PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5083359

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ASTI HOLDINGS LIMITED	07/27/2018

RECEIVING PARTY DATA

Name: SEMICONDUCTOR TECHNOLOGIES AND INSTRUMENTS PTE LTD		
Street Address:	BLK. 25, KALLANG AVENUE #04-01	
Internal Address: KALLANG BASIN INDUSTRIAL ESTATE		
City:	SINGAPORE	
State/Country:	SINGAPORE	
Postal Code:	339416	

PROPERTY NUMBERS Total: 1

Property Type	Number			
Patent Number:	7869021			

CORRESPONDENCE DATA

Fax Number:

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.

Email: info@horizonip.com.sg HORIZON IP PTE LTD Correspondent Name: Address Line 1: 7500A BEACH ROAD Address Line 2: #04-306/308 THE PLAZA

Address Line 4: SINGAPORE, SINGAPORE 199591

ATTORNEY DOCKET NUMBER:	ASTIS2018SVE15
NAME OF SUBMITTER:	DEXTER CHIN
SIGNATURE:	/dexter chin/
DATE SIGNED:	08/06/2018

Total Attachments: 6

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> **PATENT** 505036608

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DEED OF ASSIGNMENT

This Assignment is made on the	29th	of	July	, 20 _{%
			,	

PARTIES: -

- (1) **ASTI HOLDINGS LIMITED**, a Singapore company having its address at Blk. 25, Kallang Avenue #06-01, Kallang Basin Industrial Estate, Singapore 339416 ("the Assignor"); and
- (2) SEMICONDUCTOR TECHNOLOGIES AND INSTRUMENTS PTE LTD, a Singapore company and having its address at Blk. 25, Kallang Avenue #04-01, Kallang Basin Industrial Estate, Singapore 339416 ("the Assignee").

AND WHEREAS the parties have agreed that the pending patent applications and granted patents (Patents) listed in Schedule A and the registered Trademarks (Trademarks) listed in Schedule B attached hereto are to be assigned to the Assignee.

NOW THIS ASSIGNMENT WITNESSETH as follows:

- In pursuance of the said agreement and in consideration of the sum of Singapore Dollars One only (SGD1.00) and other valuable consideration now paid by the Assignee to the Assignor (the receipt of which is hereby acknowledged by the Assignor), the Assignor as the beneficial owner **HEREBY**ASSIGNS and transfers to the Assignee, its successors, assigns or other legal representatives: -
 - (a) the Patents listed in Schedule A and Trademarks listed in Schedule B;
 - (b) all inventions, invention disclosures, and discoveries described in any item in Schedule A including all other rights arising out of such inventions, invention disclosures, discoveries with respect to Schedule A;
 - (c) all goodwill of the business relating to the products and/or services in respect upon which the trademarks are used including all other rights arising out of the trademarks with respect to Schedule B;

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- (d) all causes of action (whether known or unknown or whether currently pending, filed, or otherwise) and other enforcement rights under, or on account of the Patents and Trademarks and/or any item of the foregoing categories (b) through (c), including, without limitation, all causes of action and other enforcement rights for
 - (i) damages,
 - (ii) injunctive relief, and
 - (iii) any other remedies of any kind for past, current, and future infringement; and
- (e) all rights to collect royalties and other payments under or on account of the Patents and/or Trademarks.
- 2 The Assignor warrants that no dispute in respect of the Patents and Trademarks is pending in any court of law.
- The Assignor hereby agrees for itself, its heirs, successors, assigns or other legal representatives to execute any and all papers, including applications for Letters Patents and/or Trademarks of any and all kinds and in any and all countries and to perform any and all acts which the Assignee, its successors, assigns or other legal representatives may deem necessary to secure thereto the rights herein assigned and set over.
- 4 The Assignor hereby represents and warrants that it has not granted any rights inconsistent with the rights granted herein.

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IN WITNESS WHEREOF this Deed has been executed by the parties and intended to be and is hereby delivered on the date first above written.

	EXECUTED	ASA	DEED	by
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ASTI Holdings Ltd.



