PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Bharath Upputuri	12/28/2009

RECEIVING PARTY DATA

Name:	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	No. 8, Li-Hsin Rd. 6, Hsinchu Science Park	
City:	Hsinchu	
State/Country: TAIWAN		
Postal Code:	300-77	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12684842

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: T5057-Y024U

NAME OF SUBMITTER: Yoon S. Ham

Total Attachments: 1

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PATENT REEL: 023754 FRAME: 0687

Docket No.: T5057-Y024PRO

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) Bharath UPPUTURI

2)

3)

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 <u>No. 8</u>, <u>Li-Hsin Rd. 6</u>, <u>Hsinchu Science Park</u>, <u>Hsinchu</u>, <u>300-77 Taiwan</u>, 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

SENSE AMPLIFIER SCHEME FOR LOW VOLTAGE SRAM AND REGISTER FILES

(a)	United States Patent Application No.	61/155,801; or
(b)	for which an application for United States L	etters Patent was executed on,
all Uni continu Propert	ited States Letters Patent which may be granted unations-in-part thereof, and the right to all but to the said ASSIGNEE, for its interest as A	he United States Commissioner of Patents and Trademarks to issue any and therefore and any and all extensions, divisions, reissues, continuations, or enefits under the International Convention for the Protection of Industria SSIGNEE, its successors, assigns and legal representatives; the undersigned shall hereafter act on behalf of said ASSIGNEE;
ASSIG applica ASSIG	ation for and obtaining original, divisional, reis iNEE, its successors, assigns and legal representions for patent based thereon, growing out	ransfer a like interest, and to render all necessary assistance in making sucd or extended Letters Patent of the United States, upon request of the said statives, and without further remuneration, in and to any improvements, and of or related to the said invention; and to execute any papers by the said intatives, deemed essential to ASSIGNEE's full protection and title in and to
SIGNE	ED on the date indicated aside my signature:	
1)	Porarath	12/28/09
Name	e: Bharath UPPUTURI	Date:
2)		
Namo	C:	Date:
3)		
Name	n-	Date

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REEL: 023754 FRAME: 0688