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**Datasheet for the decision  
of 27 January 2023**

**Case Number:** T 1919/17 - 3.4.01

**Application Number:** 13184623.0

**Publication Number:** 2713181

**IPC:** G01S13/93, G08G5/04

**Language of the proceedings:** EN

**Title of invention:**

Systems and methods for performing wingtip protection

**Applicant:**

Honeywell International Inc.

**Headword:**

Wingtip protection / Honeywell International

**Relevant legal provisions:**

EPC Art. 56

RPBA Art. 12(4), 12(2)

RPBA 2020 Art. 13(2), 25(2)

**Keyword:**

Inventive step - main request (no)

Amendment after summons - auxiliary requests - cogent reasons  
(no)

Statement of grounds of appeal - party's complete case - no  
substantiation for second, third and fourth auxiliary requests

**Decisions cited:**

T 1913/19



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Case Number: T 1919/17 - 3.4.01

**D E C I S I O N**  
**of Technical Board of Appeal 3.4.01**  
**of 27 January 2023**

**Appellant:** Honeywell International Inc.  
(Applicant) 115 Tabor Road  
Morris Plains, NJ 07950 (US)

**Representative:** Dowling, Andrew  
Haseltine Lake Kempner LLP  
138 Cheapside  
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**Decision under appeal:** **Decision of the Examining Division of the  
European Patent Office posted on 3 April 2017  
refusing European patent application No.  
13184623.0 pursuant to Article 97(2) EPC.**

**Composition of the Board:**

**Chair** P. Scriven  
**Members:** T. Zinke  
R. Winkelhofer

## **Summary of Facts and Submissions**

- I. The Examining Division refused the application for lack of inventive step in the light of document D1 (US-A-2009/0174591) and common knowledge. This applied to all pending requests, i.e. the main request and auxiliary requests 1 to 5. In addition, they held that auxiliary requests 4 and 5 included added matter (Article 123(2) EPC).
  
- II. The applicant appealed that decision.
  
- III. In the statement of grounds of appeal, the appellant filed sets of claims for a main and for four auxiliary requests; and requested that the decision under appeal be set aside and that a patent be granted, or the case remitted for further prosecution, on the basis of one of them. The appellant also requested oral proceedings, if the Board were minded to dismiss the appeal.
  
- IV. The Board arranged oral proceedings, and notified the appellant on 3 March 2022. In a communication under Article 15(1) RPBA annexed to the summons, the appellant was informed of the Board's preliminary opinion. In particular, the Board did not see an inventive step in the main request or in the first auxiliary request, and considered that the amendments made to the first auxiliary request had no basis in the original application (Article 123(2) EPC). Further, the Board did not envisage admitting the second, third, and fourth auxiliary requests into the appeal proceedings,

since the statement of grounds of appeal did not provide any reasoning as to why they would overcome the Examining Division's objections with regard to lack of inventive step.

V. In reply, the appellant filed replacement claims for the first auxiliary request, and argued in favour of inventive step with regard to all requests.

VI. The Board cancelled the oral proceedings, after the appellant had indicated that they would not attend or be represented at them.

VII. Claim 1 of the main request reads as follows:

*A system (18) located on a vehicle (20,62),  
the system comprising:  
at least two vertically separated antennas  
(26) configured to receive radar reflection  
signals;  
a processor (36,50) configured to:  
receive the radar reflection signals  
received by the at least two vertically  
separated antennas,  
determine a vertical position of any  
obstacles (68,70) identified in the  
radar reflection signals, and  
determine if the obstacles are within a  
predefined alert zone (66) based on the  
vertical position of the obstacles,  
wherein the predefined alert zone has a  
constant upper limit and a constant  
lower limit; and*

*an output device (44) configured to output an alert if any obstacle is within the predefined alert zone, wherein the predefined alert zone is related to a protruding portion of the vehicle and defined by whether the motion of the vehicle will result in collision with an object located therein.*

