503310217 05/18/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3356836

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| TRI D. PHAM | 03/31/2015 |
| STEVEN H. KONG | 03/31/2015 |
| HAIYAN ZHANG | 03/31/2015 |
| JOSEPH T. ARONSON | 03/30/2015 |
| MICHAEL R. LEAF | 04/06/2015 |
| GARY T. BOYD | 04/01/2015 |
| NICHOLAS A. JOHNSON | 04/03/2015 |
| QINGBING WANG | 04/20/2015 |

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: | 14443407 |

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.

Phone: 651-733-1500

Email: amveenendaal@mmm.com

Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY

Address Line 1: PO BOX 33427

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

| ATTORNEY DOCKET NUMBER: | 71127US005 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | AMBER VEENENDAAL |
| SIGNATURE: | /Amber Veenendaal/ |

PATENT 503310217 REEL: 035655 FRAME: 0901

| DATE SIGNED: | 05/18/2015 | | |
|---|--|--|--|
| | This document serves as an Oath/Declaration (37 CFR 1.63). | | |
| Total Attachments: 8 | | | |
| source=Declaration_Assignment_TriDF | Pham_71127US005_signed#page1.tif | | |
| source=Declaration_Assignment_StevenKong_71127US005#page1.tif | | | |
| source=Declaration_Assignment_HaiyanZhang_71127US005_signed#page1.tif | | | |
| source=Declaration_Assignment_JoeAronson_Signed_71127US005#page1.tif | | | |
| source=Declaration_Assignment_MichaelLeaf_71127US005signed#page1.tif | | | |
| source=Declaration_Assignment_GaryBoyd_71127US005#page1.tif | | | |
| source=Declaration_Assignment_NicholasJohnson_71127US05#page1.tif | | | |
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 $source = Declaration_Assignment_QingbingWang_71127US005\#page1.tif$

Case No:

71127US005

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:

| application and for wi | non a patent is sought on the inve | KION ENTITIED; |
|---|---|---|
| OP | TICAL DIFFUSING FILMS / | IND METHODS OF MAKING SAME |
| The specification of w | rhich: | |
| is attached here | to; | |
| was filed on as United States | Application No. | |
| is identified as P | CT International Application No. NOVEMBER 19, 2013 | PCT/US2013/070721 |
| The above-identified | application was made or authorize | i to be made by me. |
| I hereby acknowledge fine or imprisonment | e that any willful false statement m of not more than 5 years, or both. | ade in this declaration is punishable under 18 U.S.C. 1001 by |
| and do hereby assign 3M COMPANY, and a assigns, the entire rig continuation (in whole by me or made jointly termination of, my em all Letters Patent, ree thereto (including the own name and to clai international convention continuation (in whole part upon the said invented have been by me had | and transfer unto the 3M INNOV/ a corporation of Delaware, having ht, title, and interest in and to the se or in part) of said application, and with others (provided any such im- ployment with 3M COMPANY and xaminations, reissues, or extension right to apply for Letters Patent, U m any priority rights for such foreign ons, treaties, or otherwise), which e or in part), renewal, reexamination ention or improvements thereon, to this assignment and transfer not the | |
| consideration any furt that may be deemed : | her applications, assignments, and necessary by said Company, its so | and administrators, to execute and deliver without further documents, and to perform such other acts as I lawfully may, ecessors, assigns, and nominees, fully to secure its right, title, is Patent, Utility Models, or Inventors' Certificates in any and all |
| I do hereby authorize granted upon any of ti title, and interest there | he said applications, to said 3M In | Patents to issue any and all Letters Patent which may be novative Properties Company, as the assignee of the entire right |
| ragestiniiniiniiniiniiniiniiniiniiniinii Aa | | |
| Legal Name of Inver | itor | · · · · · · · · · · · · · · · · · · · |
| inventor's Signature | | Date: |
| | | |
| T. 11. | 211 | 2/2./00/ |

Case No:

