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**Datasheet for the decision
of 25 November 2025**

Case Number: T 1973/23 - 3.5.05

Application Number: 18158856.7

Publication Number: 3346733

IPC: H04R25/00

Language of the proceedings: EN

Title of invention:

A hearing aid having a slot antenna

Patent Proprietor:

GN Hearing A/S

Opponent:

Oticon A/S

Headword:

Slots and openings of an antenna/GN HEARING

Relevant legal provisions:

EPC Art. 100(c), 123(2)

RPBA 2020 Art. 12(4), 13(2)

Keywords:

Added subject-matter - main request and auxiliary requests 1 to 13 (yes): radiating slot vs. non-radiating opening
Admittance of new argument as to claim construction filed with the grounds of appeal (yes): claim construction is a matter of law + suitable to address issues that led to the decision under appeal
Admittance of claim requests filed after Art. 15(1) RPBA communication - new auxiliary requests 1 and 2 (no): no "exceptional circumstances"

Decisions cited:

G 0001/24, R 0025/22, R 0014/23, T 1354/18, T 1774/21,
T 0010/22, T 0737/22, T 2010/22, T 0217/23, T 0405/24



Beschwerdekammern
Boards of Appeal
Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0

Case Number: T 1973/23 - 3.5.05

D E C I S I O N
of Technical Board of Appeal 3.5.05
of 25 November 2025

Appellant: Oticon A/S
(Opponent) Kongebakken 9
2765 Smørum (DK)

Representative: Cohausz & Florack
Patent- & Rechtsanwälte
Partnerschaftsgesellschaft mbB
Bleichstraße 14
40211 Düsseldorf (DE)

Respondent: GN Hearing A/S
(Patent Proprietor) Lautrupbjerg 7
2750 Ballerup (DK)

Representative: Zacco Denmark A/S
Arne Jacobsens Allé 15
2300 Copenhagen S (DK)

Decision under appeal: **Decision of the Opposition Division of the European Patent Office posted on 25 October 2023 rejecting the opposition filed against European patent No. 3346733 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chair K. Bengi-Akyürek
Members: K. Peirs
F. Bostedt

Summary of Facts and Submissions

I. The appeal lies from the decision of the opposition division to reject the opposition (Article 101(2) EPC). The opposition division considered that the grounds for opposition under Article 100(a) EPC in conjunction with Articles 54 and 56 EPC, under Article 100(b) EPC and under Article 100(c) did not prejudice the maintenance of the patent as granted.

II. Oral proceedings before the board were held on 25 November 2025.

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

The respondent (proprietor) requested that the appeal be dismissed (**main request**). In the alternative, it requested that the patent be maintained in amended form on the basis of the claims of one of fifteen auxiliary requests ("new auxiliary requests 1 and 2" as well as "auxiliary requests 1 to 13"), where

- **auxiliary requests 1 to 12** were filed with the written reply to the statement of grounds of appeal

and

- **"new auxiliary requests 1 and 2"** were filed, respectively, as "auxiliary requests 14 and 15" together with **auxiliary request 13** after notification of the board's communication under Article 15(1) RPBA.

At the end of the oral proceedings, the board's decision was announced.

III. Claim 1 of the **main request** reads as follows (board's feature labelling):

- (a) "An in-the-ear hearing aid (30) comprising
- (b) a microphone (21) for reception of sound and conversion of the received sound into a corresponding first audio signal,
- (c) a signal processor (22) for processing the first audio signal into a second audio signal compensating a hearing loss of a user of the hearing aid,
- (d) a receiver (24) that is connected to an output of the signal processor for converting the second audio signal into an output sound signal,
- (e) a face plate (32), and
- (f) a transceiver for wireless data communication,
- (g) wherein the transceiver is connected with an antenna (34, 35) for electromagnetic field emission and electromagnetic field reception,
- (h) wherein the antenna is a slot antenna and
- (i) the antenna comprising an electrically conductive material,
- (j) a slot (35) provided in the electrically conductive material,
- (k) the slot extending in a plane being substantially orthogonal with an ear to ear axis of the user when the hearing aid is worn in its operational position by the user,
- (l) wherein the electrically conductive material is provided on or parallel to the face plate."

