## 504692599 12/18/2017

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4739321 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MARTIN KINYUA	05/29/2014
ERIC SOENEN	05/29/2014

#### **RECEIVING PARTY DATA**

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.
Street Address:	NO. 8, LI-HSIN RD. VI, HSINCHU SCIENCE PARK
City:	HSINCHU
State/Country:	TAIWAN
Postal Code:	300

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

Property Type	Number
Application Number:	15845218

#### **CORRESPONDENCE DATA**

**Fax Number:** (703)518-5499

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.

Phone: 7036841111
Email: tsmc@ipfirm.com

Correspondent Name: HAUPTMAN HAM, LLP (TSMC)

Address Line 1: 2318 MILL ROAD
Address Line 2: SUITE 1400

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER: T5057-1055UB

NAME OF SUBMITTER: RANDY A. NORANBROCK

SIGNATURE: /Randy A. Noranbrock/

DATE SIGNED: 12/18/2017

**Total Attachments: 1** 

source=EFiledAssgn#page1.tif

PATENT 504692599 REEL: 044422 FRAME: 0161

1014/05/29 13:39:45 046510

Docket No. T5057-1055U TSMC2014-0338

## ASSIGNMENT

In consideration of the premises and other good and valuable consideration in hand paid, the receipt and sufficiency of which is hereby acknowledged, the undersigned,

- 1) Martin KINYUA
- 2) Eric SOENEN

who has made a certain new and useful invention, hereby sells, assigns and transfers unto TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD., having a place of business at No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C.

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

# CLASS-D AMPLIFIER HAVING MIXED SIGNAL FEEDBACK CONTROL

(a)	for which an application for United States Letters Patent was filed on 2014-06-10 United States Patent Application No. 14/300.803; or	and	identified	by
(b)	for which an application for United States Letters Patent was executed on			

and the undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and all United States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or continuations-in-part thereof; and the right to all benefits under the International Convention for the Protection of Industrial Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned

agrees that the a torneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the late indicated aside my signature:

Name: Eric SOENEN

**RECORDED: 12/18/2017** 

05/29/2014

05/28/2014

PATENT REEL: 044422 FRAME: 0162