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**Datasheet for the decision
of 19 April 2013**

Case Number: T 1209/10 - 3.2.06
Application Number: 97917554.4
Publication Number: 888201
IPC: B23P11/02, B23Q17/00, B25B5/00
Language of the proceedings: EN
Title of invention:
DETERMINANT SPAR ASSEMBLY
Patent Proprietor:
The Boeing Company
Opponent:
AIRBUS Deutschland GmbH/AIRBUS France SAS/AIRBUS
UK Limited/AIRBUS España S.L./AIRBUS SAS
Relevant legal provisions:
EPC Art. 84, 123(2), 112
RPBA Art. 13(1)

Keyword:

Amendments allowable (main request) - no
Lack of clarity (first to third auxiliary request) - not
admitted
Referral of a question to the Enlarged of Appeal - no



**Beschwerdekammern
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Chambres de recours**

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Case Number: T 1209/10 - 3.2.06

D E C I S I O N
of Technical Board of Appeal 3.2.06
of 19 April 2013

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
13 April 2010 concerning maintenance of the
European Patent No. 888201 in amended form.**

Composition of the Board:

Chairman: M. Harrison
Members: G. Kadner
R. Menapace

Summary of Facts and Submissions

- I. The mention of grant of European patent No. 0 888 201, with 19 claims, on the basis of European patent application No. 97917554.4 filed on 21 March 1997, and claiming a US priority of 22 March 1996, was published on 31 May 2006.
- II. Notice of opposition, in which revocation of the patent on the grounds of Article 100(a) and 100(b) EPC was requested, was filed against the granted patent by five joint opponents, herein after called "the opponent". The ground of opposition under Article 100(c) EPC was raised by the opponent during the opposition proceedings. With its interlocutory decision posted on 13 April 2010, the opposition division found that account being taken of the amendments made by the patent proprietor during the opposition proceedings, the patent and the invention to which it related met the requirements of the Convention.

Claim 1 of the patent, in the form found allowable by the opposition division, reads as follows (amendments with respect to claim 1 as granted underlined or ~~deleted~~):

"A method of making wing spars (3), comprising:

- hanging a spar web (45) on a fixture;
- probing said spar web (45) with a probe carried by a numerically controlled machine tool to accurately determine the spatial location of a plurality of critical coordination features on said spar web;
- normalizing a machine tool program having locations of said coordination features with said actual locations in space of said coordination features as determined by said probe;

- drilling a plurality of web coordination holes in said web using a numerically controlled machine tool (75) running on a said normalized machine tool program incorporating digital wing product definition from an engineering data authority, said web coordination holes being accurately located in a predetermined position on said web such that upper and lower spar chords (40, 42) can be positioned on said web with a vertical separation between them specified by said digital wing product;
- clamping said spar chords to said spar web; and
- fastening said spar chords to said spar web in said predetermined position specified by said digital wing product definition."

In the form of the patent found allowable by the opposition division, granted claim 9 remained unamended and has the following wording:

"A method of making wing spars, according to any of the claims 1-4 comprising:

- normalizing a machine tool program having locations of said coordination features with said actual locations in space of said coordination features as determined by said probe;
- drilling chord locator tool coordination holes with said machine tool (75) using said normalized machine tool program to direct a drill held by said machine tool to locations for mounting chord locator tools on said web;
- temporarily mounting chord locator tools (95) according to any of the claims 5-10 on said web with fasteners through said chord locator tool coordination holes, said chord locator tools each having upper and lower contact surfaces thereon at vertical spacings corresponding to desired vertical spacing of said

chords (40, 42) on said web;

- supporting said upper and lower chords on said upper and lower contact surfaces of said chord locator tools at precisely accurate positions along upper and lower edges of said web;
- clamping said upper and lower chords to said web at said edge positions;
- drilling fastener holes through said upper and lower chords and said web and inserting fastener in said fastener holes;
- tightening said fasteners in said fastener holes to securely fasten said upper and lower spar chords to said web; and
- removing said chord locator tools."

The opposition division held that claim 1 of the main request contravened Article 100(c) EPC and was thus not allowable, but that the first auxiliary request met the requirements of Articles 84, 123(2) and 123(3) EPC as well as those of Articles 83, so that the grounds of opposition under Articles 100(b) and (c) EPC did not prejudice maintenance of the patent. The method according to amended claim 1 was novel and involved an inventive step when compared with the cited prior art documents, in particular:

O1: EP-A-0 338 117

O2: EP-A-0 593 127

O4: US-A-4 995 146

III. Notice of appeal was filed against this decision by the appellant (opponent) on 2 June 2010, and the appeal fee was paid on the same day. The grounds of appeal were filed on 8 July 2010.

