

# PRE-SOL LAFAVE 4-PATENT TAIL — Willfulness / Course-of-Conduct Exhibit

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## Companion to Exhibit A (12-Patent Core Liability Set)

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Litman v. Goldberg · Index No. 524343/2025 · NY Sup. Ct. Kings County · Hon. Brian L. Gotlieb, J.S.C. Prepared: 2026-04-25

### Purpose

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The 16-PTOL-85B Lafave-signed PTOL-85B pattern that produced the 12 patents in Exhibit A also produced **four additional U.S. patents that issued before the §51 statute of limitations cutoff of July 21, 2024**. Per CPLR 215(3) (1-year SOL for § 51 misappropriation of name), these four pre-SOL patents are not standalone liability. They are, however, **heavily probative of**:

1. **Commercial value of Plaintiff's name** — Defendant's firm used the same name on the same form, in the same pattern, for paying clients of the same kind, both before and after the SOL window opened.
2. **Defendant's knowledge** — these four patents establish that James Lafave (Reg. 71013) personally signed PTOL-85B forms naming Plaintiff with full knowledge of the practice; the pattern did not begin in the SOL window.
3. **Habit / routine practice under *Halloran v. Va. Chems.***, 41 N.Y.2d 386 (1977) — the pattern had a documented 169-day duration with 16 forms, all signed by Lafave with “Richard C. Litman” in Box 2 of every form. The four pre-SOL exhibits establish the routineness essential to the Halloran inference.
4. **Damages-calculation context for the 12 within-SOL uses** — pricing the per-use commercial value of Plaintiff's name draws on the longer course-of-conduct record, not just the 12 isolated within-SOL acts.

These four are not pleaded as standalone § 51 violations. Their use is foundational and contextual. Per `output/PRE_LIMITATIONS_FOUNDATION_MEMO.md` (v1.2).

## The four pre-SOL patents

#	Patent	Application	Docket	Issued	Assignee	IFW Docs	Martha Emails
W-1	11,881,807	18/215,352	33110.68U	2024-01-23	King Faisal University	53	7
W-2	11,932,607	18/384,685	33135.26U	2024-03-19	King Faisal University	43	12
W-3	11,976,365	18/122,396	33101.73U	2024-05-07	King Faisal University	78	11
W-4	11,980,937	18/392,663	33150.15U	2024-05-14	King Faisal University	47	11
					<b>TOTAL</b>	<b>221</b>	<b>41</b>

**Per-staffer roll-up:** Lafave signed PTOL-85B for all 4 (4/4 = 100%); POA signers Goldberg 4/4 = 100%. All 4 dockets follow the legacy LLO/STI 5-digit.2-digit format (Litman-originated client matters carried forward from his pre-2017 practice).

**Pre-SOL cascade total: 4 face pages + 221 IFW documents + 41 Martha emails = 266 separately-dated Litman-name uses in the pre-7/21/2024 window**, all anchored to dockets in the same Lafave-signed PTOL-85B pattern that produced the 12 in Exhibit A.

## Combined view (pre-SOL + post-SOL)

The 16-form Lafave-signed PTOL-85B pattern anchored a total cascade of **1,035 to 1,146 separately-dated Litman-name uses** across its 169-day run, of which 769-880 fall within the §51 SOL window and constitute the core liability set in Exhibit A. The 266 pre-SOL uses in this companion binder establish the willfulness/habit/course-of-conduct context.

## Reproducibility

- Source CSV: `output/patent_count_refresh/per_patent_cascade.csv`
- Pre-SOL face pages: `output/patent_count_refresh/face_pages_pre_sol/*.pdf`
- IFW raw: `output/patent_count_refresh/ifw_raw_pre_sol/*.json`
- Combined pattern analysis: `output/PTOL85_LAFAVE_FINDINGS.md`
- Pre-Limitations Foundation Memo (legal framework): `output/PRE_LIMITATIONS_FOUNDATION_MEMO.md`

# Exhibit W-1

U.S. Patent No. 11881807 (face page)

Application No. 18215352 · Docket 33110.68U

Issued 2024-01-23 · Assignee: KFU

Pre-SOL — willfulness / habit / course-of-conduct (NOT standalone liability)

