506024363 04/21/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YONGJI MAO	03/04/2020
RONGHONG YE	03/10/2020
LIYAO LIU	03/10/2020
YU ZHANG	03/11/2020
ZHANYUAN HU	03/12/2020

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	16854075	

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ATTORNEY DOCKET NUMBER:	009196.00023
NAME OF SUBMITTER:	W GARLAND PHILLIPS
SIGNATURE:	/W Garland Phillips/
DATE SIGNED:	04/21/2020

PATENT REEL: 052454 FRAME: 0317 506024363

Total Attachments: 2 source=Assignment#page1.tif source=Assignment#page2.tif

PATENT REEL: 052454 FRAME: 0318

ASSIGNMENT

WHEREAS, I/we Yongji Mao, Ronghong Ye, Liyao Liu, Yu Zhang and Zhanyuan Hu (ASSIGNORS), am/are the inventors of certain inventions and improvements described in a U.S. patent application and having the title

METHOD FOR MANUFACTURING 14NM-NODE BEOL 32NM-WIDTH METAL

	application	4	filed	on	***************************************	and	assigned	Application
No		; and						
WHER	EAS,							

Shanghai Huali Integrated Circuit Corporation

No.6 Liangteng Road, Pudong New Area, Shanghai, China, 201314

(ASSIGNEE) desires to acquire the entire right, title and interest in and to the said application, inventions and improvements and any patents that may be granted on or as a result thereof in the United States of America (U.S.) and in any and all foreign countries;

NOW, THEREFORE, for good and valuable consideration, receipt and sufficiency of which is hereby acknowledged,

I/we hereby assign, to the above named ASSIGNEE, its successors, assigns and legal representatives (NOMINEES) the entire right, title and interest in and to said application, inventions and improvements throughout the world and to any and all patents, petty patents and utility model patents which may be granted therefor, and all continuations, continuations-in-part, divisions, reissues, extensions, renewals, and any non-provisional based on a provisional thereof (LETTERS PATENT).

And I/we covenant that we have full right to convey the entire interest herein assigned, and that I have not executed and will not execute any agreement or do anything in conflict herewith;

And I/we further covenant and agree that I will without undue delay execute without further consideration all such papers as may be necessary to perfect the title to said application, inventions and improvements, and LETTERS PATENT in the ASSIGNEE or its NOMINEES, and I agree to communicate to said ASSIGNEE or its NOMINEES all known facts respecting said application, inventions, improvements, and LETTERS PATENT, to testify in any legal proceedings, to sign all lawful papers, and generally to do all things necessary to aid ASSIGNEE or its NOMINEES to obtain and enforce for their own benefit patent protection for said application, inventions and improvements in any and all countries, all at the expense, however, of the ASSIGNEE or its NOMINEES;

LAW OFFICES

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PATENT REEL: 052454 FRAME: 0319 And I/we authorize the ASSIGNEE or its NOMINEES to file in my name or their own, as appropriate, application for LETTERS PATENT in any and all countries of the world, and we authorize and request the Commissioner of Patents and Trademarks of the United States, and any proper official of any country, to issue to said ASSIGNEE or its NOMINEES any and all LETTERS PATENT for said application, inventions and improvements, for their sole use, to the full end of the term for which such LETTERS PATENT may be granted;

And I/we hereby grant the attorneys at the law firm of Banner & Witcoff the power to insert into this document information sufficient to further identify the patent application to which this assignment pertains, including the filing date and assigned application number.

2020/03/04	Mero gray ? i	2 Art
Date	Yongji Mao	<u>-</u>

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Date	Ronghong Ye	

2020/03/10	Liyao Liu &	1 主美
Date	Liyao Liu	J

20)0/2/11	Yu ZHANG	最為
Date	Yu Zhang	

200/3/12 Zhanyuan Hu Zhanyuan Hu

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