

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4192614

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DAVID CARLSON BRADLEY	06/01/2016
YAO HUANG MORIN	05/16/2016
MASSIMO MASCARO	05/27/2016
JANIS I. INTOY	06/08/2016
SEAN MICHAEL O'CONNOR	05/27/2016
ELLISHA NATALIE MARONGELLI	06/09/2016
ROBERT NICHOLAS HILTON	05/27/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	KNUEDGE INCORPORATED
<b>Street Address:</b>	10350 SCIENCE CENTER DRIVE
<b>Internal Address:</b>	SUITE 140
<b>City:</b>	SAN DIEGO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	92121
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14969029
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(301)762-4056
<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>	
<b>Phone:</b>	301-424-3640
<b>Email:</b>	epatent@usiplaw.com
<b>Correspondent Name:</b>	EDELL, SHAPIRO & FINNAN, LLC
<b>Address Line 1:</b>	9801 WASHINGTONIAN BLVD.
<b>Address Line 2:</b>	SUITE 750
<b>Address Line 4:</b>	GAITHERSBURG, MARYLAND 20878
<b>ATTORNEY DOCKET NUMBER:</b>	0565.0043C
<b>NAME OF SUBMITTER:</b>	XIAOMIN HUANG
<b>SIGNATURE:</b>	/Xiaomin Huang/

PATENT

<b>DATE SIGNED:</b>	12/20/2016
<b>Total Attachments: 6</b> source=AssignmentToRecord#page1.tif source=AssignmentToRecord#page2.tif source=AssignmentToRecord#page3.tif source=AssignmentToRecord#page4.tif source=AssignmentToRecord#page5.tif source=AssignmentToRecord#page6.tif	

**ASSIGNMENT**  
**(Joint)**

**David Carlson Bradley**, at the time of the Invention, residing in San Diego, California; **Yao Huang Morin**, at the time of the Invention, residing in San Diego, California; **Massimo Mascaro**, at the time of the Invention, residing in San Diego, California; **Janis L. Intoy**, at the time of the Invention, residing in San Diego, California; **Sean Michael O'Connor**, at the time of the Invention, residing in San Diego, California; **Ellisha Natalie Marongelli**, at the time of the Invention, residing in San Diego, California; and **Robert Nicholas Hilton**, at the time of the Invention, residing in San Diego, California (each referred to as "Assignor") have invented an invention(s) (the "Invention(s)") set forth in an application for patent of the United States, entitled **DETERMINING FEATURES OF HARMONIC SIGNALS** and which is a:

- (1) ☐ provisional application
- (a) ☐ to be filed herewith; or
- (b) ☐ bearing Application No. \_\_\_\_\_; and filed on \_\_\_\_\_; and
- (2) ☒ non-provisional application
- (a) ☐ to be filed herewith; or
- (b) ☒ bearing Application No. 14/969,029 and filed on December 15, 2015.

**WHEREAS**, KnuEdge Incorporated, a corporation duly organized under and pursuant to the laws of Delaware, and having its principal place of business at 10350 Science Center Drive, Suite 140, San Diego, CA 92121 (the "Assignee"), is desirous of acquiring the entire right, title, and interest in: the Invention(s); the application for patent identified in paragraph (1) or (2); the right to file applications for patent of the United States or other countries on the Invention(s); any application(s) for patent of the United States or other countries claiming priority to these application(s); any provisional or other right to recover damages, including royalties, for prior infringements of these applications; and any patent(s) of the United States or other countries that may be granted therefor or thereon.

**NOW, THEREFORE**, for good and sufficient consideration, the receipt of which is hereby acknowledged, and to the extent that the Assignor has not done so already via a prior agreement with the Assignee, or if the Assignor has already done so via a prior agreement with the Assignee then in confirmation of any obligation to do so in said prior agreement, the Assignor has sold, assigned, transferred, and set over, and by these presents does sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns, the Assignor's entire right, title, and interest in:

- (a) the Invention(s);
- (b) the application for patent identified in paragraph (1) or (2);
- (c) the right to file applications for patent of the United States or other countries on the Invention(s), including all rights under the Paris Convention for the Protection of Industrial Property and under the Patent Cooperation Treaty;
- (d) any application(s) for patent of the United States or other countries claiming the Invention(s);
- (e) any application(s) for patent of the United States or other countries claiming priority to the application for patent identified in paragraph (1) or (2) or any application(s) for patent claiming the Invention(s), including any division(s), continuation(s), and continuation(s)-in-part; and
- (f) any provisional or other right to recover damages, including royalties, for prior infringements of any application for patent identified in the proceeding paragraphs (b)-(e); and

(g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) – (e), including any reissue(s) and extension(s) of said patent(s).

