PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Edward A. Preble	01/30/2007
Denis Tsvetkov	01/16/2007
Andrew D. Hanser	01/15/2007
N. Mark Williams	01/12/2007
Xueping Xu	01/18/2007

RECEIVING PARTY DATA

Name:	Kyma Technologies, Inc.	
Street Address:	8829 Midway West Road	
City:	Raleigh	
State/Country:	NORTH CAROLINA	
Postal Code:	27617	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12855087

CORRESPONDENCE DATA

Fax Number: (617)523-1231

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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Email: clawlor@goodwinprocter.com Correspondent Name: **GOODWIN PROCTER LLP** Address Line 1: **EXCHANGE PLACE**

Address Line 2: PATENT ADMINISTRATOR

Address Line 4: BOSTON, MASSACHUSETTS 02109

ATTORNEY DOCKET NUMBER: KYM-006C1

NAME OF SUBMITTER: Matthew T. Currie

> **PATENT** REEL: 024833 FRAME: 0947

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Total Attachments: 10
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CONFIRMATORY ASSIGNMENT

This Confirmatory Assignment ("Assignment") shall be effective as of 1/30/07, 2006 ("Effective Date") by and between:

Edward A. Preble, residing at 8237 Hillside Dr., Raleigh, North Carolina, United States of America ("ASSIGNOR"); and

Kyma Technologies, Inc., a corporation organized under the laws of Delaware, and having a principal place of business at 8829 Midway West Road, Raleigh, North Carolina, United States of America ("ASSIGNEE").

1.0 BACKGROUND

- 1.1 ASSIGNOR, through ASSIGNOR's employment with ASSIGNEE, as either employee or contractor, as the case may be, invented certain new and useful improvements as described and set forth in an application for Letters Patent of the United States with title "INCLUSION-FREE UNIFORM SEMI-INSULATING GROUP III NITRIDE SUBSTRATES AND METHODS FOR MAKING SAME", Serial No. 11 606,633 filed on November 30, 2006. The useful improvements include novel additions to the prior art including but not limited to those improvements specifically set forth in the attached claims. The subject matter of this patent application shall be referred to as the "Invention." ASSIGNOR hereby consents to the insertion by ASSIGNEE of the serial number of the above-identified patent application when that serial number is determined.
- 1.2 ASSIGNEE, as employer of ASSIGNOR, owns all right, title and interest in and to the Invention. ASSIGNOR, as consideration for ASSIGNOR's employment with ASSIGNEE, agreed to execute all the necessary documents in order to perfect and confirm ASSIGNEE's ownership in any inventions created or developed by ASSIGNOR during ASSIGNOR's employment with ASSIGNEE.
- 1.3 For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR is executing this Assignment in order to confirm ASSIGNEE's ownership in and to formally transfer to ASSIGNEE all right, title and interest in and to the Invention and all Letters Patent or related legal rights which may be granted from the Invention in the United States or any foreign country.

2.0 ASSIGNMENT

2.1 ASSIGNOR sells, assigns and transfers to ASSIGNEE, effective as of the Effective Date first set forth above, the full and exclusive and non-revocable right, title and interest in and to the Invention, all patent applications related to the Invention, and all Letters Patent or related legal rights which may be granted from the Invention in the United States, including Letters Patent or related legal rights that may arise from a chain of applications including links such as revised filings of the application(s) referenced above, non-provisional applications claiming priority to any provisional applications listed above (if applicable), divisional applications, continuation applications, results from a reissue process, results from a re-examination process, or from any like process to any of the

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- 2.2 ASSIGNOR also assigns all of ASSIGNOR's right, title and interest in and to the Invention in all foreign countries, including the right to apply for a patent or related legal rights in any foreign country and the right to all current and further applications for patents or related legal rights for the Invention, including the right to claim International Convention priority.
- 2.3 ASSIGNOR grants to ASSIGNEE the right to file applications on any aspect of the Invention in the name of ASSIGNOR, in the name of ASSIGNEE, or otherwise, as ASSIGNEE may deem advisable.
- 2.4 ASSIGNOR further transfers and assigns to ASSIGNEE all causes of action, rights, and remedies arising under any such patent, related legal rights, or application prior to or after the Effective Date of this Agreement.
- 2.5 ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment of the Invention and all the related patents and patent applications filed therefrom.
- 2.6 ASSIGNOR further covenants that, upon ASSIGNEE's request, ASSIGNOR will promptly provide ASSIGNEE with all pertinent facts and documents relating to the Invention, and patents or patent applications as may be known and accessible to ASSIGNOR and ASSIGNOR will testify as to the same in any interference or litigation process related to the Invention or any Letters Patent, patent application, or related legal rights, related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce the Invention and any patents or patent applications relating to the Invention as may be reasonably necessary or desirable.

