505666476 09/11/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5713283

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
ALEXANDER ZAPOTYLOK	09/03/2019	
ANDREI KONAN	09/03/2019	

RECEIVING PARTY DATA

Name:	SK HYNIX INC.
Street Address:	2091, GYEONGCHUNG-DAERO, BUBAL-EUB, ICHEON-SI
City:	GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16567440

CORRESPONDENCE DATA

Fax Number: (571)327-5452

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.

571-327-5450 Phone:

Email: ipntlaw@ipntlaw.com **Correspondent Name:** IP & T GROUP LLP

Address Line 1: 8230 LEESBURG PIKE SUITE 650

Address Line 4: VIENNA, VIRGINIA 22182

ATTORNEY DOCKET NUMBER:	P18SFS0010
NAME OF SUBMITTER:	KEON WOO PARK
SIGNATURE:	/Keon Woo Park/
DATE SIGNED:	09/11/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 2

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> **PATENT** REEL: 050342 FRAME: 0474

505666476

Attorney Docket No.: P18SFS0010

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS	Alexander ZAPO	rylok			***************************************	•
hereinafter referred to	collectively as the as	signor and inventor, l	has invented a certain	improvement re	lating to	
LOGGING N	<u>MECHANISM FOR 1</u>	<u>MEMORY SYSTEM</u>				hama
	aving been filed in the as Ar which was filed und	oplication Serial No. (if applicabler the Patent Cooper	t and Trademark Offic le); ation Treaty on ; designated.		and was	amended
AND WHEREA	S SK hyr	nix Inc. of 2091, Gye	ongchung-daero, Bubi	<u>ıl-eub, Icheon-s</u>	i. Gyconggis	<u>lo</u> s
Republic of Korea hereinafter referred to	as the assignce or ap	plicant, is desirous o and continuations th	f acquiring the entire r ereof, and in and to sa reissues and prolongat	ight, title and in id invention and	terest in and	to said
consideration paid by assigns, sells and trainterest in and to said any and all patents wassignee, and said assignee, and said assigneed any and all anywise arising from including any and a assignee's successors enjoyed the same, if any and all assigns, any and all and prolongations the	y said assignee to sainsfers to said assigned application, includir which may be granted signee's successors an atinuations thereof, at renewals, reissues an or appertaining there and assigns, in as a this assignment had be assignor hereby agreeacts relating to the observeof.	id assignor, the rece e, and said assignce's ag any and all division therefor, including a ad assigns, to have, his and the said invention the reto, for and during and prolongations mple and beneficial of been made.	ration of One Dollar sipt of which is herek successors and assign and continuations to my and all renewals, told, exercise and enjoy on and any and all proof, with all the right the term or terms of thereof, for the use a manner as the said the request of said as erting of said patents,	by acknowledge ns, the full and hereof, and in a reissues and pro- y the said applica- atents which many and all suc- any and all suc- and benefit of assignor might signee, or said including any a	d, said assig exclusive rigind to said in- slongations thation, includ- ay be granted leges and ad- h patents wh said assigned or could har assignee's said all renew	nor nereby th, title and vention and nereof; said ing any and ed therefor, vantages in en granted, e, and said we held and accessors or als, reissues
AND said a said application, and assigns, in accordance	l on any and all divisi	d requests the Commions and continuation	nissioner of Patents and the state of the said assi	id Trademarks t gnee, and said a	o issue Lette issignee's suc	rs Patent on cessors and
As an abov made by me, and tha	e-named inventor, I l t I am the original inv	hereby declare that frentor or an original j	he above-identified ap oint inventor of a clair	oplication was r med invention is	nade or auth the applicat	orized to be ion.
I hereby ac by fine or imprisonn	knowledge that any v ent of not more than	villful false statemen five (5) years, or bot	t made in this declara h.	tion is punishab		U _. S.C. 1001
ASSIGNOR (INVE	NTOR):					
Signature:			· · · · · · · · · · · · · · · · · · ·	Date: <u>09/0.</u>	3/2019	,,,,,,,,,
Printed or Typed Na	nme: Alexa	inder ZAPOTYLOK	20.000			
Transfer or a Shawy see	in in the second second	***************************************				

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Attorney Docket No.: P18SFS0010

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS Andrei KONAN	, heremai	icr
referred to collectively as the assignor and inventor, has invented a certain improvement relating to		
LOGGING MECHANISM FOR MEMORY SYSTEM		
[X] said application being attached hereto; [] said application having been filed in the United States Patent and Trademark Office on, as Application Serial No		amended
AND WHEREAS SK hymix Inc. of 2091, Gyeongchung-daero, Bubal-eub, Icheon	-si. Gyeonggi-	do.
Republic of Korea hereinafter referred to as the assignce or applicant, is desirous of acquiring the entire right, title and application, including any and all divisions and continuations thereof, and in and to said invention a which may be granted therefor, including any and all renewals, reissues and prolongations thereof;	interest in and	to said
NOW THIS WITNESSETH, that for and in consideration of One Dollar (\$1.00), and consideration paid by said assignee to said assignor, the receipt of which is hereby acknowledgassigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and interest in and to said application, including any and all divisions and continuations thereof, and in any and all patents which may be granted therefor, