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Datasheet for the decision of 11 March 2024

Case Number: T 1022/21 - 3.5.03

Application Number: 13183673.6

Publication Number: 2706423

IPC: G05B23/02

Language of the proceedings: EN

Title of invention:
Aircraft avionics tablet interface module

Applicant:
ROSEMOUNT AEROSPACE INC.

Headword:
Tablet interface for aircraft/ROSEMOUNT

Relevant legal provisions:
EPC Art. 56
RPBA 2020 Art. 12(8)

Keyword:
Decision in written proceedings - (yes): indication of appellant's non-attendance - oral proceedings neither necessary nor appropriate
Inventive step - main and auxiliary requests (no): no credible technical effect over the whole scope claimed

Decisions cited:
G 0001/19, T 2271/18, T 0735/19, T 3208/19

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Case Number: T 1022/21 - 3.5.03

D E C I S I O N
of Technical Board of Appeal 3.5.03
of 11 March 2024

Appellant: (Applicant)	ROSEMOUNT AEROSPACE INC. 14300 Judicial Road Burnsville, MN 55306-4898 (US)
Representative:	Dehns St. Bride's House 10 Salisbury Square London EC4Y 8JD (GB)
Decision under appeal:	**Decision of the Examining Division of the European Patent Office posted on 15 February 2021 refusing European patent application No. 13183673.6 pursuant to Article 97(2) EPC.**

Composition of the Board:

Chair	K. Bengi-Akyürek
Members:	K. Peirs
	C. Heath

Summary of Facts and Submissions

I. The appeal of the applicant (appellant) lies from the decision of the examining division to refuse the present application based on a main request and two auxiliary requests.

The examining division deemed the provision of Article 56 EPC to be met for neither of the three claim requests. In addition, the examining division deemed claim 1 of the first auxiliary request not to be clear within the meaning of Article 84 EPC.

II. The appellant was summoned to oral proceedings before the board. A communication was issued under Article 15(1) RPBA 2020 including the board's negative preliminary opinion regarding inventive step (Article 56 EPC) as to all claim requests on file. It had regard to the following prior-art document:

D3: EP 1 726 918 A1.

III. With a letter of reply, the appellant submitted counter-arguments to the inventive-step objection raised in the board's communication, and filed an amended set of claims according to a new auxiliary request.

IV. In another written reply submitted one week ahead of the scheduled hearing, the appellant stated that it would not be attending the arranged oral proceedings. Subsequently, the oral proceedings were cancelled.

V. The appellant's final requests were that the decision under appeal be set aside and that a patent be granted

according to the claims of the **main request** underlying the appealed decision. In the alternative, the appellant requested that a patent be granted according to the claims of the **auxiliary request** filed after notification of the board's communication under Article 15(1) RPBA 2020.

VI. Claim 1 of the **main request** reads as follows (board's feature labelling):

(a) "A system (100) comprising:
(b) an aircraft avionics system (102) comprising a plurality of sensors for an aircraft;
(c) an aircraft interface device (104; 300) configured to communicate with the aircraft avionics system (102); and
(d) a tablet interface module (106; 200) configured to communicate with the aircraft interface device (104; 300) and with one or more tablets (108), wherein the tablet interface module (106; 200) provides the one or more tablets (108) with information received from the aircraft interface device (104; 300), wherein the tablet interface module comprises:
(e) a wireless transceiver (202) configured to communicate with the one or more tablets (108);
(f) a transceiver (204) configured to communicate with the aircraft interface device (104; 300); and
(g) a user interface (206) configured to establish a communications channel between the tablet interface module (200) and the one or more tablets (108) via the wireless transceiver (202),
characterised in that:
(h) the user interface includes an indicator configured to indicate if the tablet interface module is connected to a tablet,

(i) the tablet interface module is configured such that the communications channel can only be established by initiation from the tablet interface module and not the one or more tablets, and in that
(j) the communications channel is encrypted by the wireless transceiver".

