

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 1 October 2020**

Case Number: T 0886/15 - 3.4.01

Application Number: 07741395.3

Publication Number: 2012388

IPC: H01Q1/50, G06K19/07,
G06K19/077, H05K1/16,
B42D15/10, G09F3/00, H01Q1/44

Language of the proceedings: EN

Title of invention:
ARTICLE PROVIDED WITH FEED CIRCUIT BOARD

Patent Proprietor:
Murata Manufacturing Co. Ltd.

Opponent:
Leonhard Kurz Stiftung & Co. KG

Headword:
Power supply circuit board with radiation plate / Murata
Manufacturing Co.

Relevant legal provisions:
RPBA 2020 Art. 12(4), 13(1)
EPC Art. 123(2)

Keyword:

Amendments - extension beyond the content of the application as filed (yes) - intermediate generalisation
added feature not the deliberate result of technical considerations

Decisions cited:

T 0398/00

Catchword:

The added features cannot be considered to be *the deliberate result of technical considerations directed to the solution of the technical problem involved*. In the absence of any identified technical purpose justifying the features in question, their selection in a claim is arbitrary (cf. points 16-22).



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
Fax +49 (0)89 2399-4465

Case Number: T 0886/15 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 1 October 2020

Appellant: Murata Manufacturing Co. Ltd.
(Patent Proprietor) 10-1 Higashikotari 1-chome
Nagaokakyo-shi, Kyoto 617-8555 (JP)

Representative: Schenk, Markus
Schoppe, Zimmermann, Stöckeler
Zinkler, Schenk & Partner mbB
Patentanwälte
Radlkoferstrasse 2
81373 München (DE)

Respondent: Leonhard Kurz Stiftung & Co. KG
(Opponent) Schwabacher Strasse 482
90763 Fürth (DE)

Representative: Zinsinger, Norbert
Louis, Pöhlau, Lohrentz
Patentanwälte
Postfach 30 55
90014 Nürnberg (DE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 25 February
2015 revoking European patent No. 2012388
pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman P. Scriven
Members: P. Fontenay
J. Geschwind

Summary of Facts and Submissions

- I. The appeal is against the decision of the Opposition Division to revoke European patent EP-B-2 012 388.
- II. The opposition was filed against the patent as a whole, on the grounds of Articles 100(a), 100(b), and 100(c) EPC.
- III. In its decision, the Opposition Division held that the subject-matter of the patent as granted extended beyond the content of the application as filed (Article 100(c) EPC). The objections under Articles 100(a) and 100(b) EPC were not addressed.
- IV. Specifically, the Opposition Division considered that the wording "at least a portion of the coil element does not overlap with the radiation plate (20) in a plan view of the power supply circuit board (10, 50)" in granted claim 1 and claim 1 of auxiliary requests 1 to 6, defined added subject-matter. In particular, the amended wording encompassed a product with a coil element not overlapping the radiation plate at all, for which no support existed in the original disclosure. None of the figures referred to by the patentee compensated for the absence of literal support in the original disclosure.
- V. The patentee filed an appeal against the decision and requested that it be set aside and that the patent be

maintained according to a new set of claims according to a main request or one of auxiliary requests 1 to 8.

- VI. The term "at least" was deleted in claim 1 of all new requests. Claim 1 of the auxiliary requests further differed from claim 1 of the main request in various additional features regarding the configuration of the coil element, the radiation plate and the power supply circuit. In support of the new requests, reference was made to various drawings in the patent specification which the appellant considered to disclose the amended and added features.
- VII. The respondent requested that the appeal be dismissed.
- VIII. In the respondent's view, the deletion of the term "at least", in claim 1 of the main request, did not affect the finding of the Opposition Division. A product with a coil element not overlapping the radiation plate was still covered by the claim's wording. It was further argued that the drawings referred to by the appellant in the statement of grounds did not support the various definitions of the invention according to the requests then pending.
- IX. Summons to attend oral proceedings were issued. In a communication setting out its provisional view, the Board acknowledged that the new requests appeared to be occasioned by the reasoning of the Opposition Division in its refusal. It was, however, stressed that the question of convergence was likely to play a role when deciding on their admissibility.

X. In a reply to the Board's communication, the patentee filed a new main request and 4 auxiliary requests, and made the following submissions.

