

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: CURO AS Industriveien 53 7080 Heimdal
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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Date of mailing (day/month/year)	18-11-2010
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Applicant's or agent's file reference 2575-seatex	FOR FURTHER ACTION See paragraph 2 below
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International application No. PCT/NO2010/000267	International filing date (day/month/year) 06-07-2010	Priority date (day/month/year) 07-07-2009
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International Patent Classification (IPC) or both national classification and IPC See Supplemental Box

Applicant Kongsberg Seatex AS et al
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<p>1. This opinion contains indications relating to the following items:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Box No. I Basis of the opinion <input checked="" type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input checked="" type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application <p>2. FURTHER ACTION</p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p> <p>For further opinions, see Form PCT/ISA/220.</p> <p>3. For further details, see notes to Form PCT/ISA/220.</p>
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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Cover sheet

International patent classification (IPC)

G01V 1/38 (2006.01)

B63B 21/66 (2006.01)

B63G 8/42 (2006.01)

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Box No. I **Basis of this opinion**

1. With regard to the **language**, this opinion has been established on the basis of:
 - the international application in the language in which it was filed
 - a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
 - a. (means)
 - on paper
 - in electronic form

 - b. (time)
 - in the international application as filed.
 - together with the international application in electronic form.
 - subsequently to this Authority for the purposes of search.

4. In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

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Box No. II Priority

1. The validity of the priority claim has not been considered because the International Searching Authority does not have in its possession a copy of the earlier application whose priority has been claimed or, where required, a translation of that earlier application. This opinion has nevertheless been established on the assumption that the relevant date (Rules 43*bis*.1 and 64.1) is the claimed priority date.
2. This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. Additional observations, if necessary:

The priority is considered valid. Accordingly, WO2009/088291 A1 is of no relevance.

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Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	<u>1-13</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	_____	YES
	Claims	<u>1-13</u>	NO
Industrial applicability (IA)	Claims	<u>1-13</u>	YES
	Claims	_____	NO

2. Citations and explanations:

The invention concerns a device for controlling the position of an instrument cable towed in water and solves the problem of integrating the sensor equipment into the system. The solution is to attach the transmitter/receiver to or into the wing of the marine seismic streamer.

Cited documents

D1: US2006/0285434 A1

D2: US4033278 A

Document D1 is considered to represent the closest prior art. D1 describes a streamer steering device. The document discloses a body having fins that may be removably attached to the body, one or more acoustic sensors located within or on the body. The body may further comprise a rigid extension carrying sensors (part 0010, last three lines left column, nine first lines right column).

The invention according to claim 1 differs from the device in D1 in that the acoustic transmitter/receiver is located in or on the wing (fin).

Due to this feature, the measurement will be less sensitive to disturbances and get a better direction sensitivity.

Consequently, with the background of D1, the problem is to design a device with improved performance.

A solution to this problem is known from document D2, which describes a device for controlling positioning of a marine

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: Box V

seismic cable, where a sonar receiver is mounted on or into the wing (column 4, lines 40-46, figures 6,7).

Thus, the person skilled in the art, having the device known from D1 as a starting point, aiming to solve the identified problem, would with the knowledge of D2 attach the acoustic transmitter/receiver to or into the movable wing, and thus arrive at the invention according to claim 1. Since D1 and D2 both relate to the same technical field and no unexpected effect is obtained, the combination of what is known from D1 and D2 is considered obvious for a person skilled in the art.

Therefore, the subject matter defined in claim 1 does not involve an inventive step.

Dependent claims 2-13 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows:

The inventions according to claims 2,4,7,8 and 9 are disclosed in D1.

The inventions according to claims 5 and 10 are disclosed in D2.

In claim 3 a slight constructional change in the communication between the body and the wing of claim 1 is defined which comes within the scope of the customary practice followed by persons skilled in the art, especially as the advantages thus achieved can readily be foreseen. Consequently, the subject matter of claim 3 also lacks an inventive step.

The remaining claims are considered to involve measures or minor details obvious to a person skilled in the art or common general knowledge. Therefore, the invention according to these claims is not considered to involve an inventive step.

Consequently the inventions claimed in claims 2-13 do not fulfill the requirement of inventive step.

The invention is industrially applicable.

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Box No. VI **Certain documents cited**

1. Certain published documents (Rules 43*bis*.1 and 70.10)

<u>Application No. Patent No.</u>	<u>Publication date (day/month/year)</u>	<u>Filing date (day/month/year)</u>	<u>Priority date (valid claim) (day/month/year)</u>
WO2009/088291 A1	16-07-2009	16-12-2008	09-01-2008

2. Non-written disclosures (Rules 43*bis*.1 and 70.9)

<u>Kind of non-written disclosure</u>	<u>Date of non-written disclosure (day/month/year)</u>	<u>Date of written disclosure referring to non-written disclosure (day/month/year)</u>
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