Signature

Name: Loh Soon Guee Designation: Director

in the presence of:

Witness Signature

Witness Name: Anthony Loh

Vice-President, Finance

EXECUTED AS A DEED by

Semiconductor Technologies

& Instruments Pte Ltd

Signature

Name: Timothy Lim Boon Liat

Designation: Director

in the presence of:

R

Witness Signature

Witness Name: Lee For Chena

Financial controller

SCHEDULE A

Patents and Pending Applications

S/N	COMPANY FILE REFERENCE	APPLICATION NO.	PATENT NO.	TITLE	COUNTRY	GENERAL STATUS
1	ASTI/PAT0014/EP	8251328.4	NA	Multiple Surface Inspection System and Method	Europe	Pending
2	ASTI/PAT0014/TW	97112463	1365981	Multiple Surface Inspection System and Method	Taiwan	Granted
3	ASTI/PAT0014/US	11/732,888	7,768,633	Multiple Surface Inspection System and Method	USA	Granted
4	ASTI/PAT0014/KR	10-2008-0032279	10-1581777	Multiple Surface Inspection System and Method	Korea	Granted
5	ASTI/PAT0014/MY	PI 20080975	NA	Multiple Surface Inspection System and Method	Malaysia	Pending
6	ASTI/PAT0014/PH	1-2008-00113	1-2008-00113	Multiple Surface Inspection System and Method	Philippines	Granted
7	ASTI/PAT0014/SG	200802630-4	146603	Multiple Surface Inspection System and Method	Singapore	Granted
8	ASTI/PAT0014/VN	1-2008-00838	11833.00	Multiple Surface Inspection System and Method	Vietnam	Granted
9	ASTI/PAT0014/CN(DIV)	201210255085.9	ZL 201210255085.9	Multiple Surface Inspection System and Method	China	Granted
10	ASTI/PAT0015/US	12/118,209	7869021	Multiple Surface Inspection System and Method	USA	Granted
11	ASTI/PAT0009/MY	PI 20001503	MY-129411-A	System and Method for Transferring Components Between Packing Media	Malaysia	Granted
12	ASTI/PAT0009/SG	200000919-1	82069.00	System and Method for Transferring Components Between Packing Media	Singapore	Granted
13	ASTI/PAT0009/TW	89107024	1143415	System and Method for Transferring Components Between Packing Media	Taiwan	Granted
14	ASTI/PAT0009/US	09/301,396	6151864	System and Method for Transferring Components Between Packing Media	USA	Granted
15	STI/PAT0021/CN	201480041863.10	ZL 201480041863.1	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	China	Granted
16	STI/PAT0021/EP	14816677.00	NA	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Еигоре	Pending;
17	STI/PAT0021/HK	16108269.9	NA	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Hong Kong	Pending

S/N	COMPANY FILE REFERENCE	APPLICATION NO.	PATENT NO.	TITLE	COUNTRY	GENERAL STATUS
18	STI/PAT0021/KR	10-2016-7000305	10-1803792	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Korea	Granted
19	STI/PAT0021/MY	PI 20157 0 4437	NA	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Malaysia	Pending
20	STI/PAT0021/PH	1-2015-502724	NA	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Philippines	Pending
21	STI/PAT0021/TW	103119786	1546879	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Taiwan	Granted
22	STI/PAT0021/US	14/896,311	9934565	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	USA	Granted
23	STI/PAT0021/SG(DIV)	10201708537X	NA	Systems and Methods For Automatically Verifying Correct Die Removal from Film Frames	Singapore	Pending
24	ASTI/PAT0011/US	10/096,181	6545754	Post-Seal Inspection System and Method	USA	Granted
25	STI/PAT0007/US	11/888,827	8401272	Patterned Wafer Defect Inspection System And Method	USA	Granted

SCHEDULE B

Registered Trademarks

S/N	Application No.	Registration No.	Country	Class
1	T0013367F	T0013367F	Singapore	7
2	T9910894F	T9910894F	Singapore	9
3	T9910895D	T9910895D	Singapore	9

RECORDED: 08/06/2018