71127US005

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:

| application and for which a patent is sought on the invention entitled. | |
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| OPTICAL DIFFUSING FILMS AND METH | ODS OF MAKING SAME |
| The specification of which: | |
| is attached hereto; | |
| was filed on as United States Application No. | |
| is identified as PCT International Application No. filed on NOVEMBER 19, 2013 | PCT/US2013/070721 |
| The above-identified application was made or authorized to be made | by me. |
| I hereby acknowledge that any willful false statement made in this dec fine or imprisonment of not more than 5 years, or both. | claration is punishable under 18 U.S.C. 1001 by |
| In addition, for good and valuable consideration, receipt of which is act and do hereby assign and transfer unto the 3M INNOVATIVE PROPE 3M COMPANY, and a corporation of Delaware, having its principal of assigns, the entire right, title, and interest in and to the said invention continuation (in whole or in part) of said application, and in and to any by me or made jointly with others (provided any such improvement is termination of, my employment with 3M COMPANY and any of its existall Letters Patent, reexaminations, reissues, or extensions thereof, of thereto (including the right to apply for Letters Patent, Utility Models, or own name and to claim any priority rights for such foreign applications international conventions, treaties, or otherwise), which have been or continuation (in whole or in part), renewal, reexamination, reissue, or part upon the said invention or improvements thereon, to be held and have been by me had this assignment and transfer not been made; | ERTIES COMPANY, a wholly-owned subsidiary of fice at Saint Paul, Minnesota, its successors and and application, and in and to any division or and all improvements in the said invention made made during, or within one year after the sting or future subsidiaries), and in and to any and the United States of America and countries foreign or Inventors' Certificates in foreign countries in its to which such applications are entitled under may be granted thereon or on any divisional, other or further application based in whole or in |
| I do further agree for myself and for my heirs, executors, and administ consideration any further applications, assignments, and documents, that may be deemed necessary by said Company, its successors, assand interest as aforesaid and to obtain or maintain Letters Patent, Uticountries; and | and to perform such other acts as I lawfully may, signs, and nominees, fully to secure its right, title, |
| I do hereby authorize and request the Commissioner of Patents to iss granted upon any of the said applications, to said 3M Innovative Prop title, and interest therein. | ue any and all Letters Patent which may be erties Company, as the assignee of the entire righ |
| Legal Name of Inventor: STEVEN H. KONG Inventor's Signature: Date: | |
| | 3/3/1/6 |

Case No:

71127US005

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:

| OPTICAL DIFFUSING FILMS. | AND METHODS OF MAKING SAME |
|---|---|
| The specification of which: | |
| ⊠ is attached hereto; | |
| was filed on as United States Application No. | |
| is identified as PCT International Application No. filed on NOVEMBER 19, 2013 | PCT/US2013/070721 |
| The above-identified application was made or authorize | ed to be made by me. |
| I hereby acknowledge that any willful false statement make or imprisonment of not more than 5 years, or both. | nade in this declaration is punishable under 18 U.S.C. 1001 by |
| and do hereby assign and transfer unto the 3M INNOV 3M COMPANY, and a corporation of Delawars, having assigns, the entire right, title, and interest in and to the continuation (in whole or in part) of said application, and by me or made jointly with others (provided any such intermination of, my employment with 3M COMPANY and all Letters Patent, reexaminations, reissues, or extension thereto (including the right to apply for Letters Patent, Lown name and to claim any priority rights for such foreinternational conventions, treaties, or otherwise), which continuation (in whole or in part), renewal, reexamination | It of which is acknowledged, I have agreed to assign and transfer ATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of its principal office at Saint Paul, Minnesota, its successors and said invention and application, and in and to any division or id in and to any and all improvements in the said invention made improvement is made during, or within one year after the id any of its existing or future subsidiaries), and in and to any and one thereof, of the United States of America and countries foreign Jtility Models, or Inventors' Certificates in foreign countries in its ign applications to which such applications are entitled under in have been or may be granted thereon or on any divisional, on, reissue, or other or further application based in whole or in to be held and enjoyed as fully and exclusively as they would been made; |
| consideration any further applications, assignments, ar that may be deemed necessary by said Company, its s | is, and administrators, to execute and deliver without further and documents, and to perform such other acts as I lawfully may, successors, assigns, and nominees, fully to secure its right, title, ters Patent, Utility Models, or Inventors' Certificates in any and all |
| | f Patents to issue any and all Letters Patent which may be nnovative Properties Company, as the assignee of the entire righ |
| Legal Name of Inventor: | |
| HAIYAN ZHANG | |
| Inventor's Signature: | Date: |
| | 3/3//2015 |

