505640386 08/26/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5687193

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHIGEKI HARA	07/05/2019
HAJIME YOSHIDA	07/05/2019
YOSHIKAZU TAKAHASHI	07/24/2019
YASUSHI HOSOOKA	07/24/2019
TAKAHIRO IMAMURA	07/24/2019

RECEIVING PARTY DATA

Name:	NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY		
Street Address:	3-1, KASUMIGASEKI 1-CHOME, CHIYODA-KU		
City:	TOKYO		
State/Country:	JAPAN		
Postal Code:	100-8921		
Name:	MORESCO CORPORATION		
Street Address:	5-3, MINATOJIMAMINAMI-MACHI 5-CHOME, CHUO-KU		
City:	KOBE-SHI, HYOGO		
State/Country:	JAPAN		
Postal Code:	650-0047		

PROPERTY NUMBERS Total: 1

Property Type	Number		
Application Number:	16488207		

CORRESPONDENCE DATA

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, anh-vu.dao@bskb.comCorrespondent Name:BIRCH, STEWART, KOLASCH & BIRCH, LLP.Address Line 1:8110 GATEHOUSE ROAD, SUITE 100E

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER: 0234-0823PUS1

PATENT 505640386 REEL: 050173 FRAME: 0220

NAME OF SUBMITTER:	ANH-VU DAO		
SIGNATURE:	/anh-vu dao/		
DATE SIGNED:	08/26/2019		
Total Attachments: 6			
source=2019-08-22_DecAssignment_02	234-0823PUS1#page1.tif		
source=2019-08-22_DecAssignment_0234-0823PUS1#page2.tif			
source=2019-08-22_DecAssignment_0234-0823PUS1#page3.tif			
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source=2019-08-22_DecAssignment_0234-0823PUS1#page5.tif			
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PATENT REEL: 050173 FRAME: 0221

BIRCH, STEWART, KOLASCH & BIRCH, LLP

P.O. Box 747 • Falls Church, Virginia 22040-0747

Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

UNITED STATES PATENT RIGHTS, OR
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

Title of Invention

APPARATUS FOR EVALUATING GAS BARRIER PROPERTIES AND METHOD OF EVALUATING GAS BARRIER PROPERTIES

As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:

Application not ⇒
Attached

This declaration is directed to the application attached hereto. If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above and/or the following:

Enter Appln. No. Dunited States Application Number or PCT International Appln. No.PCT/JP2018/006903

Enter Filing Date ⇒ filed on February 26, 2018.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the above-identified application, including the claims.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations §1.56.

WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.

Insert Name of Assignee

→ WHEREAS, (1) National Institute of Advanced Industrial Science and Technology and (2) MORESCO CORPORATION

Insert Address of Assignee of (1) 3-1, Kasumigaseki 1-chome, Chiyoda-ku, Tokyo 100-8921, Japan and (2) 5-3, Minatojimaminami-machi 5-Chome, Chuo-ku, Kobe-shi, Hyogo 650-0047, Japan, respectively

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and

Check Box if Appropriate in any foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

BSKB-DECASSIGN(09-12)

Attorney Docket No.

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges 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.

In witness whereof, executed by the undersigned on the date opposite the undersigned name.

LEGAL NAME OF INVENTOR

Inventor's Name	⇒ Inventor:	Shigeki HARA		Date:	July 5,	2019
Inventor's Signatur	^{2 ⇔} Signature	: Shigeli	Hara			

An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use a separate form for each inventor; or check the box below and complete the attached page(s) to list additional inventors.

 $oxed{\boxtimes}$ Additional inventors are being named on the $\underline{1}$ supplemental sheet(s) attached hereto.

Attorney Docket No.