- The main request and auxiliary requests 1 and 2 corresponded, respectively, to the previous auxiliary requests 2, 4, and 6. Auxiliary requests 3 and 4 were new requests, based on the previous auxiliary request 6 and intended to better reflect the specific embodiment of Figure 23.

- The appellant submitted that the renumbered and modified requests were prompted by the Board's warning with regard to admissibility. Claim 1 of successive requests defined additional details as to the claimed product, thus meeting the condition of convergence.

- With regard to the Opposition Division's finding of added subject-matter, independent claim 1 no longer referred to "at least a portion of the coil element not overlapping the radiation plate " but recited instead that:

a first portion of the coil element does not overlap with the radiation plate in a plan view of the power supply circuit board, and a second portion of the coil element overlaps with the radiation in a plan view of the power supply circuit board.

- It was further stressed that the basis for the recited features did not reside only in the embodiments of Figures 6 and 23, but rather in the whole patent specification which confirmed that the various embodiments applied to both a band-shaped and to a

planar radiation plate. With regard to the former alternative, it was obvious that the coil element was to extend over the limited width of the radiation plate, as for example, illustrated in figures 6 and 23.

XI. Both parties were represented at the oral proceedings before the Board.

- The patentee confirmed that the main request and auxiliary requests 1 to 4, filed in response to the Board's communication, defined the final requests on which the Board had to adjudicate.

- The opponent confirmed its request that the appeal be dismissed.

- The opponent further requested that the new requests not be admitted into the appeal procedure. It was emphasised, in this respect, that the requests were late-filed and that the appellant had had the opportunity of filing them at an earlier stage of the opposition proceedings, but had chosen not to do so.

- On the substance, the opponent submitted that the original application did not disclose the new features common to claim 1 of all requests with regard to first overlapping and second non-overlapping portions. The appellant's approach was tantamount to freely combining features belonging to separate embodiments. The patent specification as a whole did not contain any support for the view that the disclosed embodiments were to apply to both types of antenna actually disclosed (band-shaped and planar). The approach suggested by the

appellant was in contradiction with the established case law with regard to added subject-matter.

- With regard to the embodiments of Figures 6 and 23, it was stressed that said figures were schematic illustration of specific embodiments which did not provide reliable information as to the relative dimensions of the various elements they depicted. Moreover, the omission of various features pertaining to these embodiments in the claim's wording lead to an intermediate generalisation of the claimed subject-matter that was not allowable under the circumstances.

- The patentee reiterated its view that the application as a whole allowed a certain degree of abstraction. Specifically, the skilled person would have recognised, from the plurality of embodiments sharing the same feature, that said feature played a particular role, thus justifying its selection, independently of the other structural specificities of the various embodiments.

XII. Claim 1 of the appellant's main request reads:

*A product comprising a power supply circuit board (10; 50) including a power supply circuit (16; 56) having a coil element, comprising:
a wireless communication circuit board (5) which is electrically connected to the power supply circuit (16; 56),
wherein one of the power supply circuit board (10; 50) and the wireless communication circuit board (5) is mounted on the other or the power supply circuit*

board (10; 50) and the wireless communication circuit board (5) are integrally formed as a board, and the other board or the integrally-formed board is mounted on the product,

wherein the product includes a radiation plate (20) having at least one of two functions, i.e., a function of emitting a transmission signal which is supplied from the power supply circuit (16; 56) through electromagnetic-field coupling and which has a frequency substantially determined in accordance with a resonant frequency of the power supply circuit (16; 56), and a function of supplying a reception signal to the power supply circuit (16; 56) through the electromagnetic-field coupling,

wherein a first portion of the coil element does not overlap with the radiation plate (20) in a plan view of the power supply circuit board (10; 50), and

wherein a second portion of the coil element overlaps with the radiation plate (20) in a plan view of the power supply circuit board (10; 50).

- XIII. Claim 1 of auxiliary request 1 differs from claim 1 of the main request in that it further recites that the coil element has a spiral shape.
- XIV. Claim 1 of auxiliary request 2 differs from claim 1 of auxiliary request 1 in that it further recites that the winding axis of the coil element is perpendicular to the radiation plate.

