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**Datasheet for the decision
of 11 February 2015**

Case Number: T 1460/10 - 3.4.01

Application Number: 03710321.5

Publication Number: 1396902

IPC: H01P5/107, H01P5/02

Language of the proceedings: EN

Title of invention:

WAVEGUIDE/MICROSTRIP LINE CONVERTER

Applicant:

MITSUBISHI DENKI KABUSHIKI KAISHA

Headword:

Relevant legal provisions:

EPC R. 139

EPC Art. 123(2)

EPC 1973 Art. 83, 84

Keyword:

Correction of error - immediately evident that nothing else
could have been intended (yes)

Amendments - allowable (yes)

Claims - clarity (yes)

Sufficiency of disclosure - (yes)

Decisions cited:

G 0003/89, T 0190/99

Catchword:



**Beschwerdekammern
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Chambres de recours**

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Case Number: T 1460/10 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 11 February 2015

Appellant:
(Applicant)

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Decision under appeal:

**Decision of the Examining Division of the
European Patent Office posted on 29 January 2010
refusing European patent application No.
03710321.5 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman G. Assi
Members: T. Zinke
M. Vogel

Summary of Facts and Submissions

- I. The appeal filed on 29 March 2010 lies from the decision of the examining division, posted on 29 January 2010, refusing European patent application No. 03 710 321.5 published with the publication No. EP 1 396 902. The appeal fee was paid on the same day. The statement setting out the grounds of appeal was filed on 1 June 2010.
- II. In the decision under appeal, the examining division held that the application according to a main request then on file did not meet the requirements of Articles 84, 83 EPC 1973 and Rules 42(1)(c) and 42(1)(e) EPC. Further, the examining division decided that the claims according to a first auxiliary request did not meet the requirements of Articles 52(1) and 56 EPC 1973.
- A claim set according to a second auxiliary request was considered not admissible because it was late filed and offending Article 123(2) EPC.
- Objections against a third auxiliary request were based on Rule 137(4) EPC and Articles 52(1), 54(1), (2) and 56 EPC 1973.
- Further, a claim set according to a fourth auxiliary request was held to contravene the requirements of Articles 52(1) and 56 EPC 1973.
- III. In the notice of appeal the appellant (applicant) requested to set aside the decision and to grant a patent on the basis of the documents then on file. Oral proceedings were requested as an auxiliary request.

- IV. With the statement setting out the grounds of appeal the appellant filed amended claims according to a main request and auxiliary requests 1 to 5 and requested grant of a patent based on one of these requests. Further, the appellant provided arguments with regard to Articles 84, 83, 52(1), 56 EPC 1973, Article 123(2) EPC and Rules 42(1)(c), 42(1)(e) and 137(5) EPC in order to support these requests.
- V. With a communication dated 11 November 2014 the appellant was summonsed to oral proceedings to take place on 11 February 2015. Enclosed was a communication of the Board under Article 15(1) RPBA dated 7 November 2014 providing the appellant with the Board's preliminary view with regard to added subject-matter (Article 123(2) EPC), clarity (Article 84 EPC 1973), inventive step (Article 56 EPC 1973) and problem to be solved (Rule 42(1)(c) EPC). The Board introduced a further document D4 (EP-A-0 893 842), which was considered relevant for the pending auxiliary request 5.
- VI. With a letter dated 14 January 2015 the appellant filed a revised auxiliary request 2 in replacement of auxiliary request 2 as filed with the statement setting out the grounds of appeal and argued with regard to original disclosure of the amendments (Article 123(2) EPC). Further, the appellant provided further arguments with regard to clarity, novelty and inventive step of the requests then on file.
- VII. The oral proceedings were held on 11 February 2015 as scheduled. During the oral proceedings the appellant withdrew all previous requests and finally requested:

- correction under Rule 139 EPC of claim 7 of the originally filed application in accordance with a version submitted during the oral proceedings, and
- remittal of the case to the examining division for further prosecution on the basis of claim 1 submitted as a single main request during the oral proceedings, which corresponds to claim 1 of the previous auxiliary request 3 filed with the grounds of appeal.

