

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | | | |
|---|---------------------------------------|---------------------------------------|---------------------|-------------------------|-----------------|------------|----------------|---------------|--------------|-------|--|
| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | |
| <table border="1"><thead><tr><th>Name</th><th>Execution Date</th></tr></thead><tbody><tr><td>Matthew Straayer</td><td>09/12/2007</td></tr><tr><td>Michael Perrott</td><td>09/12/2007</td></tr></tbody></table> | Name | Execution Date | Matthew Straayer | 09/12/2007 | Michael Perrott | 09/12/2007 | | | | | |
| Name | Execution Date | | | | | | | | | | |
| Matthew Straayer | 09/12/2007 | | | | | | | | | | |
| Michael Perrott | 09/12/2007 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"><tr><td>Name:</td><td>Massachusetts Institute of Technology</td></tr><tr><td>Street Address:</td><td>77 Massachusetts Avenue</td></tr><tr><td>City:</td><td>Cambridge</td></tr><tr><td>State/Country:</td><td>MASSACHUSETTS</td></tr><tr><td>Postal Code:</td><td>02139</td></tr></table> | Name: | Massachusetts Institute of Technology | Street Address: | 77 Massachusetts Avenue | City: | Cambridge | State/Country: | MASSACHUSETTS | Postal Code: | 02139 | |
| Name: | Massachusetts Institute of Technology | | | | | | | | | | |
| Street Address: | 77 Massachusetts Avenue | | | | | | | | | | |
| City: | Cambridge | | | | | | | | | | |
| State/Country: | MASSACHUSETTS | | | | | | | | | | |
| Postal Code: | 02139 | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | |
| <table border="1"><thead><tr><th>Property Type</th><th>Number</th></tr></thead><tbody><tr><td>Application Number:</td><td>11854615</td></tr></tbody></table> | Property Type | Number | Application Number: | 11854615 | | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 11854615 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| Fax Number: (508)303-0005 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i> | | | | | | | | | | | |
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| ATTORNEY DOCKET NUMBER: | MIT-027 (12136) | | | | | | | | | | |
| NAME OF SUBMITTER: | William G. Guerin | | | | | | | | | | |
| Total Attachments: 2 source=MIT-027_12136_Executed_Assignment#page1.tif source=MIT-027_12136_Executed_Assignment#page2.tif | | | | | | | | | | | |

CH 11854615 \$40.00

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PATENT
REEL: 019851 FRAME: 0755

ASSIGNMENT

WHEREAS, we, **Matthew Straayer** and **Michael Perrott**, have invented one or more improvements in:

**GATED RING OSCILLATOR FOR A TIME-TO-DIGITAL CONVERTER WITH
SHAPED QUANTIZATION NOISE**

described in an application (or provisional application) for Letters Patent of the United States:

☐ identified by Attorney Docket No. _____, and/or executed by us of even date herewith and about to be filed in the United States Patent Office;

☒ identified by Serial No. 11/854,615 filed in the United States Patent Office on September 13, 2007.

WHEREAS, **Massachusetts Institute of Technology** (hereinafter "ASSIGNEE"), a corporation organized and existing under the laws of the **Commonwealth of Massachusetts**, and having a usual place of business at **77 Massachusetts Avenue, Cambridge, MA 02139** desires to acquire an interest therein, in accordance with agreements duly entered into with us;

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, we have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, our entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the inventions described in said application, together with our entire right, title and interest in and to said application and such Letters Patent as may issue thereon or claim priority under international convention, including but not limited to continuations, divisionals, reissues, and reexaminations of said application or such Letters Patent; said inventions, applications and Letters Patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held by us had this assignment and sale not been made; we hereby convey all of our rights arising under or pursuant to any and all international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for Letters Patent. We hereby acknowledge that this assignment, being of our entire right, title and interest in and to said inventions, carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all Letters Patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all Letters Patent to ASSIGNEE for its own name as assignee of our entire right, title and interest therein.

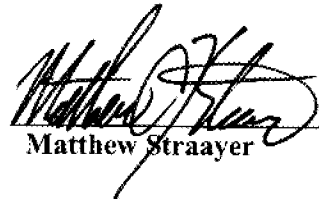
AND, we hereby further agree for ourselves and our executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including: the execution of applications for patents in foreign countries; the execution of substitution, reissue, divisional or continuation applications; and preliminary or other statements or the giving of testimony in any interference or other proceeding in which said inventions or any application or patent directed thereto may be involved; and we further

hereby authorize ASSIGNEE or its attorneys or agents to insert the correct serial number and filing date into this assignment, if none is indicated on that date of our execution of this assignment;

AND, we do hereby authorize and request the Commissioner of Patents of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said ASSIGNEE, its successors, assigns, and legal representatives.

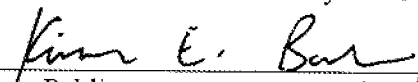
IN TESTIMONY WHEREOF, we have hereunto set our hands and affixed our seals the date set forth below.

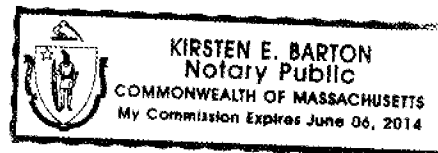
Inventor:


Matthew Straayer

Commonwealth of Massachusetts)
County of Middlesex) ss

Subscribed and sworn to before me, by the above-named Matthew Straayer this 12 day of September, 2007.


Notary Public
My Commission Expires: 6/6/2014

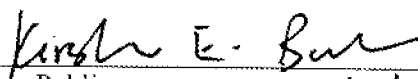


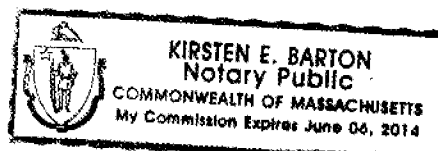
Inventor:


Michael Perrott

Commonwealth of Massachusetts)
County of Middlesex) ss

Subscribed and sworn to before me, by the above-named Michael Perrott this 12 day of September, 2007.


Notary Public
My Commission Expires: 6/6/2014



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