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**Datasheet for the decision
of 12 February 2020**

Case Number: T 0043/15 - 3.4.03

Application Number: 07113039.7

Publication Number: 1868011

IPC: G01V1/38

Language of the proceedings: EN

Title of invention:

Control system for positioning of marine seismic streamers

Patent Proprietors:

WesternGeco Seismic Holdings Limited
Services Pétroliers Schlumberger

Opponent:

ION Geophysical Corporation

Headword:

Relevant legal provisions:

EPC Art. 101(3)(b)
EPC 1973 Art. 76(1), 100(c), 111(1), 113(1)
EPC 1973 R. 71(2)
RPBA 2020 Art. 15(3), 15(6)

Keyword:

Amendments - generalization of a specific feature - extension beyond the content of the parent application as filed (yes)

Decisions cited:

Catchword:



Beschwerdekammern
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Case Number: T 0043/15 - 3.4.03

D E C I S I O N
of Technical Board of Appeal 3.4.03
of 12 February 2020

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
24 October 2014 concerning maintenance of the
European Patent No. 1868011 in amended form.**

Composition of the Board:

Chairman G. Eliasson
Members: T. M. Häusser
 W. Van der Eijk

Summary of Facts and Submissions

- I. The appeals of the patent proprietor and the opponent concern the interlocutory decision of the opposition division to maintain the European patent EP-B-1868011 as amended during the opposition proceedings (Article 101(3) (a) EPC).
- II. The opposition had been filed against the patent as a whole. Grounds of opposition were insufficiency of the disclosure, extension beyond the content of the application as filed and the parent application as filed, and lack of novelty and inventive step (Articles 100(a), (b), and (c), 54(1) and (2), and 56 EPC 1973).
- III. At the oral proceedings before the board the *appellant/o* (opponent) requested that the decision under appeal be set aside and that the European patent be revoked.

The *appellants/p* (patent proprietors) had requested in writing that the decision under appeal be set aside and the patent be maintained according to a main request, filed with the grounds of appeal, or according to a first or second auxiliary request, filed with the grounds of appeal, a third auxiliary request filed with the grounds of appeal and corresponding to the first auxiliary request in opposition proceedings and underlying the appealed decision, or one of auxiliary requests 4-11, filed with the reply to the grounds of appeal of *appellant/o* on 16 September 2015.

- IV. The wording of independent claim 1 of the various requests is as follows (board's labelling "(b)'", "(b1)'", and "(b2)'"):

Main request and first to third auxiliary requests:

"1. A method of positioning a streamer positioning device, the method comprising:

(a) towing an array of streamers with a seismic survey vessel, each streamer having a plurality of streamer positioning devices there along, each of the streamer positioning devices comprising wings; and

(b) positioning each streamer positioning device by:

(b1) converting a desired force on the streamer positioning device into a desired roll angle and a desired common wing angle by one or more deterministic calculations, the one or more deterministic calculations incorporating an estimate of the velocity of the streamer positioning device; and

(b2) adjusting the angles of the wings with a wing motor."

Fourth to seventh auxiliary requests:

Respective claim 1 of the fourth to seventh auxiliary requests differs from claim 1 of the main request in that feature (b1) is replaced by the following feature (b1)' (marking of the changes here and below by the board):

(b1)' "converting a desired force on the streamer positioning device into a desired roll angle and a desired common wing angle by ~~one or more~~ deterministic calculations, the ~~one or more~~ deterministic calculations incorporating an estimate of the velocity of the streamer positioning device; and"

Eighth to eleventh auxiliary requests:

Respective claim 1 of the eighth to eleventh auxiliary requests differs from claim 1 of the main request in that feature (b1) is replaced by feature (b1)' and features (b) and (b2) are replaced by the following features (b)' and (b2)', respectively:

(b)' "positioning each streamer positioning device by calculating a desired change in the angle of the wings by:"

(b2)' "adjusting the angles of the wings with a wing motor to produce the desired change in the angles of the wings."

- V. The parties argued essentially as follows in relation to the basis of the amendments in the parent application:

The *appellant/o* argued that the claimed subject-matter extended beyond the parent application as filed, in particular in relation to the feature concerning the deterministic calculations.

The *appellants/p* were of the opinion that the claimed subject-matter did not extend beyond the parent application as filed.

Reasons for the Decision

1. Procedural matters

With letter dated 10 July 2019 the appellants/p stated that they would not be attending the oral proceedings

scheduled before the board, which thus took place in the appellants/p's absence in accordance with Rule 71(2) EPC 1973.

According to Article 15(3) and (6) RPBA 2020, the board is not "obliged to delay any step in the proceedings, including its decision, by reason only of the absence at the oral proceedings of a party duly summoned who may then be treated as relying only on its written case" and has to "ensure that each case is ready for decision at the conclusion of the oral proceedings, unless there are special reasons to the contrary".