IV. Claim 1 of **new auxiliary request 1** differs from claim 1 of the main request in that feature (l) has been

replaced by the following feature (board's underlining, reflecting amendments vis-à-vis feature (l)):

"the slot being configured to cause emission of an electromagnetic field upon excitation, wherein the electrically conductive material is provided on or parallel to the face plate, and wherein the slot is provided on or parallel to the face plate."

V. Claim 1 of **new auxiliary request 2** differs from claim 1 of new auxiliary request 1 in that features (f) and (g) are replaced, together, by the following feature (board's mark-up, reflecting amendments vis-à-vis features (f) and (g)):

"a transceiver for wireless data communication and an antenna, wherein the transceiver is connected with ~~an~~ the antenna (34, 35) for electromagnetic field emission and electromagnetic field reception,".

VI. Claim 1 of **auxiliary request 1** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):

(m) ", wherein the slot has a width of less than 2 mm".

VII. Claim 1 of **auxiliary request 2** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):

(n) ", a feed line for exciting an electromagnetic field into the slot, the feed being a strip line or a microstrip line provided below the slot along a backside of the antenna or the back side of a

support element for the antenna".

VIII. Claim 1 of **auxiliary request 3** differs from claim 1 of auxiliary request 2 in that it comprises, at the end, the following feature (board's feature labelling):

(o) ", wherein the strip line is a linear feed line or a T-line feed".

IX. Claim 1 of **auxiliary request 4** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):

(p) ", a reflector plane for the antenna, the reflector plane being provided below or behind the face plate, closer to the body or closer to the ear drum when the hearing aid is positioned in its operative position in the ear of a user".

X. Claim 1 of **auxiliary request 5** differs from claim 1 of auxiliary request 4 in that it comprises, at the end, the following feature (board's feature labelling):

(q) ", wherein the reflector plane is provided parallel to the face plate".

XI. Claim 1 of **auxiliary request 6** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):

(r) ", a feed line for exciting an electromagnetic field into the slot, wherein the electrically conductive material is provided on a first layer, the feed line is provided in a second layer, the second layer being parallel to the first layer, the second layer being positioned closer to an ear drum

of a user than the first layer when the hearing aid is worn in its operational position by a user, and a third layer configured to form a reflector plane for the antenna, the reflector plane being provided below the second layer".

- XII. Claim 1 of **auxiliary request 7** differs from claim 1 of auxiliary request 6 in that it comprises, at the end, feature (q).
- XIII. Claim 1 of **auxiliary request 8** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):
- (s) ", wherein the slot has the form of a rod antenna".
- XIV. Claim 1 of **auxiliary request 9** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):
- (t) ", an opening in the electrically conductive material, the opening being configured to receive a hearing aid battery, wherein the slot comprises a loop formed slot in a surface of the electrically conductive material, and wherein the opening is within the loop formed slot".
- XV. Claim 1 of **auxiliary request 10** differs from claim 1 of the main request in that
- feature (h) has been replaced by the following feature (board's feature labelling and underlining, the latter reflecting amendments vis-à-vis feature (h)):

(u) "wherein the antenna is a slot loop antenna and"

and in that

- it comprises, at the end, the following feature
(board's feature labelling):

(v) "a feed line for exciting an electromagnetic field into the slot, wherein the antenna is manufactured in a 3-layer print: an outer or surface metal part of a top layer print being the electrically conductive material, the outer or surface metal part of the top layer print is used as the ground plane, the top layer is provided with a solder pad for connecting the feed line, a middle layer having the feed line, the feed line being a t-shaped feed line, and a bottom layer with a reflector plane and a solder pad for connecting to the feed line and the top layer".

XVI. Claim 1 of **auxiliary request 11** differs from claim 1 of the main request in that feature (h) has been replaced by the following feature (board's feature labelling and underlining, the latter reflecting amendments vis-à-vis feature (h)):

(w) "wherein the antenna is a slot antenna positioned on the face plate (32) and".

