## 503410075 07/27/2015

## **PATENT ASSIGNMENT COVER SHEET**

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3456709

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
KUNIHIRO ASADA	06/15/2015
TETSUYA IIZUKA	06/11/2015
SATOSHI MIURA	06/19/2015
YOHEI ISHIZONE	06/08/2015
YOSHIMICHI MURAKAMI	06/19/2015
SHUNICHI KUBO	06/19/2015
SHUHEI YAMAMOTO	06/19/2015

### **RECEIVING PARTY DATA**

Name:	THINE ELECTRONICS, INC.
Street Address:	9-1, KANDA-MITOSHIRO-CHO, CHIYODA-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	101-0053

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

Property Type	Number
Application Number:	14428229

### **CORRESPONDENCE DATA**

Fax Number:

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: aannis@sughrue.com
Correspondent Name: SUGHRUE MION, PLLC

Address Line 1: 2100 PENNSYLVANIA AVENUE NW

Address Line 2: SUITE 800

Address Line 4: WASHINGTON, D.C. 20037

ATTORNEY DOCKET NUMBER:	Q218329
NAME OF SUBMITTER:	ANDREW ANNIS
SIGNATURE:	/Andrew Annis/
DATE SIGNED:	07/27/2015

PATENT REEL: 036187 FRAME: 0288

503410075

## **Total Attachments: 4**

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PATENT REEL: 036187 FRAME: 0289

# ASSIGNMENT

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Whereas, I/we,	
<u>Name</u>	Address
and the second s	Takeda Building, The University of Tokyo,
1) Kunihiro ASADA	2-11-16, Yayoi,
1) Kummo ADADA	Bunkyo-ku, Tokyo 113-0032 Japan
	Takeda Building, The University of Tokyo,
2) Tetsuya HZUKA	2-11-16, Yayoi,
and the state of t	Bunkyo-ku, Tokyo 113-0032 Japan
	c/o THINE ELECTRONICS, INC.,
3) Satoshi MIURA	9-1, Kanda-mitoshiro-cho,
5)	Chiyoda-ku, Tokyo 101-0053 Japan
	c/o THINE ELECTRONICS, INC.,
4) Yohei ISHIZONE	9-1, Kanda-mitoshiro-cho,
· ·	Chiyoda-ku, Tokyo 101-0053 Japan
	c/o THINE ELECTRONICS, INC.,
5) Yoshimichi MURAKAMI	9-1, Kanda-mitoshiro-cho,
3)	Chiyoda-ku, Tokyo 101-0053 Japan
ARREST CONTRACTOR AND	c/o THINE ELECTRONICS, INC.,
6) Shunichi KUBO	9-1, Kanda-mitoshiro-cho,
0)	Chiyoda-ku, Tokyo 101-0053 Japan
	c/o THINE ELECTRONICS, INC.,
7) Shuhei YAMAMOTO	9-1, Kanda-mitoshiro-cho,
,,	Chiyoda-ku, Tokyo 101-0053 Japan
CLOCK-GENERATING DEVICE	
and executed an application for Letters indicated below:	Patent of the United States of America therefor on even date herewith unless otherwise
and executed an application for Letters indicated below:	Patent of the United States of America therefor on even date herewith unless otherwise arch 13, 2015 , Serial No. 14/428229 ; and
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and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN  9-1, Kanda-mit	rch 13, 2015 , Serial No. 14/428229 ; and IC. oshiro-cho,
and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN  9-1, Kanda-mit Chiyoda-ku, To	nrch 13, 2015 , Serial No. 14/428229 ; and NC. oshiro-cho, okyo 101-0053 Japan
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and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN 9-1, Kanda-mit Chiyoda-ku, To (assignee), desires to acquire the entire patents to be obtained therefor;  NOW THEREFORE, be it know	irch 13, 2015 , Serial No. 14/428229 ; and NC. oshiro-cho, okyo 101-0053 Japan right, title and interest in the application and invention, and to any United States on that, for good and valuable consideration from assignee, the receipt of which is
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and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN  9-1, Kanda-mit Chiyoda-ku, To  (assignee), desires to acquire the entire patents to be obtained therefor;  NOW THEREFORE, be it know hereby acknowledged, I/WE, as assigned and set over unto the assignee, its lawfe invention and this application, and all demay be granted thereon, and all reissue	irch 13, 2015, Serial No. 14/428229; and No. 14/428229; and No. oshiro-cho, okyo 101-0053 Japan right, title and interest in the application and invention, and to any United States on that, for good and valuable consideration from assignee, the receipt of which is or(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, if successors and assigns, MY/OUR entire right, title, and interest in and to this livisions, and continuations thereof, and all Letters Patent of the United States which is thereof, and I/WE hereby authorize and request the Commissioner of Patents and
and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN 9-1, Kanda-mit Chiyoda-ku, To (assignee), desires to acquire the entire patents to be obtained therefor;  NOW THEREFORE, be it know hereby acknowledged, I/WE, as assigne and set over unto the assignee, its lawfuinvention and this application, and all dimay be granted thereon, and all reissue Trademarks of the United States to issue	right, title and interest in the application and invention, and to any United States or that, for good and valuable consideration from assignee, the receipt of which is or(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, all successors and assigns, MY/OUR entire right, title, and interest in and to this divisions, and continuations thereof, and all Letters Patent of the United States which is thereof, and I/WE hereby authorize and request the Commissioner of Patents and the all Letters Patent for this invention to assignee, its successors and assigns, in
and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN  9-1, Kanda-mit Chiyoda-ku, To  (assignee), desires to acquire the entire patents to be obtained therefor;  NOW THEREFORE, be it know hereby acknowledged, I/WE, as assigned and set over unto the assignee, its lawfe invention and this application, and all demay be granted thereon, and all reissue	right, title and interest in the application and invention, and to any United States or that, for good and valuable consideration from assignee, the receipt of which is or(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, all successors and assigns, MY/OUR entire right, title, and interest in and to this divisions, and continuations thereof, and all Letters Patent of the United States which is thereof, and I/WE hereby authorize and request the Commissioner of Patents and the all Letters Patent for this invention to assignee, its successors and assigns, in
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and executed an application for Letters indicated below:  filed on Ma  Whereas  THINE ELECTRONICS, IN  9-1, Kanda-mit Chiyoda-ku, To  (assignee), desires to acquire the entire patents to be obtained therefor;  NOW THEREFORE, be it know hereby acknowledged, I/WE, as assigne and set over unto the assignee, its lawfe invention and this application, and all d may be granted thereon, and all reissue Trademarks of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation of the United States to issue accordance with the terms of this Assignation, and all lawful papers when called upon the title to this invention in said assigns applications, make all rightful oaths and and enforce proper patent protection for	Inch 13, 2015, Serial No. 14/428229; and No. 14/428229; and No. oshiro-cho, okyo 101-0053 Japan right, title and interest in the application and invention, and to any United States or that, for good and valuable consideration from assignee, the receipt of which is or(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, all successors and assigns, MY/OUR entire right, title, and interest in and to this divisions, and continuations thereof, and all Letters Patent of the United States which is thereof, and I/WE hereby authorize and request the Commissioner of Patents and we all Letters Patent for this invention to assignee, its successors and assigns, in parametr, overnant and agree that I/WE will, without further consideration, communicate with my facts known to ME/US respecting this invention and testify in any legal proceeding, in to do so, execute and deliver all papers that may be necessary or desirable to perfect the, its successors and assigns, execute all divisional, continuation, and reissue digenerally do everything possible to aid assignee, its successors and assigns, to obtain

