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**Datasheet for the decision
of 12 August 2009**

Case Number: T 1884/06 - 3.4.01

Application Number: 03710766.1

Publication Number: 1470429

IPC: G01P 3/487

Language of the proceedings: EN

Title of invention:

Method and apparatus for providing information from a speed
and direction sensor

Applicant:

ALLEGRO MICROSYSTEMS INC.

Headword:

-

Relevant legal provisions:

EPC Art. 123(2)

Relevant legal provisions (EPC 1973):

EPC Art. 84

Keyword:

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Decisions cited:

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Catchword:

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Case Number: T 1884/06 - 3.4.01

D E C I S I O N
of the Technical Board of Appeal 3.4.01
of 12 August 2009

Appellant: ALLEGRO MICROSYSTEMS INC.
115 Northeast Cutoff
P.O. Box 15036
Worcester, MA 01615 (US)

Representative: Dawson, Elizabeth Ann
A.A. Thornton & Co.
235 High Holborn
London WC1V 7LE (GB)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 24 July 2006
refusing European application No. 03710766.1
pursuant to Article 97(1) EPC 1973.

Composition of the Board:

Chairman: B. Schachenmann
Members: G. Assi
F. Neumann

Summary of Facts and Submissions

- I. The appellant (applicant) lodged an appeal against the decision of the examining division refusing European patent application No. 03710766.1 (publication number 1470429).
- II. On 30 April 2009 the appellant was summoned to oral proceedings scheduled to take place on 12 August 2009. On 26 May 2009 the Board issued a communication.
- III. With letter of 8 July 2009 the appellant's representative informed the Board that he did not intend to attend the oral proceedings.
- IV. The oral proceedings took place in his absence (Article 15(3) RPBA).
- V. With the grounds of appeal, the appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the following documents:

Claims 1-19 filed with the grounds of appeal;

Description pages 1-3, 5-9, 11-14, 17, 20, 22 as originally filed;

Description pages 4, 4a, 18, 19 filed with letter of 20 June 2005;

Description pages 10, 15, 16, 21 filed with letter of 21 April 2006;

Drawing sheets 1/6, 3/6-5/6 filed with letter of 20 June 2005;

Drawing sheets 2/6, 6/6 filed with letter of 21 April 2006.

As an auxiliary request, the appellant requested that oral proceedings be appointed.

VI. The wording of claim 1 reads as follows:

"A method of providing information about a target (22; 32) having at least a first edge (23a; 36) and a second edge (23b; 38), the method comprising:

detecting at least the first and second edges of the target;

generating a pulse (30a-1) in response to each of the detected first and second edges of the target, with each of the pulses having a first or second pulse width with the first pulse width corresponding to a first logic value and the second pulse width corresponding to a second different logic value; and

measuring at least one parameter of the target and/or an environment in which the target is disposed,

characterised in that a first one of the first and second pulse widths is a multiple of a second one of the first and second pulse widths; and

the method further comprises the step of forming a data word using at least two pulses by directly encoding the value of a measured parameter, whereby to convey a quantified characteristic of the target or the environment in which the target is disposed."

VII. The revised version of the European Patent Convention or EPC 2000 entered into force on 13 December 2007. In the present decision, reference is made to "EPC 1973" or "EPC" for EPC 2000 (EPC, Citation practice, pages 4-

6) depending on the version to be applied according to Article 7(1) of the Revision Act dated 29 November 2000 (Special Edition No. 1 OJ EPO 2007, 196) and the decisions of the Administrative Council dated 28 June 2001 (Special Edition No. 1 OJ EPO 2007, 197) and 7 December 2006 (Special Edition No. 1 OJ EPO 2007, 89).

Reasons for the Decision

1. The appeal is admissible.
2. The method according to claim 1 on file differs from the method of claim 1 of the application as filed by the following feature inter alia:

"the method further comprises the step of forming a data word using at least two pulses by directly encoding the value of a measured parameter".

This feature, in particular the expression *"by directly encoding the value of a measured parameter"* lacks support by the description (Article 84 EPC 1973) and extends beyond the content of the application as filed (Article 123(2) EPC).

- 2.1 As regards support by the description, according to the published application (page 19, lines 18-28; Figures 4, 4A), the output control circuit 84 receives a plurality of input signals indicative of measured parameters and from these input signals provides an output signal in accordance with the protocol described in conjunction with Figures 2 and 3. On the basis of this disclosure, the step of encoding may not be characterised as being

"*direct*" since a digital data string is only provided at the output of the control circuit 84 downstream of the detection circuits 77, 78, 80, 82. Page 18, lines 3-11 underlines this view. The data indicative of the air gap is provided to the output control circuit in the form of three logic signals which are decoded to make the correct protocol output word for air gap diagnostics. A direct encoding of the value of the air gap does apparently not occur.

- 2.2 As regards the requirement of Article 123(2) EPC, the expression "*by directly encoding the value of a measured parameter*" cannot be found *expressis verbis* in the application as filed.

The passage of the published application cited by the appellant (page 12, line 13 to page 14, line 3) describes how measured information in the form of a pulse string 30 (Figure 2) can be represented as a digital data string 40 in accordance with a given protocol (page 10, line 31 to page 11, line 2). However, it does not disclose a step of directly encoding a value, either explicitly or implicitly. Instead, this passage indicates that the range in which the measured parameter lies is encoded. Even page 14, lines 1-3 does not suggest that the value may be encoded, but rather that it is possible to provide wider or narrower ranges.

Moreover, according to the embodiment referred to in page 12, lines 19-21, a first data word provides air gap diagnostics information and a second data word provides temperature diagnostics. In this case, the values of the data words indicate whether the parameters are within defined intervals (page 13,

line 10 to page 14, line 7; original claims 22 and 38). They do not represent the values of the parameters.

3. In the communication of 26 May 2009, the Board addressed other issues like the meaning of the term "*multiple*" in claim 1 on file, which was relevant for the assessment of novelty and inventive step. In view of the objections mentioned above, however, these further issues need not be discussed in the present decision.
4. In conclusion, the application, in particular claim 1 on file, does not meet the requirements of Article 84 EPC 1973 and Article 123(2) EPC.

Order

For these reasons, it is decided that:

The appeal is dismissed.

The Registrar

The Chairman:

M. Kiehl

B. Schachenmann