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AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY,

BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,
DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,
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MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

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- with international search report (Art. 21(3))
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[Continued on next page]

(54) Title: NODE LOCKS FOR MARINE DEPLOYMENT OF AUTONOMOUS SEISMIC NODES

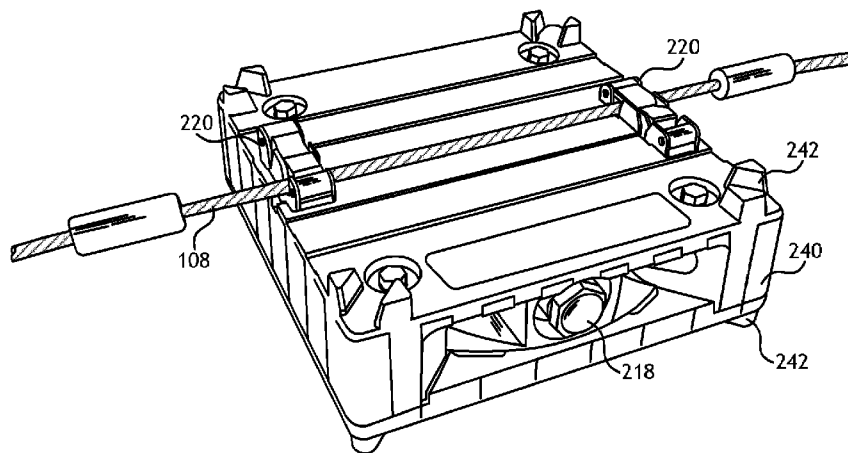
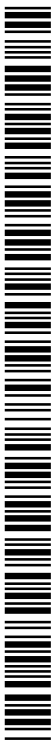


FIG. 2B

(57) Abstract: Embodiments, including apparatuses, systems and methods, for attaching autonomous seismic nodes to a deployment cable. In an embodiment, an apparatus includes a seismic node having a direct attachment mechanism configured to directly attach the seismic node to a deployment line, the direct attachment mechanism being configurable between an open and/or unlocked position and a closed and/or locked position to release and retain the deployment line.



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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/063228

A. CLASSIFICATION OF SUBJECT MATTER
 INV. G01V1/20 B63B21/58 G01V1/38 B63B21/08
 ADD.
 According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 G01V B63B B61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005/052951 A1 (RAY CLIFFORD H [US] ET AL) 10 March 2005 (2005-03-10)	1-3,7, 14, 17-21, 23-26
Y	paragraphs [0094], [0104], [0120] figures 1, 15-19	4-6, 8-11,15, 16,22, 27,28
Y	----- US 5 070 805 A (PLANTE WILFRED M [US]) 10 December 1991 (1991-12-10) column 3, paragraph 41 - column 5, paragraph 16 figures 1-3	4,5,8,9, 15,22
Y	----- GB 2 492 889 A (CGG VERITAS SERVICES SA [FR]) 16 January 2013 (2013-01-16) paragraphs [0032], [0038]; figures 4, 8 ----- -/--	6,10

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 4 September 2015	Date of mailing of the international search report 11/12/2015
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Breccia, Luca
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INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2015/063228

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2005/276161 A1 (OLIVIER ANDRE W [US]) 15 December 2005 (2005-12-15) paragraph [0023] figure 3	11
Y	----- US 2010/054079 A1 (THOMPSON JAMES N [US] ET AL) 4 March 2010 (2010-03-04) paragraphs [0034], [0062], [0065]	16,27,28
A	----- US 8 096 253 B1 (RUFFA ANTHONY A [US]) 17 January 2012 (2012-01-17) column 3, line 20 - line 37 -----	15,19

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2015/063228

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-11, 14-28

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-11, 14-28

Autonomous seismic node provided with attachment means configured for directly attaching the seismic node to a deployment line, said means comprising a receiving member and a retaining member.

2. claims: 12, 13

Autonomous seismic node provided with attachment means configured for directly attaching the seismic node to a deployment line and a pressure housing at least partially enclosed by a non-pressure housing.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/EP2015/063228

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