502005930 07/30/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ALEXANDRE M BRATKOVSKI	07/27/2012
JACOB KHURGIN	07/27/2012
WAYNE VICTOR SORIN	07/27/2012
MICHAEL RENNE TY TAN	07/27/2012

RECEIVING PARTY DATA

Name:	HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.
Street Address:	11445 COMPAQ CENTER DRIVE W.
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77070

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13560450

CORRESPONDENCE DATA

Fax Number: 9707784063 Phone: 970-898-4728 Email: terri.tuma@hp.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US

Mail.

Correspondent Name: HEWLETT-PACKARD COMPANY Intellectual Pro

Address Line 1: 3404 E. Harmony Road

Address Line 2: Mail Stop 35

FORT COLLINS, COLORADO 80528 Address Line 4:

NAME OF SUBMITTER: Christopher P. Harris

Total Attachments: 3

502005930

source=83013742Assign#page1.tif source=83013742Assign#page2.tif source=83013742Assign#page3.tif

> **PATENT** REEL: 028669 FRAME: 0962

HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

Rev 09/11 (Assignment)

PATENT APPLICATION

RECORD ID:	83013742
------------	----------

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, its successors and assigns, the entire right title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

title and interest, including the right of priority, in, to and under an apentitled: SPATIAL MULTIPLEXING FOR OPTICAL TRANSMISSION	plication for Letters Patent of the United State
Filing Date: Applica	tion No.:
and the invention(s) and improvement(s) set forth therein, and any P's), divisionals, and renewals of and substitutes for said application Patent of the United States and of countries foreign thereto which reissues, or reexaminations, or extensions of said Letters Patent. I/we additionally authorize HPDC to file applications in my/o held and enjoyed by HPDC, its successors, assigns, nominees or leg terms for which said Letters Patent respectively may be granted, resame would have been held and enjoyed by me/us had this assignme AND I/we hereby covenant that I/we have full right to converse we have not executed and will not execute any agreement in conflict that I/we will, each time a request is made, and without undue delay, necessary or desirable to perfect the title to said invention(s) or impatent, to HPDC, its successors, assigns, nominees or legal representant, to HPDC, its successors, assigns, nominees or legal representant, to testify in any legal proceedings, to sign all lawful pacontinuations, C-I-P's, reissue and foreign applications, to make all to do everything possible to aid HPDC, its successors, assigns, nomenforce, for its or their own benefit, proper patent protection for said countries provided the expenses which may be incurred by me/us it paid by HPDC; AND I/we hereby authorize and request the Commissioner and any official of any country or countries foreign to the United applications as aforesaid, to issue to HPDC, as assignee of the en Patent for said invention(s) or improvement(s), including any and all be issued and granted on or as a result of the application aforesaid, in I/we further authorize and direct the attorneys of record to application now identified by the Record ID and title set forth above known to them by the United States Patent and Trademark Office.	and all continuations, continuations-in-part (C-I for said Letters Patent, and any and all Letters may be granted thereon or therefore; and any ur name for Letters Patent in any country, to be pal representatives, to the full end of the term of issued or extended, as fully and entirely as the ent, and transfer not been made; by the entire interest herein assigned, and that I herewith, and I/we further covenant and agreed execute and deliver all such papers as may be covered and deliver all such papers as may be covered and deliver all such papers as may be covered to execute and I/we agree to communicate to execute and I/we agree to communicate to so or improvement(s), said application and said appers, to execute all disclaimers and divisionals ignitful oaths and declarations, and generally to linees and legal representatives to obtain and invention(s) or improvement(s) in any and all invention(s) or improvement(s) in any and all lending such cooperation and assistance are of Patents and Trademarks of the United States States whose duty it is to issue patents or the right, title and interest, any and all Letters Patent of the United States which may accordance with the terms of this assignment, insert the serial number and filing date of said
Harathorski.	7/27/20/2 Date Assignment Signed
Inventor's Signature	
Alexandre M Bratkovski	7/27/2-012 Date Application Signed
Inventor's Typed Name	Date Application Signed
*	
	м.
Inventor's Signature	Date Assignment Signed
Jacob Khurgin	
Inventor's Typed Name	Date Application Signed

Page 1 of 3

HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

Rev 09/11 (Assignment)

