

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7334761

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNEE NAME FOR "YOKOHAMA NATIONAL UNIVERSITY" TO "NATIONAL UNIVERSITY CORPORATION YOKOHAMA NATIONAL UNIVERSITY" previously recorded on Reel 039880 Frame 0394. Assignor(s) hereby confirms the CORRECTIVE NAME CHANGE.
RESUBMIT DOCUMENT ID:	507011270

CONVEYING PARTY DATA

Name	Execution Date
SHIGENORI MITSUSHIMA	09/07/2016
YASUTOMO TAKAKUWA	09/10/2016
YOSHINORI NISHIKI	08/22/2016
AKIHIRO KATO	08/19/2016
AKIYOSHI MANABE	08/22/2016
YASUSHI SATO	09/27/2016
KOTA MIYOSHI	09/27/2016
KOJIRO NAKAGAWA	09/26/2016
SHINJI OSHIMA	09/27/2016

RECEIVING PARTY DATA

Name:	NATIONAL UNIVERSITY CORPORATION YOKOHAMA NATIONAL UNIVERSITY
Street Address:	79-1, TOKIWADAI, HODOGAYA-KU
City:	YOKOHAMA CITY, KANAGAWA
State/Country:	JAPAN
Postal Code:	2408501
Name:	DE NORA PERMELEC LTD
Street Address:	2023-15, ENDO
City:	FUJISAWA CITY, KANAGAWA
State/Country:	JAPAN
Postal Code:	2520816

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	10202698

CORRESPONDENCE DATA**PATENT**

Fax Number: (703)205-8050

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 703-205-8000

Email: mailroom@bskb.com, alynard@bskb.com

Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP

Address Line 1: P.O. BOX 747

Address Line 4: FALLS CHURCH, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	2114-0221PUS1
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NAME OF SUBMITTER:	ALEXANDRA LYNARD
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SIGNATURE:	/ALEXANDRA LYNARD/
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DATE SIGNED:	05/17/2022
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Total Attachments: 9

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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4073913

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SHIGENORI MITSUSHIMA	09/07/2016
YASUTOMO TAKAKUWA	09/10/2016
YOSHINORI NISHIKI	08/22/2016
AKIHIRO KATO	08/19/2016
AKIYOSHI MANABE	08/22/2016
YASUSHI SATO	09/27/2016
KOTA MIYOSHI	09/27/2016
KOJIRO NAKAGAWA	09/26/2016
SHINJI OSHIMA	09/27/2016
RECEIVING PARTY DATA	
Name:	YOKOHAMA NATIONAL UNIVERSITY
Street Address:	79-1, TOKIWADAI, HODOGAYA-KU
City:	YOKOHAMA CITY, KANAGAWA
State/Country:	JAPAN
Postal Code:	2408501
Name:	DE NORA PERMELEC LTD
Street Address:	2023-15, ENDO
City:	FUJISAWA CITY, KANAGAWA
State/Country:	JAPAN
Postal Code:	2520816
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15129670
CORRESPONDENCE DATA	
Fax Number:	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	3213227954
Email:	jeremy@howardiplaw.com

Correspondent Name: JEREMY HOWARD
Address Line 1: 274 E EAU GALLIE BLVD
Address Line 2: SUITE 210
Address Line 4: INDIAN HARBOUR BEACH, FLORIDA 32937

ATTORNEY DOCKET NUMBER: PLE.001

NAME OF SUBMITTER: JEREMY HOWARD

SIGNATURE: /Jeremy Howard/

DATE SIGNED: 09/28/2016

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 7

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Combined Declaration of Inventorship and Assignment of Application for Patent

As a below-named inventor, I hereby declare that:

I believe that I am the original inventor or an original joint inventor, of the claimed invention in the Application entitled:

DEVICE FOR MANUFACTURING ORGANIC HYDRIDE

the specification of which (check one):

_____ is attached hereto

was filed as U. S. Application No. or PCT International Application No. WO2015/058824 on 3/24/2015

The Application was made or was authorized to be made by me. I hereby acknowledge that any willful false statement made in this Declaration is punishable under 18 U.S.C. §1001 by fine or imprisonment of not more than five (5) years, or both. I have reviewed and understand the contents of the Application, including the claims, and I am aware of the duty to disclose to the U. S. P. T. O. all information known to be material to patentability as defined in 37 CFR §1.56.

The below-named inventor (hereinafter referred to as ASSIGNOR) having invented and owning a certain and new and useful invention which is the subject of the Application, and

~~YOKOHAMA NATIONAL UNIVERSITY~~ (Full Name of Assignee)
NATIONAL UNIVERSITY CORPORATION YOKOHAMA NATIONAL UNIVERSITY
79-1, Tokiwada, Hodogaya-ku, Yokohama City, Kanagawa 2430291 Japan (Address of Assignee)

9/7/2021

Juan Umehara

and

DE NORA PERMELEC LTD (Full Name of Assignee)
2023-15, Endo, Fujisawa City, Kanagawa 2520816 Japan (Address of Assignee)

and

JX NIPPON OIL & ENERGY CORPORATION (Full Name of Assignee)
1-2, Otomachi 1-chome, Chiyoda-ku, Tokyo 1000162 Japan (Address of Assignee)

(hereinafter referred to as ASSIGNEE), being desirous of acquiring the entire right, title, and interest in, to and under the invention which is the subject of the Application and the United States Letters Patent to be obtained therefor.