XVII. Claim 1 of **auxiliary request 12** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):

(x) ", wherein the slot has the form of a loop".

XVIII. Claim 1 of **auxiliary request 13** differs from claim 1 of the main request in that it comprises, at the end, the following feature (board's feature labelling):

(y) ", and wherein the slot is provided on or parallel to the face plate".

Reasons for the Decision

1. *Technical background*

1.1 The opposed patent relates to a hearing aid, specifically of the in-the-ear (ITE) type, comprising an antenna for wireless data communication between, for instance, two hearing aids in a binaural hearing-aid system.

1.2 The patent identifies that the small size of ITE hearing aids, combined with the density of internal metallic components, imposes significant design constraints on radio-frequency antennas. A particular challenge that is addressed in the patent is the propagation loss of electromagnetic signals travelling between ears (ear-to-ear communication) due to absorption by the user's head. Conventional antennas are said to often emit fields that are especially prone to such a propagation loss.

1.3 To overcome this, the patent proposes using a "slot antenna" provided on the face plate of the ITE hearing aid.

1.4 The most illustrative drawing in this regard can be found in Figure 3 of the opposed patent (reproduced below).

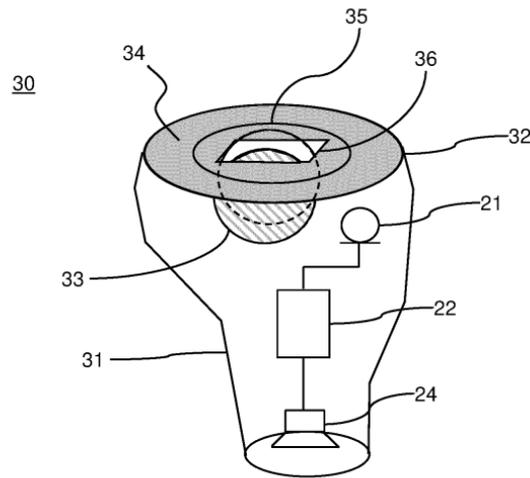


FIG. 3

It shows an ITE hearing aid (30) with a face plate (32) that faces the surroundings. An antenna is formed by an electrically conductive material (34) provided on this face plate. A slot (35) is defined within this electrically conductive material. In the embodiment shown in Figure 3, the slot (35) forms a loop which surrounds a further opening (36) for the battery (33). Because the face plate (32) is typically parallel to the side of the user's head, the slot (35) extends in a plane that is substantially orthogonal to the user's ear-to-ear axis when the hearing aid is worn. Upon excitation, this specific orientation causes the antenna to emit an electromagnetic field with an electric-field vector that is substantially orthogonal to the surface of the head. According to the patent, this polarisation (i.e. a TM surface wave) allows the associated signal to propagate along the head's surface and diffract around the head with reduced attenuation compared to conventional antenna designs, thereby allegedly improving the robustness of the respective

wireless link.

2. *Main request: claim 1 - admittance of "new argument"*

2.1 During the oral proceedings before the board, the respondent requested that the appellant's allegedly "new argument" concerning the interpretation of the term "a slot" in accordance with **feature (j)** not be admitted into the appeal proceedings. The respondent argued that the appellant questioned the function of the "slot" mentioned in feature (j) for the first time in its statement of grounds of appeal. It characterised this as a "radical departure" from the line of argument presented in the first-instance proceedings, where the opponent had consistently posited that "slot antennas" and their slots were notoriously known radiating elements. The respondent emphasised that this constituted a new argument which had not been identified as such by the appellant.

2.2 Regardless of any admittance issues under Article 13(2) RPBA concerning the respondent's orally made request not to admit the appellant's "new argument", the board acknowledges that, under Article 12(4) RPBA, any part of a party's appeal case which does not meet the requirements of Article 12(2) RPBA is to be regarded as an "amendment", which may be admitted only at the discretion of the board.