Litman v. Goldberg · Index No. 524343/2025



US011881807B1

(12) **United States Patent**  
**Elsinawi et al.**

(10) **Patent No.:** **US 11,881,807 B1**  
(45) **Date of Patent:** **Jan. 23, 2024**

(54) **PORTABLE SOLAR POWERED GENERATOR**

(71) Applicant: **KING FAISAL UNIVERSITY**,  
Al-Ahsa (SA)

(72) Inventors: **Abdulaziz Hassain Elsinawi**, Al-Ahsa (SA); **Ahmed Emad Almuhanha**, Al-Ahsa (SA); **Feras Fadhel Buzaid**, Al-Ahsa (SA); **Mahdi Hussain Ben Quti**, Al-Ahsa (SA); **Mohammed Shubber Alsaleh**, Al-Ahsa (SA); **Mohammed Radi Alhajji**, Al-Ahsa (SA); **Slim Adnene Chtourou**, Al-Ahsa (SA)

(73) Assignee: **KING FAISAL UNIVERSITY**,  
Al-Ahsa (SA)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **18/215,352**

(22) Filed: **Jun. 28, 2023**

(51) **Int. Cl.**

**H02S 10/40** (2014.01)  
**H02S 30/20** (2014.01)  
**H02S 20/30** (2014.01)  
**B60J 7/14** (2006.01)  
**B60L 8/00** (2006.01)  
**B60K 16/00** (2020.01)  
**B60K 11/06** (2006.01)

(Continued)

(52) **U.S. Cl.**

CPC ..... **H02S 10/40** (2014.12); **H02S 20/30** (2014.12); **H02S 30/20** (2014.12); **B60J 1/14** (2013.01); **B60J 7/141** (2013.01); **B60K 11/06** (2013.01); **B60K 2016/003** (2013.01); **B60L 8/003** (2013.01); **B60L 58/26** (2019.02); **B60L 2200/36** (2013.01); **B60Y 2200/141** (2013.01); **Y02T 10/7072** (2013.01)

(58) **Field of Classification Search**

CPC ..... H02S 10/40; H02S 20/30; H02S 30/20; B60J 1/14; B60J 7/141; B60K 11/06; B60K 2016/003; B60L 8/003; B60L 58/26; B60L 2200/36; B60Y 2200/141; Y02T 10/7072

See application file for complete search history.

