	U.S. Department of Commerce
08-23-1	Patent and Trademark Office
00-20-1	
	1 LEAN 19.00 AU 19.00
1 ABBID I HOW BEING HERE ALBERT ALLE	Attorney Docket No.: PA990417
	Page 1 of 1
TO: The Commissioner of Patents and Trade	
Submission Type	Conveyance Type
New	Assignment
Resubmission (Non-Recordation)	Change of Name
Document ID No.	License
Correction of PTO Error	Merger
Reel No. Frame No.	Security Agreement
Corrective Document Reel No. Frame No. 8-17-99	Other:
	C 111/2 1 4 1 3
	f additional names are attached
NAME	EXECUTION DATE
	Month, Day, Year (MMDDYYYY)
1. Stein A. Lundby	8/10/99
2. Leonid Razoumov	8/10/99
3.	
4.	
Receiving Party Mark	if 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	2121
Correspondent Name and Address	
Name: QUALCOMM Incorporated	Telephone Number: (619) 658-4833
Attn: Russell B. Miller	Facsimile: (619) 658-2502
Address: 6455 Lusk Boulevard	
Address: San Diego, California 92121	
Pages (Enter the total number of pages of the attached conveyan	ce document including any attachments)
Total number of pages: 2	
Application Number(s) or Patent Number(s)
Application Number(s If this document is being filed together with a new application) or Patent Number(s) a, the execution date of the application is:
Application Number(s If this document is being filed together with a new application Patent Application Number(s):	or Patent Number(s) the execution date of the application is: Patent Number(s):
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999	or Patent Number(s) the execution date of the application is: Patent Number(s): 1.
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2.	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2.
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3.	or Patent Number(s) the execution date of the application is: Patent Number(s): 1.
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4.	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2.
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3.
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4.
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4.
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involved)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/ blved) isted (37 CFR 3.41): \$40.00
Application Number(s If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties invotal number of properties: Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/ olved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties invotal number of properties: Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number:	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/ blved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties invotal number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge additional fees and for the properties and the properties and the properties and the properties and the properties are additional fees and for fee processing)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/ blved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge additional fees can for fee processing)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/ blved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026 ditional fees: Yes \Begin{array}{c} \text{No} \text{VOE} \text{CE} \text{CE} \text{CE}
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge add Statement and Signature To the best of my knowledge and belief, the foregoing information in the state of t	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. PCT/ 4. PCT/ olved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026 ditional fees: Yes \square No
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge additional fees can for fee processing)	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. PCT/ 4. PCT/ olved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026 ditional fees: Yes \square No
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: □ Enclosed ☑ Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge add Statement and Signature To the best of my knowledge and belief, the foregoing inforcopy of the original document. Charges to deposit account are	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. PCT/ 4. PCT/ blved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026 ditional fees: Yes No rmation is true and correct and any attached copy is a true to authorized, as indicated herein.
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: Enclosed Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge add Statement and Signature To the best of my knowledge and belief, the foregoing information in the state of t	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. 4. 3. PCT/ 4. PCT/ blved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026 ditional fees: Yes \square No rmation is true and correct and any attached copy is a true e authorized, as indicated herein.
Application Number(s) If this document is being filed together with a new application Patent Application Number(s): 1. 09/340,759, filed June 28, 1999 2. 3. 4. Patent Cooperation Treaty (PCT) (Enter only if a U.S. Application Number has not been assigned) 1. PCT/ 2. PCT/ Number of Properties (Enter the total number of properties involuted number of properties: 1 Fee Amount Fee Amount for Properties L Method of Payment: □ Enclosed ☑ Deposit Account (Enter for payment by deposit account or if additional fees can for fee processing) Deposit Account Number: Authorization to charge add Statement and Signature To the best of my knowledge and belief, the foregoing inforcopy of the original document. Charges to deposit account are	or Patent Number(s) n, the execution date of the application is: Patent Number(s): 1. 2. 3. PCT/ 4. PCT/ olved) isted (37 CFR 3.41): \$40.00 be charged to the account. A duplicate of this sheet is enclosed 17-0026 ditional fees: Yes \square No rmation is true and correct and any attached copy is a true e authorized, as indicated herein. But Date: 8/13/99

(TRANSASSIGN.VER1.2-4/5/99)

ASSIGNMENT

TO WHOM IT MAY CONCERN:

For the sum of One Dollar and other valuable consideration to us in hand paid, receipt of which is hereby acknowledged, be it known that we, Stein A. Lundby, a citizen of Switzerland having a place of residence at 1037 Diamond Street, San Diego, California 92109; and **Leonid Razoumov**, a citizen of Russia having a place of residence at 3700 Tenth Avenue, #3N, San Diego, California 92103 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, its successors, legal representatives, or assigns, the whole right, title and interest in and to a certain invention relating to a METHOD AND APPARATUS FOR CONTROLLING TRANSMISSION ENERGY IN A COMMUNICATION SYSTEM EMPLOYING ORTHOGONAL TRANSMIT **DIVERSITY** by us devised and the application for United States Patent therefor filed in the United States Patent and Trademark Office on June 28, 1999, 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 we have full right to do so, and agree that we will communicate to said corporation or its representatives all facts known to us 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.

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

Page 1

[QCPA990417 ASSN]

Done at San Diego, California this 10 day of August, 1999.
Sundby
Stein A. Lundby/ STATE OF CALIFORNIA)
) ss. COUNTY OF SAN DIEGO)
On August 11), 1999 before me, the undersigned, a Notary Public in and
for said State, personally appeared Stein A. Lundby, 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.
KAYLA R. SEIGNIOUS Commission # 1207377 KAYLA R. SEIGNIOUS Notary Public
Notary Public - California San Diego County My Comm. Expires Jan 9, 2003
Done at San Diego, California this 10 day of August, 1999.
Leonid Razoumov
STATE OF CALIFORNIA)
) ss. COUNTY OF SAN DIEGO)
On HUJUST 10, 1999 before me, the undersigned, a Notary Public in and
for said State, personally appeared Leonid Razoumov, 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.
Kayla R Metary Public
KAYLA R. SEGNIOUS Commission # 1207377 Notary Public - California San Diego County My Comm. Expires Jan 9, 2003

Page 2

[QCPA990417 ASSN]