Datasheet for the decision of 27 March 2015

Case Number: T 0931/13 - 3.2.01
Application Number: 04713452.3
Publication Number: 1602117
IPC: B60Q1/14, B60R11/04
Language of the proceedings: EN

Title of invention:
AUTOMATIC VEHICLE EXTERIOR LIGHT CONTROL SYSTEM ASSEMBLIES

Patent Proprietor:
Gentex Corporation

Opponent:
Hella KGaA Hueck & Co.

Headword:

Relevant legal provisions:
EPC Art. 123(2), 56
RPBA Art. 13(1)

Keyword:
Amendments - added subject-matter (no)
Late-filed argument - admitted (no)
Inventive step - (yes)

Decisions cited:
Catchword:
DECISION
of Technical Board of Appeal 3.2.01
of 27 March 2015

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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
15 February 2013 concerning maintenance of the

Composition of the Board:
Chairman G. Pricolo
Members: H. Geuss
P. Guntz
Summary of Facts and Submissions

I. The appeal is directed against the interlocutory decision of the Opposition Division of the European Patent Office posted on 15 February 2013 concerning maintenance of the European Patent No. 1602117 in amended form.

II. The opposition division held that the subject-matter of claim 1 as granted was not novel. Further, the opposition division found that the subject-matter of claim 1 according to the auxiliary request 1 fulfilled the provisions of Articles 123(2) and 84 EPC and involved an inventive step over the cited prior art, including in particular documents

WO 01/70538 A2 (D1),
EP 1237400 A2 (D12)

III. With the statement of grounds of appeal the appellant (opponent) additionally filed document

EP 0 860 990 A2 (D13).

IV. Oral proceedings before the Board took place on 27 March 2015.

The appellant (opponent) requested that the decision under appeal be set aside and the the patent be revoked.

The patent proprietor withdrew its appeal and requested that the appeal of the opponent be dismissed.
V. Claim 1 according to the interlocutory decision of the Opposition Division reads as follows:

An automatic vehicle exterior light control system (106), comprising: an attachment member (355a, 355b) and a carrier/baffle (430, 530) configured to secure an imager board (410, 510), such that said imager board is horizontally aligned within approximately 5 degrees and approximately -5 degrees of a desired image sensor (411) optical axis, wherein said imager board (410, 510) is vertically aligned within approximately 5 degrees and approximately -5 degrees of a desired image sensor (411) optic axis, characterized in that the carrier/baffle is provided with upper standoffs and lower standoffs which, in part, define an angle at which the associated imager board is placed with respect to an associated vehicle windshield, wherein the angle is selected by providing a predetermined upper and lower standoff length.

VI. The appellant’s submissions may be summarized as follows:

Claim 1 of the interlocutory decision of the opposition division is amended in such a way that it contains subject-matter which extends beyond the application as originally filed. The feature added to claim 1 as granted defines that the carrier/baffle is provided with upper and lower standoffs which define the angle of the desired optical axis of the imager board. However, the only passage in the application as originally filed, in which upper and lower standoffs are described, is paragraph [0048]: “the carrier/baffle is provided with upper standoffs 838 and lower standoffs 840 which, in part, define the angle at which the associated image sensor board and compass sensors
are placed with respect to an associated vehicle windshield”. The standoff-feature is therefore only disclosed in combination with the feature of the compass sensor, which is missing in claim 1. The compass sensor obviously benefits of the proper orientation of the carrier/baffle. Consequently there is a functional and structural link between the imager board and the compass sensor, as both are adjusted in position by means of the standoff-feature. Further, it is objected that the standoff-feature as introduced in claim 1 is so broad that the definition of claim 1 includes an embodiment which is not originally disclosed. This argument is provided for the first time during the oral proceedings before the Board of Appeal, however it should be admitted into the proceedings.

In particular, the embodiment in which the imager board is directly attached to the upper and lower standoffs, falls under the scope of protection of disputed claim 1 and is not disclosed in the description as originally filed. In fact, the application only discloses that the attachment member is screwed to standoffs thereby connecting the carrier/baffle with the attachment member. According to the embodiments, the imager board is inside the carrier and fixed by the retainer and the alignment pins.

Furthermore, the invention as defined in claim 1 does not involve an inventive step.

