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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR DELIVERING TREATMENT FLUID

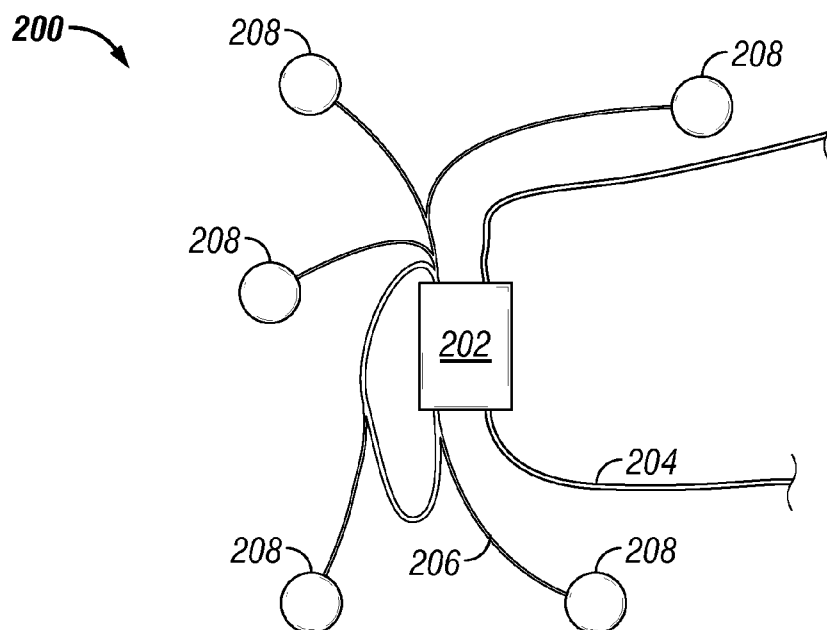


FIG. 2

(57) Abstract: The current application discloses methods and systems for preparing a pump-ready treatment fluid, delivering (206) the pump-ready treatment fluid from a blending facility 202 to a location 208 operationally coupled to a wellsite, providing the pump-ready treatment fluid to a pump; and pumping the pump-ready treatment fluid into a wellbore 208. In some embodiments, the treatment fluid is a fracturing fluid for conducting a hydraulic fracturing operation on a subterranean formation penetrated by a wellbore 208.



(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, 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, PA, 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.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
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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	US 2009/095482 A1 (SURJAATMADJA JIM B [US]) 16 April 2009 (2009-04-16) paragraphs [0004], [0018], [0022], [0024], [0028], [0031], [0036] figures 1,2,3 -----	1-30
X	US 2007/125544 A1 (ROBINSON LONNIE R [US] ET AL) 7 June 2007 (2007-06-07) paragraphs [0002], [0005], [0021], [0025], [0027], [0033] -----	1,6
A		2-5,7-30
X	US 2009/194273 A1 (SURJAATMADJA JIM B [US] ET AL) 6 August 2009 (2009-08-06) paragraphs [0009], [0136], [0148], [0151] -----	1,6
A		2-5,7-30



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 but 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

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Date of mailing of the international search report

04/07/2014

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/029822

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

"see additional sheet(s)"

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-30

A method, comprising: preparing a pump-ready treatment fluid (paragraph 36: "the final fluid"); delivering the pump-ready treatment fluid to a location (additive storage module 240; paragraphs 24 and 28) operationally coupled to a wellsite (to wells 106; figure 1); providing the pump-ready treatment fluid to a pump 218; and pumping the pump-ready treatment fluid into a subterranean formation (paragraph 31, last sentence).

2. claims: 31-40

A method for preparing a pump-ready fluid, the method comprising: providing a carrier fluid fraction; providing an immiscible substance fraction comprising a plurality of particles such that a packed volume fraction (PVF) of the particles exceeds 64%; mixing the carrier fluid fraction and the immiscible substance fraction into a treatment slurry, wherein the immiscible substance fraction exceeds 59% by volume of the treatment slurry; and providing the treatment slurry to a storage vessel.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2013/029822

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009095482 A1	16-04-2009	CA 2641059 A1 US 2009095482 A1	16-04-2009 16-04-2009
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