

PATENT ASSIGNMENT

Electronic Version v1.1
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| 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>Sabine SCHNEIDER-BETZ</td> <td>12/06/2011</td> </tr> <tr> <td>Martin SCHLOTT</td> <td>12/05/2011</td> </tr> </tbody> </table> | | Name | Execution Date | Sabine SCHNEIDER-BETZ | 12/06/2011 | Martin SCHLOTT | 12/05/2011 | | | | |
| Name | Execution Date | | | | | | | | | | |
| Sabine SCHNEIDER-BETZ | 12/06/2011 | | | | | | | | | | |
| Martin SCHLOTT | 12/05/2011 | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>Heraeus Materials Technology GmbH & Co. KG</td> </tr> <tr> <td>Street Address:</td> <td>Heraeusstrasse 12-14</td> </tr> <tr> <td>City:</td> <td>Hanau</td> </tr> <tr> <td>State/Country:</td> <td>GERMANY</td> </tr> <tr> <td>Postal Code:</td> <td>63450</td> </tr> </table> | | Name: | Heraeus Materials Technology GmbH & Co. KG | Street Address: | Heraeusstrasse 12-14 | City: | Hanau | State/Country: | GERMANY | Postal Code: | 63450 |
| Name: | Heraeus Materials Technology GmbH & Co. KG | | | | | | | | | | |
| Street Address: | Heraeusstrasse 12-14 | | | | | | | | | | |
| City: | Hanau | | | | | | | | | | |
| State/Country: | GERMANY | | | | | | | | | | |
| Postal Code: | 63450 | | | | | | | | | | |
| 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>13390388</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13390388 | | | | | | |
| Property Type | Number | | | | | | | | | | |
| Application Number: | 13390388 | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | |
| <p>Fax Number: (215)965-1331 Phone: 215-965-1347 Email: sneumann@panitchlaw.com <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Sheryl Neumann (920-88US) Address Line 1: PANITCH SCHWARZE BELISARIO & NADEL LLP Address Line 2: 2005 Market Street, Suite 2200 Address Line 4: Philadelphia, PENNSYLVANIA 19103-7013</p> | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 200920.0088 | | | | | | | | | | |
| NAME OF SUBMITTER: | Sheryl R. Neumann | | | | | | | | | | |
| Total Attachments: 2 source=00383456#page1.tif source=00383456#page2.tif | | | | | | | | | | | |

CH \$40.00 13390388

**ASSIGNMENT
(PATENT APPLICATION)**

WHEREAS, we, ("ASSIGNORS"):

| <u>Inventor</u> | <u>Citizenship</u> | <u>Address</u> |
|-----------------------|--------------------|---|
| Sabine SCHNEIDER-BETZ | German | Oisterwijkerstr. 51 63303 Dreieich, Germany |
| Martin SCHLOTT | German | Scharfensteiner Str. 33 63075 Offenbach, Germany |

having invented a certain new and useful invention entitled:

THIN FILM TRANSISTOR (TFT) HAVING COPPER ELECTRODES

for which a United States patent application is to be filed or has been filed on February 14, 2012
under U.S. Patent Application No. 13/390,388; and

WHEREAS, ("ASSIGNEE"):

Heraeus Materials Technology GmbH & Co. KG
(A German Corporation)
Heraeusstrasse 12-14
63450 Hanau, Germany

is desirous of acquiring the entire right, title and interest in and to the invention throughout the United States and the world, and all right, title and interest in, to and under any and all Letters Patent of the United States and all countries throughout the world;

FOR GOOD and VALUABLE CONSIDERATION, the full receipt and sufficiency of which are hereby acknowledged, ASSIGNORS, intending to be legally bound, do hereby:

AUTHORIZE said ASSIGNEE, or its representatives to insert above the filing date and application number of the application when these are known;

SELL, ASSIGN, TRANSFER and CONVEY to ASSIGNEE the whole and entire right, title and

interest for the United States and its possessions and territories and all foreign countries in and to the invention which is disclosed in the above-identified patent application, and, in and to any and all patent applications related thereto including, but not limited to, all provisionals, non-provisionals, divisionals, continuations, continuations-in-part, substitutes, reexaminations, reissues and all other applications for patent which have been or shall be filed in the United States and all foreign countries on the invention; all original, reissued and reexamined patents and extensions thereof which have been or shall be issued in the United States and all foreign countries on the invention to the full end of the term or terms for which the patent(s) may be granted, as fully and entirely as the same would have been held by the undersigned ASSIGNOR(S) had this Assignment not been made; and specifically including all rights of priority created by the above patent application under any treaty, convention or law relating thereto;

AUTHORIZE and REQUEST the issuing authority to issue any and all United States and foreign patents granted on the invention to ASSIGNEE;

WARRANT and REPRESENT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by ASSIGNORS, and that the full right to convey the same as herein expressed is possessed by ASSIGNORS;

AGREE and UNDERTAKE, when requested and at the expense of ASSIGNEE, to carry out in good faith the intent and purpose of this Assignment, ASSIGNORS will execute all non-provisionals, divisionals, continuations, continuations-in-part, substitutes, reexaminations, reissues, and all other patent applications on the invention; execute all lawful oaths, declarations, assignments, powers of attorney and other papers; communicate to ASSIGNEE all facts known to ASSIGNORS relating to the invention and the history thereof; and generally do everything possible which ASSIGNEE shall consider desirable for vesting title to the invention in ASSIGNEE, and for securing, maintaining and enforcing proper patent protection for the invention; all without further compensation to ASSIGNORS;

TO BE BINDING on the heirs, assigns, representatives and successors of ASSIGNORS and extending to the successors, assigns, and nominees of ASSIGNEE.

2011/12/06

Date

S. Schneider-Betz

Sabine SCHNEIDER-BETZ

2011/12/05

Date

Martin Schlott

Martin SCHLOTT