VIII. Claim 1 submitted during the oral proceedings before the Board reads as follows:

*"A waveguide-microstrip line transition, comprising:
a dielectric substrate (1);
a ground conductor pattern (2) which is formed on one surface of the dielectric substrate (1) and which has a ground conductor pattern omission portion (6);
a strip conductor pattern (3) formed on a surface of the dielectric substrate (1) opposite to the surface having the ground conductor pattern (2);
a conductor pattern (4) for shorting of a waveguide formed so as to be continuously connected to the strip conductor pattern (3);
connecting conductors (5) for connecting the ground conductor pattern (2) and the conductor pattern (4) for shorting of a waveguide to each other within the dielectric substrate (1); and
a waveguide (7) connected to the dielectric substrate (1) so as to correspond to the ground conductor pattern omission portion (6),
wherein a microstrip line is constituted by the strip conductor pattern (3), the ground conductor pattern (2), and the dielectric substrate (1), and wherein a dielectric waveguide shorting portion is constituted by the conductor pattern (4) for shorting of a waveguide,*

the ground conductor pattern (2), and the connecting conductors (5), wherein the ground conductor pattern omission portion (6) is a polygon, characterized in that the boundary between the strip conductor pattern (3) and the conductor pattern (4) for shorting of a waveguide is located, when projected in a direction perpendicular to the surface of the dielectric substrate (1) on which the strip conductor pattern (3) is formed and onto the surface of the dielectric substrate (1) on which the ground conductor pattern (2) is formed, inside the polygon."

Reasons for the Decision

1. The appeal is admissible.
2. Request for correction (Rule 139 EPC)
- 2.1 During oral proceedings the appellant requested to replace the wording of originally filed claim 7

"7. A waveguide-to-microstrip transition according to claim 1, wherein the ground conductor pattern omission portion is a polygon, and a position of a boundary between the strip conductor pattern and the conductor pattern for shorting of a waveguide agrees with one side of the polygon, or is located inside the polygon."

with a new formulation:

"7. A waveguide-to-microstrip transition according to claim 1,

wherein the ground conductor pattern omission portion is a polygon, and a position of a boundary between the strip conductor pattern and the conductor pattern for shorting of a waveguide agrees with one side of the polygon, or, when projected in a direction perpendicular to the surface of the dielectric substrate on which the strip conductor pattern is formed and onto the surface of the dielectric substrate on which the ground conductor pattern is formed, is located inside the polygon." (with emphasized amendments).

2.2 Rule 139 EPC states: *"Linguistic errors, errors of transcription and mistakes in any document filed with the European Patent Office may be corrected on request. However, if the request for such correction concerns the description, claims or drawings, the correction must be obvious in the sense that it is immediately evident that nothing else would have been intended than what is offered as the correction."*

2.3 The wording of Rule 139 EPC does not differ in substance from the former Rule 88 EPC 1973; only some editorial changes have been made in the three languages. Hence, the jurisprudence with regard to Rule 88 EPC 1973 is still applicable.

In the opinion G 3/89 (OJ EPO 1993, 117) the Enlarged Board, with regard to the requirement laid down in Rule 88, second sentence, EPC 1973 specified that *"what matters is what a skilled person would objectively have derived from the description, claims and drawings of a European patent application on the date of filing. ... The requirement laid down in Rule 88, second sentence, EPC that a correction must be obvious further implies that the incorrect information is objectively*

recognisable too. The skilled person must thus be in a position objectively and unambiguously to recognise the incorrect information using common general knowledge." (see Reasons, point 2).

Moreover, "The parts of a European patent application or of a European patent relating to the disclosure (the description, claims and drawings) may therefore be corrected under Rule 88, second sentence, EPC only within the limits of what a skilled person would derive directly and unambiguously, using common general knowledge and seen objectively and relative to the date of filing, from the whole of these documents as filed" (see Reasons, point 3).