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment of ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNOR, by these presents, hereby sell, assigns and transfers to ASSIGNEE the entire and exclusive right, title and interest to said invention and all Letters Patent of the United States to be obtained therefor on said Application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms for which the same may be granted.

ASSIGNOR hereby authorizes and requests Jeremy S. Howard, of Howard IP Law Office, PA, 274 E. Eau Gallie Blvd., Suite 210, Indian Harbour Beach, FL 32937 to insert here in parentheses (Application No. _____ filed _____) the filing date and Application number of said Application when/if known.

ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States Patent obtained herefor on said Application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms to said ASSIGNEE, of the entire right, title, and interest in and to the same, for his sole use and behoof, and for the use and behoof of his legal representatives, to the full end of the term or terms for which said Letters Patent obtained therefor on said Application or any continuation, division, renewal, substitute or reissue thereof for may be granted, as full and entirely as the same would have been held by ASSIGNOR had this Assignment and sale not been made.

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment and sale;

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNOR and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

Legal Name of Inventor MITSUSHIMA SHIGENORI

Inventor's Signature Shigenori Mitsushima Date Sep. 7, 2016

Legal Name of Additional Inventor, if Any TAKAKUWA YASUTOMO

Inventor's Signature Yasutomo Takakuwa Date Sep. 10, 2016

Legal Name of Additional Inventor, if Any NISHIKI YOSHINOBU

Inventor's Signature Yoshinobu Nishiki Date Aug. 22, 2016

Legal Name of Additional Inventor, if Any KATO AKEHIRO

Inventor's Signature A. Kato Date Aug. 19th 2016

Legal Name of Additional Inventor, if Any MANABE AKIYOSHI

Inventor's Signature Akiyoshi Manabe Date Aug. 22, 2016

Legal Name of Additional Inventor, if Any SATO YASUSHI

Inventor's Signature Yasushi Sato Date Sep. 27 '16

Legal Name of Additional Inventor, if Any MIYOSHI KOTA

Inventor's Signature Kota Miyoshi Date Sep. 27 '16

Legal Name of Additional Inventor, if Any NAKAGAWA KOJIRO

Inventor's Signature K. Nakagawa Date Sep. 26 '16

Certified Declaration of Invention and Assignment of Application for Patent

Legal Name of Additional Inventor, if Any OSHIMA SHINJI
Inventor's Signature Shinji Oshima Date Sep. 29 '16

Combined Declaration of Invention and Assignment of Application for Patent

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From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE

(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

For

SASAKI Ken-ichiro
Daichi Teikei Bldg., 1-13-4,
Nihombashi-Kakigaracho, Chuo-ku, Tokyo
1030014
JAPON

Date of mailing (day/month/year) 12 August 2016 (12.08.2016)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference 201469716PCT	
International application No. PCT/JP2015/058824	International filing date (day/month/year) 24 March 2015 (24.03.2015)

1. The following indications appeared on record concerning:

the applicant the inventor the agent the common representative

Name and Address JK NIPPON OIL & ENERGY CORPORATION 1-2, Otemachi 1-chome, Chiyoda-ku, Tokyo 1008162 Japan	State of Nationality JP	State of Residence JP
	Telephone No.	
	Facsimile No.	
	E-mail address	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

the person the name the address the nationality the residence

Name and Address See Box 3.	State of Nationality	State of Residence
	Telephone No.	
	Facsimile No.	
	E-mail address <input type="checkbox"/> Notification by e-mail authorized	

3. Further observations, if necessary:
The person identified in Box 1 is now applicant for JP.

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the International Preliminary Examining Authority
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the Authority(ies) specified for supplementary search	<input type="checkbox"/> the elected Offices concerned
	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Oishi Coutaz Megumi
Facsimile No. +41 22 338 90 90	e-mail p07.pct@wipo.int
	Telephone No. +41 22 338 74 07

Form PCT/IB/306 (January 2009)

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rapport d'ouverture de 20 à 70 %, et a un matériau de support d'électrification formé d'un conducteur d'électron, et du catalyseur d'électrode, qui est maintenu dans le matériau de support d'électrification.

