502629428 01/10/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2676036

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date | |
|---|----------------|--|
| VIASYSTEMS NORTH AMERICA OPERATIONS, INC. | 12/31/2013 | |

RECEIVING PARTY DATA

| Name: | VIASYSTEMS TECHNOLOGIES CORP., L.L.C. | |
|-------------------|---------------------------------------|--|
| Street Address: | 101 SOUTH HANLEY ROAD | |
| Internal Address: | SUITE 1800 | |
| City: | ST. LOUIS | |
| State/Country: | MISSOURI | |
| Postal Code: | 63105 | |

PROPERTY NUMBERS Total: 16

| Property Type | Number |
|---------------------|----------|
| Patent Number: | 8156645 |
| Patent Number: | 8510941 |
| Patent Number: | 8250751 |
| Application Number: | 13594971 |
| Patent Number: | 8453322 |
| Patent Number: | 7523545 |
| Patent Number: | 7856706 |
| Application Number: | 12938265 |
| Patent Number: | 8567053 |
| Application Number: | 14065047 |
| Application Number: | 61586691 |
| Application Number: | 13482702 |
| Patent Number: | 8020292 |
| Application Number: | 13206414 |
| | DATENT |

" PATENT " 502629428 REEL: 031937 FRAME: 0500

| Application Number: | 13400020 |
|---------------------|----------|
| Application Number: | 13162408 |

CORRESPONDENCE DATA

Fax Number: (618)655-9640
Phone: 618-692-2600
Email: uspt@polsinelli.com

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

Correspondent Name: POLSINELLI PC

Address Line 1: 105 WEST VANDALIA STREET

Address Line 2: SUITE 400

Address Line 4: EDWARDSVILLE, ILLINOIS 62025

| ATTORNEY DOCKET NUMBER: | 062651 | |
|-------------------------|-------------------------------|--|
| NAME OF SUBMITTER: | REBECCA L. ENDSLEY, PARALEGAL | |
| Signature: | /Rebecca L. Endsley/ | |
| Date: | 01/10/2014 | |

Total Attachments: 5

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> PATENT REEL: 031937 FRAME: 0501

UNITED STATES PATENT ASSIGNMENT

- 1. WHEREAS, Viasystems North America Operations, Inc. a California corporation, with offices at 101 South Hanley Road, Suite 1800, St. Louis, Missouri 63105, ("Assignor"), is the owner of the entire right, title, and interest in and to certain letters patent and patent applications throughout the world and the inventions disclosed therein; and
- 2. WHEREAS, Viasystems Technologies Corp., L.L.C., a Delaware limited liability company, with offices at 101 South Hanley Road, Suite 1800, St. Louis, Missouri 63105 ("Assignee"), is desirous of acquiring said right, title and interest of Assignor;
- 3. NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable consideration by Assignee to Assignor in hand paid, receipt of all of which is hereby acknowledged, Assignor has agreed to and does hereby sell, assign and transfer unto Assignee, its successors and assigns, all of Assignor's right, title and interest in and throughout the world, in and to said letters patent and patent application and all reissues thereof and reexamination certificates therefore, and the inventions disclosed therein, including Assignor's full right to sue for and recover all damages recoverable from past infringements of said letters patent; including specifically, without limiting the generality of the foregoing, the worldwide letters patent and patent applications listed in Appendix A; and Assignor has further agreed to and does hereby sell, assign and transfer unto Assignce, its successors and assigns, all of Assignor's right, title and interest in and throughout the world in and to said inventions, any other patent applications (including provisional, non-provisional, divisional, continuing, or reissue applications) based in whole or in part on said worldwide letters patent or patent applications or in whole or in part on said inventions, and any and all letters patent (including continuations and extensions thereof) of any country which have been or may be granted on any of the aforesaid patent applications or on said inventions or any part thereof; including, specifically, without limiting the generality of the foregoing, the worldwide letters patent and patent applications listed in Appendix A.
- 4. TO BE HELD AND ENJOYED BY Assignee, its successors and assigns, to the full ends of the respective terms for which said patents have been or may be granted, as fully and entirely as the same would have been held and enjoyed by Assignor had this sale and assignment not been made.
- 5. AND Assignor hereby authorizes and requests the Patent Offices of the countries wherein said patent applications are filed to issue any and all letters patent which may be granted upon said foreign country patent applications to Assignee, its successors and assigns.
- 6. AND Assignor hereby agrees to execute without further consideration any further lawful documents and any further assurances, and any provisional, non-provisional, divisional, continuing, reissue or other applications for patents of any country, that may be deemed necessary by said Assignee, its successors or assigns fully to secure its interest as aforesaid in and to said inventions or any part thereof, and in and to said several patents or any of them.
- 7. AND Assignor covenants that Assignor has granted no right or license to make, use or sell said inventions to anyone except said Assignee, that prior to the execution of this deed, Assignor's right, title, and interest in said inventions has not been otherwise encumbered, and that Assignor has not executed and will not execute any instrument in conflict herewith.

