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NOTICE OF ALLOWANCE AND FEE(S) DUE

TAROLLI, SUNDHEIM, COVELL & TUMMINO, LLP and NEXTera ENERGY 1300 EAST NINTH STREET SUITE 1700 CLEVELAND, OH 44114

EXAMINER

KORANG-BEHESHTI, YOSSEF

ART UNIT PAPER NUMBER

2863

DATE MAILED: 02/15/2022

APPLICATION NO.		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	15/948 489	04/09/2018	Brick Rule	NEE-027243 US PRI	1086

TITLE OF INVENTION: ENSEMBLE FORECAST STORM DAMAGE RESPONSE SYSTEM FOR CRITICAL INFRASTRUCTURE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1200	\$0.00	\$0.00	\$1200	05/16/2022

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. 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 THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. 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.

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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.

PART B - FEE(S) TRANSMITTAL Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web. Mail Stop ISSUE FEE By mail, send to: By fax, send to: (571)-273-2885 Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications. Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. Certificate of Mailing or Transmission 145410 7590 02/15/2022 I hereby certify that this Fee(s) Transmittal is being deposited with the United TAROLLI, SUNDHEIM, COVELL & TUMMINO, LLP and States Postal Service with sufficient postage for first class mail in an envelope **NEXTera ENERGY** addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below. 1300 EAST NINTH STREET (Typed or printed name **SUITE 1700** (Signature CLEVELAND, OH 44114 (Date FIRST NAMED INVENTOR APPLICATION NO. FILING DATE ATTORNEY DOCKET NO. CONFIRMATION NO. 15/948.489 04/09/2018 Brick Rule NEE-027243 US PRI 1086 TITLE OF INVENTION: ENSEMBLE FORECAST STORM DAMAGE RESPONSE SYSTEM FOR CRITICAL INFRASTRUCTURE APPLN. TYPE **ENTITY STATUS** ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE UNDISCOUNTED \$1200 \$0.00 \$0.00 \$1200 05/16/2022 nonprovisional EXAMINER ART UNIT CLASS-SUBCLASS KORANG-BEHESHTI, YOSSEF 2863 706-052000 1. Change of correspondence address or indication of "Fee Address" (37 2. For printing on the patent front page, list CFR 1.363). (1) The names of up to 3 registered patent attorneys or agents OR, alternatively, Change of correspondence address (or Change of Correspondence (2) The name of a single firm (having as a member a Address form PTO/AIA/122 or PTO/SB/122) attached. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/ listed, no name will be printed. AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) Please check the appropriate assignee category or categories (will not be printed on the patent) : 🗖 Individual 📮 Corporation or other private group entity 🗖 Government ■Issue Fee Publication Fee (if required) Advance Order - # of Copies 4a. Fees submitted: 4b. Method of Payment: (Please first reapply any previously paid fee shown above) Electronic Payment via EFS-Web Enclosed check Non-electronic payment by credit card (Attach form PTO-2038) The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 5. Change in Entity Status (from status indicated above) NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue Applicant certifying micro entity status. See 37 CFR 1.29 fee payment in the micro entity amount will not be accepted at the risk of application abandonment. NOTE: If the application was previously under micro entity status, checking this box will be taken Applicant asserting small entity status. See 37 CFR 1.27 to be a notification of loss of entitlement to micro entity status. NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro

entity status, as applicable.

Date

Registration No.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Applicant changing to regular undiscounted fee status.

Authorized Signature

Typed or printed name

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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 04/09/2018 NEE-027243 US PRI 15/948,489 Brick Rule 1086 **EXAMINER** 145410 7590 02/15/2022 TAROLLI, SUNDHEIM, COVELL & TUMMINO, LLP and KORANG-BEHESHTI, YOSSEF **NEXTera ENERGY** ART UNIT PAPER NUMBER 1300 EAST NINTH STREET **SUITE 1700** 2863 CLEVELAND, OH 44114 DATE MAILED: 02/15/2022

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 with the Issue Notification 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:

- 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 Cotta 002709 enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulators.