- IV. With letter dated 18 November 2010, the respondent (patentee) pursued its main request (to dismiss the appeal) and filed three auxiliary requests.
- V. In a communication accompanying the summons to oral proceedings, the Board expressed its preliminary view that the requirement of sufficiency of disclosure seemed to be met and that no lack of clarity seemed to be present. There was however doubt as to whether the amendments made to claim 1 met the requirement of Article 123(2) EPC. The Board added that the appellant's arguments in respect of lack of novelty were not convincing, and the matter of inventive step would have to be discussed during the oral proceedings. There was also doubt in the opinion of the Board as to whether the subject-matter of the auxiliary requests met the requirement of Article 123(2) EPC.
- VI. With letter dated 18 March 2013, the respondent replaced the previous three auxiliary requests by two new auxiliary requests.
- VII. Oral proceedings were held on 19 April 2013, during which the respondent withdrew its first auxiliary request and filed two further auxiliary requests.

Claim 1 of the new first auxiliary request (former second auxiliary request), concerns a combination of features appearing in independent claims 11 and 1 as originally filed, and reads:

A method of making wing spars (30) including upper and lower spar chords (40, 42) on a spar web (45), comprising:

- hanging said spar web (45) rigidly on a fixture in a predetermined spatial orientation accessible by a

numerically controlled machine tool;

- probing (*aux2) said spar web (45) with a probe carried by said machine tool to accurately determine the actual position of a plurality of critical coordination features on said spar web with reference to a fixed known location;
- normalizing a machine tool program having locations of said critical coordination features with said actual locations in space of said critical coordination features as determined by said probe;
- drilling a plurality of web coordination holes in said spar web using said machine tool (75) running on said normalized machine tool program incorporating digital wing product definition from an engineering data authority for directing a drill held by said machine tool to locations for mounting chord locator tools on said web, said web coordination holes being accurately located in a predetermined position on said spar web such that upper and lower spar chords (40, 42) can be positioned on said spar web with a vertical separation between them specified by said digital wing product;
- temporarily mounting said chord locator tools on said spar web (45) with fasteners through said web coordination holes, said chord locator tools each having (*aux3) upper and lower contact surfaces thereon at vertical spacings corresponding to desired vertical spacing of said spar chords on said spar web (45);
- supporting said upper and lower spar chords (40, 42) on said upper and lower contact surfaces of said chord locator tools at precisely accurate positions along upper and lower edges of said spar web (45);
- clamping said upper and lower spar chords to said spar web (45) at said edge positions;
- drilling fastener holes through said upper and lower spar chords and said spar web (45) and inserting

fasteners in said holes;

- tightening said fasteners in said holes to securely fasten said upper and lower spar chords (40, 42) to said spar web (45) in said predetermined position specified by said digital wing product definition; and
- removing said chord locator tools."

Claim 1 of the second auxiliary request is based on claim 1 of the first auxiliary request, at marking (*aux2) the following being inserted:

"coordination features on"

and at the end of the claim, the following being added:

"... wherein each said chord locator tool comprises

- an elongated body having upper and lower contact surfaces (110, 112, 114, 116) adjacent upper and lower ends of said elongated body;
- coordination features on said body at positions corresponding to coordination features on said web, such that registry of said coordination features on said body and said web positions said body on said web with said contact surfaces at said desired position of said reference surfaces relative to said web;
- whereby said body is positioned on said web by registry of said coordination features of said body with said coordination features of said web and is secured thereto, and said chords are placed in contact with said contact surfaces of said body to accurately locate said chords at said desired position relative to each other and said web."

Claim 1 of the third auxiliary request has the same added text at the end as claim 1 of the second auxiliary

request, the insertion at marking (*aux2) being deleted, and at marking (*aux3) the following being inserted:

"reference surfaces at a certain desired vertical spacing and positioning on said spar web, further each having"

- VIII. The appellant (opponent) requested that the decision under appeal be set aside and that the European patent No. 0 888 201 be revoked.

