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| TO: The Commissioner of Patents and Trademarks: Please record the a | tached original document(s) or copy(ies). | C 1 OI 1 | | | | | | |
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| □New | ⊠Assignment | | | | | | | |
| Resubmission (Non-Recordation) | Change of Name | | | | | | | |
| Document ID No. | | | | | | | | |
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| Correction of PTO Error | Merger | N. 1 | | | | | | |
| Reel No. Frame No. | Security Agreement | - V | | | | | | |
| Corrective Document | Other: | 1 | | | | | | |
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| Conveying Party(ies) | f additional names are attached | | | | | | | |
| NAME | EXE | CUTION DATE | | | | | | |
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| 1. Gilbert Leung | October 8, 19 | | | | | | | |
| 2. | October 0, 12 | | | | | | | |
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| 3. | | | | | | | | |
| 4. | | | | | | | | |
| Receiving Party Mark | f additional names are attached | | | | | | | |
| Name: QUALCOMM Incorporated | | | | | | | | |
| A Delaware Corporation | | | | | | | | |
| Address (Street number and name): 6455 Lusk Boulevard | | | | | | | | |
| Address (City, State, Zip Code): San Diego, California, 92 | 121 | | | | | | | |
| Correspondent Name and Address | 121 | | | | | | | |
| | | | | | | | | |
| Name: QUALCOMM Incorporated | Telephone Number: | | | | | | | |
| Attn: Russell B. Miller | Facsimile: | (619) 658-2502 | | | | | | |
| Address: 6455 Lusk Boulevard | | ; | | | | | | |
| Address: San Diego, California 92121 | | ļ | | | | | | |
| Pages (Enter the total number of pages of the attached conveyand | ce document including any attachments) | | | | | | | |
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| Application Number(s) | or Patent Number(s) | | | | | | | |
| If this document is being filed together with a new application | the execution date of the application | ia | | | | | | |
| Patent Application Number(s): | | IS: | | | | | | |
| | Patent Number(s): | | | | | | | |
| 1. 09/379,809 filed on August 23, 1999 | 1. | | | | | | | |
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| Patent Cooperation Treaty (PCT) | | | | | | | | |
| (Enter only if a U.S. Application Number has not been assigned) | | | | | | | | |
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| 2. PCT/ | 4. PCT/ | | | | | | | |
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| The state of the s | | | | | | | | |
| Name: Thomas R. Rouse, Reg. No. 40,793 Signature: | Date: February 22 | 2001 | | | | | | |
| Anomas IV. Mouse, 110g. 110. 70,755 Signature. | Date. February 22 | ., 4001 | | | | | | |
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| Submission Type | | veyance Type | |
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| Conveying Party(ies) | ☐Mark if addi | tional names are atta | iched |
| NAME | | | EXECUTION DATE Month, Day, Year (MMDDYYYY) |
| Gilbert Leung 2. | | | 10/8/99 |
| 3. | | | |
| 4. | | | |
| Receiving Party | ☐ Mark if add | tional names are att | ached |
| Name: QUALCOMM Incorporated | | names are an | |
| A Delaware Corporation | | | |
| Address (Street number and name) | : 5775 Morehouse Drive | | |
| Address (City, State, Zip Code): | San Diego, California, 92121-1 | 714 | |
| Correspondent Name and Address | | | |
| Name: QUALCOMM Incorporate | d | | ne Number: (858) 651-5886 |
| Attn: Jean Lupien Address: 5775 Morehouse Drive | | Facsimi | le: (858) 658-2502 |
| Address: 5775 Morenouse Drive Address: San Diego, California 9212 | 1 1714 | | |
| Pages (Enter the total number of page | | umant including on | v attachments) |
| Total number of pages: 3 | os of the attached conveyance doc | differe frictuding any | y attachments) |
| | Application Number(s) or P | atent Number(s) | 194 119 (194.) |
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| Patent Application Number(s): | P | atent Number(s): | |
| 1. 09/379,809 | 1. | | |
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| Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Num | her has not been assigned) | | |
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| 2. PCT/ | | PCT/ | |
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| | Amount for Properties Listed (| 37 CFR 3.41): \$40 | |
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| Statement and Signature To the best of my knowledge and copy of the original document. Cha | | | ct and any attached copy is a true l herein. |
| D. 11/2/00 | | | |
| Date: 11/3/99 Name: Sean English, Reg. No. 37,31 | O Signatura: | | |
| ivame: <u>Sean English</u> , Reg. No. 37,31 | Signature: | | |
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| MY 14844 OU. | Page 1 of <u>1</u> | | |

PATENT REEL: 011547 FRAME: 0240

ASSIGNMENT

TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to me in hand paid, receipt of which is hereby acknowledged, be it known that I GILBERT LEUNG a citizen of the United States of America having a place of residence 254 Prospect Street, Apt. 3, New Haven, CT 06511; have sold, assigned and transferred and by these presents do sell, assign, transfer and set over unto QUALCOMM Incorporated, a Delaware corporation, having a place of business at 5775 Morehouse Drive, San Diego, California 92121-1714, its successors, legal representatives, or assigns, the whole right, title and interest in and to a certain invention relating to a ADAPTIVE CHANNEL ESTIMATION IN A WIRELESS COMMUNICATION SYSTEM by me devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on August 23, 1999, and assigned Serial No. 09/379,809 and all original and reissue patents granted thereof, and all divisions, and continuations thereof, including the subject matter of any and all claims which may be obtained in every such patent, and all foreign rights to said invention, and covenant that I have full right to do so, and agree that I will communicate to said corporation or its representatives all facts known to me respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, make all rightful oaths and generally do everything possible to aid said corporation, its successors, assigns and nominees, to obtain and enforce proper patent protection for said invention in all countries.

PATENT^{SN1]}
REEL: 011547 FRAME: 0241

The Commissioner of Patents and Trademarks is requested to issue the Letters Patent which may be granted for said invention or any part thereof unto said corporation in keeping with this Assignment.

Done at New Haven Connecticut this 8 day of October, 1999.

GILBERT LEUNG

STATE OF ConnecticuT) ss. New Howen

COUNTY OF New Howen

On Cather 8, 1999 before me, the undersigned, a Notary Public in and for said State, personally appeared GILBERT LEUNG, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged that he executed same.

Notary Public

RECORDED: 02/26/2001

REEL: 011547 FRAME: 0242