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**Datasheet for the decision  
of 3 November 2022**

**Case Number:** T 0695/21 - 3.2.01

**Application Number:** 15152584.7

**Publication Number:** 3051376

**IPC:** B63H25/50, G05D1/02, B63H25/42,  
B63H5/125

**Language of the proceedings:** EN

**Title of invention:**  
Ship emergency stopping

**Patent Proprietor:**  
ABB Schweiz AG

**Opponent:**  
Siemens Aktiengesellschaft

**Headword:**

**Relevant legal provisions:**  
EPC Art. 100(b), 100(c), 100(a), 54, 56  
RPBA 2020 Art. 15(8), 11

**Keyword:**

Grounds for opposition - insufficiency of disclosure (no) -  
subject-matter extends beyond content of earlier application  
(no)

Novelty - (yes)

Inventive step - (yes)

Abridged reasons for decision - agreement with finding of  
department of first instance

Remittal - fundamental deficiency in first-instance  
proceedings (no)

**Decisions cited:**

**Catchword:**



**Beschwerdekammern**

**Boards of Appeal**

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**Case Number: T 0695/21 - 3.2.01**

**D E C I S I O N**  
**of Technical Board of Appeal 3.2.01**  
**of 3 November 2022**

**Appellant:**  
(Patent Proprietor)

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**Decision under appeal:**

**Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
16 March 2021 concerning maintenance of the  
European Patent No. 3051376 in amended form.**

**Composition of the Board:**

**Chairman**

C. Narcisi

**Members:**

J. J. de Acha González

O. Loizou

## Summary of Facts and Submissions

- I. The appeal of the patent proprietor lies against the interlocutory decision of the Opposition Division to maintain the European patent N° 3051376 in amended form according to the then auxiliary request 4.
- II. The Opposition Division held among others that:
- the patent as granted disclosed the invention according to claims 1, 4 and 5 in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art (Article 100(b) EPC);
  - the subject-matter of granted claim 12 did not extend beyond the content of the application as originally filed (Article 100(c) EPC);
  - the subject-matter of granted claim 1 was new over **D1** (WO 01/00485 A) and **E10** ("Positive benefits of manoeuvring with pods"; Kivimaki, Kristian; Veikonheimo, Tomi; Marine Power and Propulsion: Solutions for Naval Architects; pages 10 and 11); but did not involve an inventive step in view of **E3** (EP 1 187 760 B1; this European patent is based on International Application D1) combined with the teaching of **E10**.

The following document is also relevant for the present decision:

**E12**: "Mit wilden Gesten das Auto steuern";  
Johannes Wendt; Zeit Online;  
17 January 2015, 16:44; [https://  
www.zeit.de/digital/internet/2015-01 /  
gestensteuerung-mensch-maschine-](https://www.zeit.de/digital/internet/2015-01/gestensteuerung-mensch-maschine-)

kommunikationsmait-home/komplettans!cht?  
print.

III. Oral proceedings before the Board were held on 3 November 2022 in the form of a videoconference with the consent of the parties.

The appellant (patent proprietor) requested that the decision of under appeal be set aside and the patent be maintained as granted, i.e. that the opposition be rejected (main request) or, in the alternative, that the patent be maintained in amended form according to any one of the auxiliary requests A, 1, 1A, 2, 3, and 3A underlying the contested decision and resubmitted with the statement of grounds of appeal.

The respondent (opponent) requested that the appeal be dismissed. Additionally, they requested that the case be remitted to the Opposition Division under Article 11 RPBA 2020 (Rules of Procedure of the Boards of Appeal OJ EPO 2019, A63) for reasons of a substantial procedural violation.

IV. Claim 1 of the granted patent (i.e. according to the main request) reads as follows (feature numbering according to the contested decision):

- M1.1** *A control arrangement for controlling at least two azimuthing propulsion units of a ship, comprising:*
- M1.2** *one or more levers for controlling the at least two azimuthing propulsion units separately or jointly;*
- M1.3** *a crash stop activation member for activating a crash stop procedure;*
- M1.4** *means for performing the crash stop procedure in which the orientation and propulsion speed of the azimuthing propulsion units are controlled until the propagation*

*speed of the ship has at least been reduced from the moment when the crash stop procedure was activated by the crash stop activation member,*

***characterized in that***

**M1.5** *the control arrangement is configured to adjust the crash stop procedure,*

**M1.6** *by adjusting orientation and/or propulsion power of at least one azimuthing propulsion unit according to an operator control gesture received on the one or more levers during the crash stop procedure.*

Granted claim 12 reads as follows (differences with respect to originally filed claim 14 highlighted by the Board):

*A method according to claim 12<sup>1</sup>, characterized in that the crash stop procedure comprises one or more stages in which the orientation of the azimuthing propulsion units is varied as a function of the speed of the ship.*

V. The appellant's submissions insofar as relevant to the present decision can be summarised as follows:

The view of the Opposition Division as regards sufficiency of disclosure (Article 100(b) EPC) and inadmissible extension (Article 100(c) EPC) for the granted patent still applied and was shared by the appellant.

