502564267 11/11/2013

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date		
CHUN-HAO TSENG	10/17/2013		
YING-HAO KUO	10/22/2013		
KUO-CHUNG YEE	10/22/2013		

RECEIVING PARTY DATA

Name:	AIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	
Street Address:	NO. 8, LI-HSIN RD. VI, HSINCHU SCIENCE PARK	
City:	HSINCHU	
State/Country:	TAIWAN	
Postal Code:	300	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14076487

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ATTORNEY DOCKET NUMBER:	T5057-963
NAME OF SUBMITTER:	RANDY A. NORANBROCK
Signature:	/Randy A. Noranbrock/
Date:	11/11/2013

Total Attachments: 1

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PATENT REEL: 031576 FRAME: 0030 OF \$40.00 140/648/

Docket No. T5057-963 TSMC2013-0687

ASSIGNMENT

In consideration of the premises and oth	er good and	l valuable	consideration	in hand	paid, 1	the receipt :	and s	ufficiency	o
which is hereby acknowledged, the undersigned,	_				•	î		•	

1) Chun-Hao TSENG

3) Kuo-Chung YEE

2) Ying-Hao KUO

who has made a certain new and useful invention, hereby sells, assigns and transfers unto TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD., having a place of business at No. 8, Li-Hsin Rd. VI, Hsinchu Science Park, Hsinchu 300, Taiwan R.O.C.

its successors and assigns (hereinafter designated "ASSIGNEE") the entire right, title and interest for the United States of America as defined in 35 U.S.C. 100 in the invention entitled

THERMALLY CONDUCTIVE MOLDING COMPOUND STRUCTURE FOR HEAT

agrees that the attorneys of record in said application shall hereafter act on behalf of said ASSIGNEE;

DISSIPATION IN SEMICONDUCTOR PACKAGES

(a)	for which an application for United States Letters Patent was filed on 2013-11-11, and identified by United States Patent Application No. 14/076,487; or
(b)	for which an application for United States Letters Patent was executed on,
all Unite	undersigned hereby authorizes and requests the United States Commissioner of Patents and Trademarks to issue any and ed States Letters Patent which may be granted therefore and any and all extensions, divisions, reissues, continuations, or ations-in-part thereof, and the right to all benefits under the International Convention for the Protection of Industrial

Property to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives; the undersigned

AND the undersigned hereby agrees to transfer a like interest, and to render all necessary assistance in making application for and obtaining original, divisional, reissued or extended Letters Patent of the United States, upon request of the said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, in and to any improvements, and applications for patent based thereon, growing out of or related to the said invention; and to execute any papers by the said ASSIGNEE, its successors, assigns and legal representatives, deemed essential to ASSIGNEE's full protection and title in and to the invention hereby transferred.

SIGNED on the date indicated aside my signature:

1) ALIA - He SENT
Name: Chun-Hao TSENG

2) Name: Ying-Hao KUO

2) Alia - Chung YEE

Name: Kno-Chung YEE

Date:

2013. (2.2 2

Date:

<u>>0/3 · (0,22</u> Date:

> PATENT REEL: 031576 FRAME: 0031

RECORDED: 11/11/2013