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Datasheet for the decision of 16 July 2015

Case Number: T 0530/11 - 3.4.02

Application Number: 02803136.7

Publication Number: 1432961

IPC: G01B11/30, G01N33/46

Language of the proceedings: EN

Title of invention:
METHOD AND ARRANGEMENT IN A MEASURING SYSTEM

Patent Proprietor:
Sick IVP AB

Opponent:

Headword:

Relevant legal provisions:
EPC 1973 Art. 56

Keyword:
Inventive step - after amendment

Decisions cited:

Catchword:

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Case Number: T 0530/11 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 16 July 2015

Appellant: (Patent Proprietor)	Sick IVP AB Wallenbergs gata 4 583 35 Linköping (SE)
Representative:	Hammond, Andrew David Valea AB Box 1098 405 23 Gothenburg (SE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 5 January 2011 revoking European patent No. 1432961 pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman	B. Müller
Members:	F. Maaswinkel
	H. von Gronau

Summary of Facts and Submissions

I. This appeal lies from the decision of the opposition division dated 5 January 2011 revoking European patent number 1 432 961. This patent discloses an arrangement and a method for imaging the characteristics of an object moved relative to the measuring system. In its decision the opposition division found that the subject-matter of the independent claims of the patent as granted lacked novelty (Art. 52(1) and 54 EPC) having regard to the disclosure of the following document:

D5: Forslund Mattias: "Utvärdering av ny teknik vid dimensionsmätning av sågtimmer", Trätek report P0012041, ISSN 1102-1071, December 2000.

II. The patent proprietor lodged an appeal against this decision. With the grounds of appeal it requested that the decision under appeal be set aside and that the patent be maintained in the form as originally filed (Main Request) or on the basis of the sets of claims according to the First to Fourth Auxiliary Requests filed with the grounds of appeal. Furthermore, the appellant filed an auxiliary request for oral proceedings.

III. With its letter of 20 September 2011 the opponent commented on the arguments in the grounds of appeal and requested the revocation of the patent, which request is understood as a request to dismiss the appeal.

IV. In a communication pursuant to Article 15(1) RPBA the Board summoned the parties to oral proceedings scheduled for 16 June 2015.

V. With a letter of 29 May 2015 the opponent withdrew its opposition.

VI. In a letter of 4 June 2015 the appellant declared to be prepared to make the current Third Auxiliary Request the basis for a new Main Request if in this way oral proceedings could be avoided. The appellant noted that, according to the former opponent in section 1.1 of its submissions of 20 September 2011, the subject of the opposition were only the initial independent claims, and the patentability of an image compression method was not opposed. The appellant's representative argued that claim 1 of the Third Auxiliary Request was directed to such a method. He suggested a telephone conversation on this issue.

VII. In a subsequent telephone call to the appellant's representative, the rapporteur, addressing the opponent's letter of 20 September 2011 referred to by the appellant's representative, observed that, whereas in section 1.1 the opponent had stated "The patentability of this invention [*i.e. the image compression method, explanation added by the Board*] is not opposed" in Section 5.3 of this letter the opponent had raised the following objections:

"The idea to use image compression in the application of the patent to increase throughput would therefore not in itself be a patentable invention. Indeed, the patent discloses a new compression algorithm specially adapted to this application, but the unique features of this new algorithm are not included in the new independent claims of the third auxiliary request which only mentions that image compression in general is employed. Consequently, since D5 does not mention image compression, the Opponent submits that the independent claims of the

third auxiliary request are novel in view of D5. However, since image compression as a general concept was well known at the priority date, the independent claims lack inventive step in view of D5 and common general knowledge".

VIII. In the telephone conversation the rapporteur observed that the features of the new algorithm referred to by the opponent appeared to be disclosed in paragraphs [0013] to [0015] of the patent specification and were illustrated in Figures 3 and 4; in a generic way these features appeared to be defined in claim 3 of the patent as granted being dependent from claims 2 and 1; and in claim 11 of the patent as granted, being dependent from claims 9 and 10, respectively. It was also observed that claims 7 and 15 as granted apparently defined subject-matter being inconsistent with claims 1 to 3; this equally would apply to the disclosure in paragraph [0016].

IX. With a letter received on 9 June 2015 the appellant filed a new set of claims and amended description pages and requested that the patent be maintained on the basis of the following documents:

- claims 1 to 10 filed with the letter of 9 June 2015;
- columns 1, 2, 5 and 6 of the description as granted;
- columns 3 and 4 of the description filed with the letter of 9 June 2015; and
- drawings, Figures 1 to 8 as granted.

