

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT3877307

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
NICHOLAS P. SANDS	02/09/2011
KEVIN D. FISHER	02/08/2011
RECEIVING PARTY DATA	
Name:	IKANOS COMMUNICATIONS, INC.
Street Address:	47699 FREMONT BOULEVARD
City:	FREMONT
State/Country:	CALIFORNIA
Postal Code:	94538
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14242335
CORRESPONDENCE DATA	
Fax Number:	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Email:	btwalker@qualcomm.com
Correspondent Name:	QUALCOMM INCORPORATED
Address Line 1:	5775 MOREHOUSE DRIVE
Address Line 4:	SAN DIEGO, CALIFORNIA 92121
NAME OF SUBMITTER:	BRETT T. WALKER
SIGNATURE:	/Brett T. Walker/
DATE SIGNED:	05/17/2016
Total Attachments: 2	
source=Ikanos Assignment#page2.tif	
source=Ikanos Assignment#page3.tif	

ASSIGNMENT OF PATENT APPLICATION

Whereas I, an undersigned inventor, have invented certain new and useful improvements as set forth in the patent application entitled:

REDUCED MEMORY VECTORED DSL

(Atty. Docket No. 2202-p02 US), filed December 30, 2010, bearing U.S. Application No. 13/002,213.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, an undersigned inventor, hereby:

- 1) Sell, assign and transfer to Ikanos Communications, Inc., a Delaware corporation having a place of business at 47699 Fremont Boulevard, Fremont, California 94538 ("ASSIGNEE"), the entire right, title and interest in any and all improvements and inventions disclosed in, applications based upon, and patents granted upon, the above-referenced application, including foreign applications and patents and the right to claim priority from the above-referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division, continuation, substitute, renewal, re-examination or reissue thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application (including fulfilling at all times any inventor's duty of disclosure), as well as any derivative applications thereof, foreign applications based thereon, and/or enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the ASSIGNEE, its successors, assigns and other legal representative, and shall be binding upon the inventor, as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I have not entered, and will not enter into any assignment, contract or understanding that conflicts with this assignment.
- 6) Authorize and request my attorney/agent and/or ASSIGNEE's attorney to take any appropriate action in order to assist with recordal of this assignment.

Signed on the date indicated beside my signature.

1. Inventor Signature: *N.P. Sands*
Nicholas P. Sands

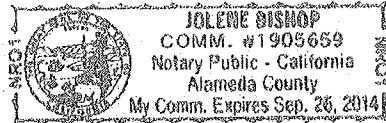
Date: 2/9/2011

State of California)
County of Alameda) ss.

On this 9 day of February, 2011, in the year 2011, before me, Jolene Bishop, Notary Public, personally appeared Nicholas P. Sands, 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 to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature *Jolene Bishop*



My commission expires on 9.26.2014

2. Inventor Signature: *Kevin D. Fisher*
Kevin D. Fisher

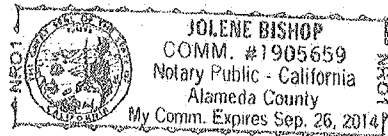
Date: 2/8/11

State of California)
County of Alameda) ss.

On this 8 day of February, in the year 2011, before me, Jolene Bishop, Notary Public personally appeared Kevin D. Fisher, 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 to me that he/she executed the same in his/her authorized capacity(ies), and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Notary Signature *Jolene Bishop*



My commission expires on 9.26.2014