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Datasheet for the decision of 4 July 2018

Case Number: T 2136/13 - 3.4.03

Application Number: 08009705.8

Publication Number: 1988585

IPC: H01L41/083

Language of the proceedings: EN

Title of invention:
Multi-layer piezoelectric device

Patent Proprietor:
Kyocera Corporation

Opponent:
CeramTec GmbH

Headword:

Relevant legal provisions:
EPC Art. 54(1), 52(1), 56, 100(a), 100(b)
RPBA Art. 12(2), 13(1)

Keyword:
Novelty - (yes)
Inventive step - (yes)
Late-filed objections - admitted (no)

Decisions cited:

Catchword:

Europäisches Patentamt
European Patent Office
Office européen des brevets

Beschwerdekammern

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Case Number: T 2136/13 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 4 July 2018

Appellant: (Opponent)	CeramTec GmbH CeramTec-Platz 1-9 73207 Plochingen (DE)
Representative:	Fehrenbacher, Eckhard Anton CeramTec GmbH CeramTec-Platz 1-9 73207 Plochingen (DE)
Respondent: (Patent Proprietor)	Kyocera Corporation 6, Takeda Tobadono-cho, Fushimi-ku, Kyoto-shi, Kyoto 612-8501 (JP)
Representative:	Viering, Jentschura & Partner mbB Patent- und Rechtsanwälte Grillparzerstraße 14 81675 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 5 August 2013 rejecting the opposition filed against European patent No. 1988585 pursuant to Article 101(2) EPC.**

Composition of the Board:

Chairman	G. Eliasson
Members:	M. Papastefanou
	C. Heath

Summary of Facts and Submissions

I. The appeal is against the decision of the Opposition Division rejecting the opposition against European patent EP 1 988 585 B1 and maintaining the patent as granted.

II. Among the documents cited during the first instance proceedings, the following are relevant for this decision:

D4: US 4 626 369 A1;
D6: pages 192-195 of the book K. Rushmeyer et al. "Piezokeramik - Grundlagen, Werkstoffe, Applikationen", expertverlag, Renningen-Malmsheim (1995);
D7: WO 01/93345 A1.

III. With the grounds of appeal, the Appellant-Opponent submitted the following new prior art document:

D8: pages 59-62 of the book "Piezokeramik - Grundlagen, Werkstoffe, Applikationen"

IV. The opposition had been filed against the patent in its entirety, requesting its revocation under the grounds of Article 100(a) EPC, in combination with Articles 52(1), 54(1) and 56 EPC (lack of novelty and inventive step), and Article 100(b) EPC in combination with Article 83 EPC (insufficient disclosure of the invention).

V. In the statement of grounds of appeal, the Appellant - Opponent (hereafter "Opponent") did not contest the Opposition Division's conclusion that the patent disclosed the invention in a manner sufficiently clear

and complete for it be carried out by a person skilled in the art (Article 83 EPC). However, it argued that, contrary to the conclusions of the Opposition Division, claim 1 lacked novelty in view of document D4 and did not involve an inventive step in view of D4 in combination with the general knowledge of the skilled person or in view of a combination of any of documents D7, D1, or D6 with D4.

VI. In its reply to the appeal, dated 14 May 2014, the Respondent-Patent Proprietor (hereafter "Proprietor") refuted the arguments of the Opponent and requested that the appeal be dismissed. As an auxiliary measure, it requested that the patent be maintained on the basis of one of 1st to 11th Auxiliary requests, which were filed with the reply to the appeal. In addition, the Proprietor requested that document D8 not be admitted into the proceedings.

VII. After the Board had issued the summons to oral proceedings and its preliminary opinion, the Opponent, in a letter dated 4 June 2018, re-iterated its arguments regarding lack of novelty and inventive step and argued for the admission of D8 into the proceedings.

In addition, the Opponent raised an objection under Article 83 EPC in connection with Article 100(b) EPC for the first time in appeal proceedings.

VIII. At the end of the oral proceedings before the Board the parties' final requests were as follows:

The Opponent requested that D8 be admitted into the proceedings and that the patent be revoked in its entirety.

The Proprietor requested that D8 not be admitted into the proceedings, that the appeal be dismissed and that the patent be maintained as granted. As an auxiliary measure it requested that the patent be maintained according to one of the 1st to 11th Auxiliary requests filed with its letter dated 14 May 2014.

