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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/388,716	07/29/2021	Jordan Kuehn	57959.12US01	9925
27683	7590	01/05/2022		
HAYNES AND BOONE, LLP IP Section 2323 Victory Avenue Suite 700 Dallas, TX 75219			EXAMINER WRIGHT, GIOVANNA COLLINS	
			ART UNIT 3672	PAPER NUMBER
			NOTIFICATION DATE 01/05/2022	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketing@haynesboone.com

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4,7,11,14, rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor (or for applications subject to pre-AIA 35 U.S.C. 112, the applicant), regards as the invention.

In claim 4, line 3 the applicant recites “withholding grease for the grease port”.
However, the applicant never claims that grease is communicated to the grease port.

The same indefiniteness applies to claims 7, 11 and 14.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.

Claim(s) 15-16,20-24,28-30 is/are rejected under 35 U.S.C. 102a1 as being anticipated by Kajaria 20170275980.

Referring to claims 15 and 23, Kajaria discloses a method (see fig. 4 and paragraph 0035), comprising:(a) queuing, using a controller, a first well in a first hydraulic fracturing queue, which first hydraulic fracturing queue is associated with a first plurality of wells standing by for hydraulic fracturing, including at least the first well and a second well (see paragraph 00355, operator can select valve to close prevent flow to one of the wells 14 by remotely operating valve 66 to a well); (b) dequeuing, using the controller, the second well from the first hydraulic fracturing queue (the operator can remotely operate valve 66 on a second well 14); (c) permitting hydraulic fracturing of the second well (when valve 66 is opened that fracturing can occur in that valve); (d) dequeuing, using the controller, the first well from the first hydraulic fracturing queue (the operator can close valve 66 after fracturing has occurred as needed); and

(e) swapping from permitting hydraulic fracturing of the second well to permitting hydraulic fracturing of the first well (the operator can allow open valve 66 to allow fluid to go to first well 14 to fracture a different section as needed during the fracturing process) and an apparatus comprising computer readable medium with instructions to execute the method (see paragraph 0028 control vehicle 40 would have computer readable medium to allow operator to control the valves for the fracturing process) .

Referring to claims 16 and 24, Kajaria discloses step (c) comprises opening a second valve associated with the second well to permit pumping of fluid into the second well via the second valve (opening valve 66 of second well 14); and wherein step (e) comprises: opening a first valve (opening valve of first well 14) associated with the first well to permit pumping of fluid into the first well via the first valve; and closing the second valve associated with the second well.

Referring to claim 20 and 28, Kajaria discloses (f) queuing, using the controller, a third well in a second hydraulic fracturing queue, which second hydraulic fracturing queue is associated with a second plurality of wells standing by for hydraulic fracturing, including at least the third well and a fourth well (see fig. 1, there are 4 wells 14); (g) dequeuing, using the controller, the fourth well from the second hydraulic fracturing queue (each well is connected to valve 66 to control flow into each well); (h) permitting hydraulic fracturing of the fourth well (the operator can control valves to permit fracturing); (i) dequeuing, using the controller, the third well from the second hydraulic fracturing queue (the operator can select valves to open as needed); and (j) swapping from permitting hydraulic fracturing of the fourth well to permitting hydraulic fracturing of

the third well (the operator can allow open valve 66 to allow fluid to go to first well 14 to fracture a different section as needed during the fracturing process).

Referring to claim 21 and 29, Kajaria discloses wherein steps (c) and (h) are executed simultaneously using hydraulic fracturing fluid from a hydraulic manifold; and wherein steps (e) and (j) are executed simultaneously using hydraulic fracturing fluid from the hydraulic manifold (see paragraph 0034 since the valves 66 are independently operated, the operator can simultaneously send fracture fluid from manifold 18 to two wells).

Referring to claim 22 and 30, Kajaria discloses step (c) comprises opening a second valve associated with the second well to permit pumping of fluid into the second well via the second valve (opening valve 66 of second well 14); and wherein step (e) comprises: opening a first valve (opening valve of first well 14) associated with the first well to permit pumping of fluid into the first well via the first valve; and closing the second valve associated with the second well; wherein step (h) comprises opening a fourth valve (fourth valve 66) associated with the fourth well to permit pumping of fluid into the fourth well via the fourth valve; and wherein step (j) comprises: opening a third valve (third valve 66) associated with the third well to permit pumping of fluid into the third well via the third valve; and closing the fourth valve associated with the fourth well.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have

been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 and 25 is/are rejected under 35 U.S.C. 103 as being unpatentable over Kajaria 20170275980 in view of Pitcher et al. 20140352968.

Referring to claim 17 and 25, Kajaria discloses that different parameters are provided to the operator to better control the fracturing process (see paragraph 0028) but does not specifically disclose measuring a flow rate of the fluid being pumped into the second well. Pitcher teaches measuring a flow rate of the fluid being pumped into the well (see paragraph 0026, flowmeter 62 used to measure fluid going into well being fractured). As it would be advantageous to know the flow rate the fracture fluid to more efficiently control the fracture process, it would be obvious to one of ordinary skill in the art before the effective filing date to modify the method and system disclosed by Kajaria to measure a flow rate of the fluid being pumped into the second well in view of the teachings of Pitcher.

Allowable Subject Matter

Claims 1-3,5-6,8-10,12-13 are allowed.

Claims 4,7,11, and 14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claims 18-19 and 26-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The closest prior art to Kajaria does not teach nor suggest determining that the flow rate of the fluid being pumped into the first well is below a flow rate threshold and has been below the flow rate threshold for a threshold amount of time in combination with the other limitations of the claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Boyd 20170123437 and Cherewyk 20180179848 both disclosed using a manifold to sequentially fracture multiple wells.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIOVANNA WRIGHT whose telephone number is (571)272-7027. The examiner can normally be reached M-F 8 am- 5 pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abby Flynn can be reached on 571- 272-9855. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of published or unpublished applications may be obtained from Patent Center. Unpublished application information in Patent Center is available to registered users. To file and manage patent submissions in Patent Center,

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/Giovanna Wright/
Primary Examiner, Art Unit 3672

<i>Notice of References Cited</i>	Application/Control No. 17/388,716		Applicant(s)/Patent Under Reexamination Kuehn et al.	
	Examiner GIOVANNA WRIGHT		Art Unit 3672	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20170123437-A1	05-2017	Boyd; Joseph Mark	G05D7/0641	1/1
*	B	US-20170275980-A1	09-2017	Kajaria; Saurabh	F16L55/07	1/1
*	C	US-20180179848-A1	06-2018	CHEREWYK; Boris (Bruce) P.	E21B21/02	1/1
*	D	US-20140352968-A1	12-2014	Pitcher; Jason L.	E21B43/26	166/308.1
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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Notice of References Cited

Part of Paper No. 20211230