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page $\underline{1}$ of $\underline{1}$

	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name ⇔	Inventor:	Hajime YOSHIDA	July 5, 2019 Date:
Inventor's Signature ⇔	Signature:	Hajine Fashida	
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name ⇔		Yoshikazu TAKAHASHI	Date:
Inventor's Signature ⇒			
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	Inventor:	Yasushi HOSOOKA	Date:
Inventor's Signature ⇒			
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	Inventor:	Takahiro IMAMURA	Date:
Inventor's Signature ⇒	Signature:		
·	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name	Inventor:		Date:
Inventor's Signature ⇒	Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name ⇒	Inventor:		Date:
Inventor's Signature ⇔	Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name ⇒	Inventor:	· · · · · · · · · · · · · · · · · · ·	Date:
Inventor's Signature ⇒	Signature:		
	LEGAL NA	AME OF JOINT INVENTOR, IF ANY	
Inventor's Name ⇔	Inventor:		Date:
Inventor's Signature ⇒	Signature:		

BSKB-DECASSIGN\(09-12)

PATENT REEL: 050173 FRAME: 0224

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

UNITED STATES PATENT RIGHTS, OR
UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

Title of Invention ⇒ APPARATUS FOR EVALUATING GAS BARRIER PROPERTIES AND METHOD OF EVALUATING GAS BARRIER PROPERTIES As a below named inventor (hereinafter designated as the undersigned), I hereby declare that: This declaration is directed to the application attached hereto. If the application is not attached hereto, the Attached application is as identified by the attorney docket number as set forth above and/or the following: Enter Appln. No. ⇒ United States Application Number or PCT International Appln. No.PCT/JP2018/006903 Enter Filing Date ⇒ filed on February 26, 2018. The above-identified application was made or authorized to be made by me. I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. I have reviewed and understand the contents of the above-identified application, including the claims. I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations §1.56. WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified. Insert Name WHEREAS, (1) National Institute of Advanced Industrial Science and Technology and (2) MORESCO of Assignee CORPORATION Insert Address of (1) 3-1, Kasumigaseki 1-chome, Chiyoda-ku, Tokyo 100-8921, Japan and (2) 5-3, Minatojimaminamiof Assignee machi 5-Chome, Chuo-ku, Kobe-shi, Hyogo 650-0047, Japan, respectively its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and Check Box if in any foreign countries. Appropriate NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged,

BSKB-DECASSIGN(09-12)

terms for which the same may be granted.

the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or

Application No. 16/488,207 filed on August 22, 2019 0234-0823PUS1

Attorney Docket No.

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges 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.

In witness whereof, executed by the undersigned on the date opposite the undersigned name.

LEGAL NAME OF INVENTOR

Inventor's Name	⇒ Inventor:	Shigeki HARA	Date:
Inventor's Signatu	^{re ⇒} Signature	:	
An application Use a separate	data sheet (PT form for each i	O/SB/14 or equivalent), including naming the entire inventor; or check the box below and complete the att	e inventive entity, must accompany this form. tached page(s) to list additional inventors.
Additiona	al inventors are	e being named on the 1 supplemental sheet(s) attache	ed hereto.

BSKB-DECASSIGN-SINGLE (09-12)

Attorney Docket No.

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	\$	Inventor:	Hajime YOSHIDA	Date:	
Inventor's Signature	4	Signature:		-	
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	₽	Inventor:	Yoshikazu TAKAHASHI	Date:	July 24, 2019
Inventor's Signature	⇔	Signature:	Yoshikazu Takahashi		
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔	Inventor:	Yasushi HOSOOKA	Date:	July 24, 2019
Inventor's Signature	⇔	Signature:	Yasushi Hosooka	1.5.	
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔	Inventor:	Takahiro IMAMURA	Date:	July 24, 2019
Inventor's Signature	Ŷ	Signature:	Takahiro I mamura		
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	➾	Inventor:		Date:	
Inventor's Signature	⇔	Signature:			
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔	Inventor:		Date:	
Inventor's Signature	\$	Signature:			
		LEGAL NA	ME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔	Inventor:		Date:	
Inventor's Signature	⇔	Signature:		M-50	
		LEGAL NA	ME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔	Inventor:		Date:	
Inventor's Signature	⇔	Signature:			

BSKB-DECASSIGN\(09-12)

PATENT REEL: 050173 FRAME: 0227

RECORDED: 08/26/2019