(JA): 本発明のある態様の有機ハイドライド製造装置 10 は、電解質膜 11 の一方の面にアノード 12、電解質膜 11 の他方の面にカソード触媒層 13 とカソード被覆層 14 からなるカソードを設けた電気化学セルを有する。アノード 12 と電解質膜 11 との間にギャップが形成されている。アノード 12 が、開口率が 30 - 70 % の網目構造を有し、電子伝導体で形成された給電支持材料と、前記給電支持材料に保持された前記電極触媒とを有する。

International search report:

Received at International Bureau: 25 May 2015 (25.05.2015) [JP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BE, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LB, LS, 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, SA, 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

European Patent Office (EPO): AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GD, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TB

African Intellectual Property Organization (OAPI): BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO): BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO): AM, AZ, BY, KG, KZ, RU, TJ, TM

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(12) International Application Status Report

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(21) Application Number: PCT/JP2015/058824	(22) Filing Date: 24 March 2015 (24.03.2015)	(25) Filing language: Japanese (JA)
(31) Priority number(s): 2014-059716 (JP)	(31) Priority date(s): 28 March 2014 (28.03.2014)	(31) Priority status: Priority document received (in compliance with PCT Rule 17.1)

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C25B 9/00 (2006.01); C07C 5/18 (2006.01); C07C 13/18 (2006.01); C25B 3/04 (2006.01); C25B 11/03 (2006.01); C25B 15/04 (2006.01)

(71) Applicant(s):

YOKOHAMA NATIONAL UNIVERSITY [JP/JP]; 79-1, Tokiwadai, Hodogaya-ku, Yokohama City, Kanagawa 2408501 (JP) (for all designated states)

LEE NORA FERMELEC LTD [JP/JP]; 2023-15, Endo, Fujisawa City, Kanagawa 2520816 (JP) (for all designated states)

IX NIPPON OIL & ENERGY CORPORATION [JP/JP]; 1-2, Otomachi 1-chome, Chiyoda-ku, Tokyo 1008162 (JP) (for all designated states)

(72) Inventor(s):

MITSUBISHI Shigenori; 79-7, Tokiwadai, Hodogaya-ku, Yokohama City, Kanagawa 2408501 (JP)

TAKAEUWA Yasutomo; 79-7, Tokiwadai, Hodogaya-ku, Yokohama City, Kanagawa 2408501 (JP)

NISHIKI Yoshinori; 2023-15, Endo, Fujisawa City, Kanagawa 2520816 (JP)

KATO Akihiro; 2023-15, Endo, Fujisawa City, Kanagawa 2520816 (JP)

MANABE Akiyoshi; 2023-15, Endo, Fujisawa City, Kanagawa 2520816 (JP)

SATO Yasushi; c/o IX Nippon Oil & Energy Corporation, 6-3, Otomachi 2-chome, Chiyoda-ku, Tokyo 1008162 (JP)

MIYOSHI Kota; c/o IX Nippon Oil & Energy Corporation, 6-3, Otomachi 2-chome, Chiyoda-ku, Tokyo 1008162 (JP)

NAKAGAWA Kojiro; c/o IX Nippon Oil & Energy Corporation, 6-3, Otomachi 2-chome, Chiyoda-ku, Tokyo 1008162 (JP)

OSHIMA Shinji; c/o IX Nippon Oil & Energy Corporation, 6-3, Otomachi 2-chome, Chiyoda-ku, Tokyo 1008162 (JP)

(74) Agent(s):

SASAKI Ken-ichiro; Daiichi Teikori Bldg., 1-13-4, Nishimbashi-Katigaracho, Chuo-ku, Tokyo 1030014 (JP)

(54) Title (EN): DEVICE FOR MANUFACTURING ORGANIC HYDRIDE

(54) Title (FR): DISPOSITIF DE FABRICATION D'HYDRURE ORGANIQUE

(54) Title (JA): 有機ハイドライド製造装置

(57) Abstract:

(EN): An organic-hydride-manufacturing device (10) according to a aspect of the present invention has an electrochemical cell provided with an anode (12) on one surface of an electrolyte film (11) and a cathode on the other surface of the electrolyte film (11), the cathode comprising a cathode catalyst layer (13) and a cathode diffusion layer (14). A gap is formed between the anode (12) and the electrolyte film (11). The anode (12) has a mesh structure with an aperture ratio of 30-70%, and has an electrifying supporting material formed of an electron conductor, and the electrode catalyst, which is held in the electrifying supporting material.

(FR): Selon un aspect, la présente invention concerne un dispositif de fabrication d'hydruure organique (10) qui comprend une cellule électrochimique pourvue d'une anode (12) sur une surface d'un film d'électrolyte (11) et d'une cathode sur l'autre surface du film d'électrolyte (11), la cathode comprenant une couche de catalyseur de cathode (13) et une couche de diffusion de cathode (14). Un espacement est formé entre l'anode (12) et le film d'électrolyte (11). L'anode (12) a une structure maillée avec un

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rapport d'ouverture de 30 à 70 %, et a un matériau de support d'électrification formé d'un conducteur d'électron, et du catalyseur d'électrode, qui est maintenu dans le matériau de support d'électrification.

(JA): 本発明のある態様の有機ハイドライド製造装置 10 は、電解質膜 11 の一方の面にアノード 12、電解質膜 11 の他方の面にカソード触媒層 13 とカソード担体層 14 からなるカソードを設けた電気化セルを有する。アノード 12 と電解質膜 11 との間にギャップが形成されている。アノード 12 が、開口率が 30 ~ 70 % の網目構造を有し、電子伝導体で形成された給電支持材料と、前記給電支持材料に保持された前記電極触媒とを有する。

International search report:

Received at International Bureau: 25 May 2015 (25.05.2015) [JP]

International Report on Patentability (IRPP) Chapter II of the PCT:

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(81) Designated States:

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European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

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