

(43) International Publication Date
19 May 2011 (19.05.2011)(10) International Publication Number
WO 2011/059977 A3

PCT

- (51) **International Patent Classification:**
G06F 19/00 (2011.01) *G06F 17/00* (2006.01)
- (21) **International Application Number:**
PCT/US2010/056025
- (22) **International Filing Date:**
9 November 2010 (09.11.2010)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
12/616,714 11 November 2009 (11.11.2009) US
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(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, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

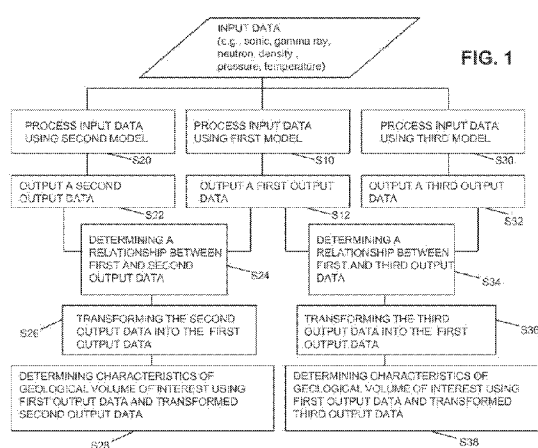
(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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))

[Continued on next page]

(54) **Title:** SYSTEM AND METHOD FOR ANALYZING AND TRANSFORMING GEOPHYSICAL AND PETROPHYSICAL DATA



(57) **Abstract:** A computer system and a computer-implemented method for analyzing input data from a geological volume of interest in a subterranean formation. The method includes processing the input data using a first subterranean interpretation model, the first subterranean interpretation model being configured to provide first output data that are representative of characteristics of the geological volume of interest. The method further includes processing the input data using a second subterranean interpretation model, the second subterranean interpretation model being configured to provide second output data that are representative of the characteristics of the geological volume of interest. The method further includes determining a relationship between the first output data and the second output data, and transforming the second output data into the first output data using the relationship to obtain a transformed second output data.

**Published:****(88) Date of publication of the international search report:**

9 September 2011

- *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))*

A. CLASSIFICATION OF SUBJECT MATTER**G06F 19/00(2011.01)i, G06F 17/00(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)

G06F 19/00; G01V 1/30; G01V 3/00; G01C 19/00

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

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: geological volume, analyzing, transform, relation

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 06128577A A (STEVEN BRENT ASSA et al.) 03 October 2000 See abstract; column 7 line 50 - column 10 line 21, column 12 line 60 - column 16 line 65 and figures 1,2	1-17
A	US 2005-0086006 A1 (PAUL FAVRET et al.) 21 April 2005 See abstract; paragraph 13 - paragraph 35 and figures 1,2	1-17
A	US 2004-0093161 A1 (HIROYUKI INUBUSHI) 13 May 2004 See abstract; paragraph 13 - paragraph 53, paragraph 103 - paragraph 108 and figures 1,10	1-17
A	US 2006-0136162 A1 (JEFFRY G. HAMMAN et al.) 22 June 2006 See abstract; paragraph 22 - paragraph 34 and figure 1	1-17
A	US 05226019A A (MICHAEL S. BAHORICH) 06 July 1993 See abstract; column 3 line 37 - column 6 line 29 and figure 3	1-17



Further documents are listed in the continuation of Box C.



See patent family annex.

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"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

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Date of the actual completion of the international search

12 JULY 2011 (12.07.2011)

Date of mailing of the international search report

13 JULY 2011 (13.07.2011)

Name and mailing address of the ISA/KR

Korean Intellectual Property Office
Government Complex-Daejeon, 189 Cheongsa-ro,
Seo-gu, Daejeon 302-701, Republic of Korea

Facsimile No. 82-42-472-7140

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2010/056025

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