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**Datasheet for the decision  
of 14 April 2011**

**Case Number:** T 2193/10 - 3.2.05

**Application Number:** 04786540.7

**Publication Number:** WO 2005/018917

**IPC:** B29C 70/32

**Language of the proceedings:** EN

**Title of invention:**

Multiple head automated composite laminating machine for the  
fabrication of large barrel section components

**Applicant:**

The Boeing Company

**Opponent:**

-

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 54, 110, 113(1), 123(2)  
EPC R. 101

**Relevant legal provisions (EPC 1973):**

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**Keyword:**

"Admissibility of the appeal - yes"  
"Extension beyond the application as filed - no"  
"Right to be heard"  
"Novelty - yes"

**Decisions cited:**

G 0004/92, T 0341/92

**Catchword:**

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Case Number: T 2193/10 - 3.2.05

**D E C I S I O N**  
of the Technical Board of Appeal 3.2.05  
of 14 April 2011

**Appellant:**

The Boeing Company  
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IL 60606-2016 (US)

**Representative:**

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**Decision under appeal:**

Decision of the Examining Division of the  
European Patent Office posted 16 July 2010  
refusing European patent application  
No. 04786540.7 pursuant to Article 97(2) EPC.

**Composition of the Board:**

**Chairman:** W. Zellhuber  
**Members:** H. Schram  
M. J. Vogel

## Summary of Facts and Submissions

I. The appeal is against the decision of the Examining Division posted on 16 July 2010 refusing European patent application No. 04 786 540.7 on the grounds that the subject-matter of claims 1 and 24 of the sole request of the appellant (applicant) extended beyond the content of the application as filed (Article 123(2) EPC).

II. In a first communication dated 23 June 2006 the examiner entrusted with the examination of the application made an objection of lack of novelty based on document WO 03/035380 (D1) against independent claims 1, 23 and 24 filed on 14 February 2006 upon entry into the regional phase before the EPO. In a second communication dated 31 March 2008, and in the communication dated 15 March 2010 annexed to the summons to oral proceedings scheduled for 17 June 2010, the novelty objection was upheld against the amended independent claims filed on 3 April 2007.

The claims on which the decision is based were filed on 16 June 2010, one day before the oral proceedings before the Examining Division. In the accompanying letter the appellant submitted that the invention as claimed was novel and inventive and requested that the oral proceedings be cancelled and that the application be allowed to proceed to grant.

On the same day a consultation by telephone took place between the examiner entrusted with the examination of the application and the representative of the appellant. The result of the consultation was:

"Although, the applicant withdrew his request for oral proceedings and announced not to come, the oral proceedings will take places (sic) as scheduled", see EPO Form 2036 dated 16 July 2010.

According to the minutes of the oral proceedings, the Examining Division found that claim 1 did not meet the requirements of Article 123(2) EPC, since the feature "all of the other delivery heads" was not defined in claim 1 (cf page 15, line 21, of the description). It was also found that claim 1 was not new over the disclosure of document D1.

Concerning the right to be heard, reference was made during the oral proceedings to the Guidelines for Examination E-III, 8 and decision T 341/92, see point 9 of the Facts and Submissions of the decision under appeal. In point 3 of the decision under appeal, it was held that the objection under Article 123(2) EPC was not a "new ground" on which the decision was based within the meaning of Article 113(1) EPC, "*since the applicant should be aware that as soon as amendments are filed, the examining division has to check these amendments whether they meet the requirements of the 123(2) EPC*", with reference to the Guidelines E-III, 8.3 and the decisions cited therein.

In point 4, entitled "Miscellaneous" (sic), of the decision under appeal the Examining Division held that the subject-matter of claim 1 further amended by the missing expression "all" did not seem to be novel over D1.

The final point of the decision under appeal reads:  
"Summarizing, the application EP 04 786 540.7 is refused under Article 97, since independent claim 1 and 24 has been extended beyond the original disclosure contrary to Article 123(2) EPC."

III. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 24 which were refused by the Examining Division.

IV. Claims 1, 23 and 24 of the sole request read as follows:

"1. A device (200) for fabricating a section of an aircraft fuselage via automated composite lamination on a mandrel surface (206) of a tool (202), the device comprising:

    a tool comprising a rotational axis and the mandrel surface, wherein the mandrel surface conforms to the section of the aircraft fuselage;

    a mechanical supporting structure (210) moveable relative to the mandrel, wherein the tool is rotatable relative to said mechanical supporting structure; and

    a plurality of material delivery heads (208) supported by said mechanical supporting structure, wherein:

        said mechanical supporting structure provides for movement of said plurality of material delivery heads relative to the mandrel surface during fabrication of the section of the aircraft fuselage, and

        wherein each of said plurality of material delivery heads is arranged to be controlled by a computer numerical control applicaton (sic) to control the plurality of material delivery heads simultaneously

to apply composite material along the mandrel surface during fabrication of the section of the aircraft fuselage and individually positionally adjustable relative to the mandrel surface and the other material delivery heads during application of the composite material by the material heads during fabrication of the section of the aircraft fuselage."

