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Case Number: T 1644/11 - 3.3.05

07836697.8 Application Number:

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H01M2/20, H01M2/30, H01M10/04

Language of the proceedings: ΕN

Title of invention:

BATTERY WITH INTEGRALLY FORMED TERMINAL

Applicant:

Johnson Controls Technology Company

Headword:

BATTERY/JOHNSON CONTROLS

Relevant legal provisions:

EPC Art. 108, 123(2) EPC R. 99(2)

Keyword:

Admissibility of appeal - appeal sufficiently substantiated (yes)

Amendments - admissible intermediate generalisation

Decisions cited:

T 0284/94, T 0962/98, T 0273/10

Catchword:



Beschwerdekammern Boards of Appeal Chambres de recours

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Case Number: T 1644/11 - 3.3.05

D E C I S I O N
of Technical Board of Appeal 3.3.05
of 4 April 2014

Appellant: Johnson Controls Technology Company

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Representative: Gerstein, Hans Joachim

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Decision under appeal: Decision of the Examining Division of the

European Patent Office posted on 7 March 2011

refusing European patent application No. 07836697.8 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman: G. Raths

Members: J-M. Schwaller

C. Vallet

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Summary of Facts and Submissions

This appeal lies from the decision of the examining division refusing European patent application No. 07 836 697.8 because claim 1 of the sole request then on file - filed by fax on 25 June 2010 - did not meet the requirements of Article 123(2) EPC.

Claim 1 read as follows:

- "1. A battery (110) comprising:
- a housing (120) having a central longitudinal axis; a cover (130) with a generally flat body (132) and a generally vertical side wall (133), the cover (130) coupled to the housing (120);
- a first flange (134) integrally formed with the side wall (133) of the cover (130) and configured to act as a first terminal for the battery (110), the flange (134) having a vertical portion (136) and a horizontal portion (138), the horizontal portion (138) extending outward past the side wall (133) of the cover (130) in a direction generally perpendicular to the central longitudinal axis; and
- a second flange (124) integrally formed with a side wall (122) of the housing (120) and configured to act as a second terminal for the battery (110), the flange (124) having a vertical portion (126) and a horizontal portion (128), the horizontal portion (128) extending beyond the side wall (122) of the housing (120) in a direction generally perpendicular to the central longitudinal axis, wherein the second flange (124) is configured to engage with a first flange (134) of an adjacent battery (110)."
- II. In the contested decision, the examining division held the subject-matter of above claim 1 to be an

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intermediate generalisation which had no basis in the application as originally filed. In this respect, it cited in particular decision T 0284/94.

The first instance argued in essence that the sole basis in the application as filed for the amendments to claim 1 could be found in the embodiment of Figures 8 to 10 described in paragraphs [0030] to [0034], which embodiment was the sole in which the terminals were flanges of the battery cover and of the battery housing.

The following underlined features, which were disclosed in combination in said embodiment, were however not included in above claim 1:

- (i) the container is cylindrical,
- (ii) the container is a generally $\underline{\text{thin-walled}}$ hollow body,
- (iii) the container is made of a <u>conductive material</u> and is conductively coupled to an electrode of the <u>battery</u>,
- (iv) the first flange $\underline{\text{extends upward from the sidewall}}$ of the cover,
- (v) the second flange $\underline{\text{extends upward past the rim of}}$ the container,
- (vi) the cover is <u>conductively separated from the</u> container by an insulator,
- (vii) the cover is made of a conductive material and is conductively coupled to an electrode of the battery, (viii) the cover has a circular surface,
- (ix) the <u>side wall of the cover extends upward from the surface of the cover, is perpendicular to this surface and follows the contour of the side wall of the container and has an outer diameter less than the inner diameter of the side wall of the container, and</u>

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- (x) the <u>vertical portion of the first flange is longer</u> than the vertical portion of the second flange.
- III. With the grounds of appeal dated 8 July 2011, the appellant filed four new sets of claims as a main request and as auxiliary requests 1 to 3.

