01-14-2002

FORM PTO-1595	U.S. Department of Commerce
TIJ-29147 1015	Patent and Trademark Office
To the Assistant Commissioner for Patents. Please record the attached	
1. Name of conveying party(ies):	P.O. Box 655474, MS 3999
<ul><li>(1) Kenji (nmi) MASUMOTO</li><li>(2) Mutsumi (nmi) MASUMOTO</li><li>(3) Akira (nmi) KARASHIMA</li><li>(4) Texas Instruments Japan, Ltd.</li></ul>	Additional name(s) & address(es) attached Yes _X_ No
3. Nature of Conveyance: X Assignment	JAN - 8 2002
Execution Date: Kenji MASUMOTO, 08/08/2001; Mutsu Texas Instruments Japan, Ltd., 08/13/  4. Application number(s) or patent number(s).  Execution date of the application: Kenji MASUMOTO, 08/08	
Akira KARASHIMA, 08/09 Title: A SEMICONDUCTOR DEVICE AND ITS MANU Docket No: TIJ-29147  A. Patent Application No.(s) S.N. 09/909,340	
Additional numbers attached? YesX_ No	Additional numbers attached?YesXNo
Name and address of party to whom correspondence concerning document should be mailed:      Name: William B. Kempler     Senior Corporate Patent Counsel     Texas Instruments Incorporated     P. O. Box 655474, MS 3999     Dallas, TX 75265	6. Number of applications and patents involved:(1)
2 AAHMED1 00000226 200668 09909340	7. Amount of fee enclosed or authorized to be charged: \$40
40.00 CH	Deposit Account No: 20-0668, Texas Instruments Incorporated     (Attach duplicate copy if paying by deposit account)
DO NO	OT USE THIS SPACE
9. Statement and signature.  To the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief, the foregoing information is to the best of my knowledge and belief.	true and correct and any attached copy is a true copy of the original document.

PATENT REEL: 012445 FRAME: 0723

## **ASSIGNMENT**

WHEREAS, TEXAS INSTRUMENTS JAPAN, LTD. (hereinafter TIJ), a Japanese company having its headquarters at 24-1 Nishi-Shinjuku 6-chome, Shinjuku-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, the or each below named inventor (hereinafter INVENTOR) is the or an inventor of the said invention;

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, having a place of business at 7839 Churchill Way, Mail Station 3999, Dallas, Texas 75251, USA, is desirous of acquiring the entire 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 sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns the entire 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 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 the entire 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 to obtain and enforce proper patent protection for said invention in all countries outside of Japan.

PATENT REEL: 012445 FRAME: 0724

## A SEMICONDUCTOR DEVICE AND ITS MANUFACTURING METHOD

Title of Invention

Japanese Serial No.:

2000-224,975

Filed:

July 26, 2000

U.S. Application Serial No.: 09/909,340

Filed:

July 19, 2001

IN WITNESS WHEREOF, this Agreement has been executed as set forth below;

Signed at Tokyo, Japan on August 13, 2001

by Texas Instruments Japan, Ltd.

Title Representative Director and President

and by the INVENTORS:

Kenji (nmi) MASUMOTO

1969-26 Fujiwara, Hiji-machi, Oita, Japan

Address

17-9 Spa-Land Toyomi, Beppu-shi, Oita, Japan

**Address** 

Akira (nmi) Karashima

2-7-5 Nijigaoka, Oita-shi, Oita, JAPAN

**RECORDED: 01/08/2002** 

Address

Date

**PATENT** 

REEL: 012445 FRAME: 0725