505507636 06/04/2019

# PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
TOMOKI YOSHIMURA	04/16/2019
SHOICHI SUZUKI	04/15/2019
TATSUSHI AIBA	04/19/2019
LIQING LIU	04/15/2019
WATARU OUCHI	04/15/2019
TAKASHI HAYASHI	05/09/2019
KIMIHIKO IMAMURA	05/14/2019

## **RECEIVING PARTY DATA**

Name:	SHARP KABUSHIKI KAISHA
Street Address:	1, TAKUMI-CHO, SAKAI-KU
City:	SAKAI CITY, OSAKA
State/Country:	JAPAN
Postal Code:	590-8522
Name:	FG INNOVATION COMPANY LIMITED
Street Address:	FLAT 2623, 26/F TUEN MUN CENTRAL SQUARE
Internal Address:	22 HOI WING ROAD, TUEN MUN
City:	NEW TERRITORIES
State/Country:	HONG KONG

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16317587

## CORRESPONDENCE DATA

Fax Number: (571)313-7421

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.

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Email: cdalakuras@kbiplaw.com **Correspondent Name: KEATING & BENNETT, LLP** Address Line 1: 1800 ALEXANDER BELL DR.

Address Line 2: SUITE 200

REEL: 049362 FRAME: 0065 505507636

PATENT -

Address Line 4:	RESTON, VIRGINIA 20191	
ATTORNEY DOCKET NUMBER:	70404.4182/SG	
NAME OF SUBMITTER:	CHRISTY DALAKURAS	
SIGNATURE:	/PMM/cd/	
DATE SIGNED:	06/04/2019	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

## **Total Attachments: 4**

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## COMBINED DECLARATION/ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

Title CIRCUIT		
As a below named INVENTOR/ASSIGNOR, I hereby declare that:		
This declaration The attached application, or		
is directed to: Multied States application or PCT international application number PCT/IP2017/025894 filed on July 18, 2017		
The above-identified application was made or authorized to be made by me.		
I be ${f ii}$ eve that I am the original inventor or an original joint inventor of a claimed invention in the application.		
I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.		
I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.		
WHEREAS, (1) Sharp Kabushiki Kaisha; (2) FG INNOVATION COMPANY LIMITED (hereinafter referred to as "ASSIGNEE") having places of business at: (1) 1. Takumi-cho, Sakai-ku, Sakai-ku, Osaka 590-8522, Japan; (2) Flat 2623, 26/F Tuen Mun Central Square, 22 Hoi Wing Road, Tuen Mun, New Territories, HONG KONG, China, is desirous of acquiring the entire right, title, and interest in, to, and under said invention and any 1_etters Patentthat may be granted therefore in the United States and in any and all foreign countries;		
NG THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by ASS. NEE 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 hereby sells, assigns, and transfers to ASSIGNEE the full and exclusive right, title, and interest to the said invention and all Letters Patent of the United States to be obtained therefore 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; and all Letters Patent and applications therefore through the world, including all the rights accruing by virtue of the International Convention for the Protection of Industrial Property or other relevant International Treaties and Arrangements.		
ASSI GNOR 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.		
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.		
LEGAL NAME OF FIRST INVENTOR/ASSIGNOR		
Inversion: Tomoki YOSHIMURA Date: 20/9/4/6		
Signature: Toule Thisware		

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	
Inventor: Shoichi SI/ZUKI	Date: 2019/4/15
Signature: Shaith Dungh	
LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	× ×6 / × × × · · · · · · · · · · · · · · · ·
Inventor: Tatsushi AIBA	Date: 2019/4/19
Signature: Facil als	¥
LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	a charles
Inventor: Lightg LIU	Date: 2019/04/15
Signature: Equing CN	
LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	3
Inventor: Wataru OUCHI	Date: 30/9/04//5
Signature: Watard Auchi	
LEGAL NAME OF SIXTH INVENTOR/ASSIGNOR	
Inventor: Takashi HAYASHI	Date:
Signature:	
LEGAL NAME OF SEVENTH INVENTOR/ASSIGNOR	
Inventor: Kimihiko MAMURA	Date: 20/9/5/19
Signature: Kimple Quamora	
LEGAL NAME OF EIGHTH INVENTOR/ASSIGNOR	
Inventor:	Date:
Signature:	

## Attorney Docket No.

## COMBINED DECLARATION/ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

Title TRANSMISSION APPARATUS, RECEPTION APPARATUS, COMMUNICATION METHOD, AND INTEGRATED CIRCUIT		
As a below named INVENTOR/ASSIGNOR, I hereby declare that:		
This declaration   The attached application, or		
is directed to:   United States application or PCT international application number PCT/JP2017/025894 filed on July 18, 2017		
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 hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.		
I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.		
WHEREAS, (1) Sharp Kabushiki Kaisha; (2) FG INNOVATION COMPANY LIMITED  (hereinafter referred to as "ASSIGNEE") having places of business at: (1) 1, Takumi-cho, Sakai-ku, Sakai City, Osaka 590-8522. Japan: (2) Flat 2623, 26/F Tuen Mun Central Square, 22 Hoi Wing Road, Tuen Mun, New Territories, HONG KONG, China, is desirous of acquiring the entire right, title, and interest in, to, and under said invention and any Letters Patent that may be granted therefore in the United States and in any and all foreign countries;		
NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by 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 hereby sells, assigns, and transfers to ASSIGNEE the full and exclusive right, title, and interest to the said invention and all Letters Patent of the United States to be obtained therefore 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; and all Letters Patent and applications therefore through the world, including all the rights accruing by virtue of the International Convention for the Protection of Industrial Property or other relevant International Treaties and Arrangements.		
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.		
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.		
LEGAL NAME OF FIRST INVENTOR/ASSIGNOR		
Inventor: Tomoki YOSHIMURA Date:		
Signature:		

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	<u> </u>
Inventor: Shoichi SUZUKI	Date:
Signature:	
LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	
Inventor: Tatsushi AIBA	Dates
CHARLES	
Signature: LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	<u></u>
**************************************	
Inventor: Liqing LIU	Date:
Claushynn	
Signature:   LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	
LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	
Inventor: Wataru OUCHI	Date:
Signature:	
LEGAL NAME OF SIXTH INVENTOR/ASSIGNOR	
*	Date: May 9, 2019
Inventor: Takashi HAYASHI	Date: / /
Signature: Joseph Hugaski	
LEGAL NAME OF SEVENTH INVENTOR/ASSIGNOR	
Inventor: Kimihiko IMAMURA	Date:
Signature:	
LEGAL NAME OF EIGHTH INVENTOR/ASSIGNOR	
Inventor:	Date:
Signature:	

PATENT REEL: 049362 FRAME: 0070

**RECORDED: 06/04/2019**