The sole feature which is not disclosed in D1 is the feature according to which the carrier/baffle is provided with upper standoffs and lower standoffs which, in part, define an angle at which the imager board is placed with respect to an associated vehicle windshield, wherein the angle is selected by providing a predetermined upper and lower standoff length.
The opposition division erred in stating that the objective problem to be solved by this feature is “how to provide a system which is easily adaptable to different vehicles”. The claim does not contain any technical feature which is able to ease the adjustment with respect to the positioning of the sensor element. For this reason, the problem to be solved by the distinguishing feature can only be seen in obtaining a defined position of the sensor element with respect to the carrier. However, the skilled person would immediately recognize that the carrier/baffle could be provided with standoffs. Standoffs are known from documents D12 and D13. In particular D13 discloses standoffs, named supporting pillars, for fixing the imager board to a carrier. The four supporting pillars provide a defined length and therefore an angle which is selected by providing a predetermined upper and lower standoff length, which is in D13 an equal length of all four supporting pillars.

VII. The respondent’s (patent proprietor's) rebuttal was essentially the following:

Throughout the patent, compass sensors are explicitly indicated as an optional feature (e.g. granted claims 7, 10, paragraphs [0054] and [0062]). The length of the upper and lower standoffs define the orientation of the imager board, which is the core feature of the patent. Whether or not compass sensors are provided has no influence on this function. Consequently there is no structural and/or functional link between the compass sensor and the standoffs in the context of the light control system as originally disclosed.

The objection that the definition of the standoff-
feature introduces an embodiment which is not originally disclosed should not be admitted into the proceedings. This objection has been mentioned for the first time in the oral proceedings before the Board of Appeal. The respondent had no time to examine this objection, and further no requests dealing with this objection could have been prepared.

Furthermore, the appellant’s inventive step-attack with respect to the added feature was always aimed at an embodiment in which the imager board is directly fixed on the standoffs (cf. D13, filed with the statement of grounds of appeal). Therefore the patent proprietor could feel confident that the objection concerning Article 123(2) EPC as submitted in the statement of grounds of appeal was complete. The patent proprietor could not expect that the specific embodiment on which the discussion on inventive step was focused would now be the subject of an objection of undisclosed subject-matter.

Finally, the decision of the opposition division is correct. The objective problem to be solved by the standoff-feature is to provide a possibility to easily adapt a light control system to different vehicle models. The upper and lower standoffs define the position and the orientation of the image sensor with respect to the carrier/baffle. The state of the art, in particular D12 or D13, does not disclose standoffs which allow a selection of an angle, thereby defining a position and an orientation of the imager board for different vehicle models.
Reasons for the Decision

1. The appeal is admissible.

2. Claim 1 has not been amended in such a way that it contains subject-matter which extends beyond the content of the application as filed (Article 123(2) EPC).

2.1 The appellant argues that paragraph [0048], which is the basis for the feature “that the carrier/baffle is provided with upper standoffs and lower standoffs which, in part, define an angle at which the imager board is placed with respect to an associated vehicle windshield, wherein the angle is selected by providing a predetermined upper and lower standoff length” added to claim 1 as granted, further discloses a compass sensor associated with the image sensor board, which is also placed at a defined angle with respect to an associated windshield.

2.2 The Board takes the view that, although both the imager board and the compass benefit of the presence of the standoffs for their positioning, there is no unextricable functional and/or structural link between these elements. In fact, the correct angular orientation of the compass sensor has no influence on the imager board which is primarily responsible for the functioning of the light control system. Furthermore, the compass sensor is defined throughout the specification (see paragraphs [0040], [54], [71] and claims 6 and 7 of the published application as filed) as an optional feature. Although paragraph [0048]
refers specifically to Fig. 8, it is clear that the optional character of the compass feature is intended in a general sense and thus applies also to a system as depicted in Fig. 8.

3. The appellant’s contention that the added feature “that the carrier/baffle is provided with upper standoffs and lower standoffs which, in part, define an angle at which the imager board is placed with respect to an associated vehicle windshield, wherein the angle is selected by providing a predetermined upper and lower standoff length” covers an embodiment (a light control system in which the imager board is directly mounted onto the standoffs) which is not originally disclosed and therefore introduces added subject-matter contrary to the requirements of Article 123(2) EPC, is not admitted into the proceedings, cf. Article 13(1) RPBA.