Case No:

71127US005

| application a | | ••••• | ought on the invent | | ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ ~~ | A A A A A A A A A A A A A A A A A A A | · |
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| as Unite | ed States | Application No. | | | | | |
| is identi is identi | | T International | Application No. 19, 2013 | | PCT/US2013/ | 070721 | ······ |
| The above-io | tentified a | pplication was i | made or authorized | to be made by | me. | | |
| fine or imprision addition, for and do here! 3M COMPAI assigns, the continuation by me or ma termination of all Letters Pathereto (incluown name as international continuation part upon the have been by | or good are | f not more than divaluable con and transfer un corporation of left, title, and interior part) of sa with others (probloyment with 3 aminations, relight to apply for any priority righs, treaties, or or in part), renember assignment this assignment | false statement man 5 years, or both. sideration, receipt of the 3M INNOVAT Delaware, having its rest in and to the said application, and invided any such imply COMPANY and a sues, or extension Letters Patent, Utights for such foreign otherwise), which haval, reexamination ements thereon, to the and transfer not be | of which is ackr FIVE PROPER is principal offici- id invention an in and to any a rovement is many any of its existion is thereof, of the ity Models, or of applications to ave been or many reissue, or officient be held and er- ten made; | nowledged, I have TIES COMPANY, e at Saint Paul, M id application, and all improvemer ade during, or with ng or future subsice United States of Inventors' Certification which such applicated the ner or further applicated as fully and | agreed to ass a wholly-owner innesota, its si in and to any ins in the said in one year aftiaries), and in America and aftes in foreign ications are en reon or on any ication based it exclusively as | ign and transfer of subsidiary of uccessors and division or invention made ter the and to any and countries foreign countries in its littled under divisional, in whole or in stee they would |
| consideration that may be | n any furth deemed n as aforesa | er applications ecessary by sa | y heirs, executors, , assignments, and id Company, its suc n or maintain Letter | documents, an cessors, assig | d to perform such | other acts as , fully to secur | I lawfully may, e its right, title, |
| I do hereby a granted upor title, and inte | n any of th | e said applicati | Commissioner of P ons, to said 3M Inno | atents to issue ovative Propert | any and all Lette les Company, as | rs Patent which the assignee c | n may be of the entire right |
| Legal Name | of Invent | or: | • | *************************************** | | | |
| JOSEPH | T. ARO | NSON | | | | | |
| Inventor's S | ignature | are. | | Date: | <i>y</i> 4 | | |
| | | e Marine | | 1 3/ | 90/15 | ,, , | annanna annanna |

PATENT

REEL: 035655 FRAME: 0906

Case No:

71127US005

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:

| OPTICAL DIFFUSING FILMS AN | D METHODS OF MAKING SAME |
|---|---|
| The specification of which: | · |
| is attached hereto; | |
| was filed on as United States Application No. | |
| is identified as PCT International Application No. filed on NOVEMBER 19, 2013 | PCT/US2013/070721 |
| The above-identified application was made or authorized to | be made by me. |
| I hereby acknowledge that any willful false statement made fine or imprisonment of not more than 5 years, or both. | in this declaration is punishable under 18 U.S.C. 1001 by |
| and do hereby assign and transfer unto the 3M INNOVATIV 3M COMPANY, and a corporation of Delaware, having its p assigns, the entire right, title, and interest in and to the said continuation (in whole or in part) of said application, and in by me or made jointly with others (provided any such impro- termination of, my employment with 3M COMPANY and an all Letters Patent, reexaminations, reissues, or extensions | and to any and all improvements in the said invention made overnent is made during, or within one year after the ly of its existing or future subsidiaries), and in and to any and thereof, of the United States of America and countries foreign with Models, or Inventors' Certificates in foreign countries in its applications to which such applications are entitled under we been or may be granted thereon or on any divisional, eissue, or other or further application based in whole or in the held and enjoyed as fully and exclusively as they would |
| that may be deemed necessary by said Company, its succe | nd administrators, to execute and deliver without further ocuments, and to perform such other acts as I lawfully may, essors, assigns, and nominees, fully to secure its right, title, Patent, Utility Models, or Inventors' Certificates in any and all |
| I do hereby authorize and request the Commissioner of Pai granted upon any of the said applications, to said 3M Innov title, and interest therein. | tents to issue any and all Letters Patent which may be rative Properties Company, as the assignee of the entire right |
| Legal Name of Inventor: MICHAEL R. LEAF | |
| Inventor's Signature: | Date: |
| michael R Jes | 4-6-15 |