(56) **References Cited**

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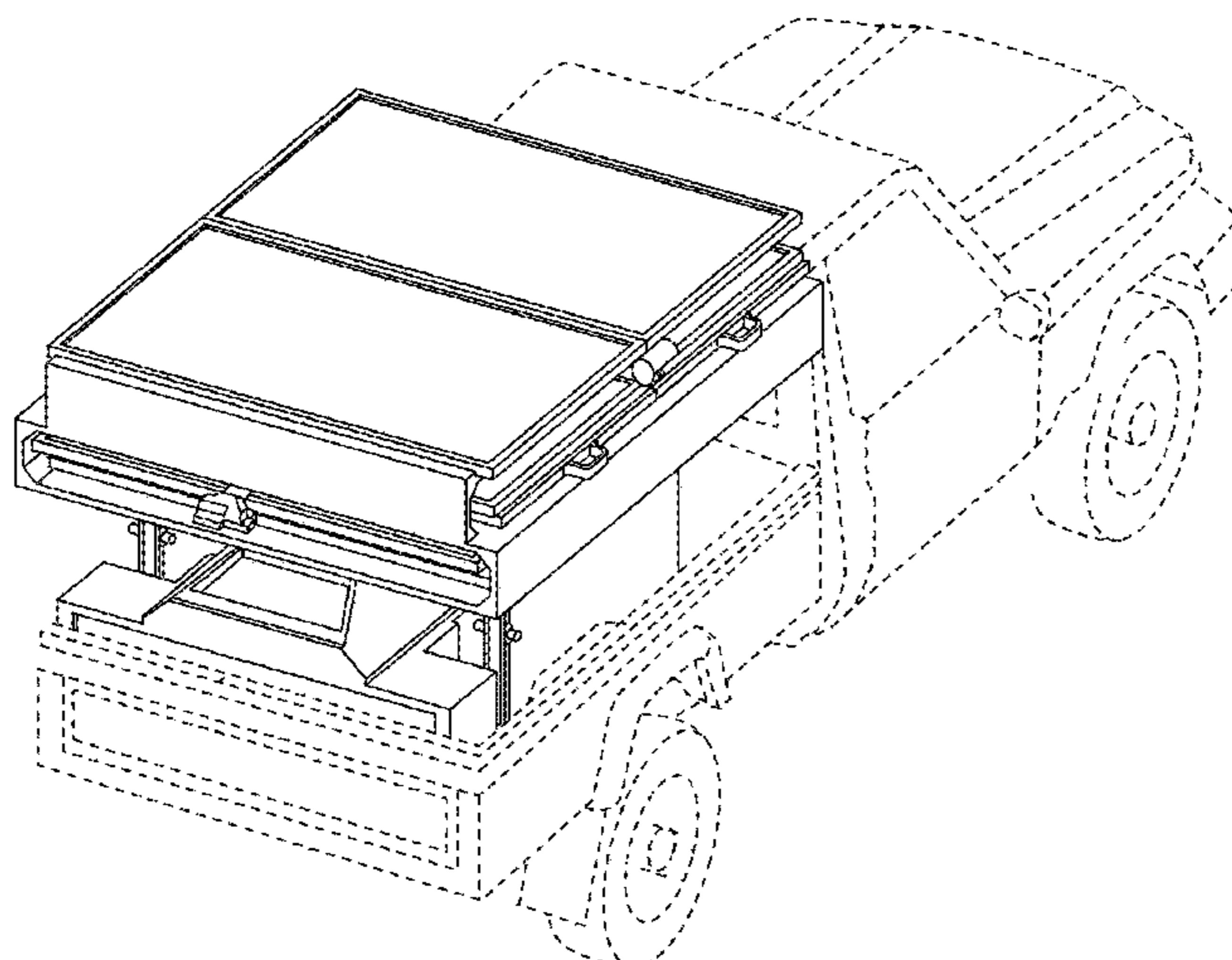
*Primary Examiner* — Michael Y Sun

(74) *Attorney, Agent, or Firm* — Nath, Goldberg & Meyer; Richard C. Litman

(57) **ABSTRACT**

A system and method for portable solar power generation is provided. The portable solar power generator will be mounted on a movable platform, making it easy to transport and install in different places. Using solar panels, the generator will create electricity, which will be stored in a battery and converted to alternating current (AC) via an inverter. The generator has a control panel that allows users to monitor and regulate power generation.

**9 Claims, 23 Drawing Sheets**



# Exhibit W-1-B

PTOL-85 Part B for U.S. Patent No. 11881807

Signed by James Lafave (Reg. 71013)

Box 2 of PTOL-85B: "Richard C. Litman"

Pre-SOL — establishes Halloran habit / pattern

Litman v. Goldberg · Index No. 524343/2025

**PART B - FEE(S) TRANSMITTAL**

Complete and send this form, together with applicable fee(s), by mail or fax, or via the USPTO patent electronic filing system.

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 Commissioner for Patents  
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**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 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. **Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.**

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37833 7590 12/13/2023  
**Richard C. Litman**  
**Nath, Goldberg & Meyer**  
 112 S. West Street  
 Alexandria, VA 22314

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(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
18/215,352	06/28/2023	Abdulaziz Hassain ELSINAWI	33110.68U	6257

TITLE OF INVENTION: PORTABLE SOLAR POWERED GENERATOR

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0.00	\$0.00	\$480	03/13/2024

EXAMINER	ART UNIT	CLASS-SUBCLASS
SUN, MICHAEL Y	1726	136-245000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.

"Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

- 1 Nath, Goldberg & Meyer
- 2 Richard C. Litman
- 3 \_\_\_\_\_

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)

**KING FAISAL UNIVERSITY**

**AL-AHSA, SAUDI ARABIA**

Please check the appropriate assignee category or categories (will not be printed on the patent) :  Individual  Corporation or other private group entity  Government

4a. Fees submitted:  Issue Fee  Publication Fee (if required)

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The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 14-0112

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Applicant asserting small entity status. See 37 CFR 1.27

Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue 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 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.

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.