X. Thereupon the Board communicated to the appellant that the scheduled oral proceedings were cancelled.

XI. Claim 1 of the request filed with the letter of 9 June 2015 reads:

"Method for imaging the characteristics of an object (3) by means of a measuring system, in which the measuring system and/or the object (3) is/are moved in relation to one another in a predefined direction of movement, the object preferably being moved in relation to the measuring system, in which method the object (3) is illuminated by means of incident light, which has limited extension in the direction of movement, and light reflected from the object (3) is detected by means of an imaging sensor (1) arranged on the same side of the object (3) as the incident light, the image-processing sensor (1) converting the detected light into electrical charges, according to which a digital representation (5) of the object (3) is created, characterised in that the light is made to strike the object (3) at a predetermined distance from the imaging sensor (1) viewed in the direction of movement of the object, and that information on the geometric profile of the object and information on the light scatter in a predetermined area around the said profile is simultaneously read out from the digital representation (5), wherein the digital representation (5) is divided up into rows and columns and a compressed image (7) is created from the digital representation (5) by reducing the number of rows by summation of the rows of the digital representation in columns in a predetermined order."

Claim 6 reads:

"Arrangement for representing the characteristics of an object (3) by means of a measuring system, in which either the measuring system or the object (3) is

designed to move in relation to one another in a predefined direction of movement, the object (3) preferably being designed to move in relation to the measuring system, which arrangement comprises at least one light source (2) designed to illuminate the object (3) with a light which is incident upon the object (3) and has a limited extension in the direction of movement, the arrangement further comprising an imaging sensor (1), which is arranged on the same side of the object (3) as the light source (2) and is designed to pick up light reflected from the object (3) and to convert this into electrical charges, an image-processing unit being designed to create a digital representation of the object (3) from said electrical charges, characterised in that the light source (2) is arranged at a predetermined distance from the imaging sensor (1) viewed in the direction of movement, and that the image-processing unit is designed to simultaneously read out information on the geometric profile of the object and information on the light scatter in a predetermined area around said profile, wherein the digital representation (5) is divided into rows and columns and the image-processing unit is designed to create a compressed image (7) from the digital representation (5) by reducing the number of rows, the image-processing unit being designed to reduce the number of rows by summation of the rows of the digital representation (5) in columns in a predetermined order.
"

Claims 2 to 5 and claims 7 to 10 are dependent claims.

Reasons for the Decision

1. The appeal is admissible.

2. Amendments

Present independent claim 1 combines the features of claims 1, 2 and 3 of the patent as granted. Similarly independent claim 6 combines the features of claims 9, 10 and 11 of the patent as granted. Claims 2 to 5 correspond to claims 4 to 6 and claim 8 of the patent as granted; and claims 7 to 10 correspond to claims 12 to 14 and claim 16 of the patent as granted. The only modifications in the description are the adaptation of the summary of the invention in col. 3, l. 2, and the deletion of paragraph [0016] of an alterative no longer being covered by the present claims. Therefore the amendments are not objectionable under Art. 123(2) EPC.

3. Patentability

3.1 Novelty

The subject-matter of the independent claims includes a further restriction of the method, respectively the arrangement, defined in the independent claims of the third auxiliary request filed with the grounds of appeal. In its reply of 20 September 2011 the former opponent had acknowledged that the subject-matter of these claims was novel. The board concurs with this position.

3.2 Inventive step

3.2.1 The subject-matter of the independent claims relates to a method, respectively an arrangement for the measurement of a geometric profile of a moving object. In its decision in which the patent was revoked the opposition division found that the subject-matter of the

independent claims as granted was anticipated by the disclosure in document D5.

3.2.2 Concerning the further features in the claims of the former Third Auxiliary Request the former opponent had noted at page 9, second paragraph of the letter of 20 September 2011 that "D5 does not mention image compression". The present independent claims further define and restrict these features relating to the image processing method and the corresponding arrangement by including the additional features of claims 3 and 11 of the patent as granted.

3.2.3 Neither document D5, nor any of the other documents referred to in the opposition proceedings disclose or relate to an image processing method as illustrated in Figures 3 and 4 and described in paragraphs [0013] to [0015] of the patent specification. The method and arrangement defined in the present independent claims solve the technical problem of reducing the quantity of data collected in the measurement of the geometric profile of the moving object. Therefore the subject-matter of the independent claims involves an inventive step.

4. Accordingly, taking into consideration the amendments made to the patent, the requirements of the Convention are met. The patent so amended can therefore be maintained (Article 101(3)(a) 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 with the order to maintain the patent as amended in the following version:

Claims: 1 to 10 filed with the letter of 9 June 2015;
Description:
columns 1, 2, 5 and 6 of the description as granted;
columns 3 and 4 of the description filed with the letter of 9 June 2015; and
Drawings: Figures 1 to 8 as granted.

The Registrar: The Chairman:

M. Kiehl B. Müller

Decision electronically authenticated