The terms, covenants and provisions of this Assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR's heirs, legal representatives and assigns.

Edward A. Preble

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CONFIRMATORY ASSIGNMENT

This Confirmatory Assignment ("Assignment") shall be effective as of ______, 2006 ("Effective Date") by and between:

Denis Tsvetkov, residing at 1232 Takeaway Pl., Morrisville, NC 27560, United States of America ("ASSIGNOR"); and

Kyma Technologies, Inc., a corporation organized under the laws of Delaware, and having a principal place of business at 8829 Midway West Road, Raleigh, North Carolina, United States of America ("ASSIGNEE").

1.0 BACKGROUND

- 1.1 ASSIGNOR, through ASSIGNOR's employment with ASSIGNEE, as either employee or contractor, as the case may be, invented certain new and useful improvements as described and set forth in an application for Letters Patent of the United States with title "INCLUSION-FREE UNIFORM SEMI-INSULATING GROUP III NITRIDE SUBSTRATES AND METHODS FOR MAKING SAME", Serial No. [1] [606, 633] filed on November 30, 2006. The useful improvements include novel additions to the prior art including but not limited to those improvements specifically set forth in the attached claims. The subject matter of this patent application shall be referred to as the "Invention." ASSIGNOR hereby consents to the insertion by ASSIGNEE of the serial number of the above-identified patent application when that serial number is determined.
- 1.2 ASSIGNEE, as employer of ASSIGNOR, owns all right, title and interest in and to the Invention. ASSIGNOR, as consideration for ASSIGNOR's employment with ASSIGNEE, agreed to execute all the necessary documents in order to perfect and confirm ASSIGNEE's ownership in any inventions created or developed by ASSIGNOR during ASSIGNOR's employment with ASSIGNEE.
- 1.3 For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR is executing this Assignment in order to confirm ASSIGNEE's ownership in and to formally transfer to ASSIGNEE all right, title and interest in and to the Invention and all Letters Patent or related legal rights which may be granted from the Invention in the United States or any foreign country.

2.0 ASSIGNMENT

2.1 ASSIGNOR sells, assigns and transfers to ASSIGNEE, effective as of the Effective Date first set forth above, the full and exclusive and non-revocable right, title and interest in and to the Invention, all patent applications related to the Invention, and all Letters Patent or related legal rights which may be granted from the Invention in the United States, including Letters Patent or related legal rights that may arise from a chain of applications including links such as revised filings of the application(s) referenced above, non-provisional applications claiming priority to any provisional applications listed above (if applicable), divisional applications, continuation applications, results from a reissue process, results from a re-examination process, or from any like process to any of the

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- 2.2 ASSIGNOR also assigns all of ASSIGNOR's right, title and interest in and to the Invention in all foreign countries, including the right to apply for a patent or related legal rights in any foreign country and the right to all current and further applications for patents or related legal rights for the Invention, including the right to claim International Convention priority.
- 2.3 ASSIGNOR grants to ASSIGNEE the right to file applications on any aspect of the Invention in the name of ASSIGNOR, in the name of ASSIGNEE, or otherwise, as ASSIGNEE may deem advisable.
- 2.4 ASSIGNOR further transfers and assigns to ASSIGNEE all causes of action, rights, and remedies arising under any such patent, related legal rights, or application prior to or after the Effective Date of this Agreement.
- 2.5 ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment of the Invention and all the related patents and patent applications filed therefrom.
- 2.6 ASSIGNOR further covenants that, upon ASSIGNEE's request, ASSIGNOR will promptly provide ASSIGNEE with all pertinent facts and documents relating to the Invention, and patents or patent applications as may be known and accessible to ASSIGNOR and ASSIGNOR will testify as to the same in any interference or litigation process related to the Invention or any Letters Patent, patent application, or related legal rights, related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce the Invention and any patents or patent applications relating to the Invention as may be reasonably necessary or desirable.

The terms, covenants and provisions of this Assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR's heirs, legal representatives and assigns.