*Furthermore, for a correction to be allowed, an application must, on the date of filing, "contain such an **obvious** error that a skilled person is in no doubt that this information is not correct and - considered objectively - cannot be meant to read as such. If, on the other hand, it is doubtful whether any information at all is incorrect, then a correction is ruled out. The same applies if incorrect information only becomes apparent in the light of the proposed correction" (see Reasons, point 5).*

- 2.3.1 Claim 7 as originally filed describes the location of the boundary between the strip conductor pattern and the conductor pattern for shorting of a waveguide in relation to an omission portion of a ground conductor pattern. From the whole disclosure of the application as originally filed (see all the figures, the wording of claim 1, to which claim 7 is referred back, as well as the application JP-A-2000-244212 cited as background art), it is directly and unambiguously derivable that the strip conductor pattern and the conductor pattern

for shorting of a waveguide are arranged in a first plane, whereas the ground conductor pattern (and the omission portion) is provided on a second plane, a dielectric substrate being located in between. Hence, the skilled person is in no doubt that the wording of original claim 7 "*a position of a boundary ... is located in the polygon*" (emphasis added) is not correct and, considered objectively, cannot be meant to read as such.

2.3.2 The question thus arises concerning the meaning of claim 7.

Article 84 EPC 1973 requires that the claims shall be clear and supported by the description. In ex parte proceedings, the requirement of clarity is understood as implying that the claims shall be clear per se. This is, however, not the case here in view of the inconsistency in the wording of claim 7 as mentioned above.

On the other hand, in view of the request for correction under Rule 139 EPC, in accordance with the opinion G 3/89 it has to be evaluated what the skilled person would derive directly and unambiguously, using common general knowledge and seen objectively and relative to the date of filing, from the whole of the documents as filed, i.e. from the figures, description and claims. In this respect, in agreement with decision T 0190/99 (not published) the Boards holds that the skilled person, when considering a claim, should rule out interpretations which are illogical or which do not make technical sense and also try, with a will to understand, to arrive at an interpretation of the claim which is technically sensible (see also, in this

respect, Case Law of the Boards of Appeal, seventh edition, September 2013, section II.A.6).

In the present case, when looking for a meaning of the unclear claimed feature in the context, the skilled person would learn from claim 7 as originally filed that the location mentioned above also "*agrees with one side of the polygon*" as an alternative. The Board interprets the wording "*agrees with*" as concerning the situation where the projection of the boundary corresponds to a side of the polygon, given that, as already mentioned above, the boundary and the polygon are in different planes. Hence, from this alternative which is explicitly stated in claim 7, the skilled person would come to the conclusion that the indented meaning of the unclarity in the claim is that the projection of the boundary in the plane of the polygon would lie inside the polygon. The Board could not find another possible intended meaning.

- 2.4 Hence, the skilled person would derive directly and unambiguously, using common general knowledge and seen objectively and relative to the date of filing, from the whole of the application as filed that the intended meaning of claim 7 was that the position of the boundary between the strip conductor pattern and the conductor pattern for shorting of a waveguide agrees with one side of the polygon, or, alternatively, its projection is located inside the polygon.

The proposed amendment of claim 7 exactly reflects this understanding and, therefore, the requested correction is allowed in accordance with Rule 139 EPC.

3. Added subject-matter (Article 123(2) EPC)

Since claim 1 of the single request is a combination of original claim 1 and original claim 7, as corrected under Rule 139 EPC, the Board is satisfied that the requirement of Article 123(2) EPC is met. In this respect, the Board notes that opinion G 3/89 (see Headnote, point 1) states that an allowed correction under former Rule 88 EPC 1973 was of a strictly declaratory nature and thus did not infringe the prohibition of extension under Article 123(2) EPC.

4. Clarity and sufficiency of disclosure (Articles 84 and 83 EPC 1973)

With the new formulation the feature describing the location of the boundary between the strip conductor pattern and the conductor pattern for shorting of a waveguide with respect to the ground conductor pattern omission portion is now clear and there is no problem for a person skilled in the art to implement this feature.

Hence, the Board is satisfied that the requirements of Articles 84 and 83 EPC 1973 are met.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The request for correction under Rule 139 EPC of claim 7

of the originally filed application in accordance with the version submitted during oral proceedings before the Board is allowed.

3. The case is remitted to the examining division for further prosecution on the basis of claim 1 submitted during the oral proceedings before the Board.

The Registrar:

The Chairman:



R. Schumacher

G. Assi

Decision electronically authenticated