Authorized Signature /James Lafave/

Date 2023-12-18

Typed or printed name James Lafave

Registration No. 71013

# Exhibit W-2

U.S. Patent No. 11932607 (face page)

Application No. 18384685 · Docket 33135.26U

Issued 2024-03-19 · Assignee: KFU

Pre-SOL — willfulness / habit / course-of-conduct (NOT standalone liability)

Litman v. Goldberg · Index No. 524343/2025



US011932607B1

(12) **United States Patent**  
**Ahmed et al.**

(10) **Patent No.: US 11,932,607 B1**  
(45) **Date of Patent: Mar. 19, 2024**

(54) **4-(2,4,5-TRIS(4-CHLOROPHENYL)-1H-IMIDAZOL-1-YL)BENZOIC ACID AS AN ANTIMICROBIAL COMPOUND**

(71) Applicant: **KING FAISAL UNIVERSITY,**  
Al-Ahsa (SA)

(72) Inventors: **Hany Mohamed Abd El-Lateef Ahmed,** Al-Ahsa (SA); **Mai Mostafa Khalaf Ali,** Al-Ahsa (SA); **Antar Ahmed Abdelhamid Ahmed,** Sohag (EG); **Amer A. Amer,** Sohag (EG)

(73) Assignee: **KING FAISAL UNIVERSITY,**  
Al-Ahsa (SA)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **18/384,685**

(22) Filed: **Oct. 27, 2023**

(51) **Int. Cl.**  
**C07D 233/64** (2006.01)  
**A61P 31/04** (2006.01)  
**A61P 31/10** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **C07D 233/64** (2013.01); **A61P 31/04** (2018.01); **A61P 31/10** (2018.01)

(58) **Field of Classification Search**  
CPC ..... **C07D 233/64**  
See application file for complete search history.

(56) **References Cited**

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Sharma et I. "Microwave Irradiated Synthesis Of Some Substituted Imidazole Derivatives (Iv) As Potential Antibacterial And Anticancer Agents", ChemInform, vol. 44, Issue 24, Jun. 11, 2013. , Only Abstract Provided.

\* cited by examiner

*Primary Examiner* — Laura L Stockton

(74) *Attorney, Agent, or Firm* — Nath, Goldberg & Meyer; Richard C. Litman

(57) **ABSTRACT**

An 4-(2,4,5-tris(4-chlorophenyl)-1H-imidazol-1-yl)benzoic acid compound, its synthesis, and its use as an antimicrobial agent.

**13 Claims, No Drawings**

# Exhibit W-2-B

PTOL-85 Part B for U.S. Patent No. 11932607

Signed by James Lafave (Reg. 71013)

Box 2 of PTOL-85B: "Richard C. Litman"

Pre-SOL — establishes Halloran habit / pattern

Litman v. Goldberg · Index No. 524343/2025

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Nath, Goldberg & Meyer
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Form with fields for (Typed or printed name), (Signature), and (Date).

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

18/384,685 10/27/2023 HANY MOHAMED ABD EL-LATEEF AHMED 33135.26U 3312
TITLE OF INVENTION: 4-(2,4,5-TRIS(4-CHLOROPHENYL)-1H-IMIDAZOL-1-YL)BENZOIC ACID AS AN ANTIMICROBIAL COMPOUND

Table with 7 columns: APPLN. TYPE, ENTITY STATUS, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE.

Table with 3 columns: EXAMINER, ART UNIT, CLASS-SUBCLASS.

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.
"Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list
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(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 Nath, Goldberg & Meyer
2 Richard C. Litman
3

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 KING FAISAL UNIVERSITY
(B) RESIDENCE: (CITY and STATE OR COUNTRY) AL-AHSA, SAUDI ARABIA
Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. Fees submitted: Issue Fee Publication Fee (if required)
4b. Method of Payment: (Please first reapply any previously paid fee shown above)
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5. Change in Entity Status (from status indicated above)
Applicant certifying micro entity status. See 37 CFR 1.29
Applicant asserting small entity status. See 37 CFR 1.27
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NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
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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.
Authorized Signature /James Lafave/ Date 2024-01-29
Typed or printed name James Lafave Registration No. 71013

# Exhibit W-3

U.S. Patent No. 11976365 (face page)

