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**Datasheet for the decision
of 16 January 2023**

Case Number: T 1371/20 - 3.2.01

Application Number: 07252604.9

Publication Number: 1873751

IPC: B64D33/02

Language of the proceedings: EN

Title of invention:

Anechoic visco-thermal liner

Patent Proprietor:

Raytheon Technologies Corporation

Opponent:

Cabinet Beau de Loménie

Headword:

Relevant legal provisions:

EPC Art. 52(1), 54, 56, 107, 123(2)

EPC R. 99, 101(1)

Keyword:

Novelty - main request (yes)

Inventive step - main request (yes)

Amendments - extension beyond the content of the application
as filed (no)

Admissibility of appeal - notice of appeal - name and address
of appellant - after correction of the notice of appeal

Decisions cited:

G 0001/12, T 0097/98, T 0001/97, G 0003/97

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

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Case Number: T 1371/20 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 16 January 2023

Appellant: Cabinet Beau de Loménie
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Respondent: Raytheon Technologies Corporation
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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
27 March 2020 concerning maintenance of the
European Patent No. 1873751 in amended form.**

Composition of the Board:

Chairman G. Pricolo
Members: V. Vinci
A. Jimenez

Summary of Facts and Submissions

I. The appeal filed by the appellant (opponent) is directed against the interlocutory decision of the opposition division to maintain the European patent No. 1 873 751 in amended form.

II. In its decision the opposition division held that the subject-matter of claim 1 as granted met the requirements of Article 123(2) EPC, but lacked novelty in the meaning of Articles 52(1) and 54 EPC, and decided to maintain the patent on the basis of the set of claims according to the auxiliary request 1 filed on 19 November 2018. In particular, the opposition division stated that the subject-matter of independent claim 1 of the auxiliary request 1 was novel and involved an inventive step in the meaning of Articles 52(1), 54 and 56 EPC in view of the following prior art:

01: EP 1 982 323

representing a state of the art according to Article 54(3) EPC, and

02: FR 2 582 847

III. Oral Proceedings pursuant to Article 116 EPC were held on 16 January 2023 before the Board by videoconference.

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

The respondent (patent proprietor) requested that the

appeal be rejected as inadmissible. Should the appeal be deemed admissible, they requested that the appeal be dismissed and the patent be maintained in the form found allowable by the opposition division (main request) or, alternatively, that the patent be maintained according to one of auxiliary requests 1 to 3 filed with reply to the statement of grounds of appeal, corresponding to auxiliary requests 4, 5 and 7 filed during the opposition proceedings.

V. Independent claim 1 according to the main request reads as follows:

*"An acoustic liner assembly (22;40;50) comprising:
a plurality of passages (28;42;58) each including an opening (30;47) and extending lengthwise into the liner assembly (22;40;50) from said opening by a length (36;48;52);*

characterised in that

the length of each of the plurality of passages is at least 50 times a width (34;46;56) of the opening of each passage (28;42;58); wherein:

the width (34;46;56) describes the largest width for any shape of the opening (30; 47),

wherein the openings (30;47) for the plurality of passages (28;42;58) combine to provide an open area for receiving incident sound waves, wherein the open area is greater than substantially 80% of the entire area of the liner assembly."

Reasons for the Decision

ADMISSIBILITY OF THE APPEAL

1. The Board finds the appeal to comply with the requirements of Articles 107 and 108 and of Rule 99 EPC and thus to be admissible.
 - 1.1 The notice of appeal submitted on 4 June 2020 was filed in the name of Safran Aircraft Engines while the notice of opposition was filed in the name of cabinet Beau de Loménie. Following a communication of the Board pursuant to Rule 100(2) EPC dated 2 July 2020 questioning the admissibility of the appeal because of non-compliance with the requirements of Article 107 EPC in conjunction with Rule 101(1) EPC, and a further communication of the Board pursuant to Article 15(1) RPBA dated 25 September 2020 annexed to the summons to oral proceedings preliminarily confirming this view, the appellant (opponent) requested with letter dated 20 October 2020 a correction of the name of the appellant in the notice of appeal under Rule 101(2) EPC or, in the alternative, under Rule 139 EPC. A corrected notice of appeal indicating that the appeal was filed in the name of "*Cabinet Beau de Loménie*" was contextually filed. Auxiliary, the appellant (opponent) requested to have his rights re-established for non-observance of the time-limit to reply to the communication under Rule 100(2) EPC of 2 July 2020.
 - 1.2 In support of this request for correction of the notice of appeal, the appellant (opponent) explained that with the first notice of appeal dated 3 June 2020 the appeal had been erroneously filed in the name of "*Safran Aircraft Engines*" while the "*true intention*" in the meaning of established Case Law of the Boards of Appeal

