

Internal distribution code:

- (A) [-] Publication in OJ
- (B) [-] To Chairmen and Members
- (C) [-] To Chairmen
- (D) [X] No distribution

**Datasheet for the decision
of 31 January 2023**

Case Number: T 1985/20 - 3.4.02

Application Number: 09175615.5

Publication Number: 2187172

IPC: G01C23/00, G08G5/00

Language of the proceedings: EN

Title of invention:

Aircraft head-up display system and method

Patent Proprietor:

Honeywell International Inc.

Opponent:

HENSOLDT Sensors GmbH

Headword:

Relevant legal provisions:

EPC Art. 123(2)

RPBA 2020 Art. 13(2)

Keyword:

Main request, auxiliary requests 1, 2, 5 and 6 - Not
admissible (reformatio in peius)
Auxiliary request 3 - Amendments - added subject-matter (yes)
Auxiliary request 4 - Amendment after summons - taken into
account (no)

Decisions cited:

G 0009/92, G 0004/93

Catchword:



Beschwerdekammern

Boards of Appeal

Chambres de recours

Boards of Appeal of the
European Patent Office
Richard-Reitzner-Allee 8
85540 Haar
GERMANY
Tel. +49 (0)89 2399-0
Fax +49 (0)89 2399-4465

Case Number: T 1985/20 - 3.4.02

D E C I S I O N
of Technical Board of Appeal 3.4.02
of 31 January 2023

Appellant: Honeywell International Inc.
(Patent Proprietor) 855 S. Mint Street
Charlotte, NC 28202 (US)

Representative: LKGlobal UK Ltd.
Cambridge House
Henry Street
Bath BA1 1BT (GB)

Appellant: HENSOLDT Sensors GmbH
(Opponent) Willy-Messerschmitt-Straße 1
82024 Taufkirchen (DE)

Representative: LifeTech IP
Spies & Behrndt Patentanwälte PartG mbB
Elsenheimerstraße 47a
80687 München (DE)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
29 September 2020 concerning maintenance of the
European Patent No. 2187172 in amended form.**

Composition of the Board:

Chairman R. Bekkering
Members: C. Kallinger
C. Almberg

Summary of Facts and Submissions

I. The opponent filed an appeal against the opposition division's interlocutory decision finding that, on the basis of auxiliary request 3, the patent as amended met the requirements of the EPC. The opponent requested that the decision be set aside and that the patent be revoked in its entirety.

II. Also the patent proprietor filed an appeal against this decision and requested that it be set aside and that the opposition be rejected. As an auxiliary measure, the proprietor requested that the patent be maintained as amended on the basis of the claims according to one of auxiliary requests 1 to 6 as indicated in the decision under appeal.

III. In a communication pursuant to Article 15(1) RPBA 2020, which was annexed to a summons to oral proceedings, the board informed the parties of its preliminary opinion. The board was, *inter alia*, of the opinion that the subject-matter of claim 1 of all of the proprietor's requests contravened Article 100(c) or 123(2) EPC.

IV. Oral proceedings took place on 31 January 2023, during which the proprietor replaced auxiliary request 4 with an amended auxiliary request 4'. In addition, the proprietor withdrew its appeal.

V. The parties' final requests are as follows.

The proprietor requests that the decision under appeal be set aside and that the patent be maintained as granted, *i.e.* that the opposition be rejected (main request).

In the alternative, the proprietor requests that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of one of auxiliary request 1 and 2 filed with the statement of grounds of appeal dated 8 February 2021.

Further in the alternative, the proprietor requests that the opponent's appeal be dismissed, i.e. that the patent be maintained in the version found allowable by the opposition division in the decision under appeal, i.e. on the basis of the claims according to auxiliary request 3.

Further in the alternative, the proprietor requests that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of auxiliary request 4' filed during the oral proceedings before the board on 31 January 2023.

Further still in the alternative, the proprietor requests that the decision under appeal be set aside and that the patent be maintained in amended form on the basis of one of auxiliary requests 5 and 6 filed with the statement of grounds of appeal dated 8 February 2021.