Application No. 18122396 · Docket 33101.73U

Issued 2024-05-07 · Assignee: KFU

Pre-SOL — willfulness / habit / course-of-conduct (NOT standalone liability)

Litman v. Goldberg · Index No. 524343/2025



US011976365B1

(12) **United States Patent**  
**Ahmed et al.**

(10) **Patent No.:** **US 11,976,365 B1**  
(45) **Date of Patent:** **May 7, 2024**

(54) **METHOD OF FORMING METAL OXIDE NANOSTRUCTURES ON A TiN-BUFFERED-SUBSTRATE**

(71) Applicant: **King Faisal University, Al-Ahsa (SA)**

(72) Inventors: **Faheem Ahmed, Al-Ahsa (SA); Nishat Arshi, Al-Ahsa (SA); Shalendra Kumar, Al-Ahsa (SA); Nagih Mohammed Shaalan, Al-Ahsa (SA); Ghazzai Almutairi, Al-Ahsa (SA); P. M. Z. Hasan, Al-Ahsa (SA); Naushad Ahmad, Al-Ahsa (SA); Thamraa Alshahrani, Al-Ahsa (SA); Afzal Hussain, Al-Ahsa (SA)**

(73) Assignee: **KING FAISAL UNIVERSITY, Al-Ahsa (SA)**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **18/122,396**

(22) Filed: **Mar. 16, 2023**

(51) **Int. Cl.**  
**C23C 18/12** (2006.01)

(52) **U.S. Cl.**  
CPC ..... **C23C 18/1216** (2013.01); **C23C 18/1245** (2013.01); **C23C 18/1266** (2013.01); **C23C 18/1291** (2013.01)

(58) **Field of Classification Search**  
CPC ..... **C23C 18/1216; C23C 18/1245; C23C 18/1266; C23C 18/1291**  
See application file for complete search history.

(56) **References Cited**

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					977/773
2021/0226115	A1*	7/2021	Wang	.....	H01L 31/1884

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Lin et al "Buffer-Facilitated Epitaxial Growth of ZnO Nanowire" Crystal Growth & Design, vol. 5, No. 2, 2005 p. 579-583. (Year: 2005).\*

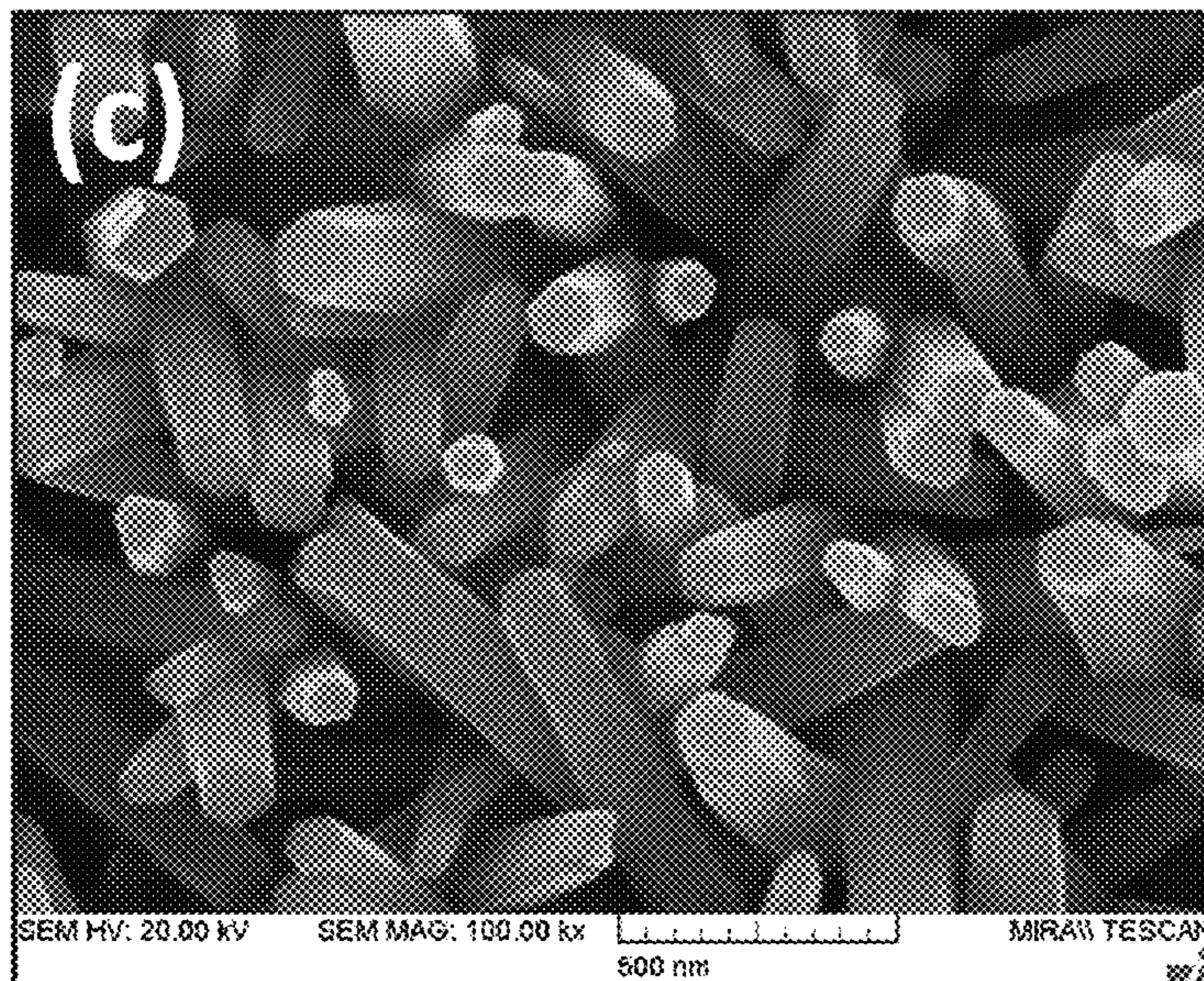
(Continued)