Case No:

71127US005

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:

| | ich a patent is sought on the inventic | | |
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| OP. | TICAL DIFFUSING FILMS AN | D METHODS | OF MAKING SAME |
| The specification of w | hich: | | |
| is attached heret | Ο, | | |
| was filed on as United States | Application No. | | |
| is identified as P | CT International Application No. NOVEMBER 19, 2013 | | PCT/US2013/070721 |
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| I hereby acknowledge fine or imprisonment of | e that any willful false statement made of not more than 5 years, or both. | e in this declara | tion is punishable under 18 U.S.C. 1001 by |
| and do hereby assign 3M COMPANY, and a assigns, the entire rig continuation (in whole by me or made jointly termination of, my em all Letters Patent, ree thereto (including the own name and to clair international conventic continuation (in whole part upon the said invested to the part upon the part upo | and transfer unto the 3M INNOVATI a corporation of Delaware, having its ht, title, and interest in and to the sail or in part) of said application, and in with others (provided any such impropriet with 3M COMPANY and at examinations, reissues, or extensions right to apply for Letters Patent, Utility many priority rights for such foreign ons, treaties, or otherwise), which has or in part), renewal, reexamination, rention or improvements thereon, to be this assignment and transfer not be | VE PROPERTI principal office of invention and and to any and overment is made thereof, of the applications to a publications to be been or may reissue, or othere and enjoyen made; | wledged, I have agreed to assign and transfer ES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and application, and in and to any division or I all improvements in the said invention made to during, or within one year after the or future subsidiaries), and in and to any and United States of America and countries foreign ventors' Certificates in foreign countries in its which such applications are entitled under to be granted thereon or on any divisional, or or further application based in whole or in byed as fully and exclusively as they would |
| consideration any furt | ther applications, assignments, and concessary by said Company, its succ | locuments, and tessors, assign: | rs, to execute and deliver without further to perform such other acts as I lawfully may, s, and nominees, fully to secure its right, title, flodels, or Inventors' Certificates in any and all |
| I do hereby authorize granted upon any of t title, and interest then | he said applications, to said 3M Inno | atents to issue a vative Propertie | iny and all Letters Patent which may be is Company, as the assignee of the entire right |
| Legal Name of Inver | ntor: | | |
| GARY T. BOYD | | | |
| Inventor's Signature | | Date: | 1 |
| 90 | | 4 | 1/1/15 |

Case No:

71127US005

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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| | OP1 | TICAL DIFFUSING FILI | NS AND METHO | DDS OF MAKING SAME |
| The | specification of wh | nich: | | |
| \boxtimes | is attached hereto | o ; | | |
| | was filed on as United States | Application No. | | |
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| con that and | sideration any furth I may be deemed r | her applications, assignment necessary by said Company, | s, and documents, a its successors, ass | rators, to execute and deliver without further and to perform such other acts as I lawfully may, igns, and nominees, fully to secure its right, title, ty Models, or Inventors' Certificates in any and all |
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| Le | gal Name of Inven | SOC | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | |
| N | ICHOLAS A. JO | OHNSON | | uuun. |
| In | ventor's Signature: | | Date: | |
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Case No:

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| consideration any futhat may be deemed | rther applications, assignments, and onecessary by said Company, its suc | nd administrators, to execute and deliver wi ocuments, and to perform such other acts a essors, assigns, and nominees, fully to sec Patent, Utility Models, or Inventors' Certifica | as I lawfully may, cure its right, title, |
| I do hereby authorize granted upon any of title, and interest the | the said applications, to said 3M Inno | tents to issue any and all Letters Patent wh vative Properties Company, as the assigne | nich may be e of the entire right |
| 1 17 2 17 3 18 | | | |
| Legal Name of Inve | entor | | |
| QINGBING WA | | | m |
| Inventor's Signatur | 3 | Date: | |
| | And the state of t | 04/20/2015 | |

PATENT REEL: 035655 FRAME: 0910

RECORDED: 05/18/2015