3.1 According to Article 13(1) RPBA any amendment to a party’s case after it has filed its grounds of appeal or reply may be admitted and considered at the Board’s discretion. The discretion shall be exercised in view of inter alia the complexity of the new subject matter submitted, the current state of the proceedings and the need for procedural economy.

3.2 In the present case, during the proceedings before the opposition division and in appeal proceedings in writing the appellant denied the contribution of the contested feature with respect to inventive step, arguing that it is generally known in the prior art that the imager board is mounted on standoffs. Documents D12 and D13 have been presented by the appellant and it has been argued that these documents disclose an image sensor (respectively an integrated
circuit board) which is mounted on supporting pillars, e.g. standoffs, to a carrier.

3.3 During the oral proceedings before the Board of Appeal the appellant asserted for the first time that the specific embodiment, in which the image sensor board is mounted directly to the standoffs, is not disclosed in the application as originally filed, although covered by the feature added to granted claim 1.

3.4 The Board holds that it is surprising that this specific embodiment on which the appellant based its attack of inventive step, is now alleged to be an embodiment for which there is no basis in the application as filed.

In view of the current state of the proceedings and the need for procedural economy, and considering that this late-filed objection, if admitted, would trigger a fully new discussion of added subject-matter and further would possibly put the entire discussion on inventive step under a new light, the Board decided to exercise its discretion pursuant to Article 13(1) RPBA not to admit this objection into the appeal proceedings.

4. The invention as defined by claim 1 is considered as involving an inventive step according to Article 56 EPC.

4.1 The appellant did not convince the Board that the opposition division erred in its finding that the feature "that the carrier/baffle is provided with upper standoffs and lower standoffs which, in part, define an angle at which the imager board is placed with respect to an associated vehicle windshield, wherein the angle
is selected by providing a predetermined upper and lower standoff length” as added to claim 1 as granted contributes to inventive step.

The appellant argues that a skilled person, starting from document D1 which discloses all features of claim 1 beside the above-mentioned feature, would regard it as obvious to modify the carrier as shown in D1 (see Fig. 44, part 4130, baffle/printed circuit board holder) and to provide standoffs for adjusting position and orientation of the imager board. A hint to such a modification is given by D12 or D13.

4.2 The Board disagrees. First of all, it was not conclusively argued why the skilled person would take such an amendment into consideration. The light control system according to D1 does not require a further possibility to adjust position and orientation of an imager board, since a possibility of an adjustment is already given by the elongated slots (4137, see Fig. 44 and page 86, last paragraph) and the wide screen sensor in combination with the automatic calibration (see Fig. 22 and page 59). Therefore, an adjustment of the orientation of an optical axis by means of upper and lower standoffs is at odds with the concept of adjustment according to D1.

As a consequence, the Board does not see any motivation for the skilled person to turn to either document D12 or document D13 for modifying the structure of the system according to D1.

4.3 Even under the assumption that the objective problem to be solved consists, as submitted by the appellant, in obtaining a defined position of the imager board with respect to the carrier/baffle, still neither D12 nor
D13 provide any hints to modify the carrier/baffle of D1 (see Fig. 44, baffle 4130) by including four supporting standoffs. In D13 supporting pillars (or standoffs 323-326; see Fig. 5) are disclosed that are part of a mounting structure for a photographic element (301) to a lens holding unit (331) in a video camera system. However, the lens holding unit has a different function as compared to the carrier (4130) in D1; in particular, the lens and the photographic element should be fitted in parallel and at a predefined distance (see col. 9, line 40 to col. 10, line 45).

Consequently the skilled person learns from D13 that the supporting pillars serve for ensuring a precise distance between a photographic element and a lens arranged in parallel. This is far from being a hint for solving the alleged problem of obtaining a defined position of the imager board with respect to the carrier/baffle in the system of D1.

Analogous considerations apply to D12, which discloses the use of standoffs (20, see Fig. 1) merely for mounting in parallel and at a specific distance a daughter board (14) onto a mother board (12).
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

A. Vottner G. Pricolo

Decision electronically authenticated