The opponent requests that the decision under appeal be set aside and that the patent be revoked.

VI. Claim 1 of auxiliary request 3, i.e. of the patent as maintained in amended form, reads as follows, with the numbering added by the board:

1.0 An aircraft head-up display system (100),
comprising:

- 1.1 a processing unit (102);
- 1.2 a database (104); and
- 1.3 a head-up display (108) coupled to the processing unit (102), the head-up display comprising a projector (112) and combiner (116);
- 1.4 wherein the processing unit (102) is configured to:
 - 1.4.1 generate display control signals for projecting non-geo-referenced symbology (202, 206, 210, 212, 216);
 - 1.4.2 generate display control signals for projecting geo-referenced symbology (220, 222, 224, 226, 228);

characterised by being further configured to
 - 1.4.3 receive terrain data from the database (104), including terrain features disposed in front of the geo-referenced symbology (220, 222, 224, 226, 228);
 - 1.4.4 generate display control signals for projecting terrain symbology, the terrain symbology representing, in a black color, said terrain features based on the terrain data; and
 - 1.4.5 send the display control signals for non-geo-referenced symbology,
 - 1.4.6 the display control signals for geo-referenced symbology, and
 - 1.4.7 the display control signals for terrain symbology to the head-up display (108)

1.4.8 such that the black color of said terrain features in the display control signals from the processing unit is transparent when viewed on a combiner of the head-up display (108) while masking portions of the geo-referenced symbology obscured by said terrain features in front.

Reasons for the Decision

1. Status of the parties

The proprietor filed an appeal. However, with the withdrawal of its appeal during the oral proceedings, the proprietor was no longer appellant but became respondent and party to the appeal proceedings as of right (Article 107, second sentence, EPC).

The opponent is therefore the sole appellant.

2. Proprietor's requests

The proprietor's main request concerns the patent as granted (main request) whereas the claims according to auxiliary requests 1, 2, 5 and 6 were filed with the statement of grounds of appeal.

With respect to these requests the proprietor argued that the amendments in auxiliary requests 5 and 6 did not broaden the scope of the claim.

The board is not convinced by this argument and is of the opinion that the subject-matter of claim 1 of all these requests have an extended scope of protection compared with that found allowable by the opposition division, i.e. that of claim 1 of auxiliary request 3.

Said extensions result from, at least, the following aspects distinguishing these requests from auxiliary request 3:

- the absence in feature 1.3 of claim 1 of the main request and each of auxiliary requests 1 and 5 of the further limitation "*the head-up display comprising a projector (112) and combiner (116)*" present in claim 1 of auxiliary request 3;
- the absence in feature 1.4.7 of claim 1 of the main request and each of auxiliary requests 1, 2, 5 and 6 of the replacement of "*said terrain features*" with "*terrain symbology*" present in claim 1 of auxiliary request 3.

Decisions G 9/92 and G 4/93 of 14 July 1994 (both OJ EPO 1994, 875) explain the prohibition of *reformatio in peius* in European patent law. Catchword 2 of these decisions reads as follows:

"If the opponent is the sole appellant against an interlocutory decision maintaining a patent in amended form, the patent proprietor is primarily restricted during the appeal proceedings to defending the patent in the form in which it was maintained by the Opposition Division in its interlocutory decision. Amendments proposed by the patent proprietor as a party to the proceedings as of right under Article 107, second sentence, EPC, may be rejected as inadmissible by the Board of Appeal if they are neither appropriate nor necessary."

In the present case, the opponent is the sole appellant against an interlocutory decision maintaining a patent in amended form. Therefore, pursuant to G 9/92 and G 4/93 above, the patent proprietor (respondent) is

primarily restricted during the appeal proceedings to defending the patent in the form in which it was maintained by the opposition division in its interlocutory decision.

As indicated above, the proprietor's main request and auxiliary requests 1, 2, 5 and 6 all imply an extended claim scope compared with that found allowable by the opposition division. This means that these requests, if admitted and allowed, would worsen the opponent's situation, despite the proprietor no longer enjoying the status of an appellant, and would therefore be neither necessary nor appropriate to defend the result the proprietor obtained before the opposition division.