2.3 However, the appellant's "new argument" relates solely to the interpretation of the claims. Determining the correct meaning of the claims is a question of law for the board to decide when assessing their compliance with the requirements of the EPC, irrespective of whether the parties have previously presented any arguments on this matter (see also **R 25/22**, Reasons 12;

R 14/23, Reasons 7, in the context of Article 54(2) EPC; **T 737/22**, Reasons 3.2). To exclude a technically viable interpretation of a claim feature simply because it was not explicitly articulated before the opposition division would prevent the board from assessing the relevant scope defined by that claim.

- 2.4 The board further agrees with the appellant's oral statement that the construction of the term "a slot" is fundamental to the assessment of added subject-matter in the current case. Specifically, the decision under appeal (Reasons 13.2) relied on "*item 14 on page 24 of the application as filed*" to provide a basis for **feature (1)**.

The appellant challenged this finding by arguing that this "item 14" could not serve as a valid basis for claim 1 as granted because it depends on "item 1" mentioned on pages 22 and 23 as filed, which explicitly required the slot to be "*configured to cause emission of an electromagnetic field upon excitation*". The omission of this functional limitation raises the question of whether the term "a slot" mentioned in feature (j) introduces subject-matter extending beyond the application as filed.

- 2.4.1 This means that the appellant's argument regarding the interpretation of the term "a slot" in feature (j) is indeed suitable to address the issues which led to the decision under appeal (Article 12(4) RPBA).

- 2.5 Accordingly, at least for this reason, the board decided to admit the appellant's argument concerning the interpretation of "a slot" in feature (j) into the appeal proceedings (Article 12(4) RPBA).

3. *Main request: claim 1 - claim construction*

3.1 The construction of the term "a slot" used in **feature (j)** is central to the assessment of added subject-matter in point 4 below. The board interprets this feature as referring to a structural element ("a slot") provided in the "electrically conductive material", which is not necessarily identical to the *radiating* element, i.e. the *radiating* slot of the antenna, implied by the term "slot antenna" in **feature (h)**.

3.2 The reasons underlying this claim construction are as follows. Claim 1 as granted uses the indefinite article "a" in feature (j) to introduce "a slot", rather than referring back to "the slot" of the "slot antenna" mentioned in feature (h). While a "slot antenna" inherently comprises a *radiating* slot, the claim wording does not preclude the presence of *additional* slots in the conductive material. From a technical perspective, such additional slots are however well technically meaningful. A "slot" in the conductive material of a hearing-aid faceplate could serve various purposes including *non-radiating* ones, such as ventilation, strain relief or acoustic tuning. Furthermore, a "slot" could perform electromagnetic functions other than radiation. For instance, it could act as a resonator or filter to absorb specific frequencies, as a reactive loading element to adjust the impedance or as a feeder to couple energy to another layer. Hence, interpreting the term "a slot" in feature (j) as a *non-radiating* slot is a technically sensible construction that falls within the broad meaning of claim 1 as granted.

3.3 The respondent disputed this construction, arguing that the skilled reader would immediately understand that the term "a slot" refers to *the* radiating slot of the slot antenna. The respondent posited that a "slot" was by definition a "narrow opening or gap", whereas an "opening" (such as for a battery) is a "hole that allows access". The respondent argued that interpreting the slot as a "giant opening which would fit the battery" would be technically absurd.

3.4 The board, however, is not convinced. The respondent's distinction between a "narrow slot" and a "large opening" is contradicted by the opposed patent itself. Paragraph [0050] of the patent specification states that the "*slot 35 may form an **opening** in the conductive material 34*" (board's emphasis). Furthermore, this paragraph discloses that a "further opening 36" is provided *within* the loop formed by the "slot" to accommodate the battery. Thus, the opposed patent explicitly envisages a configuration in which a "slot" forms an "opening". Since the battery opening (36) is also a "hole" provided in the electrically conductive material (34) on the face plate (32), it satisfies all the structural requirements of feature (j). Without the functional limitation that the slot be "*configured to cause emission of an electromagnetic field upon excitation*" (which was present in "item 1" on pages 22 and 23 of the application as filed but was not present in claim 1 as granted), claim 1 as granted contains no limitation that would allow the skilled reader to distinguish the "radiating slot" from *other* openings or slots provided in the same "electrically conductive material".

