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Datasheet for the decision of 6 February 2007

Case Number: T 0036/06 - 3.4.01

Application Number: 02780236.2

Publication Number: 1442314

IPC: G01S 5/00

Language of the proceedings: EN

Title of invention:
Method for monitoring the movements of individuals in and around buildings, rooms and the like, and direction transmitter for execution of the method and other applications

Applicant:
Nyfelt, Leif, et al

Opponent:
-

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
"Novelty, inventive step - yes"

Decisions cited:
-

Catchword:
-

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Case Number: T 0036/06 - 3.4.01

D E C I S I O N
of the Technical Board of Appeal 3.4.01
of 6 February 2007

Appellant: Nyfelt, Leif, et al.
Fjollet, Karlsund 1
S-541 92 Skövde (SE)

Representative: Karlström, Lennart
Noréns Patentbyra AB
Box 10198
S-100 55 Stockholm (SE)

Decision under appeal: **Decision of the Examining Division of the European Patent Office posted 5 September 2005 refusing European application No. 02780236.2 pursuant to Article 97(1) EPC.**

Composition of the Board:

Chairman: B. Schachenmann
Members: R. Bekkering
G. Assi

Summary of Facts and Submissions

I. European patent application no. 02 780 236.2 (publication nos. WO-A-03 040751 and EP-A-1 442 314) was refused pursuant to Article 97(1) EPC by a decision of the examining division dispatched on 5 September 2005 on the ground of lack of inventive step (Articles 52(1) and 56 EPC).

II. The applicant (appellant) lodged an appeal against the decision on 19 October 2005 and paid the appeal fee on the same day. The statement setting out the grounds of appeal was received on 4 January 2006.

III. Reference is made to the following documents:

D1: JP-A-2001 183 160 and corresponding Patent Abstracts of Japan

D2: WO-A-01 53852

D3: EP-A-1 059 510

D4: WO-A-02 075352

D5: WO-A-98 37932

IV. Oral proceedings, requested as an auxiliary measure by the appellant, were held on 6 February 2007.

V. The appellant requested that the decision under appeal be set aside and a patent be granted on the basis of the following documents:

Claims: no. 1 to 4 filed at the oral proceedings of 6 February 2007;

Description: pages 1, 2, 2a and 3 to 7 filed at the oral proceedings of 6 February 2007;

Drawings: sheet 1/1 as published;

VI. Claim 1 reads as follows:

"*1. A method of monitoring the movements of an individual (1) in and around buildings, rooms and like spaces, wherein said individual moves within an area equipped with active antennas, wherein said individual is provided with a passive transponder co-acting with said antennas for registering the position of said transponder, said antennas sending signals to a monitoring centre disclosing the position of said individual to show the movement of said individual on a display screen in said monitoring centre in the form of a three—dimensional animated picture as said individual moves within said area, characterised in that said individual (1) is equipped with a direction indicator (3, 4) mounted on the head in a defined position and/or on a handheld weapon (5) which indicator is arranged to send directional information from a mechanical or electronic sensor (6, 7) which discloses the direction of said direction indicator (3, 4) as a wireless signal to a receiver placed on said individual or in said area, said receiver in turn sending said directional information as a wireless signal to said monitoring centre so that said individual is displayed in said animated picture with his/her head and/or handheld weapon turned in the true direction.*"

Reasons for the Decision

1. The appeal complies with the requirements of Articles 106 to 108 and Rule 64 EPC and is, therefore, admissible.

2. *Amendments*

Claim 1 is based on originally filed claim 1, with the additional features provided in the pre-characterising portion of the claim being derivable from the original description as published on page 1, second paragraph and page 5, lines 3 to 5. The additional features provided in the characterising portion of the claim pertaining to the direction indicator mounted on the head of the individual and the signal transmission are disclosed on page 4, line 16 to page 5, line 11. The additional features relating to the direction indicator being mounted on a handheld weapon can be found on page 6, lines 2 to 10.

The board is thus satisfied that the amendments to claim 1 comply with the requirements of Article 123(2) EPC.

3. *Clarity and sufficiency of disclosure*

Contrary to concerns expressed in the decision under appeal, the board is, moreover, satisfied that a skilled person familiar with animation techniques would have no difficulty to generate with the aid of an animation program a three dimensional animated picture

of an individual with his/her head and/or handheld weapon turned in the true direction based on position and direction information as provided.

4. *Novelty*

4.1 Document D4, cited in the application as originally filed as starting point for the invention (see page 1, second paragraph), is filed prior to the validly claimed priority date of the present application and published after this date, so that document D4 is comprised in the state of the art under Article 54(3) and (4) EPC and therefore only prejudicial to the novelty of the subject-matter of claim 1.

Document D4 discloses a method of monitoring the movement of individuals in and around buildings, rooms and the like, wherein the individual moves within an area equipped with active antennas, wherein each individual is provided with a passive transponder co-acting with the active antennas for registering the position of the transponders. The antennas send signals to a monitoring centre disclosing the position of the individual to show the movement of the individual in the monitored area in the form of a three—dimensional animated picture on a display screen (see page 3, lines 11 to 23).

Furthermore, according to document D4 furniture or other objects may be equipped with transponders. The transponders may be provided with built-in inclination sensors/position sensors, so as to also be able to follow how furniture is used as protection or to build barricades. Similar to the aforesaid, this can also be

animated and shown three-dimensionally when studying the exercise (see page 10, line 30 to page 11, line 6).

