09-25-2009

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PATENTS ONLY

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APPLICANT(S)

Ke Zhang et al.

FOR

A LIQUID CRYSTAL DEVICE AND

METHODS THEREOF

SERIAL NO.

12/459,153

FILED

June 26, 2009

ART UNIT

2871

CONFIRMATION NO.

4180

ATTORNEY DOCKET NO.

KNST 2 00066

ASSIGNMENT RECORDATION FORM COVER SHEET

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Please record the attached document.

Name of Conveying Party(ies) 1.

Execution Date(s):

Ke Zhang

September 15, 2009

Philip J. Bos

September 16, 2009

Robert J. Twieg

September 15, 2009

Na Liu

September 15, 2009

09/24/2009 DRYRNE

Name and address of Receiving Party(ies): 2.

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Kent State University East Main and Lincoln Streets Kent, Ohio 44242 USA

> **PATENT** REEL: 023287 FRAME: 0026

| 3. | Nature of conveyance: | | | | |
|----|---|--------------|----------------|--|--|
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| | Security Agreement | | Merger | | |
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| | This document is being filed together with a new application. | | | | |
| | A. Patent Application No.(s) | B. Pa | tent No.(s) | | |
| | <u>12/459,153</u> | | _ | | |
| 5. | Address to whom correspondence concerning document should be mailed: | | | | |
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| | Respectfully submitted, | | | |
| | Fay Sharpe LLP | | | |
| <u>9-21</u> -09 Date | Sue Ellen Phillips, Reg. No. 32,046 The Halle Building, 5th Floor 1228 Euclid Avenue Cleveland, Ohio 44115-1843 216.363.9000 | | | |
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| Express Mail Label No.: | Signature: Signature: | | | |
| • | Signature: Kara L. Krist | | | |
| Date: September 21, 2009 | Name: Kara L. Krist | | | |
| | · · · · · · · · · · · · · · · · · · · | | | |

REEL: 023287 FRAME: 0028

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We, the undersigned, **Ke Zhang** of 2388 Becket Circle, Stow, Ohio 44224; **Philip J. Bos** of 6806 Windsor Road, Hudson, Ohio 44236; **Robert J. Twieg** of 1223 Woodhill Drive, Kent, Ohio 44240; and **Na Liu** of 9L Westview Drive, Bloomfield, CT 06002 ("Inventor(s)") who has/have created a certain invention for which a U.S. Patent Application has been

| | executed concurrently herewith |
|-------------|---|
| | executed on |
| \boxtimes | filed June 26, 2009, and assigned Application Serial No. 12/459,153 |

and is entitled

A LIQUID CRYSTAL DEVICE AND METHODS THEREOF

hereby sell, assign and transfer to Kent State University, ("Assignee"), a State University duly organized and existing under and by virtue of the laws of the State of Ohio, having a place of business at East Main and Lincoln Streets, Kent. Ohio 44242, its successors, assigns, nominees or other legal representatives, the full, exclusive, entire worldwide rights, title and interest in, to, and under said invention as described and claimed in said application, including any provisional application(s) from which it claims priority, the same to be held and enjoyed by Assignee for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, nominees, or other legal representatives, to the end of the term or terms for which said Letters Patent are or may be granted, reissued, or extended, as fully and entirely as the same would have been held and enjoyed by Inventor(s) if this assignment and sale had not been made; all of the entire rights, title and interest in and to said invention and said application, and all original and reissued patents granted for said invention, and all divisions, reissues, continuations-in-part, and continuations of said application, including the subject matter of any and all claims which may be obtained in every patent, and the right, where such right can be legally exercised, in Assignee's own name to apply for and obtain patents in countries foreign to the United States, including the full right to claim for any such application the benefits of the International Convention and the Patent Cooperation Treaty as fully and entirely as Inventor(s) could have done if the foreign application had been filed in the names of the Inventor(s), and the entire interest in any Letters Patent which may be granted on any such application in such foreign countries, and Inventor(s) authorize(s) and request(s) the Commissioner of Patents of the United States, and any official of any country or countries foreign to the United States whose duty is to issue patents on applications as aforesaid, to issue the said Letters Patent to Assignee, its successors, assigns, nominees, or other legal representatives, as Assignee and owner of the said entire rights, and Inventor(s) covenant(s) that Inventor(s) has/have the full right to convey the said entire interest herein assigned and that Inventor(s) has/have not executed and will not execute any agreement in conflict herewith, and Inventor(s) will communicate to Assignee, its successors, assigns, nominees, or other legal representatives all facts known to

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Inventor(s) respecting said invention, whenever requested, and testify in any legal proceedings, sign all lawful papers, execute and deliver all divisional, continuing, and reissue applications, make all rightful oaths or declarations, and do all lawful acts requisite for the application for such divisional, continuing, or reissue applications, or the procuring thereof, and that if and when Assignee, its successors, assigns, nominees, or other legal representatives desire to file a disclaimer relating thereto, Inventor(s) will, upon request, sign and deliver all lawful papers requisite for the filing of such disclaimer; and

Inventor(s) further covenant(s) and agree(s) that Inventor(s) will, at any time upon request, do everything possible to aid Assignee, its successors, assigns, nominees, or other legal representatives, either in the name of Inventor(s) or Assignee, to apply for, obtain, and enforce proper patent protection for said invention in all countries, according to the International Convention and the Patent Cooperation Treaty, and all the laws and treaties in force, all without further consideration but at the expense of Assignee, its successors, assigns, nominees, or other legal representatives.

| Signed at the City of <u>Wislake</u> on this <u>15th</u> day of <u>September</u> | State of Ohio |
|--|---------------|
| on this 15th day of September | <u>g</u> |
| • | ke y da |
| | Ke Zhang |
| State of |))ss: |
| County of | |

On this 15th day of <u>September</u>, 200 9 before me personally came they, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public

Seal

HEATHER KOVACH Notary Public, State of Ohio, Medina County My commission expires Dec. 23, 2013

| Signed at the City of Kent on this 16th day of September | State of Ohio |
|---|---|
| on this 16th day of <u>September</u> | 200 9 |
| | Ph/2/1 15cm |
| | Philip J. Bos |
| State of Ohio |) |
| State of Ohio County of Portage |)ss:) |
| On this 16th day of Septem personally came #i/ip by to me know executed the foregoing instrument, and | her. 200 9 before me in to be the individual described in and who acknowledged execution of the same. |
| - · | Buda L Decker |
| Cool | |

Seal

Brenda L. Bask-Decker Notary Public, State of Ohio My Commssion expires March 13, 2012

| Signed at the City of Kent on this 15th day of September | State of Ohio 200 9. Robert J. Twieg |
|---|--|
| State of OHIO |))ss: |
| County of PORTAGE |) |
| On this 15 day of septon personally came Repettor to me know executed the foregoing instrument, and | |
| | Charraine Streharsly Notary Public |
| Seal | Charmaine Streharsky Resident Summit County Notary Public, State of Ohlo My Commission Expires: 25 Way 2011 |

| *** | City of <u>Blo</u> on this 15_ da | | September | _State of | Connecticut _, 2009 |
|---|-----------------------------------|---|---|-----------|---|
| | | | Na Liu | | h -1111.41.111.41.111.111.111.11 . |
| State of | Connecticut | |))ss: Bloomfield | | |
| County of | Hartford | |) | | |
| On this 15th day of September , 2009 before me personally came Na Liu, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same. | | | | | |
| | | / | Notary Public | Willen | |
| Seal | | | DELORES LAM NOTARY WY COMMISSION EX | PUBLIC | |

*or satisfactorily proven