3.5 The respondent further argued, with reference to **T 1354/18**, that claim interpretation should not be

based on a purely linguistic analysis but must yield a technically sensible result. The respondent asserted that the board's focus on the indefinite article "a" was overly formalistic and failed to apply the concept of a "mind willing to understand".

- 3.6 The board agrees that claims must be interpreted in a technically sensible manner (see **T 1354/18**, Reasons 7; **T 10/22**, Reasons 2.3). However, the often-cited "mind willing to understand" does not imply an intention to ignore the actual scope of a claim in order to ensure its allowability under the EPC. Instead, the concept of a "mind willing to understand" simply means that the skilled reader, when considering a claim, should rule out an interpretation which is illogical or that does not make technical sense, i.e. understand the claimed subject-matter in an *objective* manner (see e.g. **T 2010/22**, Reasons 6.2). As explained in point 3.2 above, the "non-radiating slot" interpretation is indeed a technically sensible construction. Excluding the technically viable embodiments of the "slot" mentioned in point 3.2 above simply because of the respondent's *subjective* intention to limit the claim to a *radiating* slot would amount to disregarding the skilled reader's *objective* understanding of the claim and disregarding its *erga omnes* effect.

- 3.7 The respondent also submitted that the board "did not read the claims in accordance with the law", failed to follow the instructions of **G 1/24** and the EPO Guidelines, and stated that it was "a shame" that the board "wanted to revoke the patent" based on language details and nitpicking.

The board offhand rejects these allegations. It should first be emphasised that the Boards of Appeal do not

only act in the parties' interests but also in the interest of the public and legal certainty. In this context, when assessing whether a claim complies with the requirements of the EPC, including the requirement of Article 123(2) EPC, in view of the interpretation of the claim that identifies all technically sensible interpretations of what these claims covers, the board fulfils its judicial duty. In addition, regarding the conclusions of **G 1/24**, the board notes that this decision requires the description and drawings to be *consulted* when interpreting claims. As demonstrated in points 3.2 to 3.4 above, the board has explicitly "consulted" the description (e.g. paragraph [0050]) and the drawings to verify the technical viability of its construction. The fact that the board's objective interpretation of the claims differs from the respondent's preferred, subjective interpretation, does not constitute a misapplication of the law.

4. *Main request: claim 1 - added matter*

4.1 Claim 1 of the **main request** is based on original claim 1. Nonetheless, some of the amendments underlying claim 1 as granted introduce subject-matter which extends beyond the content of the application as filed, contrary to the opposition division's positive assessment in this regard in Reasons 13.2 of the appealed decision.

4.2 The respondent argued that the omission of the feature "*configured to cause emission of an electromagnetic field upon excitation*" (present in "item 1" on pages 22 and 23 of the description as filed and, using a similar wording, also in original claim 1) did not result in added subject-matter because the skilled reader knew that a "slot antenna" inherently comprised a *radiating*

slot. However, as already established in point 3.2 above, claim 1 as granted encompasses embodiments where the "slot" defined in feature (j) is not the *radiating* slot but serves *another* purpose.

- 4.3 There is no direct and unambiguous disclosure in the application as filed for a "slot antenna" comprising, in addition to its *radiating* slot which is inherent in a "slot antenna", a further *non-radiating* slot covered by the breadth of feature (j).

The respondent referred to "item 14 on page 24" of the application as filed in this regard. The board is not convinced, for the following reason. While "item 14" refers to "the electrically conductive material" being "*provided on or parallel to a face plate of an in-the-ear hearing aid*", it depends on "item 1" on pages 22 and 23 as filed. This "item 1" in turn explicitly requires the slot provided in the "electrically conductive material" to be "*configured to cause emission of an electromagnetic field upon excitation*". However, this requirement is missing from claim 1 as granted. The associated omission allows the "slot" in accordance with feature (j) to be used for purposes *other than* electromagnetic emission, a generalisation that was not disclosed in the application as filed.