(in this respect reference was made to decisions G1/12, T97/98 et T1/97) was clearly to file the appeal only in the name of "*Cabinet Beau de Loménie*" which had the status of opponent in the first instance proceedings.

1.3 With their reply to the statement of grounds of appeal of the appellant (opponent), the respondent (patent proprietor) requested to dismiss the request for correction and to declare the appeal inadmissible. The attention of the Board was drawn to the letter dated 27 November 2019 submitted by the appellant (opponent) during the opposition proceedings indicating "*Safran Aircraft Engines*" (and not "*Cabinet Beau de Loménie*") as the only opponent in the proceedings in front of the opposition division. In view of this circumstance, the respondent (patent proprietor) argued that the "*true intention*" mentioned by the appellant (opponent) could also have been to file the opposition, and therefore the subsequent appeal, in the name of "*Safran Aircraft Engines*", and not in the name of "*Cabinet Beau de Loménie*" as now asserted by the appellant (opponent). It was thus concluded that, given that there were (at least) two equally plausible but contradictory "*true intentions*" which could be equally inferred from the submissions of the appellant (opponent) during the opposition and appeal proceedings, the genuine "*true intention*" of the appellant (opponent) and hence the intended name of the appellant remained unclear, with the consequence to render the appeal inadmissible.

1.4 The arguments of the respondent (patent proprietor) are not convincing for the following reasons:

There is no doubt that "*Cabinet Beau de Loménie*" was the only opponent in the first instance proceedings (see for example EPO Form 2300E accompanying the notice

of opposition and section "*Summary of Facts and Submissions*" in the decision of the opposition division). The fact that the opponent was acting on behalf of a third-party, here "*Safran Aircraft Engines*" as acknowledged by the appellant (opponent), has no bearing on the identity of the opponent who is the person who fulfills the requirements of the EPC for filing an opposition (see G3/97, reasons 2), here "*Cabinet Beau de Loménie*". In this context, the letter dated 27 November 2019 cited by the respondent (patent proprietor) in support of their arguments and indicating that the opposition was filed in the name of "*Safran Aircraft Engines*" evidently contains an error which, as such, cannot question the fact that only "*Cabinet Beau de Loménie*" has the procedural status of opponent in the proceedings as identified in the notice of opposition. Therefore, contrary to the respondent's (patent proprietor's) view, it is immediately apparent from the file that the only "*true intention*" of the appellant (opponent) was to file an appeal in the name of "*Cabinet Beau de Loménie*" which had the status of opponent during the first instance proceedings and which, as such, was entitled to appeal the interlocutory decision of the opposition division by which the appellant (opponent) was negatively affected (see Article 107 EPC). This is not the case of "*Safran Aircraft Engines*" which never had the status of opponent and hence could not be entitled to appeal that decision. The correction requested does not thus represent a change of mind as to whom the appellant should be, but actually expresses what was really intended by the appellant (opponent) when filing the appeal. Finally, the Board also considers that, taking into account of the circumstances alleged by the appellant (opponent) and related to the COVID-19's restrictions and safety measures in place at that time,

the request for correction under Rule 139 EPC was filed without delay by the appellant (opponent) after they could become aware, upon reception of the summons for oral proceedings on 25 September 2020, of the erroneous indication of the appellant's name.

- 1.5 In view of the above, the request for correction is considered allowable under Rule 139 EPC and, as a consequence, the appeal is admissible. The auxiliary request for re-establishment is therefore moot and needs not to be decided. The corresponding fee will be reimbursed to the appellant (opponent).