The respondent (patent proprietor) requested that the appeal be dismissed, or the decision under appeal be set aside and the patent be maintained on the basis of the 1st auxiliary request (filed as "second auxiliary request" on 18 March 2013) or on the basis of the 2nd or 3rd auxiliary request filed during the oral proceedings before the Board.

- IX. The arguments of the appellant can be summarized as follows:

The patent in suit lacked sufficiency of disclosure because the step of normalising a machine tool program was not disclosed in a manner such that it could be carried out by a skilled person. Although the skilled person knew how to apply a linear coordinate transformation, carrying out the teaching of the patent required a non-linear coordinate transformation which was very difficult, and no explanation of it was given in the patent.

The patent in the form found allowable by the opposition division had been inadmissibly amended and thus contravened Article 100(c) EPC. Although granted independent claim 9 was partly based on independent

claim 1 as originally filed, it had however been amended by making it dependent on (at least) granted claim 1. Granted claim 1 was however based on independent claim 11 as filed. There was no disclosure supporting the isolation of the "normalizing" step out of original independent claim 1, and combining it with the method of original independent claim 11, as had been done in arriving at independent claim 1 of the main request. This new combination was therefore an inadmissible intermediate generalization.

The subject-matter of the method according to claim 1 lacked novelty when compared with the disclosure in O2. Furthermore its subject-matter was made obvious by O1 or O2 in combination with the general knowledge of the skilled person, or by O4 e.g. in combination with O1 or O2.

In respect of auxiliary requests drafted on the basis of independent claims 1 and 11 as originally filed, the appellant asserted that such amendments were not admissible and requested that the following question be referred to the Enlarged Board of Appeal:

"1. Is it admissible to support claim amendments during an opposition procedure on original claims which have been deleted before grant and therefore have not become part of the patent as opposed, in particular if they have also no support in the patent description and granted claims.

2. Is there any "Zäsurwirkung" for such deleted claims or other deleted subject-matter in order to ensure legal certainty of third parties?"

X. The respondent argued that the invention was disclosed in a manner sufficient for it to be carried out by a

skilled person. There was no need for a non-linear coordinate transformation, the step of "normalising" merely related to a comparison of the actual position of critical coordination features and transferring them into the machine tool program.

The conclusion of the opposition division was correct when it decided that the amendment to claim 1 complied with Article 123(2) EPC since the claim was restricted by an originally disclosed feature which was not related to other features in context, and the position of the patent proprietor had not been improved by the inclusion of that restricting feature.

The subject-matter of the method according to claim 1 as found allowable by the opposition division was novel when compared with the disclosure of O1 or O2. Starting from the closest prior art O4, the subject-matter claimed also involved an inventive step because neither O1 nor O2 indicated the specific steps of drilling a plurality of web coordination holes such that the upper and lower spar chords could be positioned on the web specified by the digital wing product. The conclusion concerning the presence of an inventive step also applied with respect to the auxiliary requests since each claim included further specified features which were not known from the prior art.

The first, second and third auxiliary requests should be admitted into the proceedings since they overcame the objections seen by the Board. In particular, as regards the first auxiliary request, this had been filed in response to the Board's communication. The terminology used in the claim arose out of the combination of claims 1 and 9 as granted and had been made uniform, such that the same terminology was used for the same

features and the subject-matter was a combination of claims 1 and 11 as granted, although more closely matched to claim 1 as granted.

As regards the second auxiliary request, this included the features of claim 5 as granted which were relevant to the chord locator tool defined in claim 9 as granted. This removed any difficulty under Article 123(2) EPC.

The third auxiliary request included still further features from claim 5 as granted such that any problem under Article 123(2) EPC should be avoided when considering the combination of claims 1 and 9.

Reasons for the Decision

1. The appeal is admissible.
2. *Main Request (Article 123(2) EPC)*

The feature "normalizing a machine tool program ..." inserted as an amendment into claim 1 as granted was taken from claim 1 as originally filed. Granted claim 1 however stems from independent claim 11 as originally filed. The normalizing step comprised in original claim 1 is disclosed in a specific order of method steps which differ essentially from the steps of original claim 11. According to claim 11 e.g. the drilling step is done using a numerically controlled machine tool running on a program incorporating digital wing definition from an engineering data authority whereas in claim 1 drilling is done with a machine tool using the normalized machine tool program. According to claim 11, after the drilling step follow the steps of clamping the spar chords to the spar web and fastening

the spar chords to the spar web. In claim 1 however, the following step relates to temporarily mounting chord locator tools on the web, which are not present in claim 11. Regarding these and further following differing steps, it is made clear that the normalizing step is combined with the specific further steps of original claim 1. Isolating this step of normalizing out of its context and using it in a new combination of features which is not originally disclosed constitutes an inadmissible intermediate generalization and thus contravenes Article 123(2) EPC.

