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**Datasheet for the decision
of 21 November 2014**

Case Number: T 1788/09 - 3.5.02

Application Number: 98903410.3

Publication Number: 1020011

IPC: H02K15/12, H02K15/02

Language of the proceedings: EN

Title of invention:

Modular Design and Manufacture of a Stator Core

Applicant:

Siemens Energy, Inc.

Headword:

Relevant legal provisions:

RPBA Art. 13(3)
EPC Art. 113(2), 78(1)(c)

Keyword:

Late-filed request - admitted (no)

-
amendments after arrangement of oral proceedings, need for
additional search (yes), adjournment of oral proceedings would
have been required



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1788/09 - 3.5.02

D E C I S I O N
of Technical Board of Appeal 3.5.02
of 21 November 2014

Appellant: Siemens Energy, Inc.
(Applicant) 4400 Alafaya Trail
Orlando, FL 32826-2399 (US)

Representative: Maier, Daniel Oliver
Siemens AG
Postfach 22 16 34
80506 München (DE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 22 June 2009 refusing European patent application No. 98903410.3 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman M. Ruggiu
Members: M. Léouffre
P. Mühlens

Summary of Facts and Submissions

- I. The applicant's appeal concerns the examining division's decision to refuse European patent application 98 903 410.3.
- II. The examining division found that claims 1 to 3 filed with the letter of 12 February 2009 did not involve an inventive step within the meaning of Article 56 EPC having regard to the combination of documents D1 (EP 0 010 654 A) and D3 (GB 2 156 247 A).
- III. In an annex to the summons to oral proceedings the board expressed the preliminary opinion that the subject-matter of claim 1 of the first request, which was the basis of the contested decision, did not appear to involve an inventive step having regard to the combination of documents D1 and D3. The board introduced also document DT 26 21 377 A1 (D6) into the procedure and expressed the opinion that the subject-matter of claim 1 of the second request might not be considered as involving an inventive step since it was known from that document to manufacture a modular motor from a plurality of core modules.
- IV. By online filed letter dated 20 October 2014, the appellant informed the Board that he would not be represented at the oral proceedings, withdrew all previous requests and requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 3 of a new request filed with this letter.
- V. Independent claim 1 reads as follows (indexes f) and g) added by the board):

"A method for manufacturing a modular stator core from at least two or more modules (10), characterised in comprising the steps of manufacturing the at least two or more modules by:

- a) clamping a stack of ferrous plates (20) in a fixture (11);
- b) placing the fixture containing the plates (20) in a vacuum chamber;
- c) applying a vacuum;
- d) while the plates (20) remain in the vacuum chamber, applying resin to said plates (20); and,
- e) pressurizing said vacuum chamber, whereby the resin is further forced between the plates (20), and
- f) assembling the at least two or more modules to form the modular stator core by inserting the at least two stator core modules into a stator frame (50) and clamping said state core modules together,
- g) wherein the stator frame is generally cylindrical in form, and said step of assembling comprises: (i) placing the stator frame in an upright position to accept said at least two or more modules, in the upright position the axis of the generally cylindrical stator frame being disposed vertically, (ii) placing a temporary assembly base (56) in the bottom end of the upright stator frame to support the at least two or more modules in position within the stator frame, the temporary assembly base being removed after completion of assembly of the modular stator core; (iii) lifting the at least two or more modules into the stator frame via the top end of the upright stator frame; and (iv) clamping together the at least tow or more modules."

VI. The appellant argued essentially as follows:
The amendments made to the set of claims of the previous second request were essentially based on the paragraph bridging pages 6 and 7 of the originally

filed and published application WO 98/32211 A1 and on the first sentence of the paragraph of page 7 beginning with the sentence "Those skilled in the art".

In the application as originally filed, the last two sentences of the paragraph bridging pages 1 and 2 referred to two assembly procedures that had traditionally been employed to form a cylindrical shaped stator core. In both procedures the stator frame was always disposed horizontally when the stator core was constructed/placed within the stator frame. Taking the step of orienting the stator frame vertically constituted a significant and non-obvious departure from the prior art, in particular given the size and weight of the apparatus parts involved. It was found a particular convenient and efficient method of assembling a modular stator core to insert the modules into the top end of a vertically disposed generally cylindrical stator frame. One reason for the particular convenience and efficiency was that there was reduced interference between the equipment carrying out the insertion of the modules (e.g. crane lifting cable) and the stator frame.

Reasons for the Decision

1. The appeal is admissible.

2. Features a) to e) from claim 1 are essentially features of an off-site process of manufacturing parts of a stator, in particular the core modules of the stator. The stator core modules are manufactured in accordance to the process described in the original description from page 5, line 21 to page 6, line 6 in connection with figure 3. The advantage of the so manufactured core modules is "improved heat conduction as well as

improved operational stability" (cf. original description at page 6, lines 5 to 6). The subject-matter represented by features a) to f) was originally claimed (cf. original claims 1 and 7 of published international patent application WO 98/32211) and a search conducted.

3. According to the appellant, the newly added feature g) defines a particular and more convenient solution to the problem of on-site assembling together stator modules of large size to finalise the construction of a stator. Feature g) including sub-features i), ii) and iii) was originally not claimed and has never been the subject of a search.
4. It follows from the above that the amendments made to the claims raise at least one issue which the Board cannot reasonably be expected to deal with without adjournment of the oral proceedings. The request filed with the letter dated 20 October 2014 cannot therefore be admitted into the procedure (Article 13(3) of the Rules of Procedure of the Board of Appeal).
5. The request filed with the letter dated 20 October 2014, which is not admitted into the procedure, constitutes the sole request of the appellant. There is no other text of the European patent application agreed by the applicant which the Board could decide upon (Article 113(2) EPC). Consequently the application lacks a valid set of claims and does not comply therefore with the requirement following from Article 78(1)c) EPC (cf. Case Law of the European Patent Office, 7th edition 2013, IV.B.3.2.3, page 775, paragraph 5).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



U. Bultmann

M. Ruggiu

Decision electronically authenticated