- VIII. In claim 1 of the first auxiliary request, the predefined alert zone is further defined such that it *does not widen vertically with range*; and the processor is further configured to *ignore obstacles above and below the predefined alert zone*.
- IX. Claim 1 of the second auxiliary request is, *inter alia*, amended as compared to claim 1 of the main request in that the processor is further configured to *ignore obstacles above and below the predefined alert zone*, i.e. as in claim 1 of the first auxiliary request. The other amendment in the first auxiliary request as compared to the main request (that the predefined alert zone *does not widen with range*) is not present in the second auxiliary request.
- X. Claim 1 of the third auxiliary request is amended, as compared to claim 1 of the main request, in that the processor is further configured to *ignore obstacles above and below the predefined alert zone*, i.e. as in claims 1 of the first and second auxiliary requests. The other amendment in the first auxiliary request (that the predefined alert zone *does not widen with range*) is not present. Instead, the predefined alert

zone is further defined as having a *first distance limit* and a *second distance limit*, wherein the shape of the predefined alert zone is based on the vehicle structure that the predefined alert zone relates to.

- XI. Independent claim 1 of the fourth auxiliary request is amended as compared to claim 1 of the third auxiliary request in that the predefined alert zone *does not widen with range*.

## **Reasons for the Decision**

### *Main request - Inventive step*

1. The appellant claims to have identified a single distinguishing feature in independent claim 1 of the main request, as compared to D1 that had been "inadvertently overlooked" during the discussion of the auxiliary requests before the Examining Division, namely "the absence in D1 of a clearly distinguishing upper limit of a predefined alert zone" (statement of grounds, page 1, last paragraph).
2. The Board agrees that D1 does not explicitly disclose a constant upper limit for a predefined alert zone.
3. The "constant lower limit" and the "constant upper limit" of the predefined alert zone, according to the claim wording, describe nothing other than a fixed vertical security margin to both sides of the vehicle.

4. The technical effect of the distinguishing feature can be described as avoiding false alarms from obstacles that pass above the vehicle.
5. The objective technical problem - as proposed by the appellant (see reply of 5 April 2022, page 2, 6th complete paragraph) - to be solved by the skilled person, starting from document D1, can be formulated as reducing false alarms.
6. When a skilled person starts to look into the false alarms of the system in D1, and in particular into those from identified sources that result from projections from above, under which the vehicle passes, the solution to avoiding these false alarms is straightforward.
7. D1 already provides an additional hint that false alarms are not only caused by ground-based obstacles, over which a wing may pass, but also by obstacles, which are in other regions that are not dangerous. Paragraph [0062], also cited by the appellant, explicitly refers to the example of an obstacle with a height that might pass under the wing. But in this paragraph, it is also more generally disclosed that the "deviation-measurement processing performed by means of the detection information of the first two beams ... allows elevational angular location of a possible obstacle."
8. The term "elevational angular location" is not restricted to objects on the ground, but also covers objects above the vehicle. Hence, the skilled person already has at their disposal a system that measures vertical positions (with the two vertically separated antennas) and that does not directly use the beam



apertures of the antennas, but distinguishes between object detection (whether there is an object) and alert detection (whether the object has a dangerous height or not) (D1: [0062]).

9. There is no difficulty for the skilled person, who knows the source of the false alarms that gave rise to the objective technical problem, who is aware of the means for measuring the vertical position of an obstacle, and who knows that it is possible to distinguish object detection from alert detection, to transfer the avoidance of false alarm from ground objects (as in D1) to the avoidance of false alarm from objects projecting from above. The skilled person would simply adapt the system of D1, so that also objects under which the vehicle may pass would not cause an alarm. The constant upper limit of the predefined alert zone is nothing other than a fixed vertical security margin, so that false alarms from objects above the vehicle can be avoided. No hindsight is involved.
10. The same applies to the correspondingly formulated independent method claim 7.
11. Hence, the subject-matter of claims 1 and 7 of the main request lack an inventive step (Article 56 EPC) over D1 and common general knowledge.