IX. Independent claim 1 of the patent (Main Request) has the following wording:

A multi-layer piezoelectric device comprising a stack (13) formed by stacking piezoelectric layers (11) and internal electrodes (12) alternately one on another and external electrodes (15) formed on a first side face and on a second side face of the stack, one of the adjacent internal electrodes being connected to the external electrode formed on the first side face and the other internal electrode being connected to the external electrode formed on the second side face,

characterized in that *a halogen content of the device, comprising the piezoelectric layers, the internal electrodes and the external electrodes is not less than 5 ppm nor more than 1000 ppm* (emphasis in the original).

X. The wording of the claims of the Auxiliary requests is not relevant for this decision.

XI. The parties' arguments, as far as they are relevant for this decision, can be summarised as follows:

(a) On sufficiency of disclosure

The Opponent argued that claim 1 of the patent was

a "reach-though" claim because it covered all possible combinations of all possible materials for the piezoelectric ceramic, the electrodes and the halogen. The examples only showed a limited number of combinations of materials and they were not sufficient to show that the invention was possible to carry out across the whole of the claimed scope, since it could not be proven that any halogen in any multilayer piezoelectric device would produce the claimed technical effect.

The Proprietor pointed out that the matter of insufficiency of disclosure of the claimed invention was not among the grounds of appeal and that it was a late-filed objection which should not be admitted in the proceedings.

(b) On the admissibility of D8

The Opponent argued that D8 was submitted in order to show that multi-layer piezoelectric devices were part of the common general knowledge at the time of publication of D4 (1986). The book which D8 was an excerpt from was a textbook regarding piezoelectric ceramics and the information it contained did not become public at the time of its publication but reflected what was common general knowledge already since the middle of the 1980's. The argument that multi-layer piezoelectric devices were part of the common general knowledge had been presented from the beginning of the opposition procedure and D8 was only used to support this argument; it was not, therefore, a late-filed document.

The Proprietor argued that it was not acceptable to use a book published in 1995 to interpret the

content of D4, which was published in 1986. Moreover, D8 was an excerpt of the same book D6 was excerpt of and the Opponent, who was aware of its disclosure, could and should have filed it during the opposition procedure. The Opponent had not provided any reason why it had not done so.

(c) On lack of novelty

The Opponent argued that claim 1 of the patent was not new over D4. Although D4 did not explicitly disclose multi-layer piezoelectric devices, it was common general knowledge that a piezoelectric transducer like the one mentioned in D4 could also comprise such a multi-layer structure. Regarding the halogen content, D4 disclosed a halogen (fluor) content of 1090 ppm in the piezoelectric ceramic. If the internal and external electrodes were taken into account, the content of the whole of the piezoelectric device would be under 1000 ppm and within the claimed range. The skilled person reading D4 would understand that it disclosed all the features of claim 1.

The Opponent argued also - for the first time during the oral proceedings - that the subject matter of claim 1 was not new over document D7. D7 disclosed the preamble of claim 1 and the claimed halogen content was an intrinsic feature of the multilayer piezoelectric device. D4 tought that it was common and preferred to have piezoelectric devices with materials of 99,99% purity, which indicated a 100 ppm of impurities and - as the patent showed (paragraph [0007])- halogen was an inevitable impurity.

The Proprietor argued that D4 disclosed only a single piezoelectric ceramic layer. The mention of a transducer in this context should be understood as a transducer comprising a single piezoelectric layer. The fact that multi-layer piezoelectric transducers may have existed at the time did not change the fact that such multi-layer piezoelectric devices were not disclosed in D4. Regarding the halogen content, already the statement that the piezoelectric layer in D4 contained 1090 ppm halogen was based on series of selections from the disclosure of D4 and, thus, it could not be said that such a halogen content was disclosed in D4.

Regarding document D7, the Proprietor pointed out that this objection against claim 1 was presented for the first time in the oral proceedings before the Board, it was, thus, late-filed and it should not be admitted into the proceedings.

