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**Datasheet for the decision
of 4 December 2009**

Case Number: T 0123/07 - 3.2.04

Application Number: 99203719.2

Publication Number: 1000535

IPC: A01J 5/013

Language of the proceedings: EN

Title of invention:

A method of establishing the quality and/or composition of milk

Patentee:

MAASLAND N.V.

Opponent:

DeLaval International AB

Headword:

Background light/MAASLAND

Relevant legal provisions:

EPC Art. 56

Relevant legal provisions (EPC 1973):

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Keyword:

"Inventive step (no)"

Decisions cited:

-

Catchword:

-



Case Number: T 0123/07 - 3.2.04

D E C I S I O N
of the Technical Board of Appeal 3.2.04
of 4 December 2009

Appellant: DeLaval International AB
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Respondent: MAASLAND N.V.
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Representative: Corten, Maurice Jean F.M.
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
23 November 2006 concerning maintenance of
European patent No. 1000535 in amended form.

Composition of the Board:

Chairman: M. Ceyte
Members: P. Petti
T. Bokor

Summary of Facts and Submissions

I. In its interlocutory decision dated 23 November 2006, the opposition division found that, having regard to the amendments submitted by the patent proprietor, the European patent No. 1 000 535 met the requirements of the European Patent Convention.

II. Claim 1 held allowable by the opposition division reads as follows:

"1. A method of determining the quality and/or the composition of milk by means of measurements, in which method:

a source irradiates the milk consecutively with radiation of different wavelengths, while, during at least part of the time when the source is switched on, a receiver establishes reflected radiation intensities during a period of time; the values of the thus obtained radiation intensities are stored in memory; the values are compared mutually as well as with previous values recorded during a previous measurement; and that the results of this comparison process are indicated, **characterized in that** during a measurement the source is switched off, while, during at least part of the time when the source is switched off, the receiver establishes reflected radiation intensities during a period of time; in that the values of the thus obtained radiation intensities are stored as background values in a

memory; in that the background values are incorporated in the values obtained during the period of time when the source is switched on; and in that the values adjusted by the background values are stored in a memory, so that the values can be compared with previously obtained values."

In its decision the opposition division referred *inter alia* to documents WO-A-98/30084 (D1) and US-A-4 080 076 (D5) and held that the subject-matter of amended claim 1 involved an inventive step because none of these documents disclosed the feature of claim 1 that "the values adjusted by background values are stored in a memory so that the values can be compared with previously obtained values".

III. The opponent (hereinafter appellant) lodged an appeal against this decision on 23 January 2007 and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 22 March 2007.

IV. On 27 July 2009 the parties were summoned to oral proceedings scheduled to take place on 24 November 2009. In a communication dated 18 September 2009 the board drew the attention of the parties to the issue of whether the claimed subject-matter involved an inventive step starting from D1 as closest prior art disclosing a method according to the pre-characterising portion of claim 1 and combining this closest prior art with D5.

By letter dated 22 October 2009 the respondent (patent proprietor) withdrew his request for oral proceedings, asserted that he would not attend the oral proceedings

and requested a decision on the basis of the written submissions.

Oral proceedings were cancelled by the board's communication dated 30 October 2009.

- V. The appellant requested that the decision under appeal be set aside and the patent be revoked.

The respondent requested that the appeal be dismissed.

- VI. The appellant essentially submitted that the claimed subject-matter lacked an inventive step because from D1 "it [was] known to measure, store and compare values", while from D5 "it [was] known to adjust measured values for background radiation".

Moreover, he also submitted the following:

It was held in the decision under appeal that the subject-matter of claim 1 as granted was obvious having regard to the disclosure of D1 concerning measuring substances in milk using a source of irradiation and having further regard to the disclosure of D5 concerning correcting optical measurements made on liquids for background [ambient] radiation and storing the values.

It is noted in this context that D5 recites "The results of a complete sampling cycle are stored ... after subtraction of the ambient values from the respective light values" (column 2, lines 57-61). D5 further discusses the mathematical manipulation of the results.

Thus the claimed feature concerning storage of adjusted values is expressly taught by D5.

The amendment made to claim 1 as granted concerns the storage of values "so that the values can be compared with previously obtained values".

It seems unlikely that a skilled person carrying out the teaching of D5 would even contemplate storing those values which are obtained in any way other than a way which would allow comparison with other relevant values. Therefore, the feature of the amendment to claim 1 as granted is self evident and hence obvious.

- VII. The respondent submitted that the subject-matter of amended claim 1 involved an inventive step over the cited prior art. D1 does not deal with background value correction. In D5 measured values are adjusted for background radiation but there is no hint to the claimed feature that the values corrected for background radiation are stored in a memory and compared with previously obtained values.

Reasons for the Decision

1. The appeal is admissible.
2. *Inventive step*
 - 2.1 The closest prior is represented by D1 which corresponds to the document NL-A1 004 980 cited and analyzed in the patent specification.

D1 discloses a method according to the pre-characterising portion of claim 1. This has not been disputed by the parties.

2.1.1 In the method of D1 intensity values measured for the relevant animal at each milking run are recorded to constitute historical intensity values, whereafter at a next milking run of the same animal the current intensity values are compared mutually as well as with the historical intensity values (see particularly page 3, line 37 to page 5, line 11). By comparing the intensity values with the values recorded during previous milking runs the presence of specific substances such as contaminations can be established.

2.2 This method has the disadvantage that the measured intensity values of the milk "vary to a great extent depending on the amount of the surrounding light" (see patent specification, column 1, lines 13 to 15).

The technical problem to be solved by the claimed method vis-à-vis D1 is thus to obviate this drawback or at least to minimize it (see patent specification, column 1, lines 18 and 19).

This problem is solved by the features specified in the characterising portion of claim 1.

2.2.1 D5 discloses a method of analyzing suspended solids in a flowing liquid, in which method two light sources (31, 33) irradiate the liquid and two receivers (35, 37) establish transmitted radiation intensities during a period of time.

This citation relates in essence to the same problem of eliminating the influence of the surrounding light on the measured values. In order to solve this problem (see column 4, line 61 to column 5, line 8), the light emitting sources (31, 33) are switched off during a measurement, while during at least a part of the time when the sources are switched off the light receivers establish transmitted intensities, i.e. background values, and these background values are incorporated (by way of subtraction) in the values obtained during the period of time in which the sources are switched.

The skilled person seeking to solve the above mentioned technical problem would turn to D5 which teaches to switch off the light emitting sources so as to measure the background values and to incorporate the background values in the values obtained during the period of time in which the sources are switched on so as to obtain corrected values which depend only on the amount of the light emitted by the light sources.

- 2.2.2 It is true that D5 - as submitted by the respondent and held by the opposition division in its decision - does not disclose the feature that "the values adjusted by background values are stored in a memory so that the values can be compared with previously obtained values".

However, as has been stated, it would have been obvious for the skilled person confronted with the problem of eliminating the influence of the background light on the measured values to apply the teaching of D5 to the method of D1, in which detected non-corrected values are stored and compared with previously detected non-corrected values. On the basis of this teaching, the

skilled person would not only measure the intensity of the background light and correspondingly correct the intensity values, but also store the corrected values and compare them with the previously obtained corrected values in order to render the comparison independent from the background light. He would immediately recognize that the comparison between current and historical intensities without any correction for ambient light is not reliable, because the compared values have not necessarily been detected under the same ambient light conditions. In such a way the skilled person would arrive at the claimed method without exercising any inventive skill.

- 2.3 Therefore, the subject-matter of claim 1 lacks an inventive step (Article 56 EPC).

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:

G. Magouliotis

M. Ceyte