PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Takahiro SUZUE	12/23/2016
Hiroshi YOSHIZAKI	12/23/2016

RECEIVING PARTY DATA

Name:	lame: HOYA CORPORATION	
Street Address: 7-5, NAKAOCHIAI 2-CHOME		
Internal Address:	SHINJUKU-KU	
City:	TOKYO	
State/Country:	JAPAN	
Postal Code:	1618525	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14770175

CORRESPONDENCE DATA

Fax Number: (703)836-2787

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: 703-836-6400 Email: email@oliff.com **Correspondent Name:** JAMES A. OLIFF Address Line 1: **OLIFF PLC**

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER:	167536
NAME OF SUBMITTER:	KIMBERLY SCOTT
SIGNATURE: /Kimberly C. Scott/ for James A. Oliff	
DATE SIGNED:	02/14/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

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> **PATENT REEL: 041247 FRAME: 0797** 504226320

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PATENT REEL: 041247 FRAME: 0798

ASSIGNMENT (BEING FILED FOR DUAL PURPOSE UNDER 37 CFR 1.63(e)) For Application with Filing Date on or after September 16, 2012

ASSIGNMENT

SUZUE Takahira

(2) YOSHIZAKI Hiroshi

	THEFT	(1)	SOLOL Takamio	(2)	
(1-8)	Legal Name(s)	(3)		(4)	
	of Inventor(s)	(5)		(6)	
		(7)		(8)	
		the uno		iciency of which are h	good and valuable consideration paid to each of ereby acknowledged, each undersigned agrees to
(9)	Insert Name of Assignee	(9)	HOYA CORPORATION		
(10)	Insert Address of Assignee	(10)	7-5, Nakaochiai 2-chome,	Shinjuku-ku, Tokyo 1	618525 Japan
(11)	Insert Identification	the ent inventi contin	ire right, title and interest for ion, and in all applications for uation, international, substitute examination certificates that n	the United States of A patent including any a and reissue application hay be granted on the	irs, successors, assigns and legal representatives, merica as defined in 35 U.S.C. §100, in the and all provisional, non-provisional, divisional, on(s), and all Letters Patent, extensions, reissues invention known as
	such as Title, Case Number, or Foreign		MANUFACTURING MET	HOD, MANUFACT	URING INFORMATION MANAGEMENT
	Application Number		SYSTEM, MANUFACTU	RING INFORMATIO	N MANAGEMENT DEVICE, AND
			MANUFACTURING INFO	ORMATION MANAG	JEMENT MENTHOD
		(Attor	ney Docket No. 167536), f	iled on even date herewith or as
,	Alternative Identification for	(12)	U.S. Application Number	14/770,175	
	filed applications	filed			

- 1) Each undersigned agrees to execute all papers necessary in connection with any application and/or patent for the invention and also to execute separate assignments in connection with such applications and patents as the Assignee may deem necessary.
- 2) Each undersigned agrees to execute all papers necessary in connection with any interference or post-grant proceeding which may be declared concerning any application or patent for the invention and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference or post-grant proceeding.
- 3) Each undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.
- 4) Each undersigned agrees to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.
- 5) Each undersigned authorizes and requests the Commissioner of the U.S. Patent and Trademark Office to issue any and all patents resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed, and will not execute, any agreement(s) in conflict herewith, and agrees that this assignment is binding on Assignor and Assignor's heirs, successors, assigns and legal representatives.
- 6) Each undersigned hereby grants the firm of OLIFF PLC the power to insert on this assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

(13) Declaration

As an above named inventor, I hereby declare that:

I believe I am the original inventor or an original joint inventor of a claimed invention (or claimed design) in the above-identified application for which this declaration is being submitted.

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

I have reviewed and understand the contents of the above-identified application, including the claims, and 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 declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	23-DEC-2016	Inventor Signature	段江高弘	
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
neither,	This assignment should preferably be sign then it should be signed before at least two	ed before: (a) a Notary Public if witnesses who also sign here:	within the U.S.A. (b) a U.S. Consul if outside	e the U.S.A. If
Date		Witness		
Date		Witness		

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

Date	December 23 2016	Inventor Signature	In July li	(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(SEAL)
Date		Inventor Signature		(ŚĒÁĿ)
Bate		Inventor Signature		(\$&AL)
neither	This assignment should preferably be sign then it should be signed before at least two		out within the U.S.A. (b) a U.S. Consul if outside \bar{z}	abe O.S.A. II
Date		Witness		
Date		Witness.		