VII. Claim 1 of the **auxiliary request** differs from that of the main request in that

- the term "and" is removed from the end of feature (f)

and in that

- feature (g) is replaced by the following feature (board's feature labelling and highlighting, the latter reflecting amendments vis-à-vis feature (g)):

(k) "characterised in that:
the tablet interface module comprises a user interface (206) configured to enable a user to establish a communications channel between the tablet interface module (200) and the one or more tablets (108) via the wireless transceiver (202), ~~characterised in that:~~".

Reasons for the Decision

1. *Decision in written proceedings*

As the appellant effectively withdrew its request for oral proceedings by declaring its intent not to attend them, and as the board does not consider the conduct of

oral proceedings to be expedient either (cf. Article 116(1) EPC), the decision is handed down in written proceedings (Article 12(8) RPBA 2020).

2. *Technical background*

2.1 The application pertains to aircraft operations. It specifically addresses the desire of pilots or a crew to utilise their personal tablet device, such as "tablet 108" depicted in Figure 1 (reproduced below), to interact with aircraft avionics system 102. However, this desire purportedly raises concerns regarding the reliability, safety and security of the aircraft.

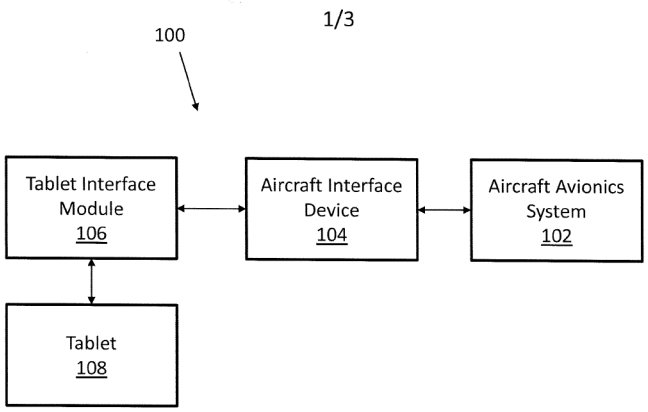

FIG. 1

2.2 To mitigate these concerns, the application proposes the utilisation of a "tablet interface module" (denoted with reference numeral "106" in Figure 1). This tablet interface module must meet the criterion of being "operationally approved". Physical access to it must be restricted to authorised personnel. Access to aircraft avionics system 102 would then be exclusively facilitated through tablet interface module 106. The application asserts that commercially available tablets

can then be used to connect to the aircraft avionics system, obviating the need for these tablets to be certified.

3. *Main request: claim 1 - inventive step*

3.1 In Reasons 1.1 and 1.2 of the appealed decision, the examining division considered document **D3** to be a suitable starting point for the assessment of inventive step. It deemed this document to disclose **features (a) to (f)**. The appellant did not contest this and neither will the board.

3.2 On the other hand, the board is at a loss to understand how the objective technical problem of "how to implement the wireless interface of D3" mentioned in Reasons 1.5 of the appealed decision can credibly be associated with **features (g) to (j)**. These features are not particularly related to implementing *any* kind of "wireless interface", whatever components the examining division might have referred to by "the wireless interface of D3".

3.3 The board's review of the examining division's inventive-step assessment of the appealed decision therefore hinges upon identifying a technical effect that can credibly be associated with features (g) to (j). The appellant focused in this respect on **feature (i)** and argued why, in its view, the examining division erred in Reasons 1.6 of the appealed decision. The board agrees that it is expedient to focus on feature (i) regarding inventive step, given that **features (g), (h) and (j)** concern mere matters of routine design which the skilled person would have readily implemented using their common general knowledge. The board is however unable to immediately

discern which technical effect feature (i) would credibly have.

3.4 The appellant considered in this regard the technical effect that **feature (i)** made it impossible to initiate a "communications channel" from an external device (e.g. a tablet), preventing unsanctioned wireless devices from connecting to the "tablet interface module" and the "aircraft avionics system". It concluded, referring to the excerpt from page 4, line 29 to page 5, line 5 of the application as filed, that feature (i) "improved the security of the system and the connection between the aircraft avionics system and the tablets".