(d) On inventive step

The Opponent argued that starting from D4 as closest prior art, the only distinguishing feature of claim 1 would be the multi-layer structure of the piezoelectric device. Such multi-layer piezoelectric devices were commonly known - as D8 showed - and the skilled person would know of their advantages over the single-layer piezoelectric devices only by his common general knowledge. D7 provided also a disclosure of such a piezoelectric device with multi-layer structure. The skilled person would replace the piezoelectric device in D4 with a multi-layer piezoelectric device in an obvious manner, arriving at the claimed invention.

In an alternative argumentation, the Opponent considered D7 as closest prior art. D7 described multi-layer piezoelectric devices but made no mention of any halogen content. The technical problem the skilled person would be faced with would then be how to improve the life span of the piezoelectric device. The skilled person would consider D4, where this problem was solved by using halides, and - since D4 disclosed halogen content within the claimed range - the combination of any of D7 with D4 would render obvious the claimed subject matter.

In a further objection, the Opponent argued that claim 1 of the patent was formulated too broadly and did not solve the technical problem identified in the patent. Its subject-matter was therefore not inventive.

The Proprietor argued that D7 was more suitable as closest prior art, since it described a piezoelectric device with a multi-layer structure Starting from D7, the skilled person would not have considered D4 since it did not relate to multi-layer piezoelectric devices. Even if he did, since D4 did not disclose or suggest halogen content within the claimed range, the subject matter of claim 1 involved an inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. Main request - Sufficiency of disclosure (Articles 100(b) and 83 EPC)

2.1 In its letter dated 4 June 2018 the Opponent raised a new objection under Article 83 and 100(b) EPC arguing that claim 1 was too broad and it could not be proven that any halogen in any multi-layer piezoelectric device would produce the claimed technical effect. The examples in the patent showed only a limited number of combinations of materials for the piezoelectric layers ($PbZrO_3$ and $PbTiO_3$), the electrodes (Ag/Pd) and halogens (Cl and Br). Claim 1, however, covered all possible combinations of materials for the piezoelectric layers, electrodes and halogens. The claim was not only too broad but it was a "reach-through" claim that covered all possible combinations of materials based merely on results of a limited number of combinations, and it was doubtful that all such combinations could produce the claimed technical effect.

Questioned why this objection was submitted so late in the procedure, the Opponent pointed to the grounds of appeal (page 6) and to the objection raised under inventive step with the argument that the claimed scope was beyond the examples, i. e. that the claimed technical effect was not obtainable across the claimed scope. It argued that it was more correct to raise the objection with relation to insufficiency of disclosure since the actual problem was that there was not enough information in the patent for the skilled person to carry out the invention across the whole of the claimed scope. Answering comments about the lack of any examples/experiments/measurements supporting its objection, the Opponent stated that the patent did not provide enough information in order to be able to carry

out such experiments/measurements without undue burden.

2.2 The Proprietor argued that this was a late-filed objection which should have been submitted with the grounds of appeal and requested that it not be admitted in the proceedings.

2.3 The Board notes that the ground of opposition under Article 100(b) EPC (insufficiency of disclosure) was raised and substantiated by the Opponent in the Notice of Opposition. In the decision under appeal, the Opposition Division concluded that the patent met the requirement of Article 83 EPC and, hence, the ground of opposition under Article 100(b) EPC did not prejudice the maintenance of the patent as granted. In the statement of grounds of appeal, the Opponent did not contest this part of the decision. It was only in the letter of 4 June 2018, one month before the oral proceedings before the Board, that the Opponent raised this ground of opposition for the first time in appeal.

2.4 According to the Rules of Procedure of the Boards of Appeal (RPBA), the statement of grounds of appeal and the reply shall contain a party's complete case (Article 12(2) RPBA) and any amendment to the party's case submitted thereafter may be admitted and considered under the Board's discretion (Article 13(1) RPBA).

2.5 It is uncontested that this ground of opposition is late-filed, hence, whether it will be admitted and considered is to be decided by the Board.

The Opponent had the possibility to raise this ground of opposition in the statement of grounds of appeal, since it was one of the grounds of the impugned

decision. The Board is of the opinion than, to raise this ground of opposition so late in the procedure (4,5 years after the statement of the grounds of appeal) and without any amendment to the Proprietor's case that might have caused such a submission, amounts to a change of position determined only by procedural tactics. This goes against the need for procedural economy, which is also one of the criteria the Board has to take into account in the exercise of its discretion.

