Datasheet for the decision of 17 April 2008

Case Number: T 0073/06 - 3.2.04
Application Number: 98940669.9
Publication Number: 0954215
IPC: A01D 67/00

Language of the proceedings: EN

Title of invention:
An agricultural machine and a method of using same

Patentee:
MAASLAND N.V.

Opponent:
KUHN S.A.

Headword:
Ground Identification System/MAASLAND

Relevant legal provisions:
EPC Art. 123

Relevant legal provisions (EPC 1973):
EPC Art. 54(1), 56, 84

Keyword:
"Inventive Step (yes)"

Decisions cited:
G 0009/92, G 0004/93

Catchword:
-
Case Number: T 0073/06 - 3.2.04

DECISION
of the Technical Board of Appeal 3.2.04
of 17 April 2008

Appellant: MAASLAND N.V.
(Patent Proprietor)
Weverskade 10
NL-3155 PD Maasland (NL)

Representative: Corten, Maurice Jean F.M.
Octrooibureau Van der Lely N.V.
Weverskade 110
NL-3147 PA Maassluis (NL)

Respondent: Kuhn S.A.
(Opponent)
4, Impasse des Fabriques
F-67706 SAVERNE Cedex (FR)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
28 November 2005 concerning maintenance of
European patent No. 0954215 in amended form.

Composition of the Board:
Chairman: M. Ceyte
Members: P. Petti
T. Bokor
Summary of Facts and Submissions

I. An opposition was filed against the European patent No. 954 215. The opposition division by its interlocutory decision dated 28 November 2005 found that the patent in an amended version based upon independent method claim 1 and dependent claims 2 and 3 filed during oral proceedings before the opposition division met the requirements of the EPC.

II. On 16 January 2006 the patent proprietor (hereinafter appellant) lodged an appeal against this decision and simultaneously paid the appeal fee. A statement setting out the grounds of appeal was received on 6 April 2006.

With the statement setting out the grounds of appeal the appellant submitted an independent apparatus claim 1 and an independent method claim 16 which corresponds to the method claim 1 held allowable by the opposition division.

III. Oral proceedings before the board were held on 17 April 2008.

During oral proceedings the appellant submitted further amendments which led to a claim 1 which reads as follows:

1. An agricultural machine, such as a mowing implement, comprising one or more mowing members (1) for mowing crop, characterized in that the agricultural machine comprises means for determining the soil conditions, the agricultural machine being provided with a subframe (19) and a carrier frame (20) partially carrying the
subframe, the latter comprising the mowing members, while the behaviour of the subframe can be forecast by means of a recording system belonging to the means, the recording system comprising sensor means (35), formed by a ground identification system, such as a picture identification system, e.g. a video camera, which ground identification system determines the type of soil.

IV. The appellant requested that the decision under appeal be set aside and the patent be maintained on the basis of claims 1 to 18 as filed during oral proceedings on 17 April 2008.

V. The opponent (hereinafter respondent) requested that the appeal be dismissed.

VI. The appellant essentially submitted that amended claim 1 was clear and that its subject-matter was novel and involved an inventive step.

VII. The respondent's arguments can be summarized as follows:

- The features (in claim 1) "the agricultural machine comprises means for determining the soil conditions" and "the behaviour of the subframe can be forecast . . ." define two different functions which render claim 1 unclear (Article 84 EPC (1973)).

- Due to the terms "such as" and "e.g.", the matter for which protection is sought is not clearly defined in claim 1 (Article 84 EPC (1973)).
- Document EP-A-149 870 (D6) discloses an agricultural machine having all the features of claim 1. In particular, the elements 62, 64 and 66 shown in Figure 19 of D6 constitute a recording system comprising sensor means formed by a ground identification system which determines the type of soil. Thus, the subject-matter of claim 1 lacks novelty (Article 54(1) EPC (1973)).

- Document US-A-4 015 366 (D5) teaches the use of video cameras to identify the type of soil. Starting from an agricultural machine as disclosed in document D6, it would be obvious for a skilled person - on the basis of the teaching of document D5 - to arrive at an agricultural machine provided with a picture identification system which determines the type of soil. Thus, the subject-matter of claim 1 does not involve an inventive step (Article 56 EPC (1973)).

**Reasons for the Decision**

Since the European patent was already granted at the time of the entry into force of the EPC 2000 on 13 December 2007, the transitional provisions according to Article 7 of the Act revising the EPC of 29 November 2000 and the Decisions of the Administrative Council of 28 June 2001 and of 7 December 2006, Article 2, have been applied. When Articles or Rules of the version of the EPC 1973 are cited, the year is indicated.
1. The appeal is admissible.

2. **Amendments**

2.1 The amendments to claim 1 represent a reaction of the appellant to objections under Article 84 EPC (1973) as well as under Article 123(2) EPC which were put forward, respectively, by the respondent and the board during oral proceedings and thus cannot be regarded as late filed. It is observed that these amendments were clearly allowable with respect to the formal requirements of Article 84 EPC (1973) and Article 123(2) EPC and that the respondent did not challenge their admissibility.

2.2 The two functions defined in claim 1, i.e. the functions of determining the soil conditions and forecasting the behaviour of the subframe do not render the claimed subject-matter unclear. Claim 1 refers to a recording system and makes it clear, on the one hand, that this recording system belongs to the means for determining the soil conditions and comprises a sensor means formed by a ground identification system which determines the type of soil and, on the other hand, that the behaviour of the sub-frame comprising the mowing members can be forecast with the aid of this recording system. Thus, claim 1 defines a machine comprising a ground identification system determining the soil conditions and — more specifically — the type of soil, which system — on the basis of the identification of the type of soil — can forecast the behaviour of the sub-frame, i.e. anticipate a changing behaviour caused by the soil conditions.
The expressions in claim 1 "such as a picture identification system" and "e.g. a video camera" define facultative features, which do not render claim 1 unclear.