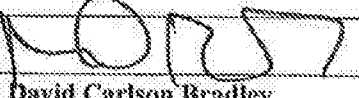



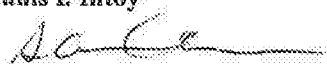
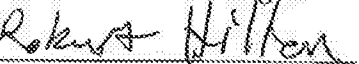
The above-granted rights, titles, and interests are to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

The Assignor hereby represents to the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, or if applicable, at such time said prior agreement was executed, the Assignor is a lawful owner of an undivided interest in the entire right, title, and interest in and to the Invention(s), that the Invention(s) are unencumbered, except, if applicable, by obligation to assign in accordance with said prior agreement, and that the Assignor has good and full right and lawful authority to sell and convey the same in the manner set forth herein.

The Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives, and assigns, that the Assignor will sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done in connection with any and all proceedings for the procurement, maintenance, enforcement and defense of the Invention(s), said applications, and said patents, including interference proceedings, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns.

The Assignor hereby authorizes and requests the attorneys of Edell, Shapiro & Finnian, LLC to insert in the spaces provided above the filing date, the application number, and the attorney docket number of the application identified in paragraph (1) or (2) when known.

The Assignor hereby requests the Commissioner of Patents to issue said patents of the United States to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Inventor Signature: <u></u>	Date: <u>6/1/16</u>
<b>David Carlson Bradley</b>	
Inventor Signature: <u></u>	Date: _____
<b>Yao Huang Morin</b>	
Inventor Signature: <u></u>	Date: _____
<b>Massimo Mascaro</b>	
Inventor Signature: <u></u>	Date: _____
<b>Janis L. Intoy</b>	
Inventor Signature: <u></u>	Date: <u>5-27-16</u>
<b>Sean Michael O'Connor</b>	
Inventor Signature: _____	Date: _____
<b>Ellisha Natalie Marongelli</b>	
Inventor Signature: <u></u>	Date: <u>5-27-2016</u>
<b>Robert Nicholas Hilton</b>	

(g) any patent(s) of the United States or other countries that may be granted for or on any application for patent identified in the preceding paragraphs (b) – (e), including any reissue(s) and extension(s) of said patent(s).

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Inventor Signature: _____ David Carlson Bradley	Date: _____
Inventor Signature: _____ Yao Huang Morin	Date: May 16, 2014
Inventor Signature: _____ Massimo Mascaro	Date: _____
Inventor Signature: _____ Janis I. Intoy	Date: _____
Inventor Signature: _____ Sean Michael O'Connor	Date: _____
Inventor Signature: _____ Ellisha Natalie Marongelli	Date: _____
Inventor Signature: _____ Robert Nicholas Hilton	Date: _____

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Inventor Signature: _____ David Carlson Bradley	Date: _____
Inventor Signature: _____ Yao Huang Morin	Date: _____
Inventor Signature: _____ Massimo Mascaro	Date: 5/22/2016
Inventor Signature: _____ Janis I. Intoy	Date: _____
Inventor Signature: _____ Sean Michael O'Connor	Date: _____
Inventor Signature: _____ Ellisha Natalie Marongelli	Date: _____
Inventor Signature: _____ Robert Nicholas Hilton	Date: _____

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Inventor Signature: _____ David Carlson Bradley	Date: _____
Inventor Signature: _____ Yao Huang Morin	Date: _____
Inventor Signature: _____ Massimo Mascaro	Date: _____
Inventor Signature: _____ <i>Janis I. Intoy</i> Janis I. Intoy	Date: <i>June 8, 2016</i>
Inventor Signature: _____ Sean Michael O'Connor	Date: _____
Inventor Signature: _____ Elisha Natalie Marongelli	Date: _____
Inventor Signature: _____ Robert Nicholas Hilton	Date: _____

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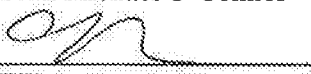
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Inventor Signature: _____ <b>Yao Huang Morin</b>	Date: _____
Inventor Signature: _____ <b>Massimo Mascaro</b>	Date: _____
Inventor Signature: _____ <b>Janis L. Intoy</b>	Date: _____
Inventor Signature: _____ <b>Sean Michael O'Connor</b>	Date: _____
Inventor Signature: _____  <b>Elisha Natalie Marongelli</b>	Date: <u>6/9/16</u>
Inventor Signature: _____ <b>Robert Nicholas Hilton</b>	Date: _____