- 4.4 The respondent explained at the hearing before the board that the explicit function of the "slot" in "item 1" was necessary because the "antenna" therein was generic, whereas the specific term "slot antenna" (introduced from "item 5" on page 23 of the application as filed) rendered the functional limitation that the slot is "*configured to cause emission of an electromagnetic field upon excitation*"

redundant.

In the board's view, the amendment involving the addition of the term "slot antenna" and the omission of the limitation that the slot is "*configured to cause emission of an electromagnetic field upon excitation*", on the one hand, restricted the antenna type but, on the other hand, broadened the definition of the slot compared to "item 1" or the associated specific embodiments. This in turn introduced subject-matter including a "slot antenna" having, alongside its *radiating* slot, a *further* slot for any purpose. While Figure 3 as filed discloses a specific non-radiating opening for accommodating a battery, it does not disclose the broader range of non-radiating slots (e.g. for ventilation or tuning) covered by claim 1 as granted.

- 4.5 Regarding the dependency of "item 14", the respondent explained that the "in-the-ear hearing aid" mentioned in "item 14" must be the same hearing aid as defined in "item 1", arguing that any other construction would be illogical or non-implementable (e.g. with the "electrically conductive material" mentioned in "items 1 and 14" extending between two hearing aids).

This is not convincing either. The application as filed clearly aims to provide a "binaural hearing aid system" (see page 4, lines 7 to 23). In this context, the skilled reader would consider it technically plausible that the orientation of a component (e.g. the "electrically conductive material") in a *first* hearing aid is defined relative ("parallel") to a component (e.g. the "face plate") of a *second* hearing aid. Thus, the "in-the-ear hearing aid" in "item 14" could very well refer to a *second* device. As an aside, the board

notes that the same applies to the other alternative in "item 14" where the material is "provided on" the face plate, since the antenna in "item 1" is not necessarily part of the hearing aid defined in that item.

- 4.6 Moreover, the respondent argued, again with reference to **G 1/24**, that the patent description must be used to interpret the claim in a manner that resolves any ambiguity regarding the construction of the "slot" mentioned in feature (j).

However, as held in **T 405/24** (see Reasons 1.2.3), **G 1/24** cannot be relied upon to adopt a narrow interpretation of the claim based on the description solely to ensure compliance with Article 123(2) EPC. Such an approach, which exclusively limits the interpretation of the claims to what is disclosed in the underlying description, would jeopardise legal certainty and render the requirement of Article 123(2) EPC meaningless. This is also not how **G 1/24** is to be understood. While G 1/24 does state that the description and drawings should always be consulted or referred to when interpreting the claims, this does not justify reading restrictions from the description and drawings into the claims for which the skilled reader, applying their technical knowledge, would have no reason to do when reading those claims. A technically sensible claim interpretation could well match a particular teaching of the patent specification. Yet, the claims are then not necessarily and exclusively limited to this teaching alone. Instead, if a claim encompasses several technically meaningful interpretations of a disputed feature, all of them – including the one involving a *non-radiating* slot in the present case – must be taken into account.

4.7 Hence, the ground for opposition under Article 100(c) EPC prejudices the maintenance of the patent as granted.

5. *New auxiliary requests 1 and 2: admittance*

5.1 Given that **new auxiliary requests 1 and 2** were filed after notification of the board's communication under Article 15(1) RPBA (cf. point II above), the admittance of these claim requests is subject to the provision of Article 13(2) RPBA, which stipulates that amendments shall, in principle, not be taken into account unless there are "exceptional circumstances", which have been justified with cogent reasons by the party concerned.

5.2 The respondent argued that these claim requests should be admitted for reasons of equal treatment and procedural fairness, in view of the board's admittance of the appellant's "new argument" regarding the construction of the term "a slot" (see point 2 above).

This could not convince the board. The admittance of the appellant's "new argument" was governed by Article 12(4) RPBA, whereas the late filing of the respondent's claim requests falls under the much stricter regime of Article 13(2) RPBA. The admittance of an argument based on facts already on file is not an *exceptional* event in appeal proceedings. In contrast, the filing of new claim requests at the final stage of the appeal proceedings, i.e. after the notification of the board's communication under Article 15(1) RPBA, is subject to strict limitations. Therefore, the admittance of new auxiliary requests 1 and 2 cannot be justified by the principle of equal treatment with the appellant's "new argument".