*Primary Examiner* — Nathan H Empie  
(74) *Attorney, Agent, or Firm* — Nath, Goldberg & Meyer; Richard C. Litman

(57) **ABSTRACT**

A method of forming one-dimensional metal oxide nanostructures includes forming a TiN film on a substrate to provide a TiN-coated substrate; providing an aqueous mixture including hexamethylenetetramine and a metal nitrate, contacting the TiN-coated substrate with the aqueous mixture such that the TiN film on the substrate is in the aqueous mixture, and heating the aqueous mixture at a temperature ranging from about 50° C. to about 100° C. for a period of time ranging from about 60 minutes to about 180 minutes to form the metal oxide nanostructures. The method offers a low-temperature approach for the growth of metal oxide

(Continued)



# Exhibit W-3-B

PTOL-85 Part B for U.S. Patent No. 11976365

Signed by James Lafave (Reg. 71013)

Box 2 of PTOL-85B: "Richard C. Litman"

Pre-SOL — establishes Halloran habit / pattern

Litman v. Goldberg · Index No. 524343/2025

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37833 7590 03/29/2024
Richard C. Litman
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Form with fields for (Typed or printed name), (Signature), and (Date).

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

18/122,396 03/16/2023 FAHEEM AHMED 33101.73U 4950
TITLE OF INVENTION: Method of Forming Metal Oxide Nanostructures on a TiN- buffered-Substrate

Table with 7 columns: APPLN. TYPE, ENTITY STATUS, ISSUE FEE DUE, PUBLICATION FEE DUE, PREV. PAID ISSUE FEE, TOTAL FEE(S) DUE, DATE DUE

Table with 3 columns: EXAMINER, ART UNIT, CLASS-SUBCLASS

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
Change of correspondence address (or Change of Correspondence Address form PTO/AIA/122 or PTO/SB/122) attached.
"Fee Address" indication (or "Fee Address" Indication form PTO/AIA/47 or PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

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(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 Nath, Goldberg & Meyer
2 Richard C. Litman
3

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: KING FAISAL UNIVERSITY
(B) RESIDENCE: (CITY and STATE OR COUNTRY) AL-AHSA, SAUDI ARABIA
Please check the appropriate assignee category or categories (will not be printed on the patent): Individual Corporation or other private group entity Government

4a. Fees submitted: Issue Fee Publication Fee (if required)
4b. Method of Payment: (Please first reapply any previously paid fee shown above)
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The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 14-0112