MAIN REQUEST

Amendments: Article 123 (2) EPC

2. The main request meets the requirements of Article 123(2) EPC as stated in the decision under appeal.
- 2.1 With their appeal the appellant (opponent) contested the conclusion of the opposition division that the subject-matter of claim 1 complied with the requirements of Article 123(2) EPC. As at the oral proceedings both parties merely referred to the arguments already submitted in writing in this respect, the Board has no reason to deviate from the reasoning and the conclusion presented in the preliminary opinion which are hereby confirmed and which read as follow:
- 2.2 The appellant (opponent) maintained the second one of the two objections raised during the opposition proceedings under Article 123(2) EPC in respect to claim 1 as granted (see contested decision, point 2.2 .1) which also applied to claim 1 maintained, namely that the feature of claim 1 stating that the passages

extend *"lengthwise into the liner assembly from said opening by a length"* is not directly and unambiguously supported by the originally filed application. It was in particular alleged that the opposition division was wrong in not considering the introduction of this feature in claim 1 as maintained as an unallowable intermediate generalisation of the embodiment in figure 2 of the application as filed showing other features which were unallowably omitted in claim 1.

- 2.3 The Board shares the view of the respondent (patent proprietor) that the wording of the originally filed claim 1 still present in claim 1 as maintained stating that the passages include *"an opening and a length wherein a length of each of the plurality of passages is at least 50 times a width of each passage"* already implies, in view of the given ratio between the length of the passage and its width, that the passages extend along their principal direction and hence *"lengthwise"*. This also implies for the person skilled in the art that each passage (per definition) extends from the respective *"said opening by a length"*. This interpretation of the wording of claim 1 as filed is also fully supported by figure 2. Taking into account that, as explained above, the origin and the elongated shape of the passages can be directly and unambiguously derived from claim 1 as filed which however does not recite the remaining features shown in figure 2 the Board, in accordance with the assessment of the opposition division, does not see how the omission in claim 1 of the features mentioned by the appellant (opponent) could lead to an unallowable intermediate generalisation. The Board also notes that the assessment of this issue provided by the examiner during the examination proceedings referred to by the appellant (opponent) is not binding for the decision of

the Board.

- 2.4 In view of the above, the assessment of the opposition division in respect of compliance with Article 123(2) EPC is confirmed.

Novelty: Articles 52(1) and 54 EPC

3. The subject-matter of claim 1 as maintained by the opposition division is novel over the prior art in the meaning of Articles 52(1) and 54 EPC as stated in the decision under appeal.

- 3.1 With their appeal the appellant (opponent) contested the conclusion of the opposition division and maintained that the subject-matter of claim 1 lacked novelty over both documents O1 (state of the art in the meaning of Article 54(3) EPC) and O2.

Novelty over O1

- 3.2 Under discussion is the last feature of claim 1 stating that *"the open area is greater than substantially 80% of the entire area of the liner assembly."*
- 3.3 The appellant (opponent) considered this feature to be directly and unambiguously derivable from the passage in paragraph [0005] of document O1 (see A-publication) stating that *"La structure métallique ainsi décrite présente une porosité pouvant dépasser 70% , donc une masse volumique compatible avec des applications aéronautiques."* (emphasis added).
- 3.4 In order to decide novelty of claim 1 in view of O1, the assessment of the following points under discussion is required:

Interpretation of the expression "open area"

- 3.5 Regarding the disputed interpretation of the term "open area" in the technical context of claim 1, the Board concurs with the appellant (opponent) that a person skilled in the art understands it as meaning the sum of all the individual areas of the openings associated to the respective passages, said areas being measured on a cross-section coincident with top surface of the liner.

"Porosity" vs. "opening ratio"

- 3.6 A further and decisive point under discussion is whether the value of the porosity of the liner suggested in the last sentence of paragraph [0005] of document O1 can be considered numerically comparable to the opening ratio expressed in claim 1 as the % of the total open area defined by the openings on the top surface of the liner and the total extension of the top surface itself, i.e. to the so-called "opening ratio" defined by the last feature of claim 1 at stake.

- 3.6.1 The person skilled in the art knows that the porosity of a material is generally expressed as the % ratio of the total volume of the cavities present in a material vs. the total volume thereof and thus, in the case of the liner according to O1, as the % ratio of the total empty volume delimited by the passages provided into the body of the liner and the total volume of the liner.