Therefore, amended claim 1 complies with the requirements of Article 84 EPC (1973)

2.3 Amended claim 1 contains all the features of granted claim 1 and the additional features specified in granted claims 3 and 4 as well as the feature that the sensor means is "formed by a ground identification system, such as a picture identification system, e.g. a video camera, which ground identification system determines the type of soil". Therefore, amended claim 1 does not contravene Article 123(3) EPC.

The features of claims 3 and 4 correspond to those of claims 2 and 3 of the application as filed. The feature relating to the ground identification system can be clearly and unambiguously derived from the description (page 7, lines 5 to 10) of the application as filed. Therefore, amended claim 1 does not contravene Article 123(2) EPC.

3. Novelty (claim 1)

3.1 Document D6 (see particularly Figure 6) discloses an agricultural machine, such as a mowing implement, comprising one or more mowing members for mowing crop (cutting bar 2), a sub-frame (frame 1) comprising the mowing members and a carrier frame (supports 10 and arms 43) partially carrying the sub-frame.
This agricultural machine also comprises (see particularly Figures 19 and 20) a skid 62 which is pivotally connected to the frame 1 and a piston-cylinder system 64 which is arranged between the skid and the frame. The skid 62 and the piston-cylinder 64 form a sensor capable of detecting the ground pressure, which sensor generates a fluid signal which is converted by a converting element 66 into an electric signal which is used to control the height of the frame 1 with respect to the ground so as to maintain the desired ground pressure over the width of the implement.

In document D6 it is referred to changes of the ground pressure occurring when the machine weight increases because it becomes fouled (see page 1, lines 16 to 18).

3.2 With respect to document D6, the respondent argued that the sensor formed by skid 62 and piston-cylinder 64 constitutes a "means for determining the soil conditions" or, more specifically, a ground identification system which determines the type of soil, and that the converting element 66 is also a recording system comprising the ground identification system.

3.2.1 The board cannot accept these arguments for the following reasons:

- Even if it can reasonably be assumed that the ground pressure changes if the soil conditions change, the ground pressure sensor of D6 cannot determine with certainty the type of soil because the ground pressure is determined not only by the nature of the soil but also by the weight of the machine. Thus, the ground pressure sensor of D6
cannot be considered as a ground identification system in the meaning of the patent in suit, in so far as this known ground pressure sensor is not capable of identifying the type of soil independently of the changes in the weight of the machine.

- The converting element 66 of document D6 is not described as having any recording functions.

3.3 Therefore, the subject matter of claim 1 is novel over document D6 (Article 54(1) EPC (1973)).

4. Inventive step (claim 1)

4.1 Having regard to the above considerations, the subject matter of claim 1 differs from the agricultural machine known from document D6 in that

(a) the behaviour of the sub-frame can be forecast by means of a recording system which belongs to the means for determining the soil conditions, the recording system comprising sensor means formed by a ground identification system which determines the type of soil.

4.2 Feature (a) makes it possible to control the mowing machine so as adapt it to the changes in the type of the soil upon which the machine will operate. Thus, the problem to be solved by the present invention may be seen in providing an agricultural machine which can be adapted to the type of soil during mowing, i.e. in real time.
4.3 Document D5 refers to the use of sensing means which are utilized to gather images from an agricultural area and are inter alia capable of detecting the humidity of the soil (see column 17, line 65 to column 19, line 9). These sensing means can be mounted on a tower, on a tethered balloon, on an airplane or on satellite (see particularly column 18, lines 1 to 6). Moreover, D5 refers to an aircraft-mounted sensing means providing images which are used to generate a "contour map for crop species", i.e. a map relating to properties of the agricultural area (see particularly column 18, lines 14 to 19). Thus, document D5 only teaches to associate an agricultural area with a sensing means capable of identifying the type of soil of the whole agricultural area.

Moreover, there is no disclosure or suggestion in document D5 of identifying the type of soil of the area on which an agricultural machine will operate, during the operation of the machine. Neither is there any disclosure or suggestion of mounting a sensing means on an agricultural machine so as to forecast the behaviour of the sub-frame carrying the working members of the machine when the machine will operate in said area.

Thus, the skilled person starting from the agricultural machine of document D6 would not arrive with the aid of D5 to the claimed subject-matter without exercising inventive skill.

4.4 Therefore, the subject matter of claim 1 involves an inventive step (Article 56 EPC (1973)).
5. Claims 2 to 18

5.1 Dependent claims 2 to 15 concern particular embodiments of the invention defined in claim 1.

5.2 The independent method claim 16 together with dependent claims 17 and 18 correspond to the method claims 1 to 3 of the amended version held allowable in the opposition division interlocutory decision. Since no appeal was filed against these claims (the patent proprietor is the sole appellant), neither the board nor the opponent might challenge them, see G 9/92, OJ 1994, 875 and G 4/93, OJ 1994, 875. In this respect, it also has to be noted that the amendments leading to the present appellant's request have no influence on the interpretation of the method claims and that these method claims were not challenged by the respondent.

6. Therefore, the patent can be maintained in amended form on the basis of claims 1 to 18.
Order

For these reasons it is decided that:

1. The decision under appeal be set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent in amended form on the basis of the following document:
   - Claims 1 to 18, as filed during oral proceedings on 17 April 2008;
   - Description: columns 1, 2, 5 and 6 as filed during oral proceedings on 17 April 2008; columns 3 and 4 of the patent specification;
   - Drawings: Figures 1 to 4 of the patent specification.

The Registrar: The Chairman:

D. Sauter M. Ceyte