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Applicant asserting small entity status. See 37 CFR 1.27
Applicant changing to regular undiscounted fee status.
NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
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NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

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.
Authorized Signature /James Lafave/ Date 2024-04-01
Typed or printed name James Lafave Registration No. 71013

# Exhibit W-4

U.S. Patent No. 11980937 (face page)

Application No. 18392663 · Docket 33150.15U

Issued 2024-05-14 · Assignee: KFU

Pre-SOL — willfulness / habit / course-of-conduct (NOT standalone liability)

Litman v. Goldberg · Index No. 524343/2025



US011980937B1

(12) **United States Patent**  
**Ramadan et al.**

(10) **Patent No.:** **US 11,980,937 B1**  
(45) **Date of Patent:** **May 14, 2024**

(54) **ELECTRICAL DOPING OF IRON WITH CHITOSAN NANOEMULSION**

**FOREIGN PATENT DOCUMENTS**

(71) Applicant: **KING FAISAL UNIVERSITY,**  
Al-Ahsa (SA)

CN	101748113	A	*	6/2010
CN	107321972	B		11/2017
CN	110833135	B		2/2020
CN	115444835	A	*	12/2022
EP	4152444	A1		3/2023
JP	6926654	B2		8/2021
WO	WO-2014081322	A1	*	5/2014

(72) Inventors: **Zayed M. Ramadan,** Al-Ahsa (SA);  
**Mayson H. Alkhatib,** Nizwa (OM)

(73) Assignee: **KING FAISAL UNIVERSITY,**  
Al-Ahsa (SA)

**OTHER PUBLICATIONS**

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

English translation of CN 101748113 (originally published Jun. 23, 2010), obtained from PE2E search.\*

English translation of CN 115444835 (originally published Dec. 9, 2022), obtained from PE2E search.\*

Ayesha Khan, Michael Goepel, Juan Carlos Colmenares, and Roger Gläser "Chitosan-Based N-Doped Carbon Materials for Electrocatalytic and Photocatalytic Applications" <https://doi.org/10.1021/acssuschemeng.9b07522>.

(21) Appl. No.: **18/392,663**

(22) Filed: **Dec. 21, 2023**

\* cited by examiner

(51) **Int. Cl.**  
**C22C 33/02** (2006.01)  
**B22F 1/16** (2022.01)

*Primary Examiner* — George Wyszomierski

(52) **U.S. Cl.**  
CPC ..... **B22F 1/16** (2022.01); **C22C 33/02** (2013.01); **B22F 2202/06** (2013.01); **B22F 2301/35** (2013.01); **B22F 2304/058** (2013.01)

(74) *Attorney, Agent, or Firm* — Nath, Goldberg & Meyer; Richard C. Litman

(58) **Field of Classification Search**  
None  
See application file for complete search history.

