

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.

DIGITAL ENCODER AND DIGITAL-TO-ANALOG CONVERTER USING SAME
Title of Invention

Japanese Serial No.: 2004-194984 Filed: 06/30/2004
U.S. Application Serial No.: 11/170,908 Filed: 06/29/2005

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

Signed at Tokyo, Japan on September 28, 2005

by **Texas Instruments Japan, Ltd.**

Name 
Toshiyuki Yamasaki

Title Representative Director and President

Date 9/28/2005

and by the **INVENTOR:**

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Sep/22/2005
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Sep/22/2005
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