

CORRECTED VERSION

(19) World Intellectual Property Organization International Bureau



(10) International Publication Number WO 2015/171192 A8

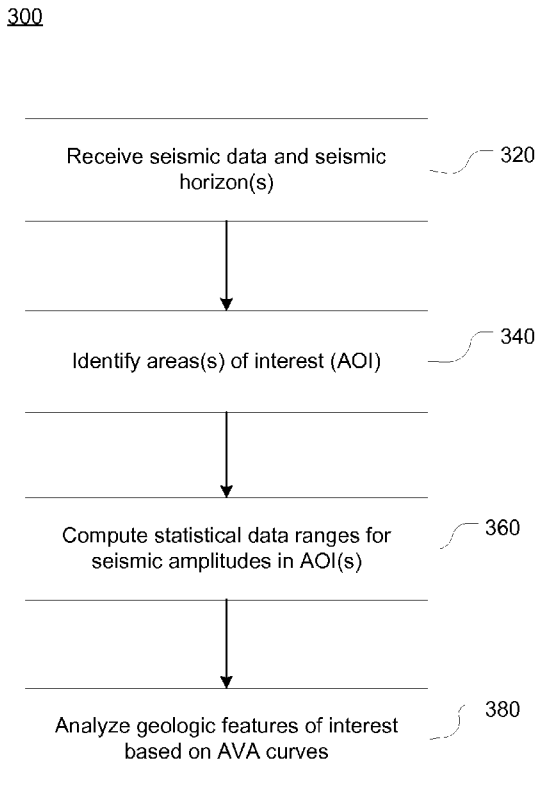
(43) International Publication Date 12 November 2015 (12.11.2015)

- (51) International Patent Classification: G01V 1/30 (2006.01)
(21) International Application Number: PCT/US2015/016828
(22) International Filing Date: 20 February 2015 (20.02.2015)
(25) Filing Language: English
(26) Publication Language: English
(30) Priority Data: 61/990,188 8 May 2014 (08.05.2014) US; 14/597,957 15 January 2015 (15.01.2015) US
(71) Applicant: CHEVRON U.S.A. INC. [US/US]; 6001 Bollinger Canyon Road, San Ramon, California 94583 (US).

- (72) Inventors: BORNHURST, John Jerome; 6001 Bollinger Canyon Road, San Ramon, California 94583 (US). MCGILL, James Robert; 6001 Bollinger Canyon Road, San Ramon, California 94583 (US).
(74) Agents: CLAPP, Marie L. et al.; Chevron Services Company, Post Office Box 6006, San Ramon, California 94583-0806 (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, 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, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR ANALYZING GEOLOGIC FEATURES USING SEISMIC DATA



(57) Abstract: A system and method for analyzing geologic features including fluid estimation and lithology discrimination may include the steps of identifying areas of interest on a seismic horizon, computing statistical data ranges for the seismic amplitudes within the areas of interest, and analyzing the geologic features based on the amplitude variation with offset (AVO) or angle (AVA) curves including the statistical data ranges.

Fig. 3

WO 2015/171192 A8



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.

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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, KM, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

(48) Date of publication of this corrected version:

17 March 2016

(15) Information about Correction:

see Notice of 17 March 2016

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*