

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SEIJI TAKAHASHI	08/17/2018
CHEN-JONG WANG	08/17/2018
DUN-NIAN YAUNG	08/17/2018
FENG-CHI HUNG	08/17/2018
FENG-JIA SHIU	08/21/2018
JEN-CHENG LIU	08/17/2018
JHY-JYI SZE	08/17/2018
CHUN-WEI CHANG	08/20/2018
WEI-CHENG HSU	08/20/2018
WEI CHUANG WU	08/16/2018
YIMIN HUANG	08/17/2018

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16113101

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NAME OF SUBMITTER: JAMES R. POTASHNIK

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DATE SIGNED: 09/13/2018

Total Attachments: 13

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JL (E)

TSMC Docket No. P20180832US01
Docket No. TSMCP918US

PATENT ASSIGNMENT

PARTIES TO THE ASSIGNMENT

Assignor(s):
Seiji Takahashi

Assignor(s):
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Assignor(s):
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Assignor(s):
Feng-Chi Hung

Assignor(s):
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Assignor(s):
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AGREEMENT

WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) of an invention entitled
**“A SEMICONDUCTOR IMAGING DEVICE HAVING IMPROVED DARK CURRENT
PERFORMANCE”** for which:

a non-provisional application for United States Letters Patent:

- was executed on even date preparatory to filing (each inventor should sign this Assignment on the same day as he/she signs the Declaration); or
- was filed on _____ and accorded U.S. Serial No. _____; or
- I hereby authorize and request my attorney associated with Customer No. 107476, to insert on the designated lines below the filing date and application number of said application when known:

U.S. Serial No. _____,
 filed on _____.

WHEREAS, ASSIGNEE (listed above), a corporation of the Republic of China is desirous of acquiring the entire right, title and interest in and to the invention and in and to any letters patent that may be granted therefore in the United States and in any and all foreign countries;

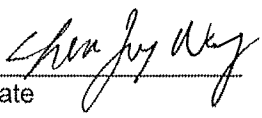
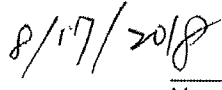
NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors and assigns, the entire right, title and interest in and to said invention and improvements, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions and in any and all foreign countries, and in any and all divisions, reissues, re-examinations and continuations thereof, including the right to file foreign applications directly in the name of

ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and its successors and assigns for their use and benefit and of their successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNOR(S) agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding said letters patent, or for the purpose of protecting title to said invention or letters patent therefore.

8/19/2018
Date

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TSMC Docket No. P20180832US01
Docket No. TSMCP918US


Date _____


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Docket No. TSMCP918US

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Date

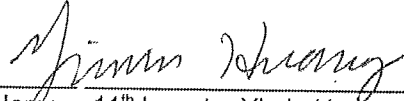
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Docket No. TSMCP918US

08/17/2018

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Name 11th Inventor Yimin Huang