However, the board is not convinced that this technical effect is directly and causally related to feature (i), even when adopting the appellant's understanding of the verb "to initiate" in this context as "to cause to exist" (cf. the paragraph bridging pages 3 and 4 of the statement of grounds of appeal). This is because a "communication" - and, hence, also the "communications channel" as per feature (i) - must necessarily involve at least two parties, where either party will typically be able to cause the communication to exist. The skilled reader of claim 1 may, arguably, be aware of ways to ensure that the task of establishing a particular "communications channel" solely lies with the "tablet interface module" in the sense that this module alone has the authority to set up a communication session that delivers data in the correct order. However, this does not mean that an external device cannot "initiate" this communications channel, e.g. by a simple polling request. The board cannot see any viable way in which feature (i) could prevent an external device from issuing such a polling request to

the "tablet interface module" in accordance with feature (d). By issuing such a polling request, the external device can very well cause a communications channel to exist, for instance by triggering the tablet interface module to at least initiate the setting up of such a communications channel. Hence, feature (i) does not necessarily *improve* or *increase* the security of the claimed system, contrary to the appellant's allegation.

3.5 The absence of any credible technical effect means that feature (i) does not necessarily contribute to solving an objective technical problem. The immediate consequence of this is that feature (i) cannot contribute to an inventive step (cf. **G 1/19**, Reasons 49, last two sentences).

3.6 Hence, the subject-matter of claim 1 of the main request does not involve an inventive step (Article 56 EPC).

4. *Auxiliary request: admittance*

4.1 The board understands that the appellant invoked the presence of "exceptional circumstances" within the meaning of Article 13(2) RPBA 2020 in view of the board raising doubts regarding the technical effect that can be credibly attributed to feature (i). The appellant regarded these doubts to introduce a "new issue" given that, in its view, the examining division had previously accepted the presence of a technical effect.

4.2 The board recalls however that, first, the identification of a certain technical effect or the indication of its absence cannot give rise to a "new objection" (i.e. Article 56 EPC was already invoked in the impugned decision here). Instead, this

identification amounts, at most, to a *different* reasoning in the assessment of inventive step in the framework of the well-established problem-solution approach, of which the determination of a credible technical effect constitutes an integral part. In addition, the board merely backed up its reasoning with a reference to the jurisprudence of the Boards of Appeal in that regard (such as the conclusions of **G 1/19** in the case at hand, as referred to in point 3.5 above). Second, the presence of a "new" objection in the appeal proceedings is not *in itself* sufficient to justify the admittance of a new auxiliary request into the proceedings but could possibly be weighed in together with other established criteria as regards admittance of new submissions (see e.g. **T 2271/18**, Reasons 3.3; **T 3208/19**, Reasons 4.2; **T 735/19**, Reasons 1.1.4(b)).

4.3 Moreover, irrespective of the board's concerns regarding whether this feature complies with Article 123(2) EPC, it is not apparent to the board how **feature (k)** could overcome the issue raised against feature (i) in point 3 above.

4.3.1 The appellant argued that there could be no doubt that "claim 1 (as amended) requires the tablet interface module to be configured to *enable a user* to establish a communications channel via the wireless transceiver, and that it is the *tablet interface module* (i.e. rather than the *user interface*) that is configured so that the communications channel can only be established by initiation from the tablet interface module and not the one or more tablets" (emphasis as in the original).

4.3.2 However, in the board's view, there is still no feasible way in which feature (i) could indeed prevent

an external device from, for instance, issuing a polling request to the "tablet interface module" in accordance with feature (d). Preventing such a polling request from being issued by the external device cannot depend on how the claimed device sets up a communications channel to deliver data in the correct order upon receipt of that polling request. In particular, it cannot depend on whether, on the side of the claimed device, the "user interface" according to feature (g) or (k), the "tablet interface module [as a whole]" in accordance with feature (d) or the "user" as mentioned in feature (k) is involved in establishing such a communications channel.

4.4 Therefore, the board decided not to admit the auxiliary request into the proceedings (Article 13(2) RPBA 2020).

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chair:

B. Brückner K. Bengi-Akyürek

Decision electronically authenticated