01/16/07
Date Denis Tsvetkov

CONFIRMATORY ASSIGNMENT

This Confirmatory Assignment ("Assignment") shall be effective as of , 2006 ("Effective Date") by and between:

Andrew D. Hanser, residing at 1332 Ballyclare Ct., Raleigh, NC 27614, United States of America ("ASSIGNOR"); and

Kyma Technologies, Inc., a corporation organized under the laws of Delaware, and having a principal place of business at 8829 Midway West Road, Raleigh, North Carolina, United States of America ("ASSIGNEE").

1.0 BACKGROUND

- 1.1 ASSIGNOR, through ASSIGNOR's employment with ASSIGNEE, as either employee or contractor, as the case may be, invented certain new and useful improvements as described and set forth in an application for Letters Patent of the United States with title "INCLUSION-FREE UNIFORM SEMI-INSULATING GROUP III NITRIDE SUBSTRATES AND METHODS FOR MAKING SAME", Serial No. 11 606,633 filed on November 30, 2006. The useful improvements include novel additions to the prior art including but not limited to those improvements specifically set forth in the attached claims. The subject matter of this patent application shall be referred to as the "Invention." ASSIGNOR hereby consents to the insertion by ASSIGNEE of the serial number of the above-identified patent application when that serial number is determined.
- 1.2 ASSIGNEE, as employer of ASSIGNOR, owns all right, title and interest in and to the Invention. ASSIGNOR, as consideration for ASSIGNOR's employment with ASSIGNEE, agreed to execute all the necessary documents in order to perfect and confirm ASSIGNEE's ownership in any inventions created or developed by ASSIGNOR during ASSIGNOR's employment with ASSIGNEE.
- 1.3 For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR is executing this Assignment in order to confirm ASSIGNEE's ownership in and to formally transfer to ASSIGNEE all right, title and interest in and to the Invention and all Letters Patent or related legal rights which may be granted from the Invention in the United States or any foreign country.

2.0 ASSIGNMENT

2.1 ASSIGNOR sells, assigns and transfers to ASSIGNEE, effective as of the Effective Date first set forth above, the full and exclusive and non-revocable right, title and interest in and to the Invention, all patent applications related to the Invention, and all Letters Patent or related legal rights which may be granted from the Invention in the United States, including Letters Patent or related legal rights that may arise from a chain of applications including links such as revised filings of the application(s) referenced above, non-provisional applications claiming priority to any provisional applications listed above (if applicable), divisional applications, continuation applications, continuation-in-part applications, results from a reissue process, results from a re-examination process, or from any like process to any of the

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- 2.2 ASSIGNOR also assigns all of ASSIGNOR's right, title and interest in and to the Invention in all foreign countries, including the right to apply for a patent or related legal rights in any foreign country and the right to all current and further applications for patents or related legal rights for the Invention, including the right to claim International Convention priority.
- 2.3 ASSIGNOR grants to ASSIGNEE the right to file applications on any aspect of the Invention in the name of ASSIGNOR, in the name of ASSIGNEE, or otherwise, as ASSIGNEE may deem advisable.
- 2.4 ASSIGNOR further transfers and assigns to ASSIGNEE all causes of action, rights, and remedies arising under any such patent, related legal rights, or application prior to or after the Effective Date of this Agreement.
- 2.5 ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment of the Invention and all the related patents and patent applications filed therefrom.
- 2.6 ASSIGNOR further covenants that, upon ASSIGNEE's request, ASSIGNOR will promptly provide ASSIGNEE with all pertinent facts and documents relating to the Invention, and patents or patent applications as may be known and accessible to ASSIGNOR and ASSIGNOR will testify as to the same in any interference or litigation process related to the Invention or any Letters Patent, patent application, or related legal rights, related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce the Invention and any patents or patent applications relating to the Invention as may be reasonably necessary or desirable.

The terms, covenants and provisions of this Assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR's heirs, legal representatives and assigns.

Date

1-15.2007

Andrew D. Hanser

CONFIRMATORY ASSIGNMENT

This Confirmatory Assignment ("Assignment") shall be effective as of ______, 2006 ("Effective Date") by and between:

N. Mark Williams, residing at 2024 Lovdal Dr., Raleigh, NC 27613,, United States of America ("ASSIGNOR"); and

Kyma Technologies, Inc., a corporation organized under the laws of Delaware, and having a principal place of business at 8829 Midway West Road, Raleigh, North Carolina, United States of America ("ASSIGNEE").