For the sake of completeness, the Board notes that the Appellant has not submitted any examples/measurements/ experiments that would serve to substantiate its doubts (see point 2.1 above), which therefore remain mere allegations. The Board, hence, considers that this objection cannot validly challenge the patentability of the claimed subject-matter, i.e. it is not *prima facie* relevant for the outcome of the appeal.

In conclusion, the Board, exercising its discretion under Article 13(1) RPBA, decided not to admit this late-filed ground of opposition in the proceedings.

3. Main request - Novelty (Articles 100(a), 52(1) and 54(1) EPC)

3.1 The disclosure of document D4

3.1.1 It is common ground that D4 describes piezoelectric ceramics made of lead, zirconate and titanate (PZT). The problem addressed in D4 is how to decrease ageing of PZT ceramics and it is solved by adding *alkali or alkaline earth halide except bromide or iodide in amount from about 0.5 to 2 weight percent and one or more metal oxides selected from the group consisting of*

oxides magnesium, chromium, scandium, lanthanium, praseodymium, neodymium and samarium in an amount from 0.5 to about 6 weight percent (column 2, lines 33-42).

D4 describes the production of such ceramics to be used in piezoelectric devices but does not describe any such device. The use of such PZT ceramics in electromechanical transducers is merely mentioned in the discussion of the state of the art (column 1, lines 8-12) and in the description of the invention (column 5, lines 52-55).

3.1.2 The following two points have remained contested throughout the procedure:

(i) whether D4 discloses a *multi-layer piezoelectric device comprising a stack formed by stacking piezoelectric layers and internal electrodes alternately one on another and external electrodes formed on a first side face and on a second side face of the stack, one of the adjacent internal electrodes being connected to the external electrode formed on the first side face and the other internal electrode being connected to the external electrode formed on the second side face;*
and

(ii) whether D4 discloses a piezoelectric device with halogen content, *comprising the piezoelectric layers, the internal electrodes and the external electrodes* of *not less than 5 ppm nor more than 1000 ppm.*

Multilayer structure

3.1.3 Making reference to document D8, the Opponent argued that it was common general knowledge to build piezoelectric transducers comprising a multi-layer structure like the one in claim 1 of the patent. The piezoelectric transducers mentioned in D4 could, therefore, comprise either a single-layer or a multi-layer structure. The multi-layer piezoelectric structure was, hence, included in the disclosure of D4 and this feature was not new.

3.1.4 The Board does not share the Appellant's view in this matter. Following the definition of novelty in Article 54(1) EPC, for a document of the state of the art to be novelty destroying, it must disclose all the features of the objected claim, either explicitly or implicitly.

3.1.5 Even if it were to be accepted that piezoelectric transducers with a multi-layer structure were indeed commonly known, this would not mean that they are disclosed in D4. As the Opponent argued, piezoelectric transducers could comprise a single layer structure or a multi-layer one. Hence, using a multi-layer structure is not the only way to implement the piezoelectric transducers of D4 and, therefore, it cannot be said that such transducers are implicitly disclosed in D4.

3.1.6 The Board concludes that D4 does not disclose a multi-layer piezoelectric device according to claim 1.

3.1.7 Regarding the admission of D8 into the procedure, the Board decided to leave the question open, since even if it were considered that piezoelectric devices with a multi-layer structure according to claim 1 were commonly known, D4 did not disclose such devices as explained above.

Halogen content

3.1.8 D4 describes in a general manner PZT ceramics containing a halide (except bromide and iodide) between 0.5 and 1.5 weight percent (column 2, line 36-38; see also point 3.1.1 above). There are four specific examples (column 3, lines 1-18) mentioning a content of lithium or barium chloride and fluoride (LiF, LiCl, BaF_2 and $BaCl_2$) between 0.75 and 1.5 weight percent (examples (1), (2), (3)) or between 0.5 and 1.5 weight percent (example (4)).

3.1.9 The Opponent referred to the last example and, taking as a reference a content of 0.5 weight percent of BaF_2, reached the conclusion that the PZT ceramic contained 1090 ppm of fluor (F), which is a halogen. Pointing out that this content referred only to the piezoelectric ceramic, the Opponent argued if the mass of the electrodes was added, then the halogen content of the whole structure would be under 1090 ppm. The electrodes were usually made of a metal like silver (Ag), which did not contain any halogen and it was sufficient that the electrodes' mass was at least 9% of the whole mass of the device in order for the halogen content to be within the claimed range (less than 1000 ppm).

