505227570 12/10/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5274339

SUBMISSION TYPE: NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FLAVIO DELL'ORTO	12/07/2018
MARCO VILLA	12/10/2018

RECEIVING PARTY DATA

Name:	OCLARO TECHNOLOGY LIMITED	
Street Address:	CASWELL, TOWCESTER	
City:	NORTHAMPTONSHIRE	
State/Country:	UNITED KINGDOM	
Postal Code:	NN12 8EQ	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16305485

CORRESPONDENCE DATA

Fax Number: (650)938-5200

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: 4158752382

Email:cmedina@fenwick.comCorrespondent Name:CHARLES CATHEYAddress Line 1:FENWICK & WEST LLPAddress Line 2:801 CALIFORNIA STREET

Address Line 4: MOUNTAIN VIEW, CALIFORNIA 94041

ATTORNEY DOCKET NUMBER: 30122-42176/US	
NAME OF SUBMITTER:	CHARLES CATHEY; REG NO 63587
SIGNATURE:	/Charles Cathey/
DATE SIGNED:	12/10/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

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PATENT 505227570 REEL: 047725 FRAME: 0219

COMBINED DECLARATION AND ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to **Oclaro Technology Limited**, having a place of business at Caswell, Towcester, Northamptonshire, United Kingdom NN12 8EQ ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

- 1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional or non-provisional application filed under 35 U.S.C. § 111, design application filed under 35 U.S.C. § 171, Registered Community Designs, international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION"), and any patents issuing thereon ("PATENT RIGHTS"):
 - U.S. Application No. 16/305,485, entitled "GROUND STRUCTURE IN RF WAVEGUIDE ARRAY," which is a National Phase Entry of International Application No. PCT/GB2017/051936, filed on June 30, 2017, which claims priority from GB Application No. 1611574.3, filed on July 1, 2016.
 - 2. The entire worldwide right, title, and interest in and to:
- (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto that have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) that may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not

1 of 2

30122/42176/FW/10443769.1

Title:	GROUND STR	UCTURE IN REV	WAVEGUIDE ARRAY		
Filed:	November 29, 2	2019	Attorney	Docket#:	30122-42176/US
Application #;	16/305,485		Client Re	(\$;	PX215547US

hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record 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 or other authority for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

By signing below, INVENTOR further attests to the following:

- The APPLICATION was made or authorized to be made by INVENTOR.
- INVENTOR believes that INVENTOR is the original inventor or an original joint inventor of a claimed invention in the APPLICATION.

INVENTOR hereby acknowledges that any willful false statement made in this document is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Name and Signature	Date of Signature (REQUIRED)
Taxis D// 1/10	7/12/18
Flavio Dell'Orto	
Name and Signature	Date of Signature (REQUIRED)
Marco Villa	

2 of 2

Title:	GROUND STRUCTURE IN RE	WAVEGUIDE ARRAY	
Filed:	November 29, 2019	Attorney Docket #: 30122-42176/US	
Application #:	16/305,485	Client Ref #: PX215547US	

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Name and Signature	Date of Signature (REQUIRED)
Flavio Dell'Orto	
Name and Signature	Date of Signature (REQUIRED)
Marine Wa	10 - Dec - 2018
Marco Villa	

2 of 2