It follows from the foregoing that admittance of the main request and auxiliary requests 1, 2, 5 and 6 would infringe the principle of prohibition of *reformatio in peius* as defined in decisions G 9/92 and G 4/93.

In conclusion, the respondent's main request and auxiliary requests 1, 2, 5 and 6 are not admitted into the appeal proceedings.

3. Proprietor's auxiliary request 3

This request concerns the patent as maintained in amended form according to the proprietor's auxiliary request 3.

3.1 Amendments (Article 123(2) EPC)

In the decision under appeal, the opposition division concluded that paragraph [0024] of the description as originally filed represented a valid basis for the

subject-matter of, inter alia, feature 1.4.8 of claim 1 and considered that a skilled person would derive the respective feature directly and unambiguously, using common general knowledge, from said paragraph.

The proprietor agreed with this conclusion and argued in particular that paragraph [0022] of the original application explained that the HUD system considered the terrain such that the geo-referenced symbology appeared more accurately relative to this terrain. This was explained further in paragraph [0024] of the original application, which disclosed that the display device displayed the terrain symbology in a "clear" color that would not be visible to the viewer on the see-through display, such as in black. It was thus immediately evident from the teaching of the application that the terrain symbology displayed on the display device corresponded to those terrain features which would mask the geo-referenced symbology. In addition, paragraph [0024] explicitly disclosed the display of the terrain symbology in black color. In conclusion, as the terrain features were necessarily part of the terrain symbology displayed in black on the display, feature 1.4.8 and in particular the feature *"the black colour of said terrain features"* was originally disclosed.

The board is not convinced by this line of argument for the following reasons.

The terms *"terrain symbology"* (as disclosed in paragraph [0024]) and *"terrain feature"* (as disclosed in paragraph [0008] and used in feature 1.4.8) cannot be equated. The term symbology is used in the patent in suit for artificial objects generated by the processor whereas terrain features are 3D objects in the terrain

and obtained from the database 104 (see also feature 1.4.3). According to the invention, different types of symbology (geo-referenced, non-geo-referenced and terrain) are rendered on the display whereas terrain features are seen as the actual or real scene.

The originally filed description states in paragraph [0024] that *"the display device 108 displays the terrain symbology in a color that will not be visible to the viewer on the see-through display, such as for example, a "clear" color such as black."* This paragraph therefore discloses explicitly that the terrain symbology is black. It is however silent with respect to the colour of the terrain features.

In contrast to this, feature 1.4.8 unambiguously defines (emphasis added) that *"the black color of said terrain features in the display control signals from the processing unit is transparent when viewed on a combiner of the head-up display (108) while masking portions of the geo-referenced symbology obscured by said terrain features in front"*.

In conclusion, the board is of the opinion that at least feature 1.4.8 does not have a basis in the application as filed and therefore, contrary to the requirements of Article 123(2) EPC, contains subject-matter which extends beyond the content of the application as filed.

Accordingly, auxiliary request 3 is not allowable.

4. Proprietor's auxiliary request 4'

4.1 Since the claims according to this request were filed at the oral proceedings before the board, well after notification of the summons, its admittance into the appeal proceedings is at the board's discretion under Article 13(2) RPBA 2020. In comparison to claim 1 of auxiliary request 3, inter alia features 1.4.4 to 1.4.6 of this request have been amended as follows (amendments marked by the board):

- 1.4.4 generate display control signals for projecting terrain symbology, the terrain symbology representing, in a black color, said terrain features based on the terrain data; and
- 1.4.5 send the display control signals for non-geo-referenced symbology,
- 1.4.6 the display control signals for geo-referenced symbology, and
- 1.4.7 the display control signals for terrain symbology to the head-up display (108)
- 1.4.8 such that the black color of said terrain symbologyfeatures in the display control signals from the processing unit is transparent when viewed on a combiner of the head-up display (108) while masking portions of the geo-referenced symbology obscured by said terrain symbologyfeatures in front.

