

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
04 May 2023 (04.05.2023)



(10) International Publication Number
WO 2023/076779 A1

- (51) **International Patent Classification:**
G01V 1/36 (2006.01) *G01V 1/00* (2006.01)
- (21) **International Application Number:**
PCT/US2022/077225
- (22) **International Filing Date:**
29 September 2022 (29.09.2022)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/271,300 25 October 2021 (25.10.2021) US
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AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, 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, 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))

- (81) **Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM,

- (54) **Title:** SEPARATION OF SEISMIC SOURCES BY JOINT INTERPOLATION AND DEBLENDING

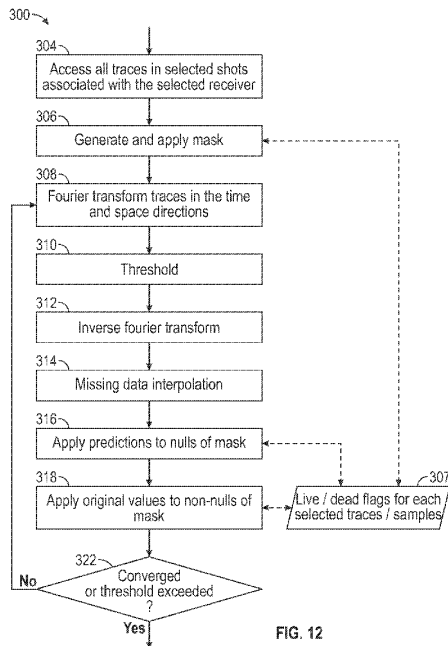


FIG. 12

(57) **Abstract:** Generally, seismic data may provide valuable information with regard to the description such as the location and/or change of hydrocarbon deposits within a subsurface region of the Earth. The present disclosure generally discusses techniques that may be used by a computing system to analyze a data set including weak-coherence signals (e.g., non-coherent blending noise). In particular, a computing system may detect portion of the weak-coherence signals of a gather due to the overlap of selected seismic source excitations and use a mask to isolate coherent signals and the other weak-coherence signals from the masked portion of weak-coherence signals. The coherent signals and other weak-coherence signals may be iteratively processed and used to predict values of the masked weak-coherence signals.

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