*First auxiliary request - Consideration*

12. The first auxiliary request was filed after notification of the summons to oral proceedings (in response to the Board's preliminary opinion). Its consideration is at the Board's discretion under Articles 13(1) and (2), and 25(1) RPBA 2020 (the

wording used in Article 13(1) RPBA 2020 is "Any amendment to a party's appeal case after it has filed its grounds of appeal or reply is subject to the party's justification for its amendment and may be admitted ..." and in Article 13(2) RPBA "Any amendment made to a party's appeal case made after the expiry of a period specified by the Board on a communication under Rule 100, paragraph 2, EPC, or where such a communication is not issued, after notification of a summons to oral proceedings shall, in principle, not be taken into account,...").

13. Article 13(2) RPBA 2020 requires exceptional circumstances for such amendments to be considered.
14. No such exceptional circumstances have been brought forward, and none are apparent. The first auxiliary request cannot be considered.
15. Moreover, the amendments made to claims 1 and 7 of the first auxiliary request as compared to the main request, would not change the claimed subject-matter in substance.
16. The amendment that the predefined alert zone "does not widen vertically with range" is only a consequence of the feature that the predefined alert zone having a constant upper limit and constant lower limit. The amendment that the processor is further configured to "ignore obstacles above and below the predefined alert zone" just repeats the meaning of the term "alert zone".
17. Hence, claims 1 and 7 of the first auxiliary request would lack an inventive step for the same reasons as for the main request.

*Second, third, and fourth auxiliary requests - Consideration*

18. With the statement of grounds, the appellant did not provide any reasoning as to why the second, third, and fourth auxiliary request filed therewith were suited to overcoming the Examining Division's objections with regard to lack of inventive step. The appellant only very generally submitted that "Additional features recited in system claim 1 ... further distinguish over the cited art" (page 4, last paragraph; page 5; third paragraph and sixth paragraph).
19. Only with the reply of 5 April 2022 to the summons did the appellant provide detailed arguments as to why the second, third and fourth auxiliary request were inventive over D1.
20. Since the second, third, and fourth auxiliary requests were filed with the statement of grounds in 2017, i.e. before the RPBA 2020 entered into force, Article 12(4) RPBA 2007 applies (Article 25(2) RPBA 2020).
21. The appellant's very general statement, cited above, did not allow the Board to understand how the amendments were suited to overcome the Examining Division's objection with regard to lack of inventive step. Hence, this statement does not qualify as sufficiently substantiated "reasons, why it is requested that the decision under appeal be reversed" (Article 12(2) RPBA 2007).
22. Under Article 12(4) RPBA 2007, the Board can disregard these auxiliary requests that were filed without sufficient substantiation.

23. The later filing of a detailed argumentation with regard to these auxiliary requests, in reply to the summons, is an amendment to the appeal case. It was only with this amendment that the Board was able to see why the appellant considered that the impugned decision should be set aside on the basis of one of these requests. Only at this point might they be considered effectively filed. As outlined above, amendments to the appellant's case at this late state of the proceedings should only be admitted under exceptional circumstances (Article 13(2) RPBA 2020).
24. The appellant has not explained what makes the current circumstances exceptional, and the Board also sees none.
25. Moreover, Article 13 RPBA 2020 mainly serves to allow account to be taken of changes of fact or in the subject matter of the appeal proceedings, within narrow limits. It does not allow the subsequent submission of essential elements of the appeal and the requests filed therewith (cf. T 1913/19, reasons 16.).
26. The second, third, and fourth auxiliary requests are not considered in the appeal proceedings.

### *Conclusion*

27. Since the main request lacks an inventive step; and the auxiliary requests are not considered, the appeal has to be dismissed.

### **Order**

**For these reasons it is decided that:**

The appeal is dismissed.

The Registrar:

The Chair:



D. Meyfarth

P. Scriven

Decision electronically authenticated