- 3.6.2 Based on the definition and considerations above, the Board concurs with the appellant (opponent) that, contrary to the view of the opposition division and of the respondent (patent proprietor), the numerical value of the porosity of the liner of O1 can be directly

compared to the opening ratio defined in claim 1. In fact, as described in paragraph [0005] of this prior art document, the passages provided in the liner are cylindrical and perpendicular to its top surface. The person skilled in the art can thus assume that each passage has the same cross-section area across the whole length of the liner. It follows that the value of the porosity of the known liner also numerically corresponds to the opening ratio measured at the top surface thereof, whereby the value suggested in O1 for the porosity of the liner can be compared, for the purpose of novelty assessment, with the value of the opening ratio defined in the last feature of claim 1 as maintained.

- 3.7 The appellant (opponent) argued that the cited passage of document O1 suggested a porosity/opening ratio >70%, and hence an open range for the porosity having a lower limit set at 70% and, in practice, an implicit and inherent physical upper limit <100% required to guarantee that there is enough material left to ensure a sufficient structural stability of the liner. For the same reasons the appellant (opponent) considered that claim 1 analogously required an opening ratio >80% with an inherent physical upper limit <100%. In view of the above interpretation of O1, the appellant (opponent) put forward that the disputed feature of claim 1 resulted in a selection of a narrower range for the opening ratio, i.e. >80% and <100% from a broader known range, i.e. >70% and <100%, suggested in O1 for the porosity/opening ratio of the liner. In addition, it was alleged that the person skilled in the art assumed that the inherent physical upper limits of the ranges disclosed in O1 and defined in claim 1 were identical or at least very close due to the similarity of the product at stake (a liner) and to the consequent

similarity of the mechanical characteristics of the material used for its manufacture. The appellant (opponent) referred to the EPO Guidelines, G-VI-8 relating to the criteria for assessing novelty of so-called "*selection inventions*" and asserted that neither of the criteria (a) and (b) indicated therein and required for a sub-range of values to be considered novel over a known broader range were met, whereby the subject-matter of claim 1, contrary to the assessment of the opposition division, lacked novelty over O1.

3.8 The Board does not agree for the following reasons:

As convincingly explained by the respondent (patent proprietor) with their replies and reiterated at the oral proceedings, the cited passage of O1 and in particular the wording "*une porosité pouvant dépasser 70%*" (emphasis added) does not directly and unambiguously disclose any range, but merely suggests to select the porosity of the liner below 70%, while said porosity may (but not necessarily) exceed 70%, for example in the case of aeronautical applications requiring a liner characterized by a lightweight structure. In particular, the Board agrees with the respondent (patent proprietor) that the cited passage of O1, contrary to the appellant's (opponent)'s allegation, does not disclose any upper limit for the porosity, so that the skilled person has no indication how far above 70% the value of the porosity may eventually go, i.e. whether the porosity can actually reach or exceed 80%. In support of this assertion the respondent (patent proprietor) correctly observed that O1 does not provide any specific example, in particular any example characterized by a porosity >80% and thus in accordance with claim 1 justifying the

interpretation of the appellant (opponent).

- 3.9 In conclusion the Board concurs with the opposition division and the respondent (patent proprietor) that document O1 does not directly and unambiguously disclose any range for the porosity, let alone a porosity exceeding 80%, whereby this state of the art is not prejudicial to novelty of claim 1.

Novelty over O2

- 3.10 The appellant (opponent) argued that document O2 disclosed on page 4, lines 9 to 14 an opening ratio $\Gamma \geq 40\%$, said broader range allegedly depriving of novelty the narrower range claimed in the contested patent for the opening ratio, i.e. $>80\%$ and $<100\%$. However, as already explained in respect of O1 and contrary to the view of the appellant (opponent), due to the lack of any indication regarding the upper limit to be adopted, the alleged broader range $>40\%$ and $<100\%$ cannot be directly and unambiguously derived from O2. Furthermore, even by assuming that this is the case, both the criteria (a) and (b) required by the above mentioned EPO Guidelines-VI-8 referred to by the appellant (opponent) for considering novel a narrower range selected from a known broader range (so-called "*selection inventions*") are met. In fact, regarding criterion (a) and as stressed by the respondent (patent proprietor), the claimed range $>80\%$ (and inherently $<100\%$) is narrow compared to the range $>40\%$ (and inherently $<100\%$) allegedly disclosed in O2. Regarding criterion (b), the Board concurs with the respondent (patent proprietor) that while the lower end-limits are known (i.e. 80% and 40% respectively) and are sufficiently far removed from each other, nothing can be said regarding the proximity of upper end-limits

