503550729 11/02/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

I IRMISSION TYPE: NEW ASSIGNMENT

EPAS ID: PAT3597356

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
BEHROOZ REZVANI	04/11/2001
SAM HEIDARI	04/11/2001
DALE SMITH	04/11/2001
REUVEN SEGEV	04/11/2001

RECEIVING PARTY DATA

Name:	IKANOS COMMUNICATIONS, INC.
Street Address:	47709 FREMONT BLVD.
City:	FREMONT
State/Country:	CALIFORNIA
Postal Code:	94538

PROPERTY NUMBERS Total: 1

Property Type	Number
Patent Number:	7075998

CORRESPONDENCE DATA

Fax Number:

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.

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:	11/02/2015

Total Attachments: 2

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PATENT 503550729 REEL: 036938 FRAME: 0758

ASSIGNMENT OF PATENT APPLICATION

Whereas I/we the undersigned inventor(s) have invented certain new and useful improvements as set forth in the patent application entitled:

METHOD AND APPARATUS FOR SYMMETRICAL DMT X-DSL COMMUNICATIONS

(Atty. Docket No.: VELCP009C) for which I (we) have executed an application for a United States Letters Patent filing date of February 7, 2001 and USSN 09/779,788.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We the undersigned inventor(s) hereby:

- l) Seli(s), assign(s) and transfer(s) to <u>IKANOS Communications</u>, <u>Inc.</u>, a <u>California</u> corporation having a place of business at <u>47709 Fremont Boulevard</u>, <u>Fremont CA. 94538</u>, (hereinafter referred to as "ASSIGNEE"), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in 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(s), continuation(s), substitutes(s) or reissue(s) 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, as well as any derivative and applications thereof, foreign applications based thereon, and/or the 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(s), as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

 Signed on the date(s) indicated beside my (our) signature(s).

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1. Inventor Signature:	2/5	Date: 4/11/61
Behrooz]	Rezvani	•
State of California)	
County of ALAME \$4) ss.	
On this // day of	April.	in the year 200 <u>/</u> , before me, ooz Rezvani, personally known to
Louis Belisa_ , p	ersonally appeared Behry	ooz Rezvani, personally known to
		e) to be the person whose name is
		ne that he/she executed the same in
his/her authorized capacity(ies), ar	nd that by his/her signatur	re on the instrument the person, or
the entity upon behalf of which the		
WITNESS my hand and of		
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Notary Signature Jours	Baluno ;	(Stouts beuso
Notary Signaturo		Commission # 11 400 FT
/	ई	Commission # 1140357
	7	Notary Public - California
Atty Docket No.:	Page 1 of 2	Alameda County

PATENT REEL: 0116**FATEMI**ME: 0827 REEL: 036938 FRAME: 0759

	- 4/1/2001	
2. Inventor Signature: Sam Heidari	Date: 4/11/2001	
Sain Heidan		
State of California)		
) ss.		
County of April is. On this // day of personally appeared Sam H (or proved to me on the basis of satisfactory evidence) to		
and the second second	in the area 200 / hafarra ma	
On this f day of personally appeared Sam H	In the year 2007, before the,	
(or proved to me on the hasis of satisfactory evidence) to	o he the person whose name is	
subscribed to the within instrument, and acknowledged to me	e that he/she executed the same in	ľ
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	e instrument.	
WITNESS my hand and official seal.		
Notary Signature Ouris Beliano	\$ 50 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	þ
Notary Signature / Johns /	(SEAL)	
3. Inventor Signature: Sale Frank	Date: 4/11/01	•
Dale Smith	3 2 3	ľ
State of California)		ľ
) ss.		L
County of Aloneth		•
On this 11 day of 1807	in the war 200 hafers me	7
On this // day of April, personally appeared Dale Sn	mith personally known to me (or	
proved to me on the basis of satisfactory evidence) to be the	nerson whose name is subscribed	
to the within instrument, and acknowledged to me that he/s		
authorized capacity(ies), and that by his/her signature on the		_
entity upon behalf of which the person acted, executed the ins	strument.	•
WITNESS my hand and official seal.	1 15 E 23	•
Notary Signature Jour Bolin	(CEAL)	•
Notary Signature () Our Bolin	- (SEAL)	ł
4. Inventor Signature: Rower Sym	Date: 4-1(-2.20/)	ľ
Reuven Segev	S P P P P P P P P P P P P P P P P P P P	ľ
State of California)	Committee Acoust	•
County of Almeda ss.		•
County of 724 views		
On this U day of April	in the year 200 / before me	1
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(or proved to me on the basis of satisfactory evidence) t	to be the person whose name is	
subscribed to the within instrument, and acknowledged to me		
his/her authorized capacity(ies), and that by his/her signature		
the entity upon behalf of which the person acted, executed the	ie instrument.	
WITNESS my hand and official seal.		
Notary Signature (Xour Bohn	(SEAL)	
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	LOUIS BELISO	
	Commission # 1140357 Notary Public - California	
	Alameda County	
Atty Docket No.: Page 2 of 2	My Comm, Expires Jun 16, 2001	
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RECORDED: 06/18/2001

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PATENT REEL: 0116 P3AFEANIE: 0828 **REEL: 036938 FRAME: 0760**