"23. An aircraft part manufacturing device for automated composite lamination on a mandrel surface of a tool having a rotational axis, comprising the device according to any of claims 1-22."

"24. A method for fabricating a section of an aircraft fuselage using a plurality of material delivery heads to apply composite materials on a mandrel surface of a mandrel having an axis, wherein the mandrel is rotatable relative to said plurality of material delivery heads, and wherein the mandrel surface substantially conforms to the section of the aircraft fuselage, the method comprising steps of:

applying, via the material delivery heads, composite material along the mandrel surface during fabrication of the section of the aircraft fuselage;

moving said material delivery heads relative to the mandrel surface during application of the composite material by the material delivery heads during fabrication of the section of the aircraft fuselage using a computer numerical control application to simultaneously (sic) control the plurality of material delivery heads; and

individually adjusting positions of at least some of said material delivery heads relative to the mandrel surface and the other material delivery heads during

application of the composite material by the material delivery heads during fabrication of the section of the aircraft fuselage using a computer numerical control application to simultaneously control the plurality of material delivery heads."

- V. In support of its request, the appellant submitted that computer numerical control applications were a specific control mechanism used within the aerospace industry for laying material in the manufacture of aircraft components. A principal advantage for the use of CNC machines over the use of robots as taught in document D1 was their ability to manufacture a feature with accuracy and repeatability. However, it had been these very features that had resulted in the person skilled in the art being biased against the idea of multiple, independent control of material delivery heads using CNC. Document D1 not only failed to disclose the independent control of a plurality of material delivery heads simultaneously using a computer numerical control application, it actually led the person skilled in the art away from considering such a solution. The invention as claimed was thus novel and inventive.

The appellant did not make any submission with respect to the sole ground for the refusal (inadmissible extension beyond the content of the application as filed), or give comments on point 3 ("Right to be heard") of the decision under appeal.



## Reasons for the Decision

### 1. *Admissibility of the appeal, Article 110 EPC*

For an appeal to be admissible, the grounds for appeal should normally specify the legal or factual reasons vis-à-vis the main reasons given for the contested decision, ie specify the reasons why that decision should be set aside. In the present case the appellant did not give any reason why the main reasons given for the contested decision, namely inadmissible extension beyond the content of the application as filed, Article 123(2) EPC, were wrong, while requesting that a patent be granted on the basis of the very claims that were refused by the Examining Division. Having regard to the fact that the admissibility of an appeal can only be assessed as a whole, and that the appellant specified the reasons why the novelty objection in the decision under appeal was unfounded, the Board considers the appeal admissible, cf Article 110 EPC and Rule 101 EPC.

### 2. *Objection of inadmissible extension, Article 123(2) EPC*

2.1 The application was refused on the grounds that the added features "[is arranged to be controlled by] a computer numerical control application to control the plurality of material delivery heads simultaneously" and "a computer numerical control application to simultaneously control the plurality of material delivery heads" (present in claims 1 and 24 of the sole request of the appellant, respectively) extended beyond the content of the application as filed.

2.2 The Examining Division held that the numerical control was disclosed (see paragraph [0041] of the published version of the application as filed) "only in the circumstance that all of the material delivery heads are controlled". It concluded that the expression "all" was missing in claims 1 and 24, see point 2 of the decision under appeal.

The Examining Division apparently took the narrow view that what had to be examined under Article 123(2) EPC was whether the (wording of the) added features extended beyond the content of the application as filed.

However, Article 123(2) EPC stipulates that "The European patent application or European patent may not be amended in such a way that it contains subject-matter which extends beyond the content of the application as filed (emphasis added by the Board).

The feature of claim 1 which is objected to reads in full: "wherein each of said plurality of material delivery heads is arranged to be controlled by a computer numerical control applicaton (sic) to control the plurality of material delivery heads simultaneously".

A straightforward interpretation of this feature is that each of said plurality of material delivery heads is simultaneously controlled by a computer numerical control application. In other words, all of the material delivery heads 208 are simultaneously controlled.

This interpretation is in conformity with paragraph [041] of the application as filed (published version), of which the first sentence reads: "Each of the multiple material delivery heads 208 may be individually controlled in coordination with all of the other delivery heads 208, for example, by expanding existing numerical control (NC) or computer numerical control (CNC) programming software to control all of the material delivery heads 208 simultaneously", see also page 17, lines 16 to 19, of the application as filed (published version).

In the judgment of the Board, the expression "the plurality of [the material delivery heads]" in claim 1 is equivalent to the expression "all of [the material delivery heads]". There is hence no need to amend the expression "the plurality of" to read "all of the plurality of" in order to comply with the requirements of Article 123(2) EPC, as suggested by the Examining Division in point 4 of the decision under appeal (see page 5, lines 10 to 9 from the bottom).