XV. Claim 1 of auxiliary request 3 differs from claim 1 of auxiliary request 2 in that it includes further limitations regarding the arrangement of the coil element, the radiation plate and the power supply circuit board. Concretely, the claim's wording was amended to recite, after the reference to the feature of the product including a radiation plate:

...

wherein the coil element is arranged on or in the power supply circuit board (10; 50) and has a spiral shape, wherein the radiation plate (20) is band-shaped and extends in a longitudinal direction, wherein the power supply circuit board (10; 50) is mounted on the band-shaped radiation plate (20) and extends in a direction perpendicular to the longitudinal direction beyond the band-shaped radiation plate (20) such that a first portion of the coil element does not overlap with the radiation plate (20) in a plan view of the power supply circuit board (10; 50), and a second portion of the coil element overlaps with the radiation plate (20) in a plan view of the power supply circuit board (10; 50), and wherein the winding axis of the coil element is perpendicular to a surface of the radiation plate.

- XVI. Claim 1 of auxiliary request 4 differs from claim 1 of auxiliary request 3 in that the last feature *perpendicular to a surface of the radiation plate* has been modified to read *perpendicular on a surface of the radiation plate*.

Reasons for the Decision

Admissibility of the patentee's requests

1. The main request and auxiliary requests 1 and 2 were initially filed with the grounds of appeal as auxiliary requests 2, 4, and 6, respectively. They differed from the requests underlying the appealed decision in that "at least a portion of the coil element does not overlap with the radiation plate...", had been amended in order to exclude the possibility of the coil element not overlapping the radiation plate at all, which the Opposition Division considered to define added subject-matter.
2. The main request and auxiliary requests 1 and 2 (former auxiliary requests 2, 4 and 6) were filed in reaction to the decision issued by the Opposition Division. It was generally accepted, until the introduction of the new rules of procedure for the boards of appeal (RPBA 2020), that a fair attempt at amending in view of the reasoning relied upon by the first instance would justify their admission into the appeal procedure. This relies on the understanding that the appellant might have thought, in good faith, that its arguments would persuade the Board.

3. The current requests were filed in response to the communication of the Board. Their admissibility is to be assessed on the basis of the new rules of procedure, which entered into force on 1 January 2020. While acknowledging that the main and auxiliary requests 1 and 2 constitute amendments in the sense of Article 12(4) RPBA 2020, the Board holds that the above considerations justify their admissibility under Article 13(1) RPBA 2020.
4. The admissibility of the main request and auxiliary requests 1 and 2 appears all the more justified because the amendments made with regard to the main request underlying the impugned decision are straightforward from a technical point of view and meet the criterion of convergence.
5. In contrast, auxiliary requests 3 and 4 were filed for the first time in reaction to the communication of the Board.
6. The versions of claim 1 in auxiliary requests 3 and 4 result from claim 1 of auxiliary request 2, by the incorporation of additional features regarding the claimed product, pertaining to the embodiment of Figure 23. The Board considers that they address the comments in its provisional opinion that the requests then on file possibly defined non-allowable intermediate generalisations of this specific embodiment.
7. The Board first notes that claim 1 of auxiliary requests 3 and 4 constitute amendments to the patentee's case in the sense of Article 12(4) RPBA 2020. It further observes, with regard to the discussion and decision regarding the merits of the previous main and auxiliary requests 1 and 2, that the

absence of a clearly identifiable effect regarding the coupling of the partly overlapping coil element with the radiation plate did not permit the Board to establish whether a functional relationship existed between the selected features of Figure 23 and those which have been omitted; and, as the case may be, what that relationship might have been. If, on the other hand, the appellant had been able to persuade the Board that no such relationship existed, this would have implied that the amendments were without effect on the questions of inventive step (a further objection that has been raised by the respondent).

8. It is thus considered that the amendments introduced in auxiliary requests 3 and 4 are unlikely to solve the pending issues as to added subject-matter and inventive step (Article 13(1) RPBA 2020).
9. In conclusion, the main request and auxiliary requests 1 and 2 are admitted into the appeal proceedings. Auxiliary requests 3 and 4 are, however, not admitted into the appeal proceedings.

Main request - added subject-matter (Article 123(2) EPC)

10. The amendment introduced in claim 1 of the main request compared to claim 1 of the main request underlying the impugned decision is intended to clarify that a first portion of the coil element does not overlap with the radiation plate while another portion does.
11. The added features have no literal basis in the original application documents. This is not contested by the appellant, who, however, argues that a basis for the amended feature is provided by the patent

specification as a whole, which consistently refers to two types of radiations plate, a band-shape electrode and a plate-shaped electrode.

