505752487 10/31/2019

PATENT ASSIGNMENT COVER SHEET

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------|----------------|
| OSAMU NOZAWA | 01/13/2016 |
| HIROAKI SHISHIDO | 01/13/2016 |
| KAZUYA SAKAI | 01/13/2016 |

RECEIVING PARTY DATA

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|-----------------|---------------------------------------|
| Street Address: | 7-5, NAKA-OCHIAI 2-CHOME, SHINJUKU-KU |
| City: | TOKYO |
| State/Country: | JAPAN |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16671065 |

CORRESPONDENCE DATA

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| ATTORNEY DOCKET NUMBER: | 103910-MB000230US-1160420 | | |
|--------------------------------|--|--|--|
| NAME OF SUBMITTER: | WILLIAM H. GORMAN | | |
| SIGNATURE: | /William H. Gorman/ | | |
| DATE SIGNED: 10/31/2019 | | | |
| | This document serves as an Oath/Declaration (37 CFR 1.63). | | |

Total Attachments: 4

source=Combined_Declaration_and_Assignment_From_Priority_103910-MASKBLANKS000230US-1160420#page1.tif source=Combined Declaration and Assignment From Priority 103910-MASKBLANKS000230US-1160420#page4.tif source=Combined Declaration and Assignment From Priority 103910-MASKBLANKS000230US-1160420#page3.tif

PATENT REEL: 050901 FRAME: 0064 505752487

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PATENT REEL: 050901 FRAME: 0065

Docket No.: Only After Sept 16, 2012

ASSIGNMENT WITH DECLARATION FOR PATENT APPLICATION (37 CFR 1.63)

特許出願宣言書付き譲渡書(37 CFR 1.63)

Japanese Language Assignment with Declaration

| 下記に署名した発明者であり、以下に譲渡人と称される私 (我々)は、下記の出願に記載された改良に関する発明を し、 | assignor(s), have invented certain improvements described in the application identified below; and |
|---|--|
| | Whereas, <u>Japan</u> of <u>HOYA CORPORATION</u> , (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; |
| よって、価値ある対価の受領をここに確認し、 | Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, |
| 上で譲渡人として指名された私(我々)は、米国における本件出願およびその発明開示、全ての分割出願および継続出願、これら出願について許可された米国特許証、全ての再発行特許、ならびに全ての外国出願に関する全ての権利(改正後のパリ条約(1883年)に基づく優先権、ならびに35 USC 119 に基づき優先権を主張する権利を含む)、権原、および利益を、上で指定した譲受人、その承継人ないし権利承継者に売却、譲渡、移転するとともに、私(我々)は米国特許商標庁長官に対し、本件出願に記載の発明に対する特許証を、譲受人、その承継人ないし権利承継者に発行することを要請し、また、私(我々)は、譲受人が本件発明に係る外国特許出願を行うことに同意し、これ以上の対価なしに、譲受人の求めにより、本件米国・外国特許出願に関して譲受人が必要とみなす全ての書類を作成します。 | I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, and all countries foreign thereto, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 USC 119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee. |
| (公証人による認証は不要であるが、これらの書類は、35 USC 261に基づく推定された証拠となる) | (Legalization not required for recording but is prima facie evidence of execution under 35 USC 261) |
| 私は,下記に記載の発明者として,以下の通り宣言します。 | As the below named inventor, I hereby declare that: |
| 本宣言付き譲渡書は、以下に関します。 | This assignment with declaration is directed to: |
| 添付の出願書、または、 | The attached application, or |
| 年月目に出願された米国出願あるいは PCT 国際出願番号(確認番号) 本件出願の名称は、以下の通りです。 | United States Application or PCT International Application Number PCT/JP2014/050404 filed on January 14, 2014 (Confirmation No). The application is entitled: |
| | MASK BLANK, PHASE-SHIFT MASK AND METHOD FOR |
| | MANUFACTURING THE SAME |
| | |

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PATENT REEL: 050901 FRAME: 0066

Japanese Language Assignment with Declaration

上記に明示された出願は, 私が作成した、または作成を許可 したものです。

私は、本件出願において請求項に記載された発明の本来の発 明者、または、本来の共同発明者であると信じています。

私は、本宣言付き譲渡書の提出に関わる本件出願の内容を検 討し、理解しています。

私は、37 CFR 1.56 に定義されるように、自身が知る全ての 特許性に関する重要な情報を、米国特許商標庁に開示する義 務があることを認識しています。

私は、本宣言付き譲渡書において故意に虚偽の供述を行った 場合、18 USC 1001 に基づき、罰金あるいは 5 年以下の懲 役、または両方による処罰の対象となることを認識していま す。

