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**Datasheet for the decision
of 11 November 2016**

Case Number: T 0859/14 - 3.2.01

Application Number: 07873670.9

Publication Number: 2099680

IPC: B64D45/02

Language of the proceedings: EN

Title of invention:

LARGE AREA CIRCUITRY USING APPLIQUES

Patent Proprietor:

The Boeing Company

Opponent:

AIRBUS (SAS) (FR)/ AIRBUS Opérations (FR)/
AIRBUS Operations Limited (GB)/ Airbus Operations
GmbH (DE)/ AIRBUS Operations S.L (ES)

Headword:

Relevant legal provisions:

EPC Art. 123(2), 111(1)

Keyword:

Added subject-matter (no)

Remittal for further prosecution (yes)

Decisions cited:

Catchword:



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Boards of Appeal
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Case Number: T 0859/14 - 3.2.01

D E C I S I O N
of Technical Board of Appeal 3.2.01
of 11 November 2016

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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 10 February
2014 revoking European patent No. 2099680
pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	G. Pricolo
Members:	C. Narcisi
	P. Guntz

Summary of Facts and Submissions

- I. European patent No. 2 099 680 was revoked by the decision of the Opposition Division posted on 10 February 2014. Against the decision an appeal was lodged by the Patentee on 9 April 2014 and the appeal fee was paid. The statement of grounds of appeal was filed on 20 June 2014.
- II. Oral proceedings took place on 11 November 2016. The Appellant (Patentee) requested that the decision be set aside and the patent be maintained as granted or, alternatively, that the patent be maintained in amended form on the basis of auxiliary requests 1 to 5 (filed on 20 June 2014 with the statement of grounds of appeal), or of auxiliary requests 6 and 7 (filed with letter dated 20 September 2016). The Respondent (Opponent) requested that the appeal be dismissed.
- III. Granted claim 1 reads as follows:
- "An appliqué comprising:
a sectioned metal foil (20) comprising a gap (60) in a metal layer that separates the metal layer into adjacent sections; and
a dielectric layer (30) underlying the sectioned metal foil (20);
wherein the sectioned metal foil (20) further comprises an electrical supply electrically connected to the adjacent foil sections of the sectioned metal foil (20) to form a circuit; and
an electrical device (80) connected to adjacent sections of the sectioned metal foil (20) so as to complete the circuit."
- IV. The Appellant's arguments may be summarized as follows:

The subject-matter of claim 1 does not contravene Article 123(2) EPC. Specifically, the feature reading "wherein the sectioned metal foil (20) further comprises an electrical supply electrically connected to the adjacent foil sections of the sectioned metal foil (20) to form a circuit" (hereinafter designated as feature (i)) does not go beyond the content of the patent application as filed (see published patent application, hereinafter designated as WO-A). The wording "the sectioned metal foil ...comprises an electrical supply", contrary to the Opposition Division's opinion, does not necessarily entail the inclusion of a power source but can also be understood as merely "providing" a connection to a power source. This is confirmed by WO-A, which discloses that "the sectioned metal foil may be formed to act as both an electrical circuit for supplying energy to devices and as a lightning diverter" (WO-A, page 5, lines 15-16) and that "the sectioned foil including sections forming a large area circuit may provide an electrical pathway to devices within the appliqué" (see patent specification (hereinafter designated as EP-B), paragraph [0034] or corresponding passages in WO-A). Alternatively, assuming that feature (i) is nevertheless construed as actually including a power source, then even in this case a corresponding disclosure can be found in WO-A (page 13, 29-page 4, line 8).

The omission (in claim 1) of the feature "wherein the sectioned foil comprises a large area circuit" (see WO-A, claim 1) (hereinafter designated as feature (ii)) does not add subject-matter extending beyond the content of the application as filed. In effect, firstly the "sectioned metal foil", as further set out in

feature (i), already implicitly includes a "large area circuit", for this term has to be seen merely in contrast to and in relation to the prior art, where hard wiring provided by narrow wires and standard flexible thin circuitry were used to connect with devices placed on, inside or within the aircraft surface (see EP-B, paragraphs [0009] to [0011]). Secondly, EP-B (and correspondingly WO-A) clearly also discloses embodiments where no mention is made of a "large area circuit" (see paragraphs [0019], [0026]).