because no upper end-limit is directly and unambiguously derivable from O2. Therefore it cannot be asserted that the criterion (b) is not met. Regarding the third criterion (c) also invoked by the appellant (opponent) the Board, in accordance with the respondent (patent proprietor), follows the jurisprudence established by several decisions of the Boards of Appeal (see "Case Law" of the Boards of Appeal, version 2019, I-C.6, second paragraph on page 143) which considered the so-called criterion of the "*purposive selection*" only relevant for assessing inventive step, but not novelty. Document O2 is thus not prejudicial to novelty of claim 1 as maintained.

- 3.11 In conclusion the Board confirms the assessment of the opposition division regarding novelty.

Inventive Step: Articles 52(1) and 56 EPC

4. The subject-matter of independent claim 1 as maintained is not rendered obvious by the prior art in the meaning of Articles 52(1) and 56 EPC as stated in the decision under appeal.
- 4.1 The appellant (opponent) contested the conclusion of the opposition division and alleged that the subject-matter of claim 1 was obvious in view of document O2 and common general knowledge.
- 4.2 There is agreement that document O2 represents the closest prior art.
- 4.3 The appellant (opponent) contested the view of the opposition division that, beside the claimed opening area ratio >80%, also the length/width ratio of the passages required by the first feature of the

characterizing portion of claim 1 was not disclosed in O2. Furthermore the appellant (opponent) criticized the statement of the technical problem of the opposition division and argued that the alleged distinguishing features solve two different and unrelated technical problems, which should thus be dealt with separately when assessing inventive step. It was also objected that the contested patent did not contain any passage indicating that the distinguishing features assessed by the opposition division solved in combination the technical problem alleged by the respondent (patent proprietor) and confirmed by the opposition division, namely maximizing the visco-thermal dissipation of noise energy across a broad frequency range. It was also put forward that document O2 already suggested to maximize acoustic absorption by maximizing the open area and the length/width ratio of the passages. In support of this assertion, the appellant (opponent) referred to the passage of O2, page 6, line 34 to page 7, line 9 and noted that, in any case, O2 solved the same technical problem that according to the opposition division was addressed by the contested patent. The appellant (opponent) concluded that it would be obvious for the skilled person starting from O2 and aiming at improving the prior art liner in the sense of maximizing the visco-thermal dissipation of noise energy across a broad frequency range, to select from the suggested opening area ratio >40% a value >80% as required by claim 1 also in view of the fact that this step would result in a reduction of the weight of the liner which is obviously welcomed in the case of aeronautical application.

- 4.4 The Board is not convinced by the arguments put forward by the appellant (opponent) for the following reasons:

As convincingly indicated by the respondent (patent proprietor), paragraphs [0009] and [0010] of the contested patent clearly explain, contrary to the appellant's (opponent's) allegation, that both the claimed length/width ratio and the opening area ratio synergistically interact in such a way to achieve the desired technical effect of maximizing the visco-thermal dissipation of noise energy across a broad frequency range. Even by assuming, as asserted by the appellant (opponent), that the claimed length/width ratio of the passages falls under certain embodiments resulting from the passage on page 4, lines 15-18 of O2, namely a length of the liner of 80 mm combined with any width of the openings within the full interval 0.1-1.00 mm disclosed therein, the Board concurs with the opposition division and the respondent (patent proprietor) that the person skilled in the art has no motivation to additionally considerably narrow the range for the opening area ratio suggested in O2 and set its lower end-limit at 80% in order to improve the visco-thermal dissipation of noise energy across a broad frequency range. Such a modification of the solution disclosed in O2 which is required to achieve the solution according claim 1 of the patent as maintained is not rendered obvious by the available prior art also in view of common general knowledge.

4.5 The Board thus also confirms the assessment of the opposition division regarding inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



A. Vottner

G. Pricolo

Decision electronically authenticated