

**Internal distribution code:**

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

**Datasheet for the decision  
of 12 December 2017**

**Case Number:** T 1951/16 - 3.2.05

**Application Number:** 08171118.6

**Publication Number:** 2070688

**IPC:** B29C65/48

**Language of the proceedings:** EN

**Title of invention:**

Aircraft structures bonded with adhesive including  
magnetostrictive material

**Applicant:**

The Boeing Company

**Relevant legal provisions:**

EPC Art. 111(1), 116(1)

EPC R. 103(1)(a)

RPBA Art. 11

**Keyword:**

Substantial procedural violation - request for oral  
proceedings ignored (yes)

Unity of invention - invitation to pay further fees justified  
(yes) - refund of further search fee (no)

Reimbursement of appeal fee (no)

**Decisions cited:**

T 0019/87, T 0766/90, T 0879/92, J 0012/15



**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 1951/16 - 3.2.05

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.05**  
**of 12 December 2017**

**Appellant:** The Boeing Company  
(Patent Proprietor) 100 North Riverside Plaza  
Chicago, IL 60606-1596 (US)

**Representative:** Mark Wegener  
Witte, Weller & Partner Patentanwälte mbB  
Postfach 10 54 62  
70047 Stuttgart (DE)

**Decision under appeal:** Interlocutory decision of the Examining Division  
of the European Patent Office posted on  
23 May 2016 refusing the request for refund of  
two further search fees.

**Composition of the Board:**

**Chairman** S. Bridge  
**Members:** P. Lanz  
D. Rogers

## **Summary of Facts and Submissions**

- I. The appeal by the applicant is directed against the interlocutory decision of the examining division dated 23 May 2016 refusing a request for the refund of two *[sic]* further search fees in respect of European patent application No. 08 171 118.6. The board notes that the request underlying the decision under appeal was for the refund of one further search fee.
- II. On 2 March 2011, the search division dispatched a communication which stated that it considered that the application was non-unitary in view of document D1 (US 5 641 422 A), which disclosed the subject-matter of original claim 1. It identified four groups of inventions, issued a partial European search report covering the first group of inventions and invited the appellant to pay three further search fees for the second, third and fourth groups of inventions.
- III. On 15 April 2011 the appellant requested a further search on the fourth group of inventions and paid the related further search fee.
- IV. On 31 May 2011 a search report covering the first and fourth groups of inventions was issued.
- V. In letters dated 15 December 2011, 7 August 2013 and 8 September 2014, the appellant submitted amended application documents and requested, on an auxiliary basis, an informal interview and/or oral proceedings.
- VI. In a further letter of 6 July 2015, the appellant proposed another amendment of the patent application. Additionally, it requested the refund of the further

search fee paid, because the finding that the features of original claim 1 were known from document D1 was, in fact, incorrect. It repeated that, "*[o]nly as an auxiliary measure, an informal interview and/or oral proceedings are requested*".

- VII. On 23 May 2016 the examining division issued its decision rejecting the request for the refund of the further search fee without a prior informal interview or oral proceedings. This decision forms the subject of the present appeal.
- VIII. In the notice of appeal, the appellant essentially argued that document D1 related to the thermoplastic welding of aircraft structures and not to bonding them with an adhesive. The subject-matter of original claim 1 was therefore novel. In consequence, the non-unity objection was not justified and the further search fee paid should have been refunded. Oral proceedings before the board of appeal were requested as an auxiliary measure.
- IX. In a communication dated 1 June 2017, the board set out its preliminary opinion, that the impugned decision was tainted with a substantial procedural violation since the examining division had failed to hold oral proceedings before refusing the request for the refund of the further search fee. The board was therefore of the view that it should issue a decision setting aside the decision under appeal and remit the case to the examining division.
- X. By letter dated 17 July 2017, the appellant took note of the board's preliminary view and submitted that a direct remittal would unduly delay the proceedings. The board should itself take a decision on the merits of

the case, in particular on the issue of novelty in view of document D1 underlying the disputed non-unity objection. The request for oral proceedings before the board of appeal was withdrawn.

