

(19) World Intellectual Property Organization  
International Bureau



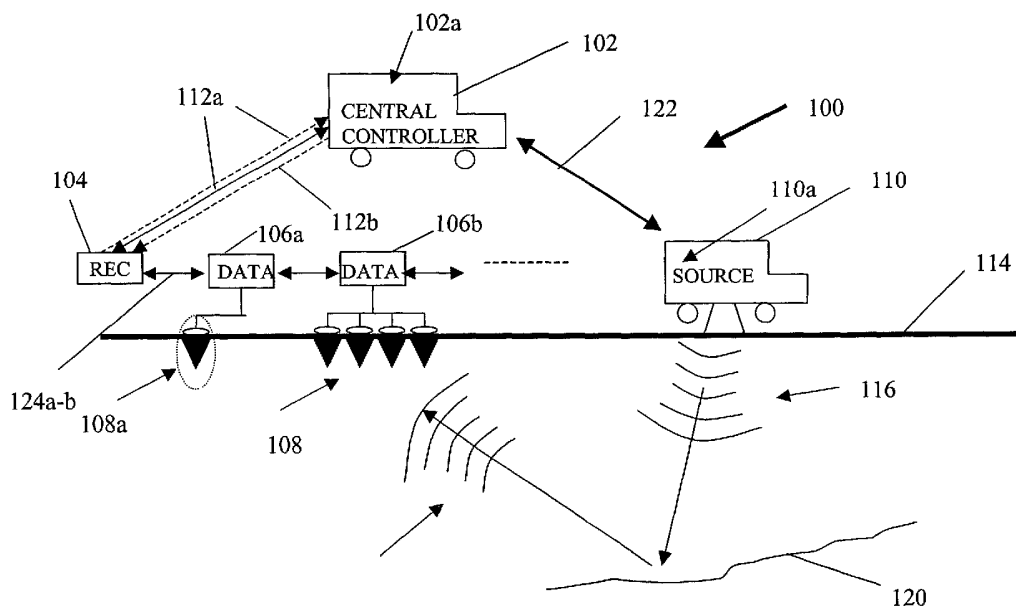
(43) International Publication Date  
14 August 2003 (14.08.2003)

PCT

(10) International Publication Number  
WO 2003/067283 A3

- (51) International Patent Classification<sup>7</sup>: G01V 1/28
  - (21) International Application Number: PCT/US2003/003851
  - (22) International Filing Date: 7 February 2003 (07.02.2003)
  - (25) Filing Language: English
  - (26) Publication Language: English
  - (30) Priority Data:
    - 60/355,447 7 February 2002 (07.02.2002) US
    - 60/355,272 7 February 2002 (07.02.2002) US
    - 60/355,373 7 February 2002 (07.02.2002) US
  - (71) Applicant: INPUT/OUTPUT, INC. [US/US]; 12300 Parc Crest Drive, Stafford, TX 77477 (US).
  - (72) Inventors: ELDER, Alfred, Keith; 1330 Woodfair Drive, Richmond, TX 77469 (US). MOORE, Robert, Christopher; 10043 Halston Drive, Sugar Land, TX 77478 (US). CAIN, Byron; 14930 Camino Rancho, Houston, TX 77083 (US).
  - (74) Agent: BYNUM, Todd, A.; Madan, Mossman & Sriram, P.C., Suite 700, 2603 Augusta, Houston, TX 77057 (US).
  - (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.
  - (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**  
— with international search report
- (88) Date of publication of the international search report:**  
10 June 2004
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: SYSTEM AND METHOD FOR CONTROL OF SEISMIC DATA ACQUISITION



(57) Abstract: The present invention provides an interactive system for controlling seismic data acquisition (100). A central controller controls seismic sources, detectors and receivers (102-a) that provide the user or operator one or more views of the operational components over a graphical user interface (102). Software is provided to change the parameters associated with the components. A second controller might be located in the seismic source vehicle (110). Two way data and audio communication is provided between the controllers (122) to provide dual control of the seismic system (100). A field operator operates and makes decisions for selecting and operating the system components and relays information to and receives information from the central operator and the controller.

WO 2003/067283 A3

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/03851

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G01V 1/28  
 US CL : 702/002, 014

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)  
 U.S. : 702/002, 014

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

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 EAST for key words and concepts.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,822,273 A (Bary et al.) 13 October 1998 (13.10.1998), see figure 1 all elements in combination with the computer work station LS and the telecommunications RTU in figure 3 in combination with the entire document.	1-58
A	US 5,600,318 A (Li) 04 February 1997 (04.02.1997), see entire patent.	1-58
A	US 5,253,219 A (Houston et al.) 12 October 1993 (12.10.1993), see entire patent.	1-58

Further documents are listed in the continuation of Box 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 published on or after the international filing date

"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)

"O" document referring to an oral disclosure, use, exhibition or other means

"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

12 December 2003 (12.12.2003)

Date of mailing of the international search report

27 JAN 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US  
 Commissioner for Patents  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Victor J. Taylor

Telephone No. 703-306-3431

*Sham S. Hoppe*

**INTERNATIONAL SEARCH REPORT**

PCT/US03/03851

**Continuation of B. FIELDS SEARCHED Item 2:**

STIC for publication and key concepts.

EIC for inventor name search on publications.