- 2.3 It may be noticed that, apart from paragraph [041] of the application as filed (published version), paragraph [052] also provides a basis for the amendments to claim 1 and 24 mentioned above. In the latter paragraph it is stated that "The process of material delivery, positioning and moving the material delivery heads, and rotating the tool may be controlled using NC or CNC techniques to provide coordinated control for the multiple material delivery heads simultaneously" (emphasis added by the Board).

The objections raised under Article 123(2) EPC during the oral proceedings by the Examining Division, in the absence of the appellant, are thus ill-founded.

3. *Right to be heard and basis of decisions. Article 113(1) EPC*

The Guidelines for Examination E-III, 8.3 deals with the situation in which a party who has been duly summoned to oral proceedings does not appear at oral proceedings.

The penultimate paragraph of this Section (April 2010) reads:

"An absent party cannot be considered taken by surprise if during oral proceedings the other side attempts to overcome objections raised before the oral proceedings. In particular, a submission during oral proceedings of a more restricted and/or formally amended set of claims with a view to overcoming the objections of the opponent is not considered a "new fact" (...). Nor is it unexpected that amended claims are examined for formal admissibility and for compliance with Art. 123(2) and (3) (see T 341/92, OJ 6/1995, 373)."

The Examining Division cited the above paragraph in point 3 of the decision under appeal. It considered the applicant-appellant as the "absent party" and the Examining Division as the "other side". However, it is clear that the "absent party" and the "other side" in the cited paragraph stand for the absent opponent and the patent proprietor, respectively. That the above paragraph pertains to inter partes oral proceedings is

also clear from the discussion in the two preceding paragraphs of the decision G 4/92 (OJ EPO 1994, 149 - Right to comment / party absent from oral proceedings), which only relates to inter partes oral proceedings, see point 1 of the Reasons.

The last sentence of the cited paragraph refers to the situation in which a patent proprietor has filed amended claims prior to oral proceedings, which it does not attend. In the inter partes case underlying decision T 341/92 (loc. cit.) the patent proprietor had deleted a feature in an independent claim. The Board stated that "According to established board practice, ..., amended claims are checked by the board of its own motion during the opposition appeal proceedings for formal admissibility and, in particular, the possibility of an infringement of Article 123(2) and (3) EPC. There is an obvious need to check for this latter possibility if the patent proprietor deletes a feature in an independent claim. ... It was therefore to be expected that a comparison of the amended claims with those of the granted patent for the purposes of Article 123(3) EPC would form part of the discussions at the oral proceedings, ...".

In the judgment of the Board, it is questionable whether, in an ex parte case, the possibility of an infringement of Article 123(2) EPC must in general be expected by an applicant who filed amended claims prior to oral proceedings and simultaneously announces that it will not attend the oral proceedings.

Since the appellant did not claim that its right to be heard with respect to Article 123(2) EPC had been

violated, and did not even mention the Article 123(2) EPC issue in its statement setting out the grounds of appeal, the Board refrains from investigating whether the requirements of Article 113(1) EPC are met, taking into account that a remittal without examining the novelty objection (formulated as an obiter dictum in the decision under appeal) would likely lead to a second refusal.

4. *Objection of lack of novelty, Article 54 EPC*

Claim 1 is directed to "1. A device (200) for fabricating a section of an aircraft fuselage via automated composite lamination on a mandrel surface (206) of a tool (202) ...". In the judgment of the Board, the expression "for fabricating a ..." must be interpreted as meaning "suitable for fabricating a ...". The expression "section of an aircraft fuselage" following the expression "for fabricating a ..." limits the scope of the claim only insofar as the device must be suitable for said purpose.

In the decision under appeal, the Examining Division held that the article to be fabricated did not limit the scope of the claim, see point 4 of the Reasons for the decision. However, the expression "section of an aircraft fuselage" appears four times in claim 1. For example, claim 1 requires that "the mandrel surface conforms to the section of the aircraft fuselage". In that feature the expression "the section of an aircraft fuselage" does limit the scope of the claim and must be taken into account in assessing novelty.

Document D1 discloses a device and a method for making aerodynamic structures using an assembly of mandrels, see page 4, line 16, to page 5, line 6. Figure 5 shows the device, which comprises a plurality of material delivery heads 21, each mounted on a robot 20, and supported by a mechanical supporting structure 22.

Document D1 does not disclose that "the mandrel surface conforms to the section of the aircraft fuselage".

Whilst document D1 states in a general way that the production is completely automated due to the use of design software, finite element analysis, simulations for depositing fibers and numerical control programming (see page 15, lines 8 to 10), this document does not disclose that each of the material delivery heads 21 is simultaneously controlled by a computer numerical control application.

The subject-matter of claims 1, 23 and 24 is thus new with respect to document D1.

5. Since the issue of inventive step has not yet been examined, and in order to maintain the appellant's right to appeal to a department of second instance, the Board exercises the discretion given to it under Article 111(1) EPC and remits the case to the Examination Division for further prosecution.

**Order**

**For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The case is remitted to the first instance for further prosecution.

The Registrar:

The Chairman:

D. Meyfarth

W. Zellhuber