

## PATENT ASSIGNMENT COVER SHEET

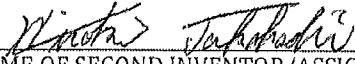
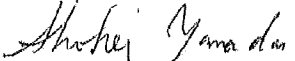
Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5860872

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HIROKI TAKAHASHI	10/04/2019
SHOHEI YAMADA	10/04/2019
HIDEKAZU TSUBOI	10/04/2019
KAZUNARI YOKOMAKURA	09/23/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SHARP KABUSHIKI KAISHA
<b>Street Address:</b>	1 TAKUMI-CHO, SAKAI-KU
<b>City:</b>	SAKAI CITY, OSAKA
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	590-8522
<b>Name:</b>	FG INNOVATION COMPANY LIMITED
<b>Street Address:</b>	FLAT 2623, 26/F TUEN MUN CENTRAL SQUARE
<b>Internal Address:</b>	22 HOI WING ROAD
<b>City:</b>	TUEN MUN, NEW TERRITORIES
<b>State/Country:</b>	HONG KONG
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16621272
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(571)313-7421
<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>	
<b>Phone:</b>	571-313-7440
<b>Email:</b>	mrhodes@kbiplaw.com
<b>Correspondent Name:</b>	KEATING & BENNETT, LLP
<b>Address Line 1:</b>	1800 ALEXANDER BELL DR.
<b>Address Line 2:</b>	SUITE 200
<b>Address Line 4:</b>	RESTON, VIRGINIA 20191
<b>ATTORNEY DOCKET NUMBER:</b>	70404.4730/HA

<b>NAME OF SUBMITTER:</b>	MICHELLE RHODES
<b>SIGNATURE:</b>	/AMD/mr/
<b>DATE SIGNED:</b>	12/11/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
<b>Total Attachments: 4</b> source=70404-4730-PTO-20191211-Signed-Declaration-Assignment#page1.tif source=70404-4730-PTO-20191211-Signed-Declaration-Assignment#page2.tif source=70404-4730-PTO-20191211-Signed-Declaration-Assignment#page3.tif source=70404-4730-PTO-20191211-Signed-Declaration-Assignment#page4.tif	

## COMBINED DECLARATION/ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

Title	TERMINAL APPARATUS, BASE STATION APPARATUS, COMMUNICATION METHOD, AND INTEGRATED CIRCUIT		
As a below named INVENTOR/ASSIGNOR, I hereby declare that:			
This declaration <input type="checkbox"/> The attached application, or			
is directed to: <input checked="" type="checkbox"/> United States application or PCT international application number <u>PCT/JP2018/023013</u>			
filed on <u>June 15, 2018</u>			
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, <u>Sharp Kabushiki Kaisha and FG Innovation Company Limited</u>			
(hereinafter referred to as "ASSIGNEE") having places of business at: <u>1, Takumi-cho, Sakai-ku, Sakai City, Osaka 590-8522, Japan</u> , and having places of business at: <u>Flat 2623, 26/F Tuen Mun Central Square, 22 Hoi Wing Road, Tuen Mun, New Territories, Hong Kong, China</u> respectively 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:	<u>TAKAHASHI, Hiroki</u>	Date:	<u>October 4, 2019</u>
Signature:			
LEGAL NAME OF SECOND INVENTOR/ASSIGNOR			
Inventor:	<u>YAMADA, Shohei</u>	Date:	<u>October 4, 2019</u>
			

Signature:	
LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	
Inventor: <u>TSUBOI, Hidekazu</u>	Date: <u>October 4, 2019</u>
Signature: <i>Hidekazu Tsuboi</i>	
LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	
Inventor: <u>YOKOMAKURA, Kazunari</u>	Date: _____
Signature:	

**COMBINED DECLARATION/ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION**

Title	TERMINAL APPARATUS, BASE STATION APPARATUS, COMMUNICATION METHOD, AND INTEGRATED CIRCUIT
<p>As a below named INVENTOR/ASSIGNOR, I hereby declare that:</p> <p>This declaration <input type="checkbox"/> The attached application, or</p> <p>is directed to: <input checked="" type="checkbox"/> United States application or PCT international application number <u>PCT/JP2018/023013</u>  filed on <u>June 15, 2018</u></p> <p>The above-identified application was made or authorized to be made by me.</p> <p>I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.</p> <p>I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.</p> <p>I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.</p> <p>WHEREAS, <u>Sharp Kabushiki Kaisha and FG Innovation Company Limited</u>  (hereinafter referred to as "ASSIGNEE") having places of business at: <u>1, Takumi-cho, Sakai-ku, Sakai City, Osaka 590-8522, Japan</u>, and having places of business at: <u>Flat 2623, 26/F Tuen Mun Central Square, 22 Hoi Wing Road, Tuen Mun, New Territories, Hong Kong, China</u> respectively 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;</p> <p>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.</p> <p>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;</p> <p>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.</p> <p>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.</p>	
LEGAL NAME OF FIRST INVENTOR/ASSIGNOR	
Inventor: <u>TAKAHASHI, Hiroki</u>	Date: _____
Signature: _____	
LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	
Inventor: <u>YAMADA, Shohei</u>	Date: _____

18R00531/US

Signature:

LEGAL NAME OF THIRD INVENTOR/ASSIGNOR

Inventor: TSUBOI, Hidekazu

Date: \_\_\_\_\_

Signature:

LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR

Inventor: YOKOMAKURA, Kazumari

Date: Sept. 23, 2019

Signature:

*Kazumari Yokomakura*