- XI. The appellant's final requests were that the decision under appeal be set aside, that the appeal fee be reimbursed, that the reimbursement of the additional search fee be recommended, and that it be recommended that the search for each of the original claims be carried out.

### **Reasons for the Decision**

1. *Substantial procedural violation*
- 1.1 In their letters dated 15 December 2011, 7 August 2013, 8 September 2014 and 6 July 2015 the appellant requested oral proceedings before the examining division with the words, "*[o]nly as an auxiliary measure, an informal interview and/or oral proceedings are requested*". No oral proceedings were held and the examining division refused the request for refund of the further search fee.
- 1.2 The board considers that this request for oral proceedings is to be interpreted as meaning that if the examining division were minded not to grant the appellant's requests, including the request for refund of the further search fee, the appellant wished to have the opportunity to present its case at oral proceedings.
- 1.3 The right of a party to oral proceedings in examination, opposition and appeal procedures is set out in Article 116 EPC. Accordingly, an adverse

decision issued without granting the aggrieved party's request for oral proceedings must be set aside (see T 19/87, OJ EPO 1988, 268, Reasons point 3; T 766/90, Reasons point 2.1; J 12/15; and the "Case Law of the Boards of Appeal of the European Patent Office", 8<sup>th</sup> edition 2016, III.C.1, page 558 et seq.).

1.4 Additionally, no clearly expressed intention on the part of the appellant to withdraw its request for oral proceedings before the examining division is apparent from the file. Silence on the part of the appellant cannot be interpreted as withdrawal of the request for oral proceedings. The board therefore holds that this request is still valid and was therefore also valid at the time of the contested decision (see T 879/92, Reasons points 2 and 3; "Case Law of the Boards of Appeal of the European Patent Office", 8<sup>th</sup> edition 2016, III.C.2.3, page 562).

1.5 The decision of the examining division dated 23 May 2016 must therefore be set aside. The appellant was entitled to oral proceedings before the examining division. Accordingly, the failure to hold such oral proceedings before refusing the request for refund of the further search fee constitutes a substantial procedural violation.

2. *Remittal of the case*

2.1 Article 11 of the Rules of Procedure of the Boards of Appeal (RPBA) provides that a case shall be remitted to the department of first instance if fundamental deficiencies are apparent in the first instance proceedings, unless special reasons present themselves for doing otherwise.

2.2 The board holds that special reasons speak against a direct remittal of the present case to the examining division. In particular, the appellant as the party concerned by the procedural violation explicitly requests the board not to remit the case. Additionally, the department of first instance evidently took note of the appellant's case on the question of non-unity, even though the appellant was deprived of the opportunity to present it orally.

Consequently, considering all the relevant facts, the board concludes that, under the present circumstances, a remittal of the case to the department of first instance against the appellant's explicit request would be inequitable. The board thus exercises its discretion under Article 111(1) EPC and Article 11 RPBA in the sense that it decides itself on the merits of the case.

3. *Non-unity of the original claims*

3.1 Claim 1 as filed reads as follows:

*"A method comprising bonding first and second aircraft structures (110, 120) together with an adhesive (130) including strain-sensitive magnetostrictive material."*

3.2 In the impugned decision, the examining division found that original claim 1 lacked novelty over document D1 and that the original dependent claims lacked unity. It is the examining division's finding regarding novelty which the appellant challenges in the present appeal proceedings. The contested issue of non-unity therefore hinges on the question of whether or not the subject-matter of claim 1 is disclosed in document D1, that is whether it is novel over the disclosure of document D1.