The subject-matter of granted claim 1 was new in view of D1, E3 and E10 (Article 54 EPC). The objection in view of E3 was late filed and not to be admitted.

Furthermore, the subject-matter of granted claim 1 involved an inventive step starting from E3 or E10 as the closest prior art (Article 56 EPC).

VI. The respondent's submissions insofar as relevant to the present decision can be summarised as follows:

The invention according to granted claims 1, 4 and 5 was not sufficiently disclosed for the skilled person (Article 100(b) EPC).

The subject-matter of granted claim 12 extended beyond the content of the application as originally filed (Article 100(c) EPC).

The subject-matter of granted claim 1 was not new in view of D1, E3 and E10 (Article 100(a) together with 54 EPC) and did not involve an inventive step starting from E3 as the closest prior art and combining it with the teaching of E10, common general knowledge or E12, or starting from E10 as the closest prior art and combining it with common general knowledge of the skilled person (Article 56 EPC).

Remittal of the case to the Opposition Division was requested under Article 11 RPBA 2020 for reasons of a substantial procedural violation because the Opposition Division did not consider in its decision the other lines of attack on inventive step for the subject-matter of granted claim 1, in particular the combination of E3 with common general knowledge or E12.

## **Reasons for the Decision**

### *Main requests - granted patent*

1. *Sufficiency of disclosure - Article 100(b) EPC*
  - 1.1 The patent discloses the invention according to claims 1, 4 and 5 in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.
  - 1.2 The respondent merely repeated the arguments submitted before the Opposition Division as regards the features M1.2, M1.4 and M1.6 of claim 1 and those of claims 4 and 5 (see points 4.1.1 to 4.1.4 of the reply to the grounds of appeal, and point 2 of the submission of 19 October 2022).
  - 1.3 Under Article 15(8) RPBA 2020, the Board may put the reasons for its decision in abridged form in respect of an issue, if the Board agrees with the finding of the department which issued the decision under appeal on that issue, and with the reasons given for it in the decision under appeal.
  - 1.4 The Opposition Division dealt in detail with the respondent's lines of argumentation in its decision. Since the Board shares the Opposition Division's reasoning on these points, the Board makes the Opposition Division's correct reasoning and findings its own (see point 3 of the impugned decision).



2. *Inadmissible extension - Article 100(c) EPC*

- 2.1 The subject-matter of granted claim 12 does not extend beyond the content of the application as originally filed.
- 2.2 The respondent submits anew the same line of reasoning as presented during the opposition proceedings. The Opposition Division in its decision duly considered it. The Board again finds the reasoning and findings of the Opposition Division correct and adopts it as its own (Article 15(8) RPBA 2020; point 4.3 of the contested decision).
- 2.3 The respondent in its reply to the statement of grounds of appeal added a new argument in the appeal proceedings which related to the feature "*automatically control*" present in granted claim 12 through the dependency on granted claim 11 (and coming from claim 13 as originally filed). In the respondent's view there was no mention of an automatic control in the originally filed claims 1 to 11.

In the Board's view the subject-matter of granted claim 1 - and for the same reasons claims 1 to 11 as originally filed (since granted claim 1 is a combination of originally filed claims 1, 4 and 6, claims 7-11 depending on the preceding claims) - implicitly includes the feature of an automated crash stop procedure. This is undisputed by the appellant and indeed correct since the control arrangement carries out the function of controlling the orientation and propulsion speed of the azimuthing propulsion units until the propagation speed of the ship has at least been reduced from the moment when the crash stop procedure was activated by the crash stop activation

member. This is also aligned with the Opposition Division's reasoning in its decision (see para. 2 on page 11). It ensues from the whole disclosure of the application as originally filed that the control arrangement carries out in an automatic manner the crash stop procedure which can be manually overridden by the operator to perform an evasive manoeuvre of the ship by adjusting the automatic crash stop procedure (see para 27 and 28 of the A-publication of the application as originally filed). Moreover the control arrangement of (original) claim 1 necessarily has to be designed in order to be capable of performing the method of (original) claim 13 (which explicitly includes said automatic procedure), given that, as it results from the patent application in its entirety, the control arrangement and the method are described in equivalent and analogous terms and manner.

