# 506510427 02/18/2021

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6557203

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
SHOTA SHINOYA	02/06/2020

#### **RECEIVING PARTY DATA**

Name:	BROTHER KOGYO KABUSHIKI KAISHA
Street Address:	15-1 NAESHIRO-CHO, MIZUHO-KU
City:	NAGOYA-SHI, AICHI-KEN
State/Country:	JAPAN
Postal Code:	467-8561

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17178326

#### **CORRESPONDENCE DATA**

**Fax Number:** (612)332-9081

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.

Email: dlizama@merchantgould.com

Correspondent Name: E. JOSEPH GESS Address Line 1: P.O. BOX 2903

Address Line 2: MERCHANT & GOULD PC

Address Line 4: MINNEAPOLIS, MINNESOTA 55402-0903

ATTORNEY DOCKET NUMBER:	04483.0208FPC1
NAME OF SUBMITTER:	MARK L. GLEASON
SIGNATURE:	/Mark L. Gleason/
DATE SIGNED:	02/18/2021

**Total Attachments: 1** 

source=2021-02-18\_04483-0208FPC1\_Assignment#page1.tif

PATENT 506510427 REEL: 055311 FRAME: 0031

### ASSIGNMENT

(1-8) Insert Name of Assignee (10) Insert Name of Assignee (10) Insert Address of Assignee (11) Insert Identification of Invention such as Title, Case Number, or Foreign Application Number (21) Insert Date of Signing of Application Number (22) on Little (23) on Little (24) on Little (24) on Little (25) on	paid to and set merica and all Letters win as
of Inventor(s)  (4)  (8)  In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer a over to over to  (9)  Insert Name of Assignee (10)  Insert Address of Assignee (10)  (10)  Insert Address of Assignee (10)  Insert Address of Assignee (11)  Insert Identification of linvention such as Title, Case Number, or Foreign Application Number  Identification of Invention such as Title, Case Number, or Foreign Application Number  (11)  Insert Date of Signing of Application (12)  Insert Date of Signing of Application (13)  Alternative (13)  Alternative (13)  Insert Date of Signing of Applications for the Invention Serial Number (17)  Insert Date of Signing of (12)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (12)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (12)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (12)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (13)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (12)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (13)  Insert Date of Signing of (13)  Alternative (13)  Insert Date of Signing of (14)  Insert Date of Signing of (15)  Insert Date of Signing	paid to and set merica and all Letters wwn as
In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer a over to  (9) Insert Name of Assignee (10) Insert Address of Assignee (11) Insert Date of Signing of (11) Insert Insert Date of Signing of (12) Insert Date of Signing of (12) Insert Date of Signing of (12) Insert Date of Signing of (13) Alternative (13) U.S. application Serial Number Invention Serial	merica and all Letters win as
cach of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer a over to assign, and hereby does assign, transfer a over to over to over to over to over to over to assign, and hereby does assign, transfer a over to	merica and all Letters win as
(10) Insert Address of Assignee (9) EROTHER KOGYO KABUSHIKI KAISHA  (110) Insert Address of Assignee (12) 15-1 Naeshiro-che, Mizuho-ku, Nagoya-shi, Aichi-ken 467-8561, Japan (hereinafter designated as the Assignee) the entire right, title and interest for the United States of A as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any provisional, non-provisional, divisional, continuation, substitute, and reissue application(s), and all Patent, extensions, reissues and reexamination certificates that may be granted on the invention such as Title, Case Number, or Foreign Application Number (Atterney Docket No. for which the undersigned has (have) executed an application for patent in the United States of American Application for filled applications (13) U.S. application Serial Number 17/178,326 (dentification for filled applications (13) U.S. application Serial Number 17/178,326 (dentification for filled applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with application or continuation or division thereof, or any patent or reissue application hased thereon, for the invention, and to cooperate v Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers necessary in connection with any application may be necessary in connection for provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	merica and all Letters win as
(10) Insert Address of Assignee  (10) 15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Aichi-ken 467-8561, Japan  (hereinafter designated as the Assignee) the entire right, title and interest for the United States of A as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any provisional, non-provisional, divisional, continuation, substitute, and reissue application(s), and all Patent, extensions, reissues and reexamination certificates that may be granted on the invention knot invention such as Title, Gase Number, or Foreign Application Number  (Attorney Docket No. for which the undersigned has (have) executed an application for patent in the United States of American Application for filed applications  (13) Atternative (13) U.S. application Serial Number 17/178,326  (14) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisit reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  (2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared con any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate v Assignee in every way possible in obtaining evidence and going forward with such interference.  (2) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectic for invention and patents are provisions of the International Convention for Protection of Industrial Property or similar agreements.  (4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	merica and all Letters win as
