(19) World Intellectual Property Organization

International Bureau



(10) International Publication Number WO 2010/009165 A3

(43) International Publication Date 21 January 2010 (21.01.2010)

(51) International Patent Classification: H04L 12/26 (2006.01)

(21) International Application Number:

PCT/US2009/050593

(22) International Filing Date:

14 July 2009 (14.07.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/174,263

16 July 2008 (16.07.2008)

US

- (71) Applicant (for all designated States except CA, CL, PE, US): GECO TECHNOLOGY B.V. [NL/NL]; Gevers Deynootweg 61, NL-2586 BJ S Gravenhage (NL).
- (71) Applicant (for CA only): SCHLUMBERGER CANA-DA LIMITED [CA/CA]; 525 - 3rd Avenue S.W., Calgary, AB T2P 0G4 (CA).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BRADY, James, P. [US/US]; 6248 Wickersham Lane, Houston, TX 77057 (US). CANNELL, William, A.C. [GB/NO]; Syverstadkollen 30, N-1394 Nesbru (NO). BENETEAU, Lionel [FR/NO]; Toppasveien 50, N-1352 Kolsas (NO). KNUT-SEN, Thorleiv [NO/NO]; Blakstadlia 29, N-1386 Asker (NO).
- (74) Agent: YE, Liangang (Mark); WesternGeco L.L.C., 10001 Richmond Avenue, Houston, TX 77042 (US).

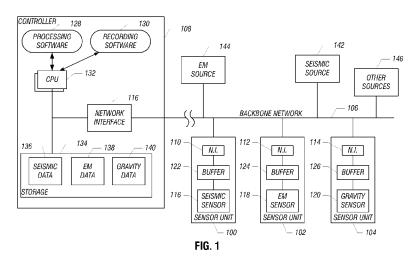
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))
- (88) Date of publication of the international search report:

11 March 2010

(54) Title: A SYSTEM HAVING A NETWORK CONNECTED TO MULTIPLE DIFFERENT TYPES OF SURVEY SENSORS



(57) Abstract: A system includes a network, multiple different types of survey sensors connected to the network, and a controller connected to the network. The multiple different types of survey sensors are configured to communicate different types of measurement data over the network to the controller.



International application No. **PCT/US2009/050593**

A. CLASSIFICATION OF SUBJECT MATTER

H04L 12/26(2006.01)i

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)

H04L 12/26; E21C 25/00; G06F 15/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean utility models and applications for utility models since 1975.

Japanese utility models and applications for utility models since 1975.

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKOMPASS(KIPO internal), IEEE xplore

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2005-0194182 A1 (PAUL RODNEY et al.) 08 September 2005 See page 1 paragraph[0009] - page 5 paragraph[0042]	1-14
A	US 6735630 B1 (GELVIN; DAVID C. et al.) 11 May 2004 See column 6 line 43 - column 7 line 51; column 64 line 55 - column 72 line 29; claims. 1 - 25	1-14

	Further documents are	listed in	n the conti	nuation o	f Boy C

See patent family annex.

- * Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- 'E" earlier application or patent but published on or after the international
- 'L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "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
- "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
- "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
- "&" document member of the same patent family

Date of the actual completion of the international search

24 DECEMBER 2009 (24.12.2009)

Date of mailing of the international search report

31 DECEMBER 2009 (31.12.2009)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office Government Complex-Daejeon, 139 Seonsa-ro, Seogu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

Authorized officer

JANG, Dae Geun

Telephone No. 82-42-481-5645



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/050593

Patent document cited in search report BR 0508369 A 31.07.2007 CA 2558 162-A1 06.10.2005 CN 1965249 A 16.05.2007 GB 0619313 D0 15.11.2006 GB 0811860 D0 30.07.2008 GB 2428820 B 24.09.2008 GB 2448256 A 07.02.2007 GB 2428820 B 24.09.2008 GB 2448256 A 08.10.2008 GB 2448256 B 26.11.2008 N020064496A 04.12.2006 US 2005-091899 A2 06.10.2005 W0 2005-091899 A2 06.10.2005 W0 2005-091899 A3 25.01.2007 W0 2005-091899 A3 25.01.2007 W0 2005-091899 A3 25.01.2007 W0 2005-091899 A3 25.01.2007 W0 2005-091899 A3 11.05.2004 US 6735630 B1 11.05.2004
CA 2558162-A1
GB 2448256 B 26.11.2008 N020064496A 04.12.2006 US 2005-194182 A1 08.09.2005 W0 2005-091899 A2 06.10.2005 W0 2005-091899 A2 06.10.2005 W0 2005-091899 A3 25.01.2007 W0 2005-091899 A3 25.01.2007