Finally it is noted, although not relevant to the present decision (since the objection was not withdrawn by the respondent), that during the oral proceedings the respondent nonetheless seemed to concede when discussing novelty that the subject-matter of granted claim 1 as originally filed implicitly included the feature of an automated crash stop procedure.

3. *Novelty - Article 100(a) together with 54 EPC*

3.1 The subject-matter of granted claim 1 is new in view of D1, E3 and E10.

3.2 D1 and accordingly E3, since the reasoning of the respondent in the reply to the statement of grounds of appeal merely referred to the objection put forward for D1 when addressing E3 (E3 being a family member of D1),

do not disclose features M1.5 and M1.6. The view of the Opposition Division in its decision is correct.

Regarding features M1.5 and M1.6 the respondent again reiterated the lines of argumentation duly considered by the Opposition Division in its decision (see point 5 of the contested decision). Since the reasoning of the Opposition Division is correct, the Board adopts it as its own (Article 15(8) RPBA 2020).

In this respect it is pointed out that feature M1.5 cannot be read in isolation but it is further specified by feature M1.6 in the characterising part of granted claim 1. Accordingly, D1 fails to disclose that the "adjustment" of the crash stop procedure is carried out when such a procedure is taking place. In particular, D1 (or D3) discloses an abortion of the crash stop procedure which is not encompassed by the meaning and scope of the feature "the control arrangement is configured to adjust the crash stop procedure" according to claim 1 of the patent specification.

The question of the admissibility of the novelty objection in view of E3 can therefore remain unanswered.

- 3.3 E10 does not disclose features M1.3 to M1.6 of granted claim 1 because it is not directly and unambiguously derivable from E10 whether the disclosed crash stop procedure is manual or automated.

The respondent essentially argued that the crash stop procedure disclosed on page 11 of E10 implied at least a partly automatic crash stop procedure. This followed implicitly from the last sentence on page 11 of E10 and from the fact that in order to carry out the tests described under this passage of E10, only an automatic

procedure could reasonably make sense. Moreover, both the patent in suit and E10 made clear that a manually operated crash stop procedure with azimuthing propulsion units was difficult and risky, such that an automation due to the complexity of such propulsion units was required. This was further confirmed by the reference on page 10 of E10 to the necessity of using an autopilot.

This is not persuasive for the following reasons. As noted by the Opposition Division, E10 is silent on whether the disclosed crash stop procedure with Azipods on page 11 is carried out manually or automatically. The contested patent itself (see para. [0016]) - as pointed out by the respondent - confirms that a manual operated crash stop procedure with Azipods can be carried out by the operator of the vessel, yet it is complex. Further, E10 merely acknowledges that the master or operator of the vessel must be acquainted with how to use the equipment properly but it does not either explicitly or implicitly address whether it has to be imperatively operated in an automatic manner. E10 is primarily addressing the advantages of Azipods in comparison to conventional (rudder-propeller) propulsion systems, also when performing crash stops. Consequently, the fact that a manual operation of Azipods propulsion units is complex and allegedly riskier does not imply that their operation is exclusively automatic. Accordingly, it is not directly and unambiguously derivable from the disclosure of E10 that manually operated Azipods are excluded.

- 3.4 The subject-matter of method claim 11 is also new in view of D1 (E3) and E10 for the same reasons as for the subject-matter of granted claim 1.

4. *Inventive step - Article 100(a) together with 56 EPC*

4.1 The subject-matter of granted claim 1 involves an inventive step in view of E3 combined with the teachings of E10, E12 or common general knowledge of the skilled person, or in view of E10 together with common general knowledge of the skilled person.

*Starting from E3*

4.2 The subject-matter of granted claim 1 differs from the control arrangement of E3 on account of features M1.5 and M1.6 (see point 3.2 above) not being disclosed in E3.

4.3 The Opposition Division considered that the objective technical problem resided in improving the safety of the ship during a crash stop procedure. This was not disputed by the parties.

4.4 The respondent agreed with the view of the Opposition Division according to which the skilled person would specifically be taught from E10 that an additional safety factor was obtained because the pods were individually steerable during a crash stop so that course-keeping and steering capability still remained possible (see last sentence on page 11 of E10). Accordingly, the skilled person would in light of this teaching adapt the control arrangement of E3 during an automatic crash stop procedure so that when the operator of the vessel manually acted with a gesture on the control levers, the automatic crash stop procedure would no longer be terminated but adjusted by adjusting orientation and/or propulsion power of the Azipods to

maintain the steerability that improved the safety of the vessel.