	Application No. 15/948,489		Applicant(s) Rule et al.				
Notice of Allowability	Examiner			AIA (FITF) Status Yes			
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS (nerewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHT of the Office or upon petition by the applicant. See 37 CFR 1.313 at 1. ✓ This communication is responsive to 01/20/2022.	ears on the cove (OR REMAINS) or other appropr GHTS. This appl	er sheet with the co CLOSED in this appliate communication vication is subject to vication.	lication. If not i will be mailed	included in due course. THIS			
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 rest restriction requirement and election have been incorporated		ent set forth during th	ne interview or	າ; the			
3. The allowed claim(s) is/are See Continuation Sheet. As a re Patent Prosecution Highway program at a participating int information, please see http://www.uspto.gov/patents/init PPHfeedback@uspto.gov.	tellectual propert	y office for the corre	sponding appl				
4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
Certified copies: a) □All b) □ Some* c) □ None of the:							
 Certified copies of the priority documents have Certified copies of the priority documents have 							
 Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). 				application from the			
* Certified copies not received:							
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.			complying wit	h the requirements			
. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.							
including changes required by the attached Examiner's 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 B attached Examiner's comment regarding REQUIREMENT F	BIOLOGICAL MA FOR THE DEPO	TERIAL must be sul SIT OF BIOLOGICA	omitted. Note i L MATERIAL.	the			
Attachment(s) 1. Notice of References Cited (PTO-892)		Examiner's Amend					
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 	6. 🗹	Examiner's Statem	ent of Reason	s for Allowance			
3. Examiner's Comment Regarding Requirement for Deposit of Biological Material 4. Interview Summary (PTO-413), Paper No./Mail Date	7. ~	Other PTO-2323.					
/Y.K./ Examiner, Art Unit 2863		UN SINHA/ ary Examiner, Art	Unit 2863				

Continuation of 3. The allowed claim(s) is/are: 1-3,5-13,15-19 and 22

Notice of Pre-AIA or AIA Status

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

Response to Amendment

2. Applicant's Amendment filed 01/20/2022 has been entered. Claims 1-3, 5-13, 15-19, and 22 remain pending. Applicant's amendment to incorporate the limitation of Claim 21 into independent Claims 1, 11, and 16 overcome the 35 U.S.C. 103 rejection of Claims 1-3, 5-13, 15-19, and 22.

Response to Arguments

3. Applicant's arguments, see Pages 10-12, filed 01/20/2022, with respect to the 35 U.S.C. 103 rejection of Claims 1-22 have been fully considered and are persuasive. The 35 U.S.C. 103 rejection of Claims 1-22 has been withdrawn.

Allowable Subject Matter

4. Claim 1-3, 5-13, 15-19, and 22 allowed.

The following is an examiner's statement of reasons for allowance:

The most pertinent prior art is Riland (US20160343093). The prior art Riland teaches a utility resource asset management system for evaluation of weather, terrain, and utility data for the determination of damage predictions with metrics, alerts, asset allocation, and response plans. The prior art Riland teaches the limitations "A storm damage response system

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comprising: an inventory database configured to store inventory data associated with location and characteristics associated with power-providing equipment in the geographic area with respect to power generator systems; and a storm damage model control system configured to implement a storm damage model algorithm to generate a predictive storm response plan comprising an operational procedure for repairing or maintaining the power generator systems to mitigate storm damage impact; calculate a statistical impact value indicative of a cost-based resource allocation estimate associated with the probabilistic model based on an aggregate of a plurality of iterative probabilistic simulations for the probabilistic model, the storm damage model control system comprising the relative statistical impact value of the probabilistic model of each of the plurality of ensemble forecast models to generate the predictive storm response plan." The secondary prior art Ravela (US20070168155) teaches the limitations "a storm ensemble database configured to store a plurality of ensemble forecast models associated with respective potential storm paths of a given storm across a geographic area, as provided from and updated by a weather forecasting service; the storm damage model algorithm being configured to generate a probabilistic model for each of the plurality of ensemble forecast models and to calculate a statistical impact value indicative of a cost-based resource allocation estimate associated with the probabilistic model based on an aggregate of a plurality of simulations for the probabilistic model associated with the respective one of the plurality of ensemble forecast models to generate the predictive storm response plan". The tertiary prior art Altschule (US20180156940) teaches the limitations "comprising a scenario comparator configured to select the probabilistic model associated with a respective one of the plurality of ensemble forecast models". The combination of Riland, Ravela, and Altschule is silent with

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regard to the limitation "the storm damage model algorithm being configured to generate a probabilistic model associated with the operational failure of the power-providing equipment relative to time, cost, resource availability, and storm severity constraints for each of the plurality of ensemble forecast models" and there is no such evidence which suggests that one of ordinary skill in the art would modify the storm response plan to use the inventory data of the time, cost, resource availability, and storm severity constraints in the generation of the probabilistic model. This is an improvement to the planning and allocation of resources for a storm response relating to the statistical impact based on probabilities of the for the storm forecast. Using the probabilistic model that is associated with the time, cost, resource availability, and storm severity constraints allows for the preparation for the maintenance of power systems and preventative care of power systems to mitigate the impact of the storm on the power systems.

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."

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to YOSSEF KORANG-BEHESHTI whose telephone number is (571)272-3291. The examiner can normally be reached Monday - Friday 10:00 am - 6:30 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

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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, Stephen Meier can be reached on (571) 272-2149. 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

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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

Customer Service Representative, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y.K./

Examiner, Art Unit 2863

/TARUN SINHA/

Primary Examiner, Art Unit 2863