5.3 During the oral proceedings before the board, the respondent further submitted that it was confronted with a new line of argument in the statement of grounds of appeal – namely that the "slot" mentioned in feature (j) need not be a "radiating slot" – which deviated substantially from the view which the opponent had presented during the opposition proceedings. The respondent characterised the new claim requests as a legitimate exercise of their right to react to this new line of argument. It further argued that the amendments made in new auxiliary requests 1 and 2 were not detrimental to procedural economy because they would have required some discussion regardless of when they were filed. The respondent further emphasised that these requests must be admitted because the board had not marked the appellant's view as "new" in its preliminary opinion sent with the board's communication under Article 15(1) RPBA, but had nonetheless agreed with it.

Yet, these arguments do not constitute "exceptional circumstances" either. As set out in **T 1774/21** (Reasons 3.4), the fact that a board takes up an objection which a party had previously addressed together with arguments but not with claim requests does not constitute an "exceptional circumstance". Furthermore, the board is under no obligation to explicitly label arguments as "new" or "old" in its preliminary opinion; it is the duty of the parties to analyse the submissions on file and identify relevant objections.

5.4 Moreover, the legal and factual basis for the objection taken up by the board in its preliminary opinion was fully present at the very start of the appeal proceedings. This is because the argumentation relating

to the proper construction of the term "slot" in accordance with feature (j) and the unsuitability of "item 14" on page 23 of the description as filed as a basis for the amendments underlying claim 1 as granted were clearly present already in the appellant's statement of grounds of appeal. In particular, on page 5 of that statement, the appellant argued that claim 1 as granted covers any slot, "*be it for causing emission or not*". Moreover, on pages 30 and 31, the appellant specifically attacked the opposition division's reliance on "item 14", noting that it referred back to "item 1" from which the expression "*configured to cause emission of an electromagnetic field upon excitation*" had "intentionally been removed".

- 5.5 Faced with the question, during the oral proceedings before the board, of why these claim requests were not filed earlier, the respondent submitted that it could not have foreseen that the board would agree with the appellant's "new argument".

This argument could likewise not persuade the board. A deciding body's preliminary opinion cannot be understood as an invitation for a party to repair omissions in its earlier submissions. The board agrees in this regard with **T 217/23** (Reasons 13 to 15) that each party must submit all facts, evidence, arguments and requests for amendments relevant to its case as early and completely as possible and not in a piecemeal manner. If the respondent had indeed perceived the appellant's "new argument" as a "radical departure" from the opponent's line of argument presented during the opposition proceedings (cf. point 2.1 above), this "new argument" should have prompted an immediate and comprehensive response in its written reply to the

statement of grounds of appeal, rather than delaying the filing of these new claim requests until the board had validated the appellant's position.

- 5.6 Furthermore, the respondent argued that the claim requests were filed months before the oral proceedings before the board, were simple and addressed the objection concerned without adding complexity, and that it had believed that its existing claim requests would succeed.

However, criteria such as timing or complexity do not inherently establish "exceptional circumstances" under Article 13(2) RPBA. Since the board finds no such circumstances, criteria such as complexity or timing relative to the hearing cannot inherently justify admittance. Moreover, the respondent's *subjective* assessment at the time of drafting its written reply to the statement of grounds of appeal – namely, that the claim requests already on file would succeed and that no additional fallback positions were necessary – was a calculated risk inherent to *inter partes* proceedings. Realising at a later stage that this assessment may have been incorrect cannot establish "exceptional circumstances" and cannot justify a "wait and see" or "trial and error" approach.

- 5.7 Therefore, the board decided not to admit new auxiliary requests 1 and 2 into the appeal proceedings (Article 13(2) RPBA).