Claim 1 of the main request read as follows:

"1. A battery (110) comprising:

a housing (120) having a central longitudinal axis, the housing (120) conductively coupled to a first electrode of the battery (110);

a cover (130) with a generally flat body (132) and a generally vertical side wall (133) that extends upward from and perpendicular to the body (132), wherein the side wall (133) of the cover (130) follows a contour of a side wall (122) of the housing (120) and has an outer diameter less than the inner diameter of the side wall (122) of the housing (120), the cover (130) conductively coupled to a second electrode of the battery (110), the cover (130) conductively separated from the housing (120) by an insulator;

a first flange (134) integrally formed with the side wall (133) of the cover (130) and configured to act as a first terminal for the battery (110), the flange (134) having a vertical portion (136) that extends upward from the sidewall (133) of the cover (130) and a horizontal portion (138), the horizontal portion (138) extending outward past the side wall (133) of the cover (130) in a direction generally perpendicular to the central longitudinal axis; and

a second flange (124) integrally formed with a side wall (122) of the housing (120) and configured to act as a second terminal for the battery (110), the flange (124) having a vertical portion (126) that extends

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upward past a rim (123) of the side wall (122) and a horizontal portion (128), the horizontal portion (128) extending beyond the side wall (122) of the housing (120) in a direction generally perpendicular to the central longitudinal axis, wherein the second flange (124) is configured to engage with a first flange (134) of an adjacent battery (110); wherein the housing (120) and the cover (130) are each made of a conductive material."

IV. In a communication dated 1 August 2013, the board drew the appellant's attention to the fact that its appeal was based on new claims, the objective of which was to be understood as a reply to the objections raised in the decision of the first instance, however without having contested the decision. In other words, the appellant appeared to agree with the decision, and the appeal proceedings thus corresponded to a continuation of the examination proceedings. It followed that by neither contesting the decision nor defending its claims submitted before the first instance, the appeal could thus be found inadmissible.

The board further observed that the amendment in claim 1 by which the housing was defined as having a "central longitudinal axis" did not appear to meet the requirements of Article 123(2) EPC, since said feature had no basis in the application as filed. Furthermore, the battery disclosed in the embodiment defined in paragraphs [0030] to [0034] of the application as filed had a cylindrical housing.

V. With a letter dated 2 December 2013, the appellant contested the board's opinion regarding the admissibility of the appeal. Further, it cancelled the requests submitted with the grounds of appeal and filed

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four new sets of claims as a main request and as auxiliary requests 1 to 3.

Claim 1 of the main request reads as follows (differences from claim 1 of the main request filed with the grounds of appeal are emphasised by the board):

"1. A battery (110) comprising:

a housing (120) having a central longitudinal axis, the housing (120) conductively coupled to a first electrode of the battery (110);

a cover (130) with a generally flat body (132) and a generally vertical side wall (133) that extends upward from and perpendicular to the body (132), wherein the side wall (133) of the cover (130) follows a contour of a side wall (122) of the housing (120) and has an outer diameter less than the inner diameter of the side wall (122) of the housing (120), the cover (130) conductively coupled to a second electrode of the battery (110), the cover (130) conductively separated from the housing (120) by an insulator;

a first flange (134) integrally formed with the side wall (133) of the cover (130) and configured to act as a first terminal for the battery (110), the flange (134) having a vertical portion (136) that extends upward from the sidewall (133) of the cover (130) and a horizontal portion (138), the horizontal portion (138) extending outward past the side wall (133) of the cover (130) in a direction generally perpendicular to the

central longitudinal axis; and

a second flange (124) integrally formed with a side wall (122) of the housing (120) and configured to act as a second terminal for the battery (110), the flange (124) having a vertical portion (126) that extends upward past a rim (123) of the side wall (122) and a

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horizontal portion (128), the horizontal portion (128) extending beyond the side wall (122) of the housing (120) in a direction generally perpendicular to the central longitudinal axis, wherein the second flange (124) is configured to engage with a first flange (134) of an adjacent battery (110); wherein the housing (120) and the cover (130) are each made of a conductive material."