The further feature reading "an electrical supply electrically connected to the adjacent foil sections of the sectioned metal foil to form a circuit" (hereinafter designated as feature (iii)) does not go beyond the content of the application as filed. In particular, this feature is based on WO-A (see passage on page 13, lines 30-32), as the omission of a "large area circuit" (including the attachment point) mentioned in said passage does not constitute a generalization of the content of the application as filed (see above).

Finally, the feature reading "an electrical device connected to adjacent sections of the sectioned metal foil so as to complete the circuit" (hereinafter designated as feature (iv)) does not add any subject-matter not being disclosed in WO-A. Indeed, original claim 1 (see WO-A) recites "electrical devices connected to the large area circuit sections", such that the explicit mention of "a connection in the gap" does not appear to be necessary.

V. The Respondent's arguments may be summarized as follows:

The subject-matter of claim 1 contravenes the requirements of Article 123(2) EPC, for feature (i) (see above) goes beyond the content of the application as filed. In particular, according to the Appellant's arguments the wording "the sectioned metal foil ... comprises an electrical supply" has to be construed as the "sectioned metal foil" constituting or forming an electrical supply, or forming part of an electrical supply". However, this interpretation of the verb "comprises" does not coincide with the current and most common meaning given to this verb, which is usually that of "includes" or "contains". Moreover, adopting this specific meaning of the verb "comprise" would lead to a lack of clarity or a technical nonsense in relation to other claimed features where the same verb is employed (e.g. "an appliqué comprising", "a sectioned metal foil comprising a gap"). The construction of said feature (i) would itself further be affected and become doubtful and difficult, for it could be read as "the sectioned metal foil constitutes an electrical supply connected to the sectioned metal foil", which is technical nonsense.

Therefore, the verb "comprises" can only be understood as meaning "includes" or "contains", feature (i) thus stating that an electrical supply (or power source) is "included" in the sectioned metal foil. No disclosure can however be found for this feature in the application as filed (WO-A), for (contrary to the Appellant's opinion) a power source is only mentioned as an example of a device 80 (see WO-A, page 13, line 29-page 14, line 8), which is plugged into a gap separating an electrically positive and an electrically negative section of the sectioned metal foil so as to complete the circuit. Therefore the power source (e.g. capacitor, electrochemical device or battery etc.) is itself electrically connected to and energized by said

electrical supply provided to the sectioned metal foil. Consequently this power source cannot be identified with said electrical supply which (see WO-A, page 13, lines 29-32) is "provided to the large area circuit of the sectioned metal foil at an appropriate attachment point".

The omission of feature (ii) in the subject-matter of claim 1 is not supported by the original disclosure of the application as filed (WO-A). The "large area circuit" is disclosed in the patent specification (see EP-B, paragraph [0012] or corresponding parts in WO-A) as being an essential part of the solution (according to the invention) to the problems of the prior art, related to the use of hard wires or standard flexible thin circuitry external to the aircraft (see EP-B, paragraphs [0010], [0011]). Thus, a "large area circuitry" represents a more robust system providing an electrical connection, electrical connectivity to a device still being provided if a part of the foil is damaged (EP-B, paragraph [0013]). The passages referred to by the Appellant (see paragraphs [0019] and [0026] in EP-B) are no disclosure of embodiments without large area circuitry, since these passages must be read in the given context of the preceding or following passages. Moreover, contrary to the Appellant's view, the omitted term "large area circuitry" implies a limitation of the claimed subject-matter (see EP-B, paragraphs [0012], [0015], [0018]), for not every type of circuit qualifies as "large area circuit".

The further features (iii) and (iv) constitute a generalization of the content of the application as filed (WO-A), contrary to Article 123(2) EPC. In effect, in feature (iii) it was omitted that an electrical supply is provided "to the large area

circuit of the sectioned metal foil at an appropriate attachment point" (see WO-A, page 13, lines 30-32). Likewise, in feature (iv) it was omitted that the electrical connection is obtained by plugging the device "into a gap separating an electrically positive section of foil and an electrically negative section of foil" (see WO-A, page 13, lines 32-33). In both cases no alternatives were indicated in the description of WO-A for the omitted features.