参加管轄官庁対する出願へのアクセス許可

図 印を付けた場合、下記の署名者は本書をもって、米国特許商標庁が、ヨーロッパ特許庁(EPO)、日本特許庁(JPO)、韓国知的所有権庁(KIPO)、世界知的所有権機関(WIPO)、および上記の出願に基づく優先権を主張する外国出願が提出されたその他の知的所有権管轄官庁に、上記の特許出願へのアクセス権を付与することを許可します。37 CFR 1.14(c)および(h)を参照。出願人が、EPO、JPO、KIPO、または上記の出願に基づく優先権を主張する外国出願が提出されたその他の知的所有権管轄官庁に対して、上記の出願へのアクセス権を付与することを希望しない場合には、この欄には印を付けないでください。

下記の署名者は、37 CFR 1.14(h)(3)に従い、1)上記の出願時の特許出願、2) 35 USC 119(a)~(d)に従って,上記出願が優先権を主張するいずれの外国出願、(37 CFR 1.55 の認証謄本の要件を満たす外国出願の写しが上記の特許出願で提出された場合)、ならびに 3)上記の特許出願について、それによる利益を享受するいずれの出願時の米国出願に関して、出願時の出願書の写しへのアクセス権を付与します。

下記の署名者は、37 CFR 1.14(c)に従い、参加管轄官庁に対する出願へのアクセス許可の提出日に関する情報へのアクセス権を付与します。

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application for which this assignment with declaration is being submitted.

I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization To Permit Access To Application by Participating Office

☑ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application-as-filed with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

STATEMENT OF ACCURATE TRANSLATION IN ACCORDANCE WITH 37 CFR 1.69(b):

The assignment with declaration is an accurate translation of the corresponding English language assignment with declaration.

Signature

Date

9/28/2012

| NAME OF SOLE OR FIRST INVENTOR: 唯一あるいは第一の発明者名 | | | | | |
|---|---------------------------------|---|-----------------------------------|--------------------------|--|
| Given Name (first and middle 名(名およびミドルネーム | | Osamu | Family Name or Surn 姓NOZAWA | ame | |
| Inventor's signature 発明者の署名 | Osamu | Nozawa | | Date 日付 Jan. 13, 2016 | |
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| Given Name (first and middle 名(名およびミドルネーム | e [if any]) 、[該当する場合]) | Hiroaki | Family Name or Surn 姓 SHISHIDO | ame | |
| Inventor's signature 発明者の署名 | Hiroaki | Shishido | | Date 日付 Jan. 13, 2016 | |
| Residence: 住所: | Shinjuku-ku, Japa | n | | | |
| Mailing Address: 郵送先: | c/o HOYA COR 7-5, Naka-Ochia | PORATION i 2-chome, Shinjuku-ku | ı, Tokyo, Japan | | |
| NAME OF THIRD INVEN 第三の発明者名: | TOR: | | | | |
| Given Name (first and middle 名(名およびミドルネーム | | Kazuya | Family Name or Surn 姓 SAKAI | ame | |
| Inventor's signature 発明者の署名 | | | | Date 日付 | |
| Residence: 住所: | Shinjuku-ku, Japa | n | | | |
| Mailing Address: c/o HOYA CORPORATION 郵送先: 7-5, Naka-Ochiai 2-chome, Shinjuku-ku, Tokyo, Japan | | | | | |
| NAME OF FOURTH INVENTOR: 第四の発明者名: | | | | | |
| Given Name (first and middle 名(名およびミドルネーム | | | Family Name or Surn 姓 | ame | |
| Inventor's signature 発明者の署名 | | *************************************** | | Date 日付 | |
| Residence: 住所: | | | | | |
| Mailing Address: 郵送先: | | | | | |
| NAME OF FIFTH INVENTOR: 第五の発明者名: | | | | | |
| Given Name (first and middle [if any]) Family Name or Surname 名(名およびミドルネーム[該当する場合]) 姓 | | | | | |
| Inventor's signature 発明者の署名 | | | | Date 日付 | |
| Residence: 住所: | | | | | |
| Mailing Address: 郵送先: | | | | | |
| | | VAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA | | | |

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