502824245 05/27/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT2870841 Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MARIYA KURCHUK	11/14/2012
COLIN WELTIN-WU	07/03/2012
YANNIS TSIVIDIS	11/14/2012

RECEIVING PARTY DATA

Name:	THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK
Street Address:	412 LOW MEMORIAL LIBRARY
Internal Address:	535 WEST 116TH STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10027

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14268602

CORRESPONDENCE DATA

Fax Number: (212)230-8888

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: MEGAN.STEMBRIDGE@WILMERHALE.COM

Correspondent Name: JANE M. LOVE PH.D.

Address Line 1: 7WTC, 250 GREENWICH STREET

Address Line 2: WILMERHALE

Address Line 4: NEW YORK, NEW YORK 10007

ATTORNEY DOCKET NUMBER:	19240.835 US3
NAME OF SUBMITTER:	MEGAN L. STEMBRIDGE
SIGNATURE:	/MEGAN L. STEMBRIDGE/
DATE SIGNED:	05/27/2014

Total Attachments: 5

source=835US3 CU ASG#page1.tif source=835US3 CU ASG#page2.tif

PATENT 502824245 REEL: 032964 FRAME: 0173

source=835US3 CU ASG#page3.tif source=835US3 CU ASG#page4.tif source=835US3 CU ASG#page5.tif

ASSIGNMENT BY INVENTORS

T	HIS AS	SIGNMEN	T, made this	3	day of			_, by
Mariya KUR	CHUK;	Colin WEL	TIN-WU; a	nd Yannis	TSIVIDIS	(hereinaf	ter referred	to as
Assignors), re	esiding a	t 207 Read	ing Circle, E	Bridgewate	er, New Jers	ey 08807	7; 10 The C	rescent,
Berkeley, Cal	lifornia	94708; and	410 Riversi	de Drive,	Apt. 52A, N	lew York	, New York	10025,
respectively;								

WHEREAS, Assignors have invented certain new and useful improvements in SYSTEMS, DEVICES, AND METHODS FOR CONTINUOUS-TIME DIGITAL SIGNAL PROCESSING AND SIGNAL REPRESENTATION, set forth in a Patent application for Letters Patent of the United States, already filed on April 10, 2012 as U.S. Application No. 13/501,197, which is a U.S. National Phase Application of International Patent Application No. PCT/US2010/052316 filed October 12, 2010; and

WHEREAS, THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, having its principal place of business at 412 Low Memorial Library, 535 West 116th Street, New York, New York 10027 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or

terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply

with the rules of the United States Patent and Trademark Office for recordation of this document:

All practitioners at Customer Number 56949

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

11/14/12 Date	Mariya Kurchuk
Witness:	J. S. Cuche.
Date Witness:	Colin Weltin-Wu
Date	<u> </u>
Date Witness:	Yannis Tsividis
Data	

with the rules of the United States Patent and Trademark Office for recordation of this document:

All practitioners at Customer Number 56949

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date	Mariya Kurchuk
Witness:	
Date	
Date US/Wh	Colin Weltin-Wu
Witness:	 .
7/3/20/2 Date	- Jami
Date	Yannis Tsividis
Witness:	
Date	

with the rules of the United States Patent and Trademark Office for recordation of this document:

All practitioners at Customer Number 56949

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date	Mariya Kurchuk
Witness:	
Date	
	•
Date	Colin Weltin-Wu
Witness:	•
Date	
Date 11/14/2012	Yannis Tsividis
Witness: 011/14/2012	len Sonetz
Date	