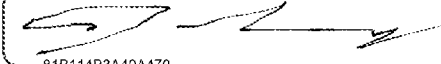


PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT5528382

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
DEVIN BRINKLEY	01/22/2019
BRUCE MOISION	01/23/2019
PAUL CSONKA	01/17/2019
BARIS IBRAHIM ERKMEN	01/24/2019
RECEIVING PARTY DATA	
Name:	X DEVELOPMENT LLC
Street Address:	1600 AMPHITHEATRE PARKWAY
City:	MOUNTAIN VIEW
State/Country:	CALIFORNIA
Postal Code:	94043
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16415028
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:	pto@bciplaw.com
Correspondent Name:	BOTOS CHURCHILL IP LAW LLP
Address Line 1:	430 MOUNTAIN AVENUE
Address Line 2:	SUITE 401
Address Line 4:	NEW PROVIDENCE, NEW JERSEY 07974
ATTORNEY DOCKET NUMBER:	ATOZX 3.0F-2049 [9015]
NAME OF SUBMITTER:	AVA MARIE FELA
SIGNATURE:	/Ava Marie Fela/
DATE SIGNED:	05/17/2019
Total Attachments: 4	
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source=Assignment#page2.tif	
source=Assignment#page3.tif	

ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional) ATOZX 3.8F-2049
<p>WHEREAS, I, <u>Devin Brinkley of Redwood City, California</u>, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "Adaptive Rate Modem" (hereafter "Patent Application"),</p> <p><input checked="" type="checkbox"/> WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Trademark Office on <u>January 16, 2019</u>, Application Number <u>62/793,108</u>, and</p> <p><input type="checkbox"/> WHEREAS (if the left box is checked), the Patent Application names the following inventors: (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. _____, filed on _____] the application number and filing date of the application when known), and</p> <p>WHEREAS, <u>X Development LLC</u>, incorporated or otherwise formed in <u>Delaware</u> and having a place of business at <u>1600 Amphitheatre Parkway, Mountain View, CA 94043</u> (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;</p> <p>NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, including the right to sue for and collect past damages, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any non-provisional, divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the purpose of the offending provision.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="width: 45%;"> <p style="text-align: center;">1/22/2019</p> <hr style="width: 80%; margin: 0 auto;"/> <p style="text-align: center;">(Date)</p> </div> <div style="width: 45%; text-align: center;"> <p>DocuSigned by:</p>  <p>81B114B3A49A470...</p> <hr style="width: 80%; margin: 0 auto;"/> <p>(Signature)</p> </div> </div>	

ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional) ATOZX 3.8F-2049
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WHEREAS, I, Bruce Moision of Palo Alto, California, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "Adaptive Rate Modem" (hereafter "Patent Application"),

☒ WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Trademark Office on January 16, 2019, Application Number 62/793,108, and

☐ WHEREAS (if the left box is checked), the Patent Application names the following inventors:
(and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. _____, filed on _____] the application number and filing date of the application when known), and

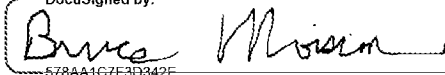
WHEREAS, X Development LLC, incorporated or otherwise formed in Delaware and having a place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043 (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;

NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, including the right to sue for and collect past damages, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any non-provisional, divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the purpose of the offending provision.

1/23/2019

(Date)

DocuSigned by:



578AA1G7F3D342E...

(Signature)

ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional) ATOZX 3.8F-2049
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WHEREAS, I, Paul Csonka of Redwood City, California, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "Adaptive Rate Modem" (hereafter "Patent Application"),

☒ WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Trademark Office on January 16, 2019, Application Number 62/793,108, and

☐ WHEREAS (if the left box is checked), the Patent Application names the following inventors:
(and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. _____, filed on _____] the application number and filing date of the application when known), and

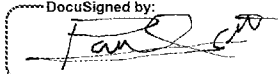
WHEREAS, X Development LLC, incorporated or otherwise formed in Delaware and having a place of business at 1600 Amphitheatre Parkway, Mountain View, CA 94043 (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;

NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, including the right to sue for and collect past damages, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any non-provisional, divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the purpose of the offending provision.

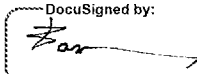
1/17/2019

(Date)

DocuSigned by:



A62FC50338A3446...
(Signature)

ASSIGNMENT OF PATENT APPLICATION	Docket Number (Optional) ATOZX 3.8F-2049
<p>WHEREAS, I, <u>Baris Ibrahim Erkmn of Sunnyvale, California</u>, have invented or discovered inventions or discoveries, the subject matter of which is described in the patent application entitled "Adaptive Rate Modem" (hereafter "Patent Application"),</p> <p><input checked="" type="checkbox"/> WHEREAS (if the left box is checked), the Patent Application was filed with the U.S. Patent and Trademark Office on <u>January 16, 2019</u>, Application Number <u>62/793,108</u>, and</p> <p><input type="checkbox"/> WHEREAS (if the left box is checked), the Patent Application names the following inventors: (and whereas I hereby authorize Lerner, David, Littenberg, Krumholz & Mentlik, LLP, to insert in here in brackets [Application No. _____, filed on _____] the application number and filing date of the application when known), and</p> <p>WHEREAS, <u>X Development LLC</u>, incorporated or otherwise formed in <u>Delaware</u> and having a place of business at <u>1600 Amphitheatre Parkway, Mountain View, CA 94043</u> (hereafter, the "assignee") is desirous of acquiring, or has acquired and is desirous of memorializing its acquisition further herein, the entire right, title and interest in same;</p> <p>NOW, THEREFORE, for good and valuable consideration the receipt of which is hereby acknowledged, I agree as follows. I agree to assign, and hereby do assign, to the assignee my entire right, title and interest in and to the Assigned Applications in the United States of America and all other countries, including the right to sue for and collect past damages, where "Assigned Applications" means the Patent Application, including any and all inventions, discoveries and other subject matter described therein, any non-provisional, divisional, continuation, continuation-in-part, substitute, reissue, re-examination or other application claiming priority or benefit to the Patent Application pursuant to any law or treaty, and any patent issuing from the foregoing. I agree to assign, and hereby do assign, to assignee the right to claim such priority or benefit. I have not previously conveyed, nor am I aware of an obligation to convey, my rights in the Assigned Applications to a third party. I hereby authorize the U.S. Patent and Trademark Office, and any other governmental agency in the world, to issue to assignee all patents resulting from the Assigned Applications and to record assignee's ownership thereof. At assignee's reasonable request I agree, without further remuneration, to execute and deliver documents prepared at assignee's expense and to provide other cooperation, such as testimony, as may be reasonably required to evidence or protect assignee's rights in the Assigned Applications. Assignee may assign or transfer all or part of its rights set forth herein in its sole discretion. I agree that the assignee may affix its signature to this document as well as any other indicia of its acceptance of the provisions hereof. If any provision herein is unenforceable, the requirements of the provision shall remain to the full extent permissible by law and the offending portions thereof shall be deemed replaced, to the extent possible, with a provision most closely reflecting the purpose of the offending provision.</p> <div style="display: flex; justify-content: space-between; margin-top: 20px;"> <div style="text-align: center;"> <u>1/24/2019</u> _____ (Date) </div> <div style="text-align: center;"> DocuSigned by:  8128CF0E2148413... _____ (Signature) </div> </div>	