4.2 The proprietor argued that only with the board's communication annexed to the summons to oral proceedings, the proprietor was informed about the board's preliminary opinion which, with respect to the

objection under Article 123(2) EPC against feature 1.4.8 of the proprietor's auxiliary request 3, i.e. the patent as maintained in amended form, differed from the opposition division's conclusion. Therefore, this change of opinion could only be addressed by respective amendments after receipt of the board's communication.

The proprietor further argued that in view of the board's communication, it had been of the opinion that the board had no objections against amended feature 1.4.4 of auxiliary request as the board's communication stated on page 9 that *"[t]he board therefore is of the opinion that features 1.4.5 to 1.4.8 do not have a basis in the application as filed and therefore contain subject-matter which extends beyond the content of the application as filed."* Therefore, the proprietor learned only during the oral proceedings before the board that the board was of the opinion that also feature 1.4.4 contained subject-matter which extended beyond the content of the application as filed. As a consequence, the proprietor's first chance to address this objection with respective amendments was at the oral proceeding before the board.

In addition, the late filing of this request did not constitute an abuse of procedure and was not detrimental to procedural efficiency.

Finally, as the board, in contrast to the opposition division, was of the opinion that feature 1.4.8 of auxiliary request 3, i.e. the patent as maintained in amended form, did not meet the requirements of Article 123(2) EPC, the proprietor should get a chance to react to this differing view. Otherwise, his right to be heard (Article 113(1) EPC) would be violated.

The proprietor requested that for the above reasons, auxiliary request 4' be admitted into the appeal proceedings.

- 4.3 The opponent argued that the amendments in feature 1.4.8 in claim 1 of auxiliary request 4 were directed at overcoming an objection under Article 123(2) EPC that was already presented by the opponent in its statement of grounds of appeal. With respect to this feature, the board issued its preliminary opinion according to which feature 1.4.8 of auxiliary request 3 did not meet the requirements of Article 123(2) EPC. This preliminary opinion was confirmed during the oral proceedings before the board. Therefore, the proprietor was not confronted with "a new case" during the oral proceedings which could justify the filing of further amendments at such a late stage of the appeal proceedings.

In addition, the amendments in newly filed auxiliary request 4' did not address all outstanding objections, in particular not the further objections under Article 123(2) EPC, e.g. against feature 1.3 as indicated in the board's preliminary opinion.

The opponent requested that for the above reasons, auxiliary request 4' should not be admitted into the appeal proceedings.

- 4.4 The board is not convinced by the proprietor's arguments and follows the opponents line of argument for the following reasons.

The proprietor's argument that it learned only during the oral proceedings about the board's interpretation of feature 1.4.4 and in particular that this feature

did not meet the requirement of Article 123(2) EPC, is not convincing because, irrespective of when the proprietor learned of the board's interpretation of feature 1.4.4, in auxiliary request 3 it was feature 1.4.8 that was found not to comply with the requirements of Article 123(2) EPC.

The objection under Article 123 (2) EPC against amended feature 1.4.8 in claim 1 of the proprietor's auxiliary request 3 was already discussed in the decision under appeal (see point 11.3) and was again brought forward by the opponent in its statement of grounds of appeal (see point III.5). In its reply to the opponent's statement of grounds of appeal, the proprietor provided a reasoning with respect to this objection (see reply dated 8 June 2021, point 3.5). The board is therefore of the opinion that the proprietor's right to be heard with respect to the objection under Article 123 (2) EPC against amended feature 1.4.8 in claim 1 of the proprietor's auxiliary request 3 has not been violated.

The fact that a board's preliminary opinion differs from the contested decision, is also not a valid reason for filing amendments at such a late stage of the appeal proceedings (see Case Law of the Boards of Appeal, 10th ed. 2022, section V.A.4.5.6 h)).

Altogether, the proprietor has failed to present cogent reasons justifying exceptional circumstances. As a result, auxiliary request 4' is not to be taken into account (Article 13(2) RPBA 2020).

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:



L. Gabor

R. Bekkering

Decision electronically authenticated