PATENT APPLICATION

4 E. Harmony Road		
Stop 35	RECORD ID:	83013742
t Collins, Colorado 80528		

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

subsidiaries and affiliates, and do hereby assign and transfer to HPDC, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:		
SPATIAL MULTIPLEXING FOR OPTICAL TRANSMISSION		
Filing Date: Applicat	ion No ·	
and the invention(s) and improvement(s) set forth therein, and any a P's), divisionals, and renewals of and substitutes for said application Patent of the United States and of countries foreign thereto which reissues, or reexaminations, or extensions of said Letters Patent. I/we additionally authorize HPDC to file applications in my/or held and enjoyed by HPDC, its successors, assigns, nominees or leg terms for which said Letters Patent respectively may be granted, reissame would have been held and enjoyed by me/us had this assignme AND I/we hereby covenant that I/we have full right to convey we have not executed and will not execute any agreement in conflict that I/we will, each time a request is made, and without undue delay, necessary or desirable to perfect the title to said invention(s) or imp Patent, to HPDC, its successors, assigns, nominees or legal repret HPDC, or to its nominee, all known facts respecting said invention(s) Letters Patent, to testify in any legal proceedings, to sign all lawful pacontinuations, C-I-P's, reissue and foreign applications, to make all rido everything possible to aid HPDC, its successors, assigns, nominenforce, for its or their own benefit, proper patent protection for said countries provided the expenses which may be incurred by me/us in paid by HPDC; AND I/we hereby authorize and request the Commissioner of and any official of any country or countries foreign to the United applications as aforesaid, to issue to HPDC, as assignee of the ent Patent for said invention(s) or improvement(s), including any and all be issued and granted on or as a result of the application aforesaid, in I/we further authorize and direct the attorneys of record to application now identified by the Record ID and title set forth above known to them by the United States Patent and Trademark Office.	and all continuations, continuations-in-part (C-I- for said Letters Patent, and any and all Letters may be granted thereon or therefore; and any ur name for Letters Patent in any country, to be al representatives, to the full end of the term or ssued or extended, as fully and entirely as the int, and transfer not been made; by the entire interest herein assigned, and that I/ herewith, and I/we further covenant and agree execute and deliver all such papers as may be provement(s), said application and said Letters estatives, and I/we agree to communicate to any or improvement(s), said application and said pers, to execute all disclaimers and divisionals, ghtful oaths and declarations, and generally to inees and legal representatives to obtain and invention(s) or improvement(s) in any and all invention(s) or improvement(s) in any and all reductions and Trademarks of the United States States whose duty it is to issue patents on tire right, title and interest, any and all Letters Letters Patent of the United States which may accordance with the terms of this assignment. insert the serial number and filing date of said	
Inventor's Signature	Date Assignment Signed	
Alexandre M Bratkovski		
Inventor's Typed Name	Date Application Signed	
most standard Mary		
Inventor's Signature	Date Assignment Signed	
Jacob Khurgin Inventor's Typed Name	July 27'12	
arramar a rypea realize	Date Application Signed	

Page 2 of 3

HEWLETT-PACKARD COMPANY Intellectual Property Administrator		PATENT APPLICATION
3404 E. Harmony Road Mail Stop 35	RECORD ID:	83013742
Fort Collins, Colorado 80528		
ASSIGNMENT OF PATI	ENT APPLICATION (cont)
11/40	I want to be a second of the s	To the same
Inventor's Signature		14 L. Juni
investor o organização	Date Assignmen	It \$igned
Wayne Victor Sorin	1197	102
Inventor's Typed Name	Date Application	Signed
1 0 00 - 7	· ·	<i>f</i> :
Julial Censela Ca		/12
Inventor's Signature	Date Assignmer	d Signed
Michael Renne Ty Tan	7/27	112
Inventor's Typed Name	Date Application	Signed
	**	
·		
Inventor's Signature	Date Assignmen	t Signed
	The second of th	em e me program
Inventor's Typed Name	Date Application	Saned
	The state of the s	of the state of th
		•
Inventor's Signature	Date Assignmen	t-Staned
		erigita sagarances
Inventor's Typed Name	Date Application	
The Company of Manager (Company)	pete Application	oilinea
	THE PROPERTY OF THE PROPERTY O	
Inventor's Signature	Date Assignmen	l Signed
		1
Inventor's Typed Name	Date Application	Signed
Inventor's Signature	Date Assignment	Signed
Inventor's Typed Name	Date Application	Signed
And the second of the second o	dendinative skilled in the property of the second	The state of the s

Page 3 of 3

Rev 09/11 (Assignment)