**INVENTORS** DATE SIGNED 15 June 2015 1): Name: Kunihiro ASADA

Page 1 of 2

2):	LEISUHA alzutea	0/11/20/5
Name:	Tetsuya IIZUKA	
3):	Swtoshi Minne	6/19/2015
Name:	Satoshi MIURA	
4):		
Name:	Yohei ISHIZONE	
5): _	村工务道	0/19/2015
Name:	Yoshimichi MURAKAMI	
6):	Shurichi hulo	19 June 2015
Name:	Shunichi KUBO	
7):	Shuhei Yamamota	19 June 2015
Name:	Shuhei YAMAMOTO	-

# ASSIGNMENT

貴No:PCT0074(US) 弊No:FP13-0494-00US-XX

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	<u>Name</u>	<u>Address</u>	
1)	Kunihiro ASADA	Takeda Building, The University of Tokyo, 2-11-16, Yayoi, Bunkyo-ka, Tokyo 113-0032 Japan	
2)	Tetsuya IIZUKA	Takeda Building, The University of Tokyo, 2-11-16, Yayoi, Bunkyo-ku, Tokyo 113-0032 Japan	
3)	Satoshi MIURA	c/o THINE ELECTRONICS, INC., 9-1, Kanda-mitoshiro-cho, Chiyoda-ku, Tokyo 101-0053 Japan	
4)	Yohei ISHIZONE	c/o THINE ELECTRONICS, INC., 9-1, Kanda-mitoshiro-cho, Chiyoda-ku, Tokvo 101-0053 Japan	
5)	Yoshimichi MURAKAMI	c/o THINE ELECTRONICS, INC., 9-1, Kanda-mitoshiro-cho, Chiyoda-ku, Tokyo 101-0053 Japan	
6)	Shunichi KUBO	c/o THINE ELECTRONICS, INC., 9-1, Kanda-mitoshiro-cho, Chiyoda-ku, Tokyo 101-0053 Japan	
7)	Shuhei YAMAMOTO	c/o THINE ELECTRONICS, INC., 9-1, Kanda-mitoshiro-cho, Chiyoda-ku, Tokyo 101-0053 Japan	
-			

hereinafter called assignor(s), have invented certain improvements in

#### CLOCK-GENERATING DEVICE AND CLOCK DATA RECOVERY DEVICE

and executed an application for Letters Patent of the United States of America therefor on even date herewith unless otherwise indicated below:

> filed on March 13, 2015 , Serial No. 14/428229 ; and

Whereas

THINE ELECTRONICS, INC.

9-1, Kanda-mitoshiro-cho, Chiyoda-ku, Tokyo 101-0053 Japan

(assignee), desires to acquire the entire right, title and interest in the application and invention, and to any United States patents to be obtained therefor;

NOW THEREFORE, be it known that, for good and valuable consideration from assignee, the receipt of which is hereby acknowledged, I/WE, as assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof; and I/WE hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent for this invention to assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

#	INVENTORS	DATE SIGNED	1
1): ( Name:	Kunihiro ASADA	/	1

**REEL: 036187 FRAME: 0292** 

(2):		
Name:	Tetsuya IIZUKA	
3):		
Name:	Satoshi MIURA	
4) : Name :	Yohei ISHIZONE	06/08/2015
1,441316	· Louise Rollings (12)	
5):		
Name :	Yoshimichi MURAKAMI	
6):		
Name :	Shunichi KUBO	
7):		
Name: \	Shuhei YAMAMOTO	/
かり		B/T

**RECORDED: 07/27/2015** 

**REEL: 036187 FRAME: 0293**