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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 October 2012 (26.10.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/143666 A3

(51) International Patent Classification:
E21B 43/267 (2006.01)

(21) International Application Number:
PCT/GB2012/000310

(22) International Filing Date:
4 April 2012 (04.04.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/089,847 19 April 2011 (19.04.2011) 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, QA, RO, RS, RU, RW, 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,

[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR IMPROVED PROPPED FRACTURE GEOMETRY FOR HIGH PERMEABILITY RESERVOIRS

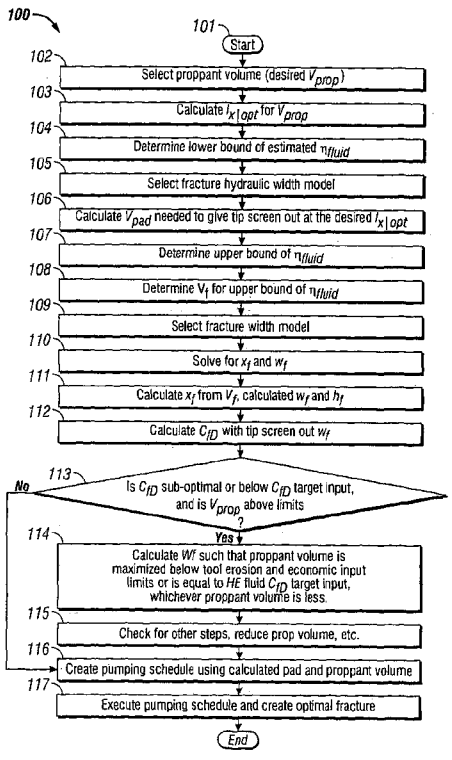


FIG. 1

(57) Abstract: Systems and methods for improved propped fracture geometry for high permeability reservoirs are provided. In one embodiment, a method of determining a pad volume and proppant volume for fracturing a subterranean formation is provided comprising selecting a proppant volume for placement in a fracture to be created in a subterranean formation; determining a desired fracture geometry for the fracture; calculating a pad volume sufficient to create the desired fracture geometry in the subterranean formation at a lower fluid efficiency value; calculating a fracture length that would result from injecting the pad volume into the subterranean formation at an upper fluid efficiency value; calculating a fracture width that corresponds to the calculated fracture length; and calculating a proppant volume sufficient to fill a fracture having the calculated length and width.

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GM, KE, LR, LS, MW, MZ, NA, RW, 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).

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:
25 April 2013

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2012/000310

A. CLASSIFICATION OF SUBJECT MATTER
INV. E21B43/267
ADD.

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)
E21B

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	K.G. NOLTE: "Determination of Proppant and Fluid Schedules From Fracturing-Pressure Decline", SPE PRODUCTION ENGINEERING, vol. 1, no. 4, 1 July 1986 (1986-07-01), XP055054046, ISSN: 0885-9221, DOI: 10.2118/13278-PA	1,10,14, 15,19
Y	abstract figure 4 Introduction Examples for Proppant Schedule - 1st paragraph Examples for Proppant Schedule - Effect of Treatment Volume Examples for Treatment Volume Conclusions ----- -/--	2-9, 11-13, 16-18,20

[X] Further documents are listed in the continuation of Box C. [ ] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
20 February 2013	06/03/2013

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Form PCT/ISA/210 (second sheet) (April 2005)

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"FracPac-N Fracture Design Service for High Perm Formations", , 1 January 2009 (2009-01-01), XP055054049, Retrieved from the Internet: URL:http://www.halliburton.com/public/pe/contents/Data_Sheets/web/H/H07172.pdf [retrieved on 2013-02-20]	1,10,15
Y	figure 2 Streamlined Fracpack Process Dimensionless Fracture Conductivity is the Key FracPac-N Service Integrated Design Program -----	2-9, 11-13, 16-18,20
Y	Peter Valkó: "HF2D FRAC DESIGN SPREADSHEET", , 30 May 2006 (2006-05-30), XP055054056, Retrieved from the Internet: URL:http://www.pe.tamu.edu/valko/public_html/Hydraulic_Fracture_Design/xls/Hf2D/HF2D06.doc [retrieved on 2013-02-20]	2
A	Proppant Number; page 11 - page 12 Sizing; page 18 - page 19 Optimum fracture dimensions; page 20 Pumping Schedule; page 21 Samples Runs; page 25 - page 70 -----	1,3-20
A	VAN H.R. ET AL: "Proppant Concentration in and Final Shape of Fractures Generated by Viscous Gels", SOCIETY OF PETROLEUM ENGINEERS JOURNAL, vol. 14, no. 6, 1 December 1974 (1974-12-01), XP055054061, ISSN: 0197-7520, DOI: 10.2118/4820-PA Introduction Discussion of Examples -----	1-20

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