08-18-2000 FORM PTO-1595 of Commerce RECORDATION FORM demark Office TI J-28710 PATENTS C 101436310 To the Assistant Commissioner for Patents. Please record the attached original documents on our 1. Name of conveying party(ies): 2. Name and Address of receiving party(ies): (1) Hiroshi (nmi) TAKAHASHI TEXAS INSTRUMENTS INCORPORATED (2) Yutaka (nmi) TOYONOH P.O. Box 655474, MS 3999 (3) Yasumasa (nmi) IKEZAKI 7-24-00 Dallas, TX 75265 (4) Tohru (nmi) URASAKI Additional name(s) & address(es) attached? ____ Yes X No (5) Akihiro (nmi) TAKAGAMA (6) Texas Instruments Japan, Ltd. 3. Nature of Conveyance: __X__ Assignment ____ Merger Security Agreement Change of Name Execution Date: TAKAHASHI, 5/12/00; TOYONOH, 5/12/00; IKEZAKI, 5/22/00; URASAKI, 5/12/00; TAKAGAMA, 5/23/00; Texas Instruments Japan, Ltd., 5/26/00. 4. Application number(s) or patent number(s). Execution date of the application: TAKAHASHI, 5/12/00; TOYONOH, 5/12/00; IKEZAKI, 5/22/00; URASAKI, 5/12/00; TAKAGAMA, 5/12/00 Title: Ratio Circuit Docket No: TI J-28710 A. Patent Application No.(s) B. Patent No.(s) S.N. 09/532,254 Additional numbers attached? Yes X No Additional numbers attached? Yes X No 6. Number of applications and patents involved: ____(1)____ 5. Name and address of party to whom correspondence concerning document should be mailed: Bret J. Petersen, Reg. No. 37,417 Texas Instruments Incorporated P.O. Box 655474, MS 3999 Dallas, TX 75265 7. Amount of fee enclosed or authorized to be charged: \$40 8. Deposit Account No: 20-0668, Texas Instruments **Incorporated** (Attach duplicate copy if paying by deposit account) DO NOT USE THIS SPACE 08/18/2000 DNGUYEN 00000039 200668 09532254 01 FC:581 40.00 CH

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the

Total Number of Pages Including Cover Sheet, Attachments and Document: 4

9. Statement and signature.

Bret J. Peterson, Reg. No. 37,417
Person Signing Document

original document.

PATENT

REEL: 010997 FRAME: 0622

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.

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: 010997 FRAME: 0623 Title of Invention: RATIO CIRCUIT Japanese Serial No.: 11(1999)-079,329, Filed: March 24, 1999 U.S. Application Serial No.: 09/532,254, Filed: March 22, 2000 IN WITNESS WHEREOF, this Agreement has been executed as set forth below; Signed at Tokyo on May 26, 2000 by Texas Instruments Japan, Ltd. Name K. Chulla for T. Chema
Toshiaki Ikoma Title Representative Director and President Date ______5/26/00 and by the INVENTOR: Hiroshi (nmi) TAKAHASHI 1-10-5 Tsurugamai, Ohi-machi, Iruma-gun, Saitama, 356-0041, JAPAN Address May / 12 /00 Date

Yutaha Tayorol

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May /12 /00
Date

PATENT REEL: 010997 FRAME: 0624

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(5) Akihiro (nmi) TAKEGAMA
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<u>//ax / 23/00</u> Date

RECORDED: 07/24/2000

PATENT REEL: 010997 FRAME: 0625