U.S. DEPARTMENT OF COMMERCE Form PTO-1595 U.S. Patent and Trademark Office 102289086 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings ⇒ ⇒ ⇒ To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies) 1. Name of conveying party(ies): **Raytheon Company** Kenneth A. Essenwanger Internal Address: Intellectual Property and Licensing Additional dame(s) of conveying party(ies) attached? 🖵 Yes 🎑 No 3. Nature of conveyance: ☐ Merger Assignment Street Address: __ Security Agreement Change of Name 141 Spring Street Other Zip:**02421-7899** Lexington City: 11/07/02 Execution Date: 4. Application number(s) or patent number(s): Internal Docket No. PD-01W185 If this document is being filed together with a new application, the execution date of the application is:_____ B. Patent No.(s) A. Patent Application No.(s) 10/162,486 Additional numbers attached? Yes No 6. Total number of applications and patents involved: L 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41).....\$_ **Raytheon Company** ☐ Enclosed Leonard A. Alkov Internal Address: Authorized to be charged to deposit account 8. Deposit account number: P.O. Box 902 (E1/E150) Street Address: 50-0616 (Attach duplicate copy of this page if paying by deposit account) El Segundo 90245-0902 State: /20/2**dbe dbyrne - 00000222 300**616 -DO NOT USE THIS SPACE 01 FC:00219. Statement and signature. 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 original document. 11/08/2002 Leonard A. Alkov, 30,021 Date Signature Name of Person Signing

Total number of pages including cover sheet, attachments, and documents:

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

ASSIGNMENT

WHEREAS, I, as below named joint inventor of the city and state as stated below next to my name, have invented "Digital – Phase to Digital Amplitude Translator With First Bit Off Priority Coded Output for Input to Unit Weighted Digital to Analog Converter" for which application for Letters Patent of the United States has been executed by me on this day; and

WHEREAS, RAYTHEON COMPANY, a Delaware Corporation, having its principal place of business in Lexington, Massachusetts, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, I do hereby sell, assign and transfer to RAYTHEON COMPANY, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations, continuations-in-part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said RAYTHEON COMPANY, its successors, assigns or other legal representatives; convenient that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to RAYTHEON COMPANY, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by RAYTHEON COMPANY, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said Letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of RAYTHEON COMPANY, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in RAYTHEON COMPANY, its successors, assigns or other legal representatives.

> PATENT REEL: 013497 FRAME: 0166

IN WITNESS WHEREOF, we have executed this instrument.

RECORDED: 11/08/2002

Full Name of Inventor	Inventor Signature	Date Signed
Kenneth A. Essenwanger	Last a. Toy	11/2/02
Residence (City and State)		Invention Agreement Date
19536 East Empty Saddle, Walnut, California 91789		n/a
STATE OF California) SS:	
COUNTY OF Los Angeles)	
		Notary Public in and for said State,
personally appeared KE	UNETH A. E.SSENWANG	ER
personally known to me or proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/ase subscribed to the within instrument and acknowledged to me that he/s/le/they executed the same in his/hgs/these authorized capacity(ies), and that by his/hgs/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.		
WITNESS my hand and official seal.	Notary Public Claure	Panous
ELAINE PANOUSIS Commission # 1296202 Notary Public - Californi Los Appeles County	7	

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