as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any provisional, non-provisional, divisional, continuation, substitute, and reissue application(s), and all Patent, extensions, relissues and reexamination certificates that may be granted on the invention known of Invention such as Title, Case  Number, or Foreign Application Number  (Attorney Docket No.  for which the undersigned has (have) executed an application for patent in the United States of Amere 12)  Insert Date of Signing of (12) on Left 6, 2 o 2 o Application  (13) Atternative (13) U.S. application Serial Number 17/178,326  Intendification for filled applications  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisions and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared cone any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate v Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection for provisions of the international Convention for Protection of industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	and all Letters own as
identification of invention such as Title, Case Number, or Foreign Application Number  (Attorney Docket No.  for which the undersigned has (have) executed an application for patent in the United States of Amer  (12) Insert Date of Signing of (12) on Label 6, 2020 Application  (13) Alternative (13) U.S. application Serial Number 17/178,326  Insert Date of Signing of (12) on Label 6, 2020  Application  (14) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divising reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared contain any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate vassignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectical or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
of invention such as Title, Case Number, or Foreign Application Number  (Attorney Docket No.  for which the undersigned has (have) executed an application for patent in the United States of Amer  (12) Insert Date of Signing of (12) on Application  (13) Alternative (13) U.S. application Serial Number 17/178,326  Insert Date of Signing of (14) on Application  (14) Alternative (15) Experimental Serial Number 17/178,326  Insert Date of Signing of (16) on Application Serial Number 17/178,326  Insert Date of Signing of (17) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application of Signing Office of February 18, 2021  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (18) on Application Serial Number 17/178,326  Insert Date of Signing of (	
for which the undersigned has (have) executed an application for patent in the United States of American Signing of Signing of Application (12) on Application (13) Alternative (13) U.S. application Serial Number 17/178,326 Identification for filed applications filed February 18, 2021  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divising electrons and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared containing applications or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate which application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate when the undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
for which the undersigned has (have) executed an application for patent in the United States of American Signing of Application  (12) Insert Date of Signing of Application  (13) Alternative (13) U.S. application Serial Number 17/178,326  Identification for filed applications filed February 18, 2021  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, division reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared contain application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate via Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectic claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
Signing of Application  (13) Alternative (13) U.S. application Serial Number 17/178,326  Identification for filed applications filed February 18, 2021  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, division reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared contany application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate very way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectic claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, division reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared containly application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate via Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectic claims or provisions of the international Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divising reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared contany application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate via Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectic claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared contany application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate via Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connectic claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reis reexamination a grant of a valid United States patent to the Assignee.	
5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreements inherewith.  6) The undersigned hereby grant(s) the firm of <b>Merchant &amp; Gould P.C.</b> the power to insert on this assignment any identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Of recordation of this document.  In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).	th such cerning with the on with ssue or United y have) conflict further
Date Leb. 6, 2020 Name of Inventor Shota Shinoya (SE	ΔΙΛ
Shota SHINOYA	· Nu/
Date Name of Inventor (SE	AL)
Date Name of Inventor (SE	AL)
Date Name of inventor (SE	AL)

Name of Inventor

PATENT REEL: 055311 FRAME: 0032

(SEAL)

**RECORDED: 02/18/2021** 

Date