1.0 BACKGROUND

- 1.1 ASSIGNOR, through ASSIGNOR's employment with ASSIGNEE, as either employee or contractor, as the case may be, invented certain new and useful improvements as described and set forth in an application for Letters Patent of the United States with title "INCLUSION-FREE UNIFORM SEMI-INSULATING GROUP III NITRIDE SUBSTRATES AND METHODS FOR MAKING SAME", Serial No. [Mloolo, 633] filed on November 30, 2006. The useful improvements include novel additions to the prior art including but not limited to those improvements specifically set forth in the attached claims. The subject matter of this patent application shall be referred to as the "Invention." ASSIGNOR hereby consents to the insertion by ASSIGNEE of the serial number of the above-identified patent application when that serial number is determined.
- 1.2 ASSIGNEE, as employer of ASSIGNOR, owns all right, title and interest in and to the Invention. ASSIGNOR, as consideration for ASSIGNOR's employment with ASSIGNEE, agreed to execute all the necessary documents in order to perfect and confirm ASSIGNEE's ownership in any inventions created or developed by ASSIGNOR during ASSIGNOR's employment with ASSIGNEE.
- 1.3 For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR is executing this Assignment in order to confirm ASSIGNEE's ownership in and to formally transfer to ASSIGNEE all right, title and interest in and to the Invention and all Letters Patent or related legal rights which may be granted from the Invention in the United States or any foreign country.

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<u>///2/07</u>
Date N. Mar

- 2 -Atty. Docket No.: KI06002USU

Me Mill

CONFIRMATORY ASSIGNMENT

This Confirmatory Assignment ("Assignment") shall be effective as of ______, 2006 ("Effective Date") by and between:

Xueping Xu, residing at 15 Central St., Stamford, CT 06906, United States of America ("ASSIGNOR"); and

Kyma Technologies, Inc., a corporation organized under the laws of Delaware, and having a principal place of business at 8829 Midway West Road, Raleigh, North Carolina, United States of America ("ASSIGNEE").

1.0 BACKGROUND

- 1.1 ASSIGNOR, through ASSIGNOR's employment with ASSIGNEE, as either employee or contractor, as the case may be, invented certain new and useful improvements as described and set forth in an application for Letters Patent of the United States with title "INCLUSION-FREE UNIFORM SEMI-INSULATING GROUP III NITRIDE SUBSTRATES AND METHODS FOR MAKING SAME", Serial No. [1] (600, 633] filed on November 30, 2006. The useful improvements include novel additions to the prior art including but not limited to those improvements specifically set forth in the attached claims. The subject matter of this patent application shall be referred to as the "Invention." ASSIGNOR hereby consents to the insertion by ASSIGNEE of the serial number of the above-identified patent application when that serial number is determined.
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- 1.3 For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR is executing this Assignment in order to confirm ASSIGNEE's ownership in and to formally transfer to ASSIGNEE all right, title and interest in and to the Invention and all Letters Patent or related legal rights which may be granted from the Invention in the United States or any foreign country.

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- 2.2 ASSIGNOR also assigns all of ASSIGNOR's right, title and interest in and to the Invention in all foreign countries, including the right to apply for a patent or related legal rights in any foreign country and the right to all current and further applications for patents or related legal rights for the Invention, including the right to claim International Convention priority.
- 2.3 ASSIGNOR grants to ASSIGNEE the right to file applications on any aspect of the Invention in the name of ASSIGNOR, in the name of ASSIGNEE, or otherwise, as ASSIGNEE may deem advisable.
- 2.4 ASSIGNOR further transfers and assigns to ASSIGNEE all causes of action, rights, and remedies arising under any such patent, related legal rights, or application prior to or after the Effective Date of this Agreement.
- 2.5 ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment of the Invention and all the related patents and patent applications filed therefrom.
- 2.6 ASSIGNOR further covenants that, upon ASSIGNEE's request, ASSIGNOR will promptly provide ASSIGNEE with all pertinent facts and documents relating to the Invention, and patents or patent applications as may be known and accessible to ASSIGNOR and ASSIGNOR will testify as to the same in any interference or litigation process related to the Invention or any Letters Patent, patent application, or related legal rights, related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce the Invention and any patents or patent applications relating to the Invention as may be reasonably necessary or desirable.

The terms, covenants and provisions of this Assignment shall inure to the benefit of ASSIGNEE, its successors, assigns and other legal representatives, and shall be binding upon ASSIGNOR, ASSIGNOR's heirs, legal representatives and assigns.

1/18/2007 Date

RECORDED: 08/13/2010

Xueping Xu

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