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**Datasheet for the decision
of 23 July 2014**

Case Number: T 1456/10 - 3.4.01
Application Number: 05011575.7
Publication Number: 1607759
IPC: G01R31/34, G01P3/489, G01P3/48
Language of the proceedings: EN

Title of invention:

Apparatus for detecting the operating characteristics of electric motors

Applicant:

E.D.C. Electrical Dynamic Company S.r.l.

Headword:

Relevant legal provisions:

RPBA Art. 12(4)

Keyword:

all requests: not admitted

Decisions cited:

T 1587/07

Catchword:



**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 1456/10 - 3.4.01

D E C I S I O N
of Technical Board of Appeal 3.4.01
of 23 July 2014

Appellant: E.D.C. Electrical Dynamic Company S.r.l.
(Applicant) Via Cialdini, 35/2
20161 Milano (IT)

Representative: Borsano, Corrado
Metroconsult S.r.l.
Foro Buonaparte, 51
20121 Milano (IT)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted on 8 February 2010 refusing European patent application No. 05011575.7 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chairman G. Assi
Members: H. Wolfrum
M. Vogel

Summary of Facts and Submissions

I. European patent application 05 011 575.7 (publication No. EP 1 607 759) was refused by a decision of the examining division dispatched on 8 February 2010 for the reason of added subject-matter (Article 123(2) EPC) in claim 1 of each of the requests then on file.

II. The applicant lodged an appeal against the decision and paid the prescribed fee on 9 April 2010. A statement setting out the grounds of appeal was filed on 7 June 2010.

The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of sets of amended claims according to a main request or one of three auxiliary requests, all filed on 7 June 2010 with the statement setting out the grounds of appeal. Oral proceedings were requested as well.

III. On 25 February 2014 the appellant was summoned to oral proceedings to take place on 23 July 2014.

In an annex accompanying the summons pursuant to Article 15(1) RPBA the Board informed the appellant that it was doubtful whether the new requests should be admitted (Article 12(4) RPBA) and pointed to a number of deficiencies which rendered the requests clearly unallowable.

IV. By telefax of 17 July 2014 the appellant's representative informed the Board that the applicant and the representative would not attend the oral proceedings and asked for a decision to be issued.

V. On 23 July 2014 oral proceedings were held in the absence of the appellant.

VI. The following claims of the main request are pertinent for the purposes of the present decision:

"6. An apparatus as in claim 1, wherein, in case said operating characteristics relate to a dynamic status of the speed of said motor, said means for detecting the operating characteristics of the electric motor (10) comprise means for:

- setting the number of transitions (NT) to an acceleration time limit (TL) corresponding to reaching a constant speed by said motor;*
- generating a third data array (140) of cells holding a cumulative acceleration time till reaching said acceleration time limit (TL), each cell of the third array (140) holding said cumulative acceleration time ($T_i = T_{i-1} + T_i$);*
- generating from said third data array (140) a function $Time = F(Space)$;*
- generating a fourth data array (141) of cells, having a number of cells (NE) equal to said number of transitions (NT), each cell containing the value of a function $Space = F(Time)$ obtained from an interpolation function of said function $Time = F(Space)$;*
- generating a fifth data array (145) of cells, each *i*-th cell containing the instantaneous speed value obtained by using said function $Space = F(Time)$, each value of instantaneous speed in the *i*-th cell being achieved by calculating the slope of a segment obtained by a linear regression of a first number of cell positions (NV) around said *i*-th cell;*
- generating a sixth data array (146) of cells, each *i*-th cell containing the instantaneous acceleration value, each value of instantaneous acceleration (ACC*

(i)) in the i -th cell being achieved by calculating the slope of a segment obtained by a linear regression of a second number of cell positions (NA) around the i -th cell of the fifth data array (145);

- generating a seventh data array (147) of cells, each i -th cell containing the instantaneous torque value $Torque(i)$, each value of instantaneous torque in the i -th cell being achieved by multiplying each instantaneous acceleration value in the sixth data array (146) of cells and the total moment of inertia M of the motor;
- generating a torque - RPM curve from the values in said fifth (145) and seventh data array (147) of cells."

