PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3095331

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| TZU-CHEN LEE | 09/24/2014 |
| DAVID A. ENDER | 09/24/2014 |
| GUOPING MAO | 09/24/2014 |
| JUN-YING ZHANG | 10/23/2014 |
| JAIME B. WILLOUGHBY | 09/24/2014 |

RECEIVING PARTY DATA

| Name: | 3M INNOVATIVE PROPERTIES COMPANY | |
|-----------------|----------------------------------|--|
| Street Address: | P.O. BOX 33427 | |
| City: | ST. PAUL | |
| State/Country: | MINNESOTA | |
| Postal Code: | 55133-3427 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14493778 |

CORRESPONDENCE DATA

Fax Number: (651)736-3833

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY

Address Line 1: P.O. BOX 33427

Address Line 4: ST. PAUL, MINNESOTA 55133-3427

| ATTORNEY DOCKET NUMBER: | 64425US008 |
|-------------------------|--|
| NAME OF SUBMITTER: | JAMIE L. ANDERSON |
| SIGNATURE: | /Jamie L. Anderson/ |
| DATE SIGNED: | 11/05/2014 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 5

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REEL: 034170 FRAME: 0504 503048732

PATENT

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source=Assignement_Signed_64425US008#page5.tif

PATENT REEL: 034170 FRAME: 0505

Case No:

64425US008

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

| LIGHT GUIDES HAVING ENHANC | ED LIGHT EXTRACTION |
|--|--|
| | |
| The specification of which: | |
| is attached hereto; | |
| was filed on September 23, 2014 | |
| as United States Application No. | 14/493,778 |
| is identified as PCT International Applica filed on | tion No. |
| The above-identified application was made or | authorized to be made by me. |
| I hereby acknowledge that any willful false stapunishable under 18 U.S.C. 1001 by fine or in years, or both. | |
| Legal Name of Inventor: | maninamanamanamanamanamanamanamanamanama |
| Tzu-Chen Lee | |
| Inventor's Signature: | Date: |
| F-5-1/4/4 | 9/24/2014 |

Case No:

64425US008

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

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| The above-identified application was made or | authorized to be made by me. |
| I hereby acknowledge that any willful false stapunishable under 18 U.S.C. 1001 by fine or in years, or both. | tement made in this declaration is opposite than 5 |
| Legal Name of Inventor: | |
| David A. Ender | |
| Inventor's Signature: | Date: |
| Carl DEnde | 9-24-14 |

Case No:

64425US008

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

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| The above-identified application was made or | authorized to be made by me. |
| I hereby acknowledge that any willful false stapunishable under 18 U.S.C. 1001 by fine or in years, or both. | |
| Legal Name of Inventor: | |
| Guoping Mao | |
| Inventor's Signature: | Date: |
| | 9/24/2014 |

3M 1938827v1

PATENT REEL: 034170 FRAME: 0508

Case No:

64425US008

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

| sought on the invention entitled: | |
|---|--|
| LIGHT GUIDES HAVING ENHANC | ED LIGHT EXTRACTION |
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| is attached hereto; | |
| was filed on September 23, 2014 as United States Application No. | 14/493,778 |
| is identified as PCT International Application | ation No. |
| The above-identified application was made o | r authorized to be made by me. |
| I hereby acknowledge that any willful false st punishable under 18 U.S.C. 1001 by fine or i years, or both. | atement made in this declaration is mprisonment of not more than 5 |
| Legal Name of Inventor: | The second s |
| Jun-Ying Zhang | |
| Inventor's Signature: | Date: |
| | 10/23/2014 |

3M 1938830v1

Case No:

64425US008

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

| LIGHT GUIDES HAVING ENHAN | CED LIGHT EXTRACTION |
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| The above-identified application was made | or authorized to be made by me. |
| I hereby acknowledge that any willful false : punishable under 18 U.S.C. 1001 by fine or years, or both. | |
| Legal Name of Inventor: | |
| Jaime B. Willoughby | |
| Inventor's Signature: | Date: |
| pine & Willry/14 | 9/24/14 |
| | |

3M 1938833v1

PATENT REEL: 034170 FRAME: 0510

RECORDED: 11/05/2014