| ASSIGNOR |
|--|
| Viasystems North America Operations, Inc. |
| |
| By: Daniel J. Weber |
| Vice President & General Counsel |
| |
| Date: |
| |
| ACKNOWLEDGMENT |
| STATE OF Missouri) SS. CITY OF Saint (auis) |
| \sim (/ / \sim) ss. |
| CITY OF Saint COUIS |
| On this 3/ day of December, 2013, before me personally appeared Daniel J. |
| Weber, to me known to be the person described in, and who executed the foregoing instrument. |
| and duly acknowledged to me that she executed the same for the uses and purposes therein set |
| forth. |
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| My Commission expires: 12-76 2011 |
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| RONALD C. HOVIS Notary Public - Notary Seal |
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| St. Louis County My Commission Expires: Dec. 26, 2014 |
| Commission # 10415605 |

| ASSIGNEE |
|--|
| Viasystems Technologies Corp., L.L.C |
| |
| By: Daniel J. Weber |
| Vice President & Genéral Counsel |
| Date: $\frac{\partial /3}{//3}$ |
| |
| ACKNOWLEDGMENT |
| STATE OF Missouri) |
| SS |
| CITY OF Saint Covis |
| On this 3/ day of 100 |
| On this 3/ day of <u>December</u> , 2013, before me personally appeared, Daniel J. |
| Weber, to me known to be the person described in, and who executed the foregoing instrument, and duly acknowledged to me that she executed the same for the uses and purposes therein set |
| forth. |
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| My Commission expires: 17-76 Z014 |
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| RONALD C. HOVIS Notary Public - Notary Seal |
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| St. Louis County My Commission Expires: Dec. 26, 2014 Commission # 10415605 |
| Gommission # 10415605 |

Appendix A

| Polsinelli No. | Country | Title | Application No. | Patent No. |
|-------------------|---------|---|-----------------|---------------|
| 062651- 444267 | US | METHOD OF MANUFACTUrRING A MULTILAYER PRINTED WIRING BOARD WITH COPPER WRAP PLATED HOLE | 12/157,021 | 8,156,645 |
| 062651- 444269 | US | METHODS OF MANUFACTURING A PRINTED WIRING BOARD HAVING COPPER WRAP PLATED HOLE | 13/399,995 | 8,510,941 |
| 062651- 444271 | US | METHOD OF MANUFACTURING A PRINTED CIRCUIT BOARD | 12/070,811 | 8,250,751 |
| 062651- 445960 | US | METHOD OF MANUFACTURING A PRINTED CIRCUIT BOARD | 13/594,971 | |
| 062651- 444330 | US | MANUFACTURING METHODS OF MULTILAYER PRINTED CIRCUIT BOARD HAVING STACKED VIA | 12/539,172 | 8,453,322 |
| 062651- 444247 | US | METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS WITH STACKED MICRO VIAS | 11/706,473 | 7,523,545 |
| 062651- 444261 | US | METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS WITH STACKED MICRO VIAS | 12/381,925 | 7,856,706 |
| 062651- 444262 | US | METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS WITH STACKED MICRO VIAS | 12/938,265 | |
| 062651- 444345 | US | METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS | 13/153,254 | 8,567,053 |
| 062651- 464804 | US | SYSTEMS AND METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS USING BLIND AND INTERNAL MICRO VIAS TO COUPLE SUBASSEMBLIES | 14/065,047 | |
| 062651- 444369 | US | PRINTED CIRCUIT BOARD WITH EMBEDDED HEATER | 61/586,691 | |

PATENT REEL: 031937 FRAME: 0505

Appendix A

| 062651- 445958 | US | PRINTED CIRCUIT BOARD WITH EMBEDDED HEATER | 13/482,702 | |
|-------------------|----|--|------------|-----------|
| 062651- 444328 | US | METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS | 12/772,086 | 8,020,292 |
| 062651- 444304 | US | METHODS OF MANUFACTURING PRINTED CIRCUIT BOARDS USING PARALLEL PROCESSES TO INTERCONNECT WITH SUBASSEMBLIES | 13/206,414 | |
| 062651- 444367 | US | METHOD FOR ANCHORING A CONDUCTIVE CAP ON A FILLED VIA IN A PRINTED CIRCUIT BOARD AND PRINTED CIRCUIT BOARD WITH AN ANCHORED CONDUCTIVE CAP | 13/400,020 | |
| 062651- 444366 | US | SYSTEMS AND METHODS FOR REDUCING OVERHANG ON ELECTROPLATED SURFACES OF PRINTED CIRCUIT BOARD | 13/162,408 | |

RECORDED: 01/10/2014

PATENT REEL: 031937 FRAME: 0506