However, E10 does not teach the skilled person to proceed as contended by the Opposition Division and the respondent. The referred passage of E10 ("Crash stop" on page 11) merely specifies the advantages of performing a crash stop procedure, with azimuthing propulsion units by turning the Azipods without reversing the turning speed of the propeller, in comparison to the conventional method in which only the rotation direction of the propeller is reversed. The last sentence on page 11 further specifies that during the crash stop procedure course-keeping and steering capability still remain unaffected compared to the conventional method, since the pods are individually steerable during the crash stop. The way the crash stop procedure is carried out, manually or in an automated manner, remains unspecified. This passage therefore only clarifies that during the crash stop (manual or automated) with Azipods the vessel is still able to keep course and steer while carrying out the stop procedure. It does not suggest any manual intervention of the operator during an automated crash stop procedure in order to adjust said automated crash stop procedure, though. This mixture of the two kinds of action is neither derivable from nor is it suggested by this passage.

Accordingly, the reasoning of the Opposition Division and of the respondent is based on hindsight. E10 does neither teach nor motivate or incentivize the skilled person to adjust the automatic crash stop procedure of E3 by adjusting orientation and/or propulsion power of at least one azimuthing propulsion unit through manual intervention of the operator on the control levers during the automatic crash stop procedure.

4.5 The lines of attack starting from E3 in combination with common general knowledge or E12 are even less promising. The skilled person does not find any hint or motivation in the common general knowledge or in E12, which pertains to control of a cell phone through gestures, to modify the control arrangement of the two azimuthing propulsion units of the ship disclosed in E3, so that it adjusts the crash procedure by adjusting orientation and/or propulsion power of at least one azimuthing propulsion unit according to an operator control gesture received on the lever(s) during the crash stop procedure.

The line of argumentation of the respondent referring to a contactless control by means of a voice control or camera detecting movements cannot convince the Board, since claim 1 as granted is directed to an operator control gesture acting on the lever, i.e. with contact.

*Starting from E10*

4.6 The inventive step objection of the respondent against the subject-matter of claim 1 as granted starting from E10 was based - analogously as for the combination of E3 with E10 - on the allegation that the last sentence of E10 hinted to the skilled person a manual override and adjustment by the operator of an automatic crash stop procedure of the vessel.

4.7 This is as presented above not correct. The skilled person does not find any hint either in E10 or in its common general knowledge to carry out an adjustment of an automatic crash stop procedure as specified in the characterising portion of granted claim 1.

4.8 The inventive step objection against the subject-matter of granted claim 1 starting from E10 as the closest prior art was put forward after notification of the summons to oral proceedings before the Board. Nevertheless the question of its admissibility into the appeal proceedings can be left unanswered since this objection is not successful on the grounds of substantive patent law.

4.9 The subject-matter of method claim 11 is also not rendered obvious in view of the combination of E3 with E10, common general knowledge or E12 for the same reasons as for the subject-matter of granted claim 1.

4.10 The Board further notes that according to established case law of the Boards of Appeal and under the EPC the skilled person considered in order to assess the requirements of sufficiency of disclosure and of inventive step is the same. It has however to be borne in mind that when assessing sufficiency of disclosure the skilled person is aware of the invention as disclosed in the granted patent and that, on the other hand, the skilled person is not aware of the invention according to the patent when assessing inventive step of the subject-matter claimed, but only of the prior art at hand. This prevents the skilled person from being influenced by hindsight when examining inventive step.

5. *To the alleged substantial procedural violation*

5.1 The respondent requested that the case be remitted to the Opposition Division under Article 11 RPBA 2020 for reasons of a substantial procedural violation incurred by the Opposition Division since it disregarded in the contested decision the inventive step objections based



on the combination of E3 with common general knowledge or E12.

5.2 A remittal is however not justified because the Board sees no deficiencies in the proceedings before the Opposition Division, at least insofar as the auxiliary requests ranking higher than auxiliary request 4 are concerned. Further, since the opponent did not file an appeal, auxiliary request 4 is not the object of this appeal proceedings and this holds true for any possible procedural deficiency allegedly related to this request. In particular, the Opposition Division rejected the requests (main request, auxiliary requests 1 to 3A), which are the object of these appeal proceedings and ranking higher than the version maintained (auxiliary request 4) for lack of inventive step in view of E3 with E10.

Therefore, there was no obligation on the Opposition Division to give further reasons also in respect of other lines of attack on inventive step for said requests (preceding auxiliary request 4) decided upon in the contested decision.).

6. It follows from the above that the appeal is allowable and well founded.

**Order**

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

1. The decision under appeal is set aside.
2. The patent is maintained as granted.

The Registrar:

The Chairman:



A. Vottner

C. Narcisi

Decision electronically authenticated