Dependent claims 2 to 10 represent specific embodiments of the subject-matter of claim 1.

VI. The appellant requests that the contested decision be set aside and that the case be remitted to the examining division with the order to grant a patent on the basis of one of the sets of claims dated 2 December 2013

Reasons for the Decision

- 1. Admissibility of the appeal
- 1.1 Considering the arguments developed by the appellant in its reply to the communication of the board, the objection raised as to the admissibility of the appeal is not maintained. The board notes that the appellant contested the decision of the first instance, since it stated that several objections of the examining division were not reasoned. The appellant argued in particular that there was no indication as to why the examining division thought that the container had to be cylindrical or why it had to be a generally thin-walled hollow body. The examining division also did not indicate why the cover had to have a circular surface or why the vertical portion of the first flange had to

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be longer than the vertical portion of the second flange.

- 1.2 In the board's view, the amended claims proposed in response to the contested decision are to be held as a reply to arguments raised for the first time, in particular the one based on decision T 0284/94 that an amendment of a claim by a technical feature taken in isolation from the description of a specific embodiment is not allowable if the thus amended claim does not provide a complete solution to a technical problem unambiguously recognisable from the description.
- 1.3 It follows therefrom that the board holds the appeal admissible under Article 108 and Rule 99(2) EPC.
- 2. Admissibility under Article 123(2) EPC of the amended claims of the main request
- 2.1 In the board's view, the subject-matter of claim 1 of this request is based on claims 1 to 4 as well as on Figures 8 to 10 and paragraphs [0030] to [0034] of the application as filed.
- 2.2 The board cannot endorse the conclusion of the examining division that the omission from claim 1 of the features:
 - the container is cylindrical,
 - the container is a generally thin-walled hollow body,
 - the cover has a circular surface,
 - the <u>vertical portion of the first flange is longer</u> than the vertical portion of the second flange,

extends beyond the content of the application as filed, and so infringes Article 123(2) EPC.

By analogy to decision T 0284/94, which stated that an amendment to a claim by introduction of a technical feature taken in isolation from the description of a specific embodiment had to provide a complete solution to a technical problem unambiguously recognisable from the application, the Board finds in the present case that the technical problem recognisable from the application is defined in paragraphs [0004] to [0006] and consists of the provision of eliminating the coupling - e.g. by welding or by buss bars - of the terminals to the battery, improving the lifetime of the battery, and configuring the terminals so that they can directly be coupled to terminals of adjacent batteries. Owing to this particular definition of the problem, the skilled person directly and unambiguously understands that the above underlined features do not contribute to the solution of the problem, and so are not necessary for the definition of the invention. It follows that said features can be omitted from the subject-matter of claim 1 at issue without infringing Article 123(2) EPC.

This conclusion is also in conformity with decision T 0962/98 (point 2.5 of the reasons) that an intermediate generalisation would be admissible if the skilled person could recognise without any doubt from the application as filed that the characteristics taken from a working example were not closely related to the other characteristics of the working example and applied directly and unambiguously to the more general context, or in T 0273/10 (points 14.2 and 14.3 of the reasons), that a claim amended by inclusion of a bundle of features extracted from a specific embodiment was allowable as long as the bundle of features proposed as an amendment comprised all the features essential for the performance of the invention, and that those

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features of the embodiment which did not contribute to solve the problem underlying the invention did not have to be part of the claimed subject-matter resulting from the amendment.

2.3 As the decision of the first instance concerned only claim 1, the board did not make a detailed analysis of the admissibility under Article 123(2) EPC of the dependent claims 2 to 10 of this request. However, it appears that at least claims 2, 3, 7, 9 and 10 do not have a basis in the application as originally filed.

Order

For these reasons it is decided that:

The case is remitted to the department of first instance for further prosecution on the basis of claim 1 of the main request dated 2 December 2013.

The Registrar:

The Chairman:



C. Vodz G. Raths

Decision electronically authenticated