10-13-1999



FORM PTO-1595		:	Patent and Trademark Office
TIJ-26959	_ 1011698	336	
To the Assistant Commissioner for Patent	ts. Please record the attached ori	ginal documents or copy thereof.	
1. Name of conveying party(ies): (1) Norito (nmi) Umehara (2) Takahiro (nmi) Imura (3) Yoshikatsu (nmi) Umeda (4) Texas Instruments Japan, I 3. Nature of Conveyance: X Assignment Security Agreement Other	\\ \lambda \big \qqq \\ \lambda \lambda \lambda \qqq \qqq \\ \text{Ltd.} \\ \tag{Ange of Name} \\ \tag{Change of Name} \\ \tag{mura, 09/14/99; Umeda, 09/27/99} \\ \tag{s}.	2. Name and Address of receiving party(ies) Name: TEXAS INSTRUMENTS INCOR Address: P.O. Box 655474, MS 3999 City: Dallas State: TX Zip: 75265 Additional name(s) & address(es) attached?	PORATED
Docket No: TIJ-26959 A. Patent Application No.(s) S.N. 09/366,378		B. Patent No.(s)	
Additional numbers attached?	YesX No	Additional numbers attached? _	YesXNo
Name and address of party to whom corr document should be mailed: Name William B. Kempler Senior Corporate Patent Cou Texas Instruments Incorporat Address: P.O. Box 655474, MS 3999 City: Dallas State TX Zip: 75265	ınsel	6. Number of applications and patents involve	ed:(1)
State (7) Zip. Folde		Amount of fee enclosed or authorized to b	e charged: \$40
		Deposit Account No: 20-0668, Texas Inst (Attach duplicate copy if paying by deposit a	truments Incorporated
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Date		nd correct and any attached copyrish true oppy o	f the original opcument. pler, Heg. No. 28,228
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1 40.00 CH Total	Number of Pages Including Cover	r Sheet, Attachments and Document: 3	

PATENT REEL: 010293 FRAME: 0092

ASSIGNMENT

WHEREAS, TEXAS INSTRUMENTS JAPAN, LTD. (hereinafter TIJ), a Japanese company having its headquarters at 24-1 Nishi-Shinjuku 6-chome, Shiniuku-ku, Tokyo, Japan, under the laws of Japan made application, in its own name, for Letters Patent in Japan in respect of an invention as set forth below;

WHEREAS, Norito Umehara, Takahiro Imura, and Yoshikatsu Umeda (hereinafter INVENTOR) are the inventors of the said invention;

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, Dallas, Texas 75251, is desirous of acquiring our entire undivided right, title and interest in and to the said invention outside of Japan, and in and to the U.S. patent application as identified hereinafter and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, by this Assignment, TIJ and INVENTOR sells and assigns to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, their entire undivided right, title and interest in and to the said invention in the U.S.A. and all other countries outside Japan; in and to the U.S. patent application as identified below and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and the right to file applications and obtain patents in its own name or its successors or assigns in any said other country or group of countries, and to claim priority under the terms of the International Convention for the Protection of Industrial Property or any other relevant convention;

TIJ and INVENTOR hereby authorize and request the Commissioner of Patents to issue U.S. patents for said invention, or U.S. patents resulting therefrom, insofar as the interest of TIJ and INVENTOR is concerned to the said TEXAS INSTRUMENTS INCORPORATED, as assignee of their entire undivided right, title and interest.

TIJ and INVENTOR further agree to communicate to TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns and legal representatives, any facts known to TIJ and INVENTOR respecting the said invention, and at the expense of TEXAS INSTRUMENTS INCORPORATED, sign any and all patent applications, assignments, affidavits and other lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, testify in any legal or quasi-legal proceedings and generally do everything possible to aid said TEXAS INSTRUMENTS INCORPORATED, its successors, assigns and nominees or its successors or assigns, to obtain and enforce proper patent protection for said invention in all countries outside of Japan.

> PATENT TIJ-26959 REEL: 010293 FRAME: 0093

Date

RECORDED: 10/08/1999

SEMICONDUCTOR DEVICE

Title of Invention

Norito (nmi) Umehara, Takahiro (nmi) Imura, and Yoshikatsu (nmi) Umeda Inventor

Japanese Application No.: <u>10(1998) - 220056</u> filed: <u>August 04, 1998</u>
U.S. Application Serial No.: 09/366,378 filed: August 03, 1999 IN WITNESS WHEREOF, this Agreement has been executed as set forth below
Signed at <u>Tokyo</u> on <u>September 29, 1999</u> by Texas Instruments Japan, Ltd.
Name Toshiaki Ikoma
Title Representative Director and President
Date $9/9/9$
and by the INVENTOR(S):
(1) Morito (lan hara) Norito (nmi) Umehara
Norito (nmi) Umehara
3-17-7-303 Kurakakiuchi, Ibaraki-shi, Osaka 567-0878, Japan Address
Date Date
(2) Takahiro Imura
Takahiro (nmi) Imura
Grand Palace NS-1-501, 1-21-3, Ninomiya, Tsukuba-shi, Ibaraki 305-0051, Japan Address
Date
(3) Brennida
Yoshikatsu Umeda
26-14, Sekinoeshinmachi, Beppu-shi, Oita 874-0002, JAPAN Address 9/27/99

TIJ-26959

PATENT REEL: 010293 FRAME: 0094