this respect, it can remain open whether the Defendants should have contested the Claimant's measurements more specifically. Even if the Claimant's measurements as such are assumed to be correct, the Court cannot infer from them that the buffer chamber with a buffer volume permits to homogeneously mix gas drawn into the buffer chamber through the reference gas inlet with remaining gas in the buffer chamber:

200. The Claimant provides Exhibit TW 7 for illustrating the reference gas flow into the housing of the METRUM device and sets out that approximately 80% of the reference gas intake happens in the gripping area of the METRUM device. In this context, the Claimant describes the reference gas flow as follows: The main flow (approximately 80%) of the reference gas enters the housing through the (several) slits in the gripping area and the housing functions as a buffer chamber, which provides the homogeneously mixed gas (mixture of reference and remaining gas) to the reference gas conduit (which the Claimant considers to be the inlet of the valve block) and then to the valve block.

201. The Claimant‘s further provided Exhibit TW 11 illustrates measurements at a METRUM device proving – undisputedly – a delay between test gas as reference gas being released outside the housing and being measured at the gas analyzer.

202. Although, the Defendants agree with the Claimant insofar that Exhibit TW 7 shows reference gas entering the METRUM housing through several slits around the housing (not only in the gripping area) and that the measurements according to Exhibit TW 11 at the METRUM device indeed show a delay, the requirements of feature 5 are not met. The delay may be understood as buffering but not as a homogeneous mixing in the sense of feature 5:

203. Undisputedly, there are several reference gas inlets at the METRUM housing and reference gas flows into the housing from several sides: According to Exhibit TW 7, there may be one main flow on the right side and another main flow on the opposing left side of the housing´s gripping area, as well as further gas intakes outside the gripping areas. Hence, there will naturally occur mixing of gases inside the housing of the product, which, however, may also be caused by the reference gas entering the housing from several slits around the housing.

204. It has to be noted that feature 5 requires a physical enclosure of sufficient volume to retain a quantity of gas ("remaining gas") with which newly drawn-in reference gas is mixed, such that short-term fluctuations in target gas concentration are averaged out over time. The mere fact that several reference gas streams, entering from different sides of the housing, meet and blend does not establish that the housing retains such quantity of remaining gas, nor that it permits the homogeneous mixing of incoming reference gas with the remaining gas, as required by the patent in suit.

205. Apart from that, the measurements according to Exhibit TW 11 do not show that the delay is caused by the housing itself. On the contrary, the measurements of Exhibit TW 11 only show a delayed detection of the test gas surrounding the METRUM device in its configuration with several reference gas inlets. The measurements are, at least in part, based on the presence and distribution of the several reference gas inlets around the housing. Absent a measurement isolating the effect of the housing allegedly providing the function of a buffer chamber as such from the effect of the multiple reference gas inlets, the observed delay shown in Exhibit TW 11 cannot be attributed to the alleged "buffer chamber defining a buffer volume". Therefore, the measurements do not show that the housing permits the homogeneous mixing of the several reference gas streams with the remaining gas as required by feature 5.

206. Since the Claimant’s measurements are - relating to feature 5 - from the outset unconvincing and inconclusive, the Defendant’s alleged failure to provide their own measurements is irrelevant. Due to the explained circumstances of the case at hand, no specific contesting within the meaning of R. 171.2 RoP is required.

G. Decision on costs and ceiling

207. Pursuant to Art. 69(1) UPCA in conjunction with R. 118.5 RoP, a decision on costs has to be made. Since the Claimant has been unsuccessful in its action for infringement,

it must bear the costs in this respect. As the Defendants are unsuccessful in relation to the counterclaim for revocation directed against the Claimant, they have to bear the costs in this respect.

208. Pursuant to Art. 69(1) UPCA, the costs are to be borne up to a maximum amount determined in accordance with the Rules of Procedure. With a value in dispute of € 1,000,000 for the infringement action and of € 1,500,000 for the counterclaim for revocation, according to the table adopted by the Administrative Committee on April 24, 2023, on the basis of R. 152.2 RoP, the maximum limit for reimbursable costs is determined at € 400,000. The parties have reached an agreement on this during the oral hearing. The total costs are to be distributed evenly over the infringement claim and the counterclaim for revocation.

H. No interim award of costs (Art. 69(1) UPCA; R. 150.2 RoP)

209. The Defendants request for an interim award of costs pursuant to R. 150.2 RoP. That request is to be refused.

210. R. 150.2 RoP permits, but does not require, an interim award of costs to the successful party in the decision on the merits. The provision presupposes a party that can be identified as the successful party for the proceedings as a whole, and an amount that can already be regarded as clearly due. At least the first condition is not met.

211. Each party has prevailed on the claim directed against it and failed on the claim it pursued. There is therefore no single successful party within the meaning of R. 150.2 RoP (cf. LD Hamburg, UPC_CFI_58/2024, decision of 19 February 2025, p. 41 and operative part V.).

212. The Court of Appeal's practice of awarding, as a rule, no more than 50% of the applicable ceiling as an interim reimbursement (Meril v Edwards, UPC_CoA, 25 November 2025) concerns cases in which a party has succeeded overall. It does not require an interim award where success is split and the net creditor cannot yet be determined.

DECISION:

I. The infringement action is dismissed.

II. The counterclaim for revocation is dismissed.

III. The costs of the infringement action shall be borne by the Claimant.

IV. The costs of the counterclaim for revocation shall be borne by the Defendants.

V. The Defendants' request for an interim award of costs is rejected.

VI. The value in dispute of the infringement action is set at EUR 1,000,000. The value in dispute for the counterclaim for revocation is set at EUR 1,500,000.

VII. The ceiling of recoverable representation costs is set at a total of EUR 400,000 for the infringement action and the counterclaim for revocation.

Düsseldorf on 6 October 2026
NAMES AND SIGNATURES

Presiding Judge Dr Thom	Anna Bérénice Dr. THOM Digital unterschrieben von Anna Bérénice Dr. THOM Datum: 2026.10.05 10:42:59 +02'00'
Legally qualified judge Dr Rinken	Ingo Rinken Digital unterschrieben von Ingo Rinken Datum: 2026.10.05 08:23:28 +02'00'
Legally qualified judge Knijff	Marije Knijff Digitally signed by Marije Knijff Date: 2026.10.05 12:07:57 +02'00'
Technically qualified judge Holz	Digitally signed Holz Ulrike 2026-10-05 08:53:39 +0200 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet
For the sub-registrar	Digitally signed Frank Hermann Moritz 2026-10-05 13:11:34 +0200 Unified Patent Court Einheitliches Patentgericht Juridiction unifiée du brevet

INFORMATION ON APPEAL:

An appeal against this decision may be brought before the Court of Appeal by any party whose claims have been unsuccessful, in whole or in part, within two months of service of the decision (Art. 73(1) UPCA, R. 220.1 (a) RoP, 224.1 (a) RoP).

INFORMATION ON ENFORCEMENT (Art. 82 UPCA, Art. 37(2) UPCS, R. 118.8, 158.2, 354, 355.4 RoP):

An authentic copy of the enforceable order will be issued by the Deputy-Registrar upon request of the enforcing party, R. 69 RegR.

This decision was read in open court on 6 October 2026.
Presiding Judge Dr Thom

Anna Bérénice Dr. THOM

Digital unterschrieben von Anna Bérénice Dr. THOM
Datum: 2026.10.06 10:01:18 +02'00'