(57) **ABSTRACT**

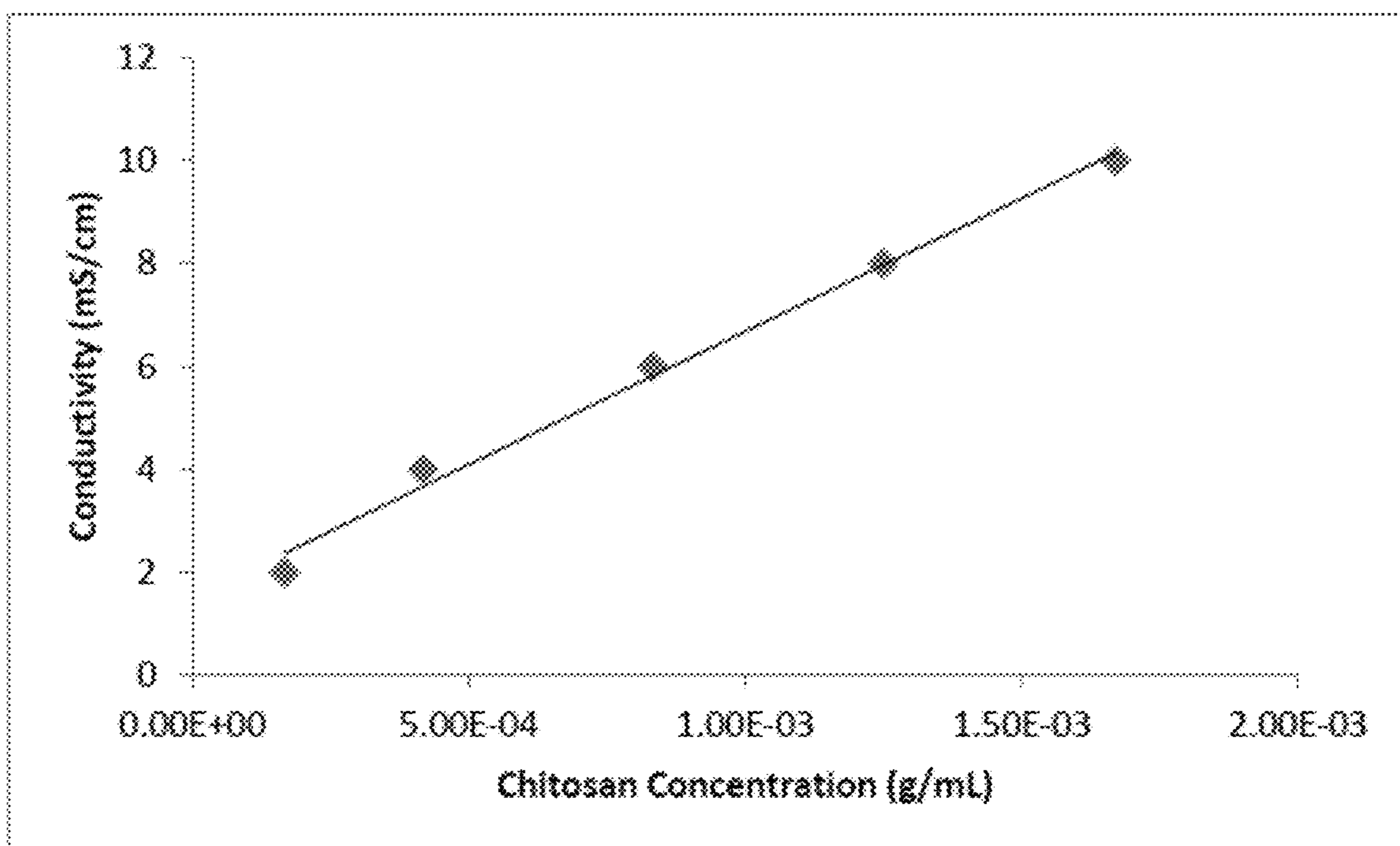
Methods for improving the electrical conductivity of iron by coating, or doping, it with a chitosan nanoemulsion. The electrical conductivity of the iron can be improved by increasing the concentration of chitosan in the nanoemulsion, increasing the voltage applied during the doping process, and increasing the duration of the doping process.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2016/0340668 A1\* 11/2016 White ..... C12Q 1/686  
2021/0164970 A1\* 6/2021 Alocilja ..... H01F 1/0054

**14 Claims, 2 Drawing Sheets**



# Exhibit W-4-B

PTOL-85 Part B for U.S. Patent No. 11980937

Signed by James Lafave (Reg. 71013)

Box 2 of PTOL-85B: "Richard C. Litman"

Pre-SOL — establishes Halloran habit / pattern

Litman v. Goldberg · Index No. 524343/2025

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via the USPTO patent electronic filing system.

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Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

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 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. Because electronic patent issuance may occur shortly after issue fee payment, any desired continuing application should preferably be filed prior to payment of this issue fee in order not to jeopardize copendency.

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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 papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

37833 7590 04/03/2024
Richard C. Litman
Nath, Goldberg & Meyer
112 S. West Street
Alexandria, VA 22314

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via the USPTO patent electronic filing system or by facsimile to (571) 273-2885, on the date below.

Form with fields for (Typed or printed name), (Signature), and (Date).

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.

18/392,663 12/21/2023 ZAYED M. RAMADAN 33150.15U 9444
TITLE OF INVENTION: ELECTRICAL DOPING OF IRON WITH CHITOSAN NANOEMULSION

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Authorized Signature /James Lafave/ Date 2024-04-04
Typed or printed name James Lafave Registration No. 71013