Moreover, weapons may also be equipped with gyros or other types of direction sensors, which also enable the direction in which the weapon has been sighted to be recorded. This can also be shown in an animated form on a picture screen when playing back a sequence of events. Direction sensors may also be placed on the heads of respective individuals taking part in an exercise, so that the direction in which individuals are looking can be recorded by a sequence of events (see page 12, lines 8 to 18).

Not disclosed in document D4 is, however, the transmission of the directional information from the direction indicator as a wireless signal to a receiver placed on the individual or in the monitored area, this receiver in turn sending the directional information as a wireless signal to the monitoring centre.

The subject-matter of claim 1 is, thus, novel over document D4 (Article 54(1), (3) and (4) EPC).

4.2 Document D2 is pre-published and provides the closest prior art for the purposes of Article 56 EPC (cf. point 5, below). In particular, document D2 discloses a method according to the pre-characterising portion of claim 1 of monitoring the movements of an individual in and around buildings, rooms and like spaces (see description, page 3, last paragraph to page 6, second paragraph and figures 1 to 3), wherein the individual moves within an area equipped with active antennas (2a, 3a..), wherein the individual is provided with a

passive transponder co-acting with the antennas for registering the position of the transponder, the antennas sending signals to a monitoring centre (13) disclosing the position of the individual to show the movement of the individual on a display screen in said monitoring centre in the form of a three—dimensional animated picture as said individual moves within said area (see page 12).

Furthermore, in document D2 it is indicated that also weapons may be equipped with transponders and that the weapon may be fitted with a gyro or like means that enables the sighting of the weapon to be registered (see page 9, second paragraph).

The document is, however, silent on whether and how the sighting information of the weapon is taken into account in the scenes, and how the information would be provided to the monitoring centre.

Novelty of the subject-matter of claim 1 is, thus, provided over document D2 (Article 52(1) and 54(1), (2) EPC).

4.3 Novelty is also provided with respect to the remaining available, more remote prior art.

5. *Inventive step*

5.1 The difference of the subject-matter of claim 1 over document D2 is provided by the characterising features of the claim and resides in substance in the provision of a direction indicator mounted on the individual's head or on a handheld weapon arranged to send

directional information from a mechanical or electronic sensor which discloses the direction of said direction indicator as a wireless signal to a receiver placed on said individual or in said area, said receiver in turn sending said directional information as a wireless signal to said monitoring centre so that said individual is displayed in said animated picture with his/her head and/or handheld weapon turned in the true direction.

The objective problem to be solved having regard to document D2 may accordingly be seen as displaying the individual in the animated three dimensional picture with the head and/or handheld weapon turned in the correct direction.

Although arguably, as held in the decision under appeal, the mention in document D2 of the use of video cameras (see page 2, first paragraph) shows the desirability of displaying a correctly turned three-dimensional animated picture of the individual, the document does not contain any hints to the concrete solution claimed of sending the directional information, separately from any position data of the individual obtained by co-action of a transponder carried by the individual and active antennas placed in the area to be monitored, by means of a receiver/transmitter placed on the individual or in the area, acting as a relay transmitter for sending the directional information to the monitoring centre. Moreover, there is no suggestion for incorporating the directional information in the animation.

5.2 Document D1 discloses a method of displaying the position and the orientation of a ship on an onboard display.

The subject-matter of claim 1 differs from document D1 in that the monitoring centre and the display screen are remote from the individual or object. Moreover, there is no indication in document D1 that a wireless signal is sent from the direction indicator to the monitoring centre. Furthermore, in document D1 the ship does not move in an area equipped with antennas registering the position of transponders on the ship. In document D1 the position of the ship is determined by GPS. Accordingly, document D1 is based on a generally different setup and does not render the claimed solution obvious.

5.3 Document D3 discloses a method in which, based on the position information of a device held by a user (eg obtained via GPS or triangulation using cell phone base stations) and the range and bearing relative to the device of an object of interest, the device determines the position of the object of interest. The position of the object of interest is then communicated to a database containing information of the object, stored in the device or stored remotely and accessed via a cellular radio system. The information is forwarded to the device where it is displayed (see page 4, lines 30 to 49).

Contrary to what is held in the decision under appeal, there is no disclosure in document D3 of sending a wireless signal disclosing the direction of a direction indicator to a monitoring centre. Document D3 is, thus,

also based on an entirely different setup and does not render the claimed solution obvious.

5.4 Finally, document D5 discloses a method of determining the position of multiple objects such as players on an indoor playing field for creating animations or graphs. A number of radio transceivers with antennas are positioned proximate the playing field for determining the position of transceivers carried by the players. Sensors, including gyro sensors, may also be positioned on the players coupled to the transceivers (see pages 5 to 7) for providing orientation information.

The document is, however, not concerned with displaying the individual with his head or handheld object turned in the actual direction. In the document, moreover, the transceivers for position determination are used for transmitting orientation information as well. There is nothing to suggest the use of a separate receiver as claimed.

Accordingly, document D5 does not render the claimed solution obvious either.

5.5 For the reasons above, the subject-matter of claim 1 is considered to involve an inventive step (Articles 52(1) and 56 EPC).

5.6 The dependent claims 2 to 4 contain further features of the method and, thus, involve an inventive step as well.

6. The description has been adapted to the amended claims as appropriate.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the examining division with the order to grant a patent on the basis of the following documents:

   Claims: no. 1 to 4 filed at the oral proceedings of 6 February 2007;

   Description: pages 1, 2, 2a and 3 to 7 filed at the oral proceedings of 6 February 2007;

   Drawings: sheet 1/1 as published;

The Registrar: The Chairman:

R. Schumacher B. Schachenmann