

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

24197 7590 08/30/2022 KLARQUIST SPARKMAN, LLP 121 SW SALMON STREET SUITE 1600 PORTLAND, OR 97204 EXAMINER GONZALEZ, JULIO CESAR

ART UNIT PAPER NUMBER

DATE MAILED: 08/30/2022

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
17/124,243	12/16/2020	Kent R. Madison	10184-104051-02	8096

TITLE OF INVENTION: SYSTEMS AND METHODS OF POWER GENERATION WITH AQUIFER STORAGE AND RECOVERY SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00	\$600	11/30/2022

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD</u> <u>CANNOT BE EXTENDED</u>. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

	Alexandria, Virgir	nia 22313-1450					
INSTRUCTIONS: This f further correspondence ir below or directed otherw	cluding the Patent, adva	nce orders and notification	n of maintenance fees will lence address; and/or (b)	l be mailed to the cur indicating a separate	rent cor "FEE	rrespondence address as ADDRESS" for mainte	
CURRENT CORRESPONDE	ENCE ADDRESS (Note: Use Bl	ock 1 for any change of address)	Fee paj	e(s) Transmittal. Thi	s certif l paper	icate cannot be used fo , such as an assignmen	domestic mailings of the r any other accompanying t or formal drawing, must
24197 KLARQUIST S 121 SW SALMO SUITE 1600	SPARKMAN, LL	/2022 P	I h Sta add	Cer ereby certify that the ates Postal Service w dressed to the Mail S	tificate is Fee(s vith suf Stop IS	e of Mailing or Transr s) Transmittal is being ficient postage for first SUE FEE address abo	nission deposited with the United class mail in an envelope ye, or being transmitted to 3-2885, on the date below.
PORTLAND, O	R 97204						(Typed or printed name)
							(Signature) (Date)
			L				(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
17/124,243	12/16/2020	•	Kent R. Madison		10)184-104051-02	8096
TITLE OF INVENTION	: SYSTEMS AND MET	HODS OF POWER GEN	ERATION WITH AQUI	FER STORAGE AN	JD REO	COVERY SYSTEM	
APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	E PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$600	\$0.00	\$0.00		\$600	11/30/2022
EXAM	INER	ART UNIT	CLASS-SUBCLASS	7			
GONZALEZ, J	ULIO CESAR	2896	290-054000				
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3. ASSIGNEE NAME A			ч <u>,</u>	, I ,			
		ed below, no assignee dat n 37 CFR 3.11 and 37 CF					must have been previously nent.
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Applicant asserting	g micro entity status. Se g small entity status. See g to regular undiscounte	e 37 CFR 1.29 37 CFR 1.27 d fee status.	fee payment in the micro <u>NOTE</u> . If the application to be a notification of lo <u>NOTE</u> . Checking this be entity status, as applicable	o entity amount will n was previously und ss of entitlement to r ox will be taken to bo sle.	not be ler mic nicro e e a noti	accepted at the risk of a ro entity status, checkin ntity status. fication of loss of entit	
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Page 2 of 3

PART B - FEE(S) TRANSMITTAL

PTOL-85 Part B (08-18) Approved for use through 01/31/2020

OMB 0651-0033 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web. By mail, send to:

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450

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	PARKMAN, LLP		GONZALEZ, J	IULIO CESAR
121 SW SALMON SUITE 1600	STREET		ART UNIT	PAPER NUMBER
PORTLAND, OR	97204		2896	
			DATE MAILED: 08/30/202	2

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b) (2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)
	17/124,243	Madison et	al.
Notice of Allowability	Examiner	Art Unit	AIA (FITF) Status
	JULIO C GONZALEZ	2896	Yes

 1. This communication is responsive to <u>06/21/22</u>. A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/were filed on 2. An election was made by the applicant in response to a restriction requirement set forth during the interview on; the restriction requirement and election have been incorporated into this action. 3. The allowed claim(s) is/are <u>1,4-14 and 17-26</u>. As a result of the allowed claim(s), you may be eligible to benefit from the Patent Prosecution Highway program at a participating intellectual property office for the corresponding application. For more information , please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov. 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). Certified copies:
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Certified copies:
•
a) 🗌 All b) 🗋 Some* c) 🗋 None of the:
 Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No.
3. 🗌 Copies of the certified copies of the priority documents have been received in this national stage application from the
International Bureau (PCT Rule 17.2(a)).
* Certified copies not received:
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Attachment(s)
1. Notice of References Cited (PTO-892) 5. Examiner's Amendment/Comment
2. ☐ Information Disclosure Statements (PTO/SB/08), 6. ☑ Examiner's Statement of Reasons for Allowance Paper No./Mail Date .
3. Examiner's Comment Regarding Requirement for Deposit 7. Other of Biological Material
4. Interview Summary (PTO-413), Paper No./Mail Date.
/Julio C. Gonzalez/
Primary Examiner, Art Unit 2896
S. Patent and Trademark Office

Reasons for Allowance

The following is an examiner's statement of reasons for allowance: with 1. respect to claims 1, 4 - 14, 17 - 26, the cited prior art of record fails to disclose, in combination with the discussion of the claim limitations during the interview held on 06/14/22, an aquifer storage system/method having a pump, an electric motor connected to the pump, a operating the pump in forward and reverse direction in order to drive the motor and determining the power output of the motor and a difference between the power output of the motor and a power set point and operating a drive unit to control the speed of the motor based on the difference of the power output of the motor and the power set point and further disclosing varying a frequency of the drive signal output and detecting an increase in power output beyond the first power set point after changing the frequency of the drive signal and store the increased power output as a new power output set point and further disclosing having a down well control valve in the well bore coupled to a sleeve and coupled to a one-way valve and the one-way valve being disposed in the sleeve and the pump is disposed below the down well flow control valve.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 17/124,243 Art Unit: 2896

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JULIO C. GONZALEZ whose telephone number is (571)272-2024. The examiner can normally be reached M-F.

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, Jessica Han can be reached on 571-272-2078. 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, visit: https://patentcenter.uspto.gov. Visit https://www.uspto.gov/patents/apply/patent-center for more information about Patent Center and https://www.uspto.gov/patents/docx for information about filing in DOCX format. For additional questions, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Application/Control Number: 17/124,243 Art Unit: 2896 Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or

571-272-1000.

/Julio C. Gonzalez/ Primary Examiner, Art Unit 2896

August 18, 2022