6. *Auxiliary requests 1 to 13: claim 1 - added matter*

- 6.1 Irrespective of the question of admittance, the board finds that none of the amendments underlying claim 1 of **auxiliary requests 1 to 13** overcomes the deficiency

which was identified for the main request in point 4 above. Specifically, none of these claim requests re-introduces the critical functional limitation that the "slot" mentioned in **feature (j)** is "*configured to cause emission of an electromagnetic field upon excitation*", as required by "item 1" on pages 22 and 23 of the description as filed.

6.2 During the oral proceedings before the board, the respondent argued that certain amended features implied this functionality. The board is not persuaded, for the following reasons:

6.2.1 In relation to **auxiliary request 2**, the respondent submitted that a "slot" in an electrically conductive material must necessarily emit an electromagnetic field if it is excited.

The board notes, however, that **feature (n)** – which in particular adds the expression "*a feed line for exciting an electromagnetic field into the slot*" – does actually not require the "slot" in accordance with feature (j) to radiate. It merely requires the presence of a "feed line" capable of coupling energy ("*exciting an electromagnetic field*") into the slot structure. This is however not technically equivalent to the "slot" being "*configured to cause emission*". A "slot" such as the one mentioned in feature (j) could realistically be configured to dampen, filter or store the electromagnetic energy excited by the "feed line", rather than to radiate it. As discussed with the parties during the oral proceedings before the board, whether a "slot" effectively radiates depends on factors such as its geometry relative to the excitation frequency, a dependency that is explicitly acknowledged in the application as filed itself (see page 6,

line 22: "*The slot may have any form suitable for emission*"). Thus, the requirement of feature (n) does not limit the "slot" mentioned in feature (j) to a *radiating* element.

The respondent further argued in this regard that a skilled reader would not provide a "feed line" to excite a "slot" (such as a ventilation slot) if there was no expectation of radiation, essentially asking "why would the feature be there then?".

This argument, however, relies on the incorrect premise that the "excitation" defined in feature (n) must be the primary, intended function of that feature. However, the claim wording is broad enough to equally cover scenarios where the "excitation" is secondary, incidental or even technically indifferent. For instance, in the space-constrained environment of a hearing aid, a "feed line" might necessarily be routed in close proximity to a structural slot (e.g. a vent). This proximity could result in the feed line "*exciting an electromagnetic field into the slot*" due to coupling, even if radiation is not desired. Feature (n) covers such a configuration. Consequently, the presence of a "feed line" does not implicitly limit the "slot" of feature (j) to a *radiating* antenna element as originally disclosed.

- 6.2.2 As regards **auxiliary requests 3, 6, 7 and 10**, the respondent acknowledged that the same reasoning as for auxiliary request 2 applies to these claim requests, which rely on similar definitions of a "feed line".
- 6.2.3 Regarding claim 1 of **auxiliary request 8**, the respondent argued that the requirement according to **feature (s)** that the slot has "*the form of a rod*"

antenna" implies that the slot must emit an electromagnetic field.

The board, however, agrees with the appellant that the mere physical form of the "slot" is not equivalent to the functional requirement that it be "*configured for causing emission an electromagnetic field upon excitation*". A "slot" having the shape of a rod could, for example, serve as a *non-radiating* resonator. Moreover, claim 1 of auxiliary request 8 is silent regarding any means of "excitation". Without excitation, the form alone does typically not dictate the function of "causing emission".

- 6.2.4 In relation to claim 1 of **auxiliary request 11**, the respondent submitted that the position of the "slot antenna" on the face plate, as specified in **feature (w)**, implied that the "slot" is configured for causing emission, stating that it would be "very obvious" for such an antenna to radiate.

The board acknowledges that this is one possible construction of feature (w). However, following the reasoning set out in points 3.2 and 6.2.1 above, it is not the only technically sensible one. The mere location of a component does not inherently limit its function to a "radiating" implementation. A *non-radiating* slot (e.g. for ventilation or tuning) located on the face plate is well technically feasible and covered by the claim language.

- 6.3 Hence, auxiliary requests 1 to 13 are not allowable under Article 123(2) EPC, too.

Order

For these reasons it is decided that:

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

The Registrar:

The Chair:



B. Brückner

K. Bengi-Akyürek

Decision electronically authenticated