In addition, the Opponent pointed to column 3, line 22 of D4, where it was mentioned that the materials used were of a purity of 99,99%. This indicated that any impurity, including any halogen (which was descriped as inevitable impurity in the patent; paragraph [0007]), would be in the range of 0,01%, i. e. 100 ppm. Hence, the lower limit of the claimed range was also disclosed in D4.

3.1.10 The Board does not share this argument of the Opponent. As discussed with regard to the multi-layer structure, for a feature to be considered as implicitly disclosed in D4, it has to be directly unambiguously derivable from the content of D4. The Opponent made arguments about how one might arrive at the claimed feature, but has not shown that this conclusion was inevitable when reading the disclosure of D4, since a series of selections and assumptions were necessary to reach a result within the claimed range. This is not sufficient to show that D4 discloses the claimed halogen content and the Board concludes that the characterising feature of claim 1 is not disclosed in D4.

3.1.11 The Board, hence, concludes that the subject matter of claim 1 is new with respect to D4.

3.2 Document D7

3.2.1 The Opponent raised an objection for lack of novelty of claim 1 with respect to document D7 for the first time in the oral proceedings before the Board. As a reason for this late submission of this objection, the Opponent referred to the Board's preliminary opinion and particularly to point 6.3 where the Board stated that D7 disclosed the preamble of claim 1.

The Opponent argued that the multi-layer piezoelectric structure of D7 comprised intrinsically halogen content within the range defined in claim 1. According to the Opponent, it was known from the patent that halogen can be present as impurity in the piezoelectric ceramic (see paragraph [0007]). A purity of 99,99% was also known, as document D4 showed (column 3, line 22). The titanium oxide and zirconium oxide used for the PZT ceramic in D7 were usually cleaned during the

manufacture of the piezoelectric ceramic using F or Cl and after cleaning, an amount of F or Cl would remain in the ceramic as impurity. Hence, the 0.01% impurity in the piezoelectric ceramic would be F or Cl (which are both halogens), which meant that the piezoelectric ceramic of D7 would have 100 ppm halogen content.

3.2.2 The Proprietor objected that this objection was filed late and it was a surprise. It made reference to the Opponent's letter of 4 June 2018 and pointed out that until a month before the oral proceedings, the Opponent recognized that there was a distinguishing feature between claim 1 and D7 and D7 could, thus, not be regarded as novelty destroying. There had been no amendment in the Proprietor's case and there was no reason to submit this new objection so late in the proceedings and it requested that for it not to be admitted in the proceedings.

3.2.3 It is uncontested that this is a late-filed objection and that its admission is only possible at the Board's discretion (Article 13(1) RPBA).

Reasoning in a similar way as with the late-filed objection under Article 100(b) EPC (see point 2.5), the Board cannot find any ground that could have caused this change of position by the Opponent. Rather, it seems that this change of position is determined by procedural tactics only, as the Opponent also acknowledged by making reference to the Board's preliminary opinion.

Moreover, the new alleged fact, that the multi-layer piezoelectric structure of D7 comprises intrinsically 100 ppm of halogen is based in a series of assumptions and references to other documents. As already discussed

in relation with D4, in an objection for lack of novelty, the document of the state of the art must disclose, at least implicitly, all the features of the objected claim (see also points 3.1.4, 3.1.5 and 3.1.10 above). The Board considers that this is not the case, since the objection by the Opponent is based on a series of allegations that are not supported by the disclosure of D7. The late-filed objection is, hence, considered to be *prima facie* not relevant.

3.2.4 The Board, exercising its discretion under Article 13(1) RPBA, decided not to admit this objection in the proceedings for reasons mainly related to procedural economy.

3.3 In conclusion, the Board's finds that the subject matter of claim 1 of the patent as granted is new.

4. Inventive Step (Article 100(a), 52(1) and 56 EPC)

4.1 D4 as closest prior art

4.1.1 The Opponent argued that D4 related to piezoelectric ceramics and it addressed the same problem as the patent (how to avoid/delay the ageing of the PZT ceramic and the deterioration of its performance D4) and it was, thus, a suitable starting point for the skilled person. D4 disclosed all the features of claim 1 except the multi-layer structure of the piezoelectric device.