12. In the appellant's view, the drawings illustrating the various embodiments of the invention have to be construed with this information in mind. As a consequence, the basis for the proposed amendments is not limited to the only embodiments of figures 6 and 23, but includes all eighteen embodiments of the invention. Because of of the reduced width of a band-shaped electrode, the coil member only partially overlaps it, as for example shown in figures 6 and 23.
13. The patent specification, however, is devoid of any explicit or implicit indication that the drawings refer indiscriminately to both band-shaped electrodes and plate-shaped electrodes. In the absence of any such indications, the argument according to which the large number of embodiments establishes that the structural specificities of the various embodiments are not essential for the invention, thus justifying their omission from the claim's definition, fails from the start.
14. In view of the embodiments of the invention disclosed in relation with figures 6-8 and 23-25, it has to be established whether these embodiments could also constitute, on their own, a sufficient basis for the claim's definition.

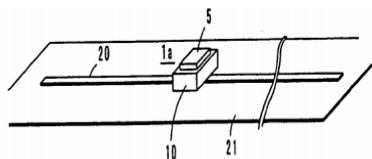


Figure 6

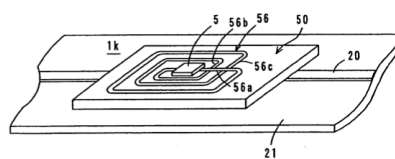


Figure 23

15. While Figure 6 suggests that a portion of the power supply circuit board 10 overlaps the radiation plate 21 while another portion does not, it cannot establish that the same applies to the coil element incorporated in it. Figures 7 and 8, which pertain to the same embodiment, do not add any valuable information in this respect.

16. Figure 23 contains more details regarding the relative positioning and shape of the various elements constituting the product. It appears to constitute a more promising support for the recited features in claim 1. If it is further assumed, in favour of the appellant, that Figure 23 discloses a coil element partly overlapping the radiation plate - which is contested by the opponent - the question then to be answered is whether said feature can be selected from the embodiment while omitting all other elements depicted in said figure and disclosed in the corresponding section of the description.

17. The selection of some features from a group of features originally disclosed in combination is allowable under Article 123(2) EPC if the selected and omitted features are neither structurally nor functionally linked. It is only when these conditions are met that the intermediate generalisation resulting from the selection can be considered allowable.

18. The magnetic coupling between the coil element and the radiation plate depends on a multiplicity of parameters. It is directly influenced, among other things, by the distance separating the coil from the radiation plate, the amount of magnetic flux intercepted by the plate, the magnetic permeability of the material constituting said plate, the orientation of the coil element, the number of loops it incorporates, the surface they encompass, ...

19. The patent specification explicitly refers to the use of a non-magnetic body for the radiation plate 20. Explicit reference is made to an aluminium or copper foil (cf. page 23, lines 16 - 20) which are metals with permeabilities similar to that of air. Under these circumstances, the fact that a part of the magnetic flux will not flow through the radiation plate, as a consequence of a portion of the coil element not overlapping with the radiation plate, appears deprived of any practical meaning.

20. In the absence, in the drawing and the corresponding portion of the description, of any indication as to the effects resulting from a first not overlapping and second portion overlapping the radiation plate, it is impossible to recognise whether the conditions for selecting a feature from its context, recalled above, are fulfilled.

21. A further consequence is that it is impossible for the skilled person to recognise what purpose is meant to be achieved by the selected features in the context of the invention. They thus cannot be considered to be *the deliberate result of technical considerations directed to the solution of the technical problem involved* (cf. T 398/00, point 3.4). In the absence of any identified

technical purpose justifying the features in question, their selection in claim 1 is purely arbitrary. Their introduction into claim 1 of the main request results only from the intention of defining an artificial difference with the prior art.

22. The introduction of the features directed to the coil element having a first portion not overlapping the radiation plate and a second portion overlapping the radiation plate defines new subject-matter in contravention of Article 123(2) EPC.

First and second auxiliary requests

23. The additional feature introduced into claim 1 of auxiliary request 1 as to the spiral shape of the coil element does not affect the finding developed above with regard to the main request, as conceded by the appellant.
24. The same applies to the added feature regarding the winding axis of the coil element being perpendicular to the radiation plate which was introduced in claim 1 of auxiliary request 2.

Order

For these reasons it is decided that:

The appeal is dismissed

The Registrar:

The Chairman:



D. Meyfarth

P. Scriven

Decision electronically authenticated