The appellants/p had argued and explained in writing why they considered the claimed subject-matter not to extend beyond the parent application as filed. By not attending the oral proceedings before the board the appellants/p gave up the opportunity to present their case orally in this respect and could thus be treated as relying only on their written submissions.

The board's decision, which hinges on the issue of extension beyond the parent application as filed (see below), is therefore in conformity with the requirements of Article 113(1) EPC 1973 that the decisions of the EPO may only be based on grounds or evidence on which the parties concerned have had an opportunity to present their comments.

Accordingly, the case was ready for decision at the conclusion of the oral proceedings in accordance with Article 15(6) RPBA 2020.

2. Amendments

2.1 In the decision under appeal the opposition division held that the subject-matter of the feature of converting a desired force on the streamer positioning device into a desired roll angle and a desired common wing angle by deterministic calculations did not extend beyond the content of the parent application as filed (see point 3.2.2 of the Reasons).

2.2 The appellant/o argued that the above feature extended beyond the parent application since the specific formulas on page 17 of the parent application were not claimed.

2.3 Respective claim 1 of all requests relates to a method of positioning a streamer positioning device and contains the feature of converting a desired force on the streamer positioning device into a desired roll angle and a desired common wing angle by (one or more) deterministic calculations which incorporate an estimate of the velocity of the streamer positioning device (see features (b1) and (b1)'), which constitutes an amendment in relation to original claim 1 of the parent application. The fact that respective claim 1 of the main request and the first to third auxiliary requests refers to "one or more deterministic calculations" whereas the expression "one or more" is omitted in claim 1 of the other requests is not relevant for what is to follow.

It has to be examined whether the amendment mentioned above is directly and unambiguously derivable for the skilled person - using common general knowledge - from the parent application as filed.

2.4 The appellants/p argued that the claimed broad formulation was justified since two alternative

formulas were provided in the parent application as examples of deterministic calculations, both of them being indicated as optional.

The board notes first that deterministic calculations related to the desired force, the common wing angle and the roll angle are only mentioned in the part of the parent application concerning the detailed description of the invention, namely on page 17, first to penultimate paragraph. In particular, this passage contains two formulas allowing the common wing angle α to be determined from the desired force F and the towing velocity v_{tow} .

The first formula contains all of the three relevant parameters, namely the desired force F , the common wing angle α and the velocity v_{tow} . Given the desired force F and the velocity v_{tow} the common wing angle α can therefore directly be obtained using this formula.

The second formula relates a "gain factor" GF to the towing velocity v_{tow} . In order to obtain the desired force F it is necessary, as stated in the passage mentioned above, to multiply the gain factor GF by $\cos^2(\alpha)$. This will then again allow the common wing angle α to be determined from the desired force F and the towing velocity v_{tow} . However, when this crucial step of multiplication by $\cos^2(\alpha)$ is taken into account it becomes evident that the second formula is merely a special case of the first formula which is obtained from the first formula by setting the cross-current velocity v_{current} equal to zero.

Hence, the parent application contains in fact only one specific deterministic calculation for converting a desired force on the streamer positioning device into a

desired common wing angle using an estimate of the velocity of the streamer positioning device.

Furthermore, the mere statements on page 17 of the parent application that the deterministic calculations could "for instance" be performed using the given formulas do not provide any further technical teaching in this respect and do not alter the fact that only one specific deterministic calculation for converting a desired force into a desired common wing angle is in fact provided.

- 2.5 The amendment mentioned under point 2.3 above amounts therefore to a generalization from said one disclosed specific deterministic calculation for converting a desired force into a desired common wing angle to the broadly claimed "one or more deterministic calculations" (main request and the first to third auxiliary requests) and "deterministic calculations" (fourth to eleventh auxiliary request), respectively.

The effect of this generalization is that not only the specifically disclosed deterministic calculations are claimed but also any other alternative deterministic calculations for converting a desired force into a desired common wing angle which incorporate an estimate of the velocity of the streamer positioning device.

The appellants/p did not argue that such alternative deterministic calculations were implied by the disclosure of the parent application, nor how such alternative calculations could be performed in detail. In the boards view this would not be evident for the skilled person, either.

The amendment mentioned under point 2.3 above is therefore considered to constitute a generalization which is not directly and unambiguously derivable from the parent application as filed (cf. *Case Law of the Boards of Appeal of the EPO*, 9th edition, section II.E. 1.8.1).

2.6 Consequently, respective claim 1 of all requests contains subject-matter extending beyond the content of the parent application as filed (Articles 76(1) and 100(c) EPC 1973).

3. Conclusion

Since all requests on file contain subject-matter extending beyond the content of the parent application as filed, the patent has to be revoked (Article 101(3) (b) EPC and Article 111(1) EPC 1973).

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:



S. Sánchez Chiquero

G. Eliasson

Decision electronically authenticated