3.3 In its novelty assessment, the examining division referred to the column 4, lines 31 to 34 and column 12, lines 15 to 48 of document D1 as anticipating the claimed subject-matter. The cited passages relate to thermoplastic welding using a metal ribbon for inductively heating and melting the surfaces to be bonded, wherein the molten resin of the thermoplastic part to be joined *"functions as a hot melt adhesive"* (cf. column 4, lines 31 to 34). According to the examining division, the materials disclosed in column 12 of document D1 (*inter alia* cobalt-alloy and nickel-iron alloys) have magnetostrictive properties.

3.4 The relevant passages of document D1 read as follows (emphasis added by the the board):

*"Three major joining technologies exist for aerospace composite structure: mechanical fastening; adhesive bonding; and welding. Both mechanical fastening and adhesive bonding are costly, time consuming assembly steps that introduce excess cost even if the parts that are assembled are fabricated from components produced by an emerging, cost efficient process. Mechanical fastening requires expensive hole locating, drilling, shimming, and fastener installation, while adhesive bonding often requires complicated surface pretreatments.*

*In contrast, thermoplastic welding, which eliminates fasteners, features the ability to join thermoplastic composite components at high speeds with minimum touch labor and little, if any, pretreatments. In our experience, the welding interlayer (comprising the susceptor and surrounding thermoplastic resin either coating the susceptor or sandwiching it) also can simultaneously take the place of shims required in mechanical fastening. As such, composite welding holds*

*promise to be an affordable joining process. For "welding" thermoplastic and thermoset composite parts together, the resin that the susceptor melts functions as a hot melt adhesive. If fully realized, the thermoplastic-thermoset bonding will further reduce the cost of composite assembly." (cf. column 4, lines 13 to 35).*

*"An electromagnetic induction coil heats a susceptor to melt and cure a thermoplastic resin (also sometimes referred to as an adhesive) to bond the elements of the assembly together." (cf. column 5, lines 43 to 46)*

*"The metal ribbon may be copper, a cobalt alloy, nickel-iron alloys, or any other suitable "smart" susceptor from the alternatives discussed in U.S. patent application 08/469,604". (cf. column 12, lines 47 to 50).*

- 3.5 In view of the above, the board concludes that document D1 discloses a method of bonding first and second aircraft structures. The bonding interlayer comprises a metal coated with or surrounded by a thermoplastic resin, wherein the latter has the function of and is explicitly referred to as an adhesive. Consequently, document D1 concerns the bonding of aircraft structures with an adhesive. Moreover, the appellant does not dispute that cobalt alloys and nickel-iron alloys, which document D1 suggests as materials for the metal of the interlayer, have magnetostrictive properties (cf. application as filed, paragraph [0016] refers to nickel-iron alloys as a magnetostrictive material). For these reasons, document D1 fully anticipates the subject-matter of original claim 1.

3.6 This conclusion is not altered by the fact that the method of document D1 is referred to as "thermoplastic welding", as pointed out by the appellant. As explained above, the method of document D1 comprises all features of the contested claim. Hence, the designation as "welding" in the prior art cannot, as such, establish a difference in substance, which would clearly distinguish the claimed subject-matter from the disclosure of document D1.

3.7 Based on these considerations, the board holds that, contrary to the appellant's view, the subject-matter of original claim 1 is not new over document D1. Since the appeal is confined to this issue, the finding in the impugned decision on a lack of unity of the claims as filed is upheld and the appeal is to be dismissed. In consequence, the appellant's requests for a reimbursement of the additional search fee and for a search of each of the original claims are not allowable.

4. *Reimbursement of the appeal fee*

4.1 The provisions of Rule 103(1)(a) EPC require the appeal to be allowable for the appeal fee to be reimbursed in the event of a serious procedural violation. Since this condition is not met, the appellant's request for a reimbursement of the appeal fee has to be refused.

## Order

### For these reasons it is decided that:

1. The appeal is dismissed.
2. The request for a reimbursement of the appeal fee is refused.
3. The case is remitted to the examining division for further prosecution.

The Registrar:

The Chairman:



D. Meyfarth

S. Bridge

Decision electronically authenticated