Although the respondent argued that the introduced wording relating to "normalizing" should be acceptable because the opposition division had found that the proprietor's position was not improved by having this wording in the claim, the Board is not convinced by such argument. Whether the proprietor's position is improved or not, does not directly affect whether the subject-matter after any amendment is disclosed directly and unambiguously to a skilled person, which is the question to be answered with regard to Article 123(2) EPC.

The further argument that the step of "normalizing" was not taken out of context is also unconvincing. The basis for the disclosure of the introduced wording was claim 1 as filed (which became claim 11 as granted). However, claim 1 as filed gives the broadest disclosure of any method involving the use of normalizing, whereas claim 11 as filed did not disclose normalizing at all. As explained above, each of these claims relates to a different method. Nothing in the application as filed can be found to suggest that "normalizing" could be understood as a separate step to be used as and where appropriate in another method not having all the same

steps. Nor did the respondent argue that there was any such disclosure. The disclosure of "normalizing" in the description on page 14, lines 2 to 6 also provides no further information in this regard and relates only to a specific embodiment.

The main request is therefore not allowable.

3. *Auxiliary requests (Article 13(1) RPBA)*

3.1 According to Article 13(1) of the Rules of Procedure of the Boards of Appeal (RPBA) any amendment to a party's case after it has filed its grounds of appeal may be admitted and considered at the Board's discretion. The discretion has to be exercised in view of inter alia the complexity of the new subject-matter submitted, the current state of the proceedings and the need for procedural economy.

3.2 First auxiliary request

Claim 1 of this request relates to an alleged combination of the features of original claims 11 and 1. As stated above (see point 2), these claims differ essentially in their functional features and in their order of method steps, whereby there exists a fundamental incompatibility between them. Rather than being a combination of features which could be readily considered, the claim is in fact a "fusion" of incompatible features of the two claims, resulting from designating certain features of one claim by different expressions from another claim. The question as to whether such terminology can be fused in this manner results in great complexity in terms of the clarity (Article 84 EPC) of the features involved and their correct meaning in the context of the claim. Clarity of

the claim and also its effect on consideration of Article 123(2) EPC led the Board to the conclusion that the amended request appeared at least *prima facie* not to be allowable. Since dealing with the respondent's new case would have required extensive further discussions, this would have contravened the need for procedural economy. In view of this complexity and since this claim was filed only one month before the oral proceedings, the Board exercised its discretion under Article 13(1) RPBA not to admit it into the proceedings.

3.3 Second auxiliary request

Claim 1 of this request includes the same deficiencies as those of the first auxiliary request. Further added were parts of granted claim 5 which itself relates however to the use of a portable chord locator tool. The first paragraph of that claim was omitted. Therefore, since the deficiencies under Article 84 EPC and the problems of the resulting complexity were not removed by way of this request, this request was also not admitted into the proceedings.

Since the request was already not admitted for the foregoing reasons, it can be left undecided as to whether the amendments introduced by themselves caused additional objections under Article 123(2) EPC.

3.4 Third auxiliary request

Claim 1 of this request was further amended by insertion of text parts of the first paragraph of granted claim 5. By that amendment the deficiencies present in the previous request were not overcome such that the

Board exercised its discretion under Article 13(1) RPBA also not to admit this request into the proceedings.

4. None of the respondent's requests being both allowable and admitted, the patent has to be revoked.
5. *Referral of a question to the Enlarged Board of Appeal (Article 112 EPC)*

The appellant requested referral of a question to the Enlarged Board according to Article 112 EPC. This question however refers to a problem which is not relevant for the decision to be made with regard to the requests on file, since the decision of the case was taken in respect of grounds which are not addressed in the appellant's question. For this reason the request for referral of a question to the Enlarged Board of Appeal is rejected since there is no requirement to refer the question in order to ensure uniform application of the law nor because a point of fundamental importance has arisen.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



M. H. A. Patin

M. Harrison

Decision electronically authenticated