"7. An apparatus as in claim 1, wherein, in case said operating characteristics relate to detecting mechanical defects and/or vibrations in the stationary status of said motor, said means for detecting the operating characteristics of the electric motor (10) comprise means for:

- setting the number of transitions $NT = 1$, and the division factor $N=2$;
- generating an eighth array (171) of cells, each i -th cell containing the cumulative value of the angular position corresponding to the preceding position $(i-1)*DA$, where DA is an angle equal to $(360 \text{ DEG} * N) / (2*NP)$, and NP is said number of pulses per revolution of the shaft;
- generating a ninth array (172) of cells, each i -th cell containing a value of time necessary to pass through the fraction of the round angle corresponding to said angle DA ;
- generating a tenth array (173) of cells, each i -th cell containing a cumulative time ($T_i = T_{i-1} + T_i$)

corresponding to said cumulative value of the angular position in said eighth array (171);

- generating a space-time curve from the values in said eighth (171) and tenth array (173) of cells;
- generating an eleventh data array (174) of cells, each i -th cell containing the instantaneous speed value, each value of instantaneous speed in the i -th cell being achieved by calculating the slope of a segment obtained by a linear regression of a third number of cell positions (NV) around the i -th cell of said space-time curve ;
- generating a speed-time curve from the values in said eleventh (174) and tenth array (173) of cells;
- generating a twelfth data array (175) of cells, each i -th cell containing the instantaneous acceleration value, each value of instantaneous acceleration in the i -th cell being achieved by calculating the slope of a segment obtained by a linear regression of a fourth number of cell positions (NA) around the i -th cell of said speed-time curve;
- generating a thirteenth data array (176) of cells, each i -th cell containing the instantaneous torque value $Torque(i)$, each value of instantaneous torque in the i -th cell being achieved by multiplying each instantaneous acceleration value in the twelfth data array (175) of cells and the total moment of inertia M of the motor;
- generating a dynamic speed - angular position curve from the values in said eleventh (174) and eighth array (171) of cells;
- generating a dynamic torque - angular position curve from the values in said twelfth (175) and eighth array (171) of cells."

The main request comprises in addition method claims 8 to 14 as well as claims 15 and 16 directed to a

computer program and a computer readable medium, respectively.

The first, second and third auxiliary requests comprise claims which correspond to claims 6 to 16 of the main request.

Reasons for the Decision

1. In the following reference is made to the provisions of the EPC 2000, which entered into force as of 13 December 2007, unless the former provisions of the EPC 1973 still apply to pending applications.
2. The appeal complies with the requirements of Articles 106 to 108 EPC and Rule 99 EPC and is, therefore, admissible.
3. Admissibility of the appellant's requests
 - 3.1 According to Article 12(4) RPBA, it lies in a board's discretion not to admit facts, evidence or requests which could have been presented in the first instance proceedings.
 - 3.2 The requests filed with the statement of grounds of appeal contain dependent claims, such as claims 6 and 7 of the main request (and corresponding claims in the auxiliary requests) which are directed to subject-matter that was never claimed in any of the requests filed before the examining division.

Moreover, in all of its requests filed with the statement of grounds of appeal, the appellant has put forward for the first time method claims, whereas the

claims filed during the examination proceedings were exclusively directed to an apparatus.

Likewise, the new requests pursued in the appeal contain for the first time independent claims directed to a computer program and a computer readable medium.

3.3 In general, it is not a board's task or the purpose of appeal proceedings to examine fresh subject-matter which could have readily been claimed (and examined accordingly) in the first instance. The more so in a case, as the present one, in which the applicant did not attend oral proceedings before the examining division to which it had been summoned and thus missed, on its own volition, an opportunity for presenting such subject-matter.

3.4 Moreover, it is noted that claims 6 and 7 of the main request (and corresponding claims 5 and 6 in all of the auxiliary requests) have no antecedent in the claims as originally filed so that it can be safely assumed that their subject-matter was not considered in the search for the present application.

In this context, the Board doubts that their subject-matter forms a single general inventive concept with that of the originally-claimed invention. Thus, the said claims do not concern the same invention for which the search report had been drawn up.

Consequently, the requests on file infringe the requirement of Rule 137(5) EPC, according to which amended claims may not relate to unsearched subject-matter which does not combine with the originally claimed invention to form a single general inventive concept.

- 3.5 The appellant has not put forward any argument in support of the admission of its requests into the appeal proceedings.
- 3.6 Under these circumstances, the Board, in exercising its discretion under Article 12(4) RPBA, arrives at the conclusion that none of the requests which were filed with the statement of grounds of appeal is admitted into the appeal proceedings.

It follows that there is no valid request on file and the appeal has therefore to be dismissed (see in analogy T 1587/07, unpublished, point 4. of the reasons).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



R. Schumacher

G. Assi

Decision electronically authenticated