Regarding the halogen content, reference was made to the arguments regarding novelty (see points 3.1.8 and 3.1.9). According to the Opponent, even if it were not implicitly disclosed in D4, a halogen content within the claimed range was at least suggested in it.

The skilled person was aware, based only on his common general knowledge, that a piezoelectric device with a multi-layer structure had advantages over a single-layer piezoelectric device and would use such a multi-layer piezoelectric structure within the teaching of D4 in an obvious manner. Alternatively he would consider the teaching of such a multi-layer piezoelectric device from D7 and combine it with D4 in obvious way, arriving, thus at the invention of claim 1.

4.1.2 The Proprietor contested the selection of D4 as closest prior art, arguing that, since the patent related to problems of multi-layer piezoelectric devices, the starting point for the skilled person had to be such a multi-layer piezoelectric device and D4 did not disclose any. D7 was, therefore, more suitable as closest prior art.

Regarding the teaching of D4 about halogen content, the Proprietor pointed out that in order to arrive at the value of 1090 ppm, the Opponent had made a series of selections from the examples disclosed in D4 and these selections already involved inventive skill, or at least hindsight. In addition, the content of 1090 ppm referred only to the piezoelectric ceramic and in order to reach a value within the claimed range further assumptions about the size and the mass of the electrodes had to be made, which were also beyond what D4 disclosed or suggested.

The Proprietor also pointed to D7 where it was described that a layer of piezoelectric ceramic had a thickness of 125 µm (page 10, line 14) whereas an electrode had a thickness of approximately 3 µm (page 10, lines 24-25). The Proprietor argued that this

showed that the electrodes could be as little as 2% of the mass of the device and the assumptions made by the Opponent were based on hindsight.

4.1.3 The Board does not share the Opponent's opinion that D4 suggests halogen content within the claimed range. As already stated previously, the conclusion that the piezoelectric ceramic in D4 contains 1090 ppm of halogen is based on the assertion that the ceramic contains 0.5 weight percent of BaF_2. Even if, as the Opponent argues, this value is disclosed in D4, in order to use this value as basis for the calculation of the halogen content, several selections are necessary: one of the limits of one of the ranges in combination with one of the described halide compositions. There is nothing in D4 that would prompt the skilled person to select this particular value of this particular example. In addition, the assumptions regarding the mass of the electrodes and its percentage in the whole of the mass of the piezoelectric device are not supported by D4 or any other document of the prior art. On the contrary, as the Proprietor pointed out, the only relevant disclosure available is in D7 and points to a rather low contribution of the electrodes to the whole mass of the device.

4.1.4 Hence, the Board concludes that D4 does not suggest a halogen content within the claimed range. Even if it is considered obvious for the skilled person to use a multi-layer structure according to claim 1 for the piezoelectric device in D4 (either based on common general knowledge or in combination with D7), a halogen content within the claimed range is neither disclosed nor suggested.

4.2 D7 as closest prior art

Starting from D7, the conclusion is no different. Even if the Board agreed with the Opponent in that the skilled person would combine D7 and D4 in an obvious way, this combination would neither disclose nor suggest halogen content within the claimed range, as explained already.

4.3 Since the Board reaches the same conclusion irrespective of which of the documents D4 and D7 is more suitable as closest prior art, this question can be left open.

4.4 In a different approach, the Opponent argued that claim 1 did not involve an inventive step because it was too broadly formulated and did not solve the technical problem identified in the patent.

4.4.1 The Board does not agree. Tables 8-1 and 8-2 (Example 2) of the patent present results of various measurements that show that a multi-layer piezoelectric device according to claim 1 achieves indeed the desired technical effect of limiting deterioration of the piezoelectric ceramic due to ageing. In the absence of any concrete indication to the contrary - and the Opponent had not provided any, either - , the Board sees no reason to doubt the results presented in these tables, which show that the invention according to claim 1 solves indeed the identified technical problem.

4.5 The Board reaches, thus, the conclusion that the subject-matter of claim 1 of the patent involves an inventive step within the meaning of Article 56 EPC.

5. Since none of the objections raised by the Opponent prejudices the maintenance of the patent as granted, the appeal must fail.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

S. Sánchez Chiquero G. Eliasson

Decision electronically authenticated