01-10-2002

FOR	M PTO-1595		U.S. Department of Commerce				
Docket Number: TI-33162 101939965 Patent and Trademark Office							
To th	e Ass't Commissioner for Patents. Please record the attached	ongmai docu y there	of. Q				
Tod [Alan (onal names(s) attached?YesxNo	Name and Address of recei Name: Texas Instrument Address: 7839 Churchill W City: Dallas, Texas 752 Country: United States of Address.	s Incorporated				
			es) attached? Yes _X_No				
	Assignment Merger Security Agreement Change of Name Other October 22, 2001						
4. Application number(s) or patent number(s). _X_ This document is being filed together with a new application. Execution date of the application: October 22, 2001 Title: USING QUADRANT SHIFTING TO FACILITATE BINARY ARITHMETIC WITH TWO'S COMPLEMENT OPERANDS							
	Patent Application No.(s) S.N.	B. Patent No.(s)	ashada Van V Na				
5. Na do Ro Te P.(Da	Additional number attached? Yes X No ame and address of party to whom correspondence concerning cument should be mailed: onald O. Neerings xas Instruments Incorporated D. Box 655474, M/S 3999 Illas, TX 75265 2-917-5299	6. Number of applications and p	patents involved:(1)				
		Amount of fee enclosed or a B. Deposit Account No: 20-066					
	DO NOT USE THIS SPACE						
To	9. 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. Scott B. Stahl, Reg. No. 33,795						
	Total Number of Pages Including Cove	r Sheet, Attachments and Docume	ent: <u>2</u>				

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PATENT

REEL: 012424 FRAME: 0816

Docket No.: TJ-33162

ASSIGNMENT

WHEREAS, I, the undersigned inventor (or one of the undersigned joint inventors), of residence as listed, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, TEXAS INSTRUMENTS INCORPORATED, a corporation organized and existing under the laws of the State of Delaware, with its principal office at 7839 Churchill Way, M.S. 3999, Dallas, TX 75251, is desirous of acquiring my entire right, title and interest in and to the said invention, and to the said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, I hereby sell and assign to the said TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my entire right, title and interest in and to the said invention and in to the said application and all patents which may be granted therefor, and all divisions, reissues, substitutions, continuations, and extensions thereof; and I hereby authorize and request the Commissioner of Patents and Trademarks to issue all patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the said TEXAS INSTRUMENTS INCORPORATED as assignee of my entire right, title and interest.

I also hereby sell and assign to TEXAS INSTRUMENTS INCORPORATED, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including the right to file applications and obtain patents under the terms of the International Convention for the Protection of Industrial Property, and of the European Patent Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to said TEXAS INSTRUMENTS INCORPORATED or to its successors, assigns, and legal representatives, any facts known to me respecting said invention, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, 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.

IN WITNESS WHEREOF, I hereunto set hand and seal this day and year;

TITLE OF	TITLE USING QUADRANT SHIFTING TO FACILITATE BINARY ARITHMETIC WITH TWO'S COMPLEMENT OPERANDS		
INVENTION			
SIGNATURE	(1)		
OF	10.01/11	[(1) (-th-)	
INVENTOR	& Tod David Voly	KING CENTRE	
AND NAME	Tod David Wolf	Alan Gatherer	
DATE	x 10/22/2001	10/22/01	
BEGIDENIGE	8 /0/1	~ 10/0 / 1	
RESIDENCE		'	
(City, County, State)	Richardson, Dallas, Texas	Richardson, Collin, Texas	
DATE		, ,	
APPLICATION	10/22/2001	(10/22/03	
EXECUTED	8 10/2 / 200	8 10/240)	

After recording return Assignment to:

RECORDED: 10/26/2001

Ronald O. Neerings Texas Instruments Incorporated P. O. Box 655474, M/S 3999 Dallas, TX 75265

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PATENT REEL: 012424 FRAME: 0817