Reasons for the Decision

1. The appeal is admissible.

2. The subject-matter of claim 1 as granted (main request) does not infringe Article 123(2) EPC.
Looking first at feature (i) (i.e. "wherein the sectioned metal foil (20) further comprises an electrical supply electrically connected to the adjacent foil sections of the sectioned metal foil (20) to form a circuit") the Board concurs with the Appellant's view in that the meaning of the term "electrical supply" is not necessarily and only that of a "power source" but it is also that of a (or a part of a) system used to provide electricity, as illustrated e.g. by the usual expression "to turn off the electrical supply". Following this meaning of "electrical supply" the sectioned metal according to feature (i) is construed as being (part of) a system providing electricity. This interpretation is supported by the patent specification (EP-B) as a whole (and correspondingly by the application as filed (WO-A)), stating that "the sectioned metal foil may be formed to act as both an electrical circuit for supplying energy to electrical devices and as a lightning diverter" (EP-B, [0026]), that "the sectioned metal foil may provide

electrical supply to resistive materials between the separate metal foils" (EP-B, [0034]) and that "an electrical supply is provided to the large area circuit of the sectioned metal foil at an appropriate attachment point" (EP-B, [0064]).

On the other hand these passages of EP-B also demonstrate that the term "electrical supply" in feature (i) of claim 1 cannot be construed as meaning "power source" and, contrary to the Appellant's opinion, no support can be found in WO-A (or EP-B) for such an interpretation. In effect, the cited passage in WO-A (page 13, line 29-page 14, line 8) supports this fact, for an "electrical supply" is stated to be "provided to .. the sectioned metal foil at an appropriate attachment point" and "devices 80" (such as "capacitors", "electrochemical devices and power supplies") "may be plugged into a gap 60 separating an electrically positive section of foil and an electrically negative section of foil, and placed in contact with the positive and negative sections so as to complete the circuit and be electrically energized" by the electrical supply.

The omission of feature (ii) (i.e. "wherein the sectioned foil comprises a large area circuit") in claim 1 does not violate Article 123(2) EPC. The Board agrees with the Appellant's view that the wording "a sectioned metal foil" in claim 1 already necessarily defines a "large area circuit", for said term, by its very nature, has to be seen in relation and in contrast to conventional cabling or circuitry as described in EP-B (paragraphs [0010], [0011]; see above, points IV and V). A sectioned metal foil being used as an appliqué (covering part of an external surface of an aircraft) constitutes a large planar material and thus

fulfils the requirement of being large within the meaning of the patent specification (EP-B). EP-B actually confirms this view, given that paragraph [0019], which can be read independently of preceding or following paragraphs, does not mention a "large area circuit".

Feature (iii) of claim 1 (i.e. "an electrical supply electrically connected to the adjacent foil sections of the sectioned metal foil to form a circuit") does not constitute a generalization of the content of the application as filed. Omitting the feature that an "electrical supply is provided to the large area circuit" "at an appropriate attachment point" in above feature (iii) does not add any further information not disclosed in WO-A. Indeed, feature (ii) already specifies that the electrical supply is connected to the sectioned metal foil and for the same reasons given above a "large area section" is necessarily implied by the term "sectioned metal foil" and can therefore be omitted. The connection to the electrical supply being provided at "an appropriate attachment point" is a self-evident feature and does not necessitate explicit mention in claim 1.

Finally, feature (iv) (i.e. "an electrical device connected to adjacent sections of the sectioned metal foil so as to complete the circuit") likewise does not represent a generalization of the content of WO-A, for claims 1 and 2 in WO-A evidently include the feature implying that electrical devices are connected to the large area circuit sections (see claim 1), which comprise electrically positive and negative sections separated by a gap (see claim 2). The last features (corresponding to original claim 2) are already included in claim 1, so that (apart from the omission

of "large area circuit" (see reasons above)) feature (i) is equivalent to claims 1 and 2 as filed. Hence in feature (iv) there is no need to further specify that the devices 80 are plugged into a gap separating adjacent metal foil sections.

3. The Opponent's objections based on Article 123(2) EPC put forward against claim 1 gave rise to corresponding objections against independent method claim 7. For the same reasons as set out hereinbefore these objections are unfounded.
4. The Board decided to remit the case to the department of first instance for further prosecution concerning the issues of novelty and inventive step, given that these had not been considered at all in the appealed decision and that both parties so requested during oral proceedings (Article 111(1) EPC).

Order

For these reasons it is decided that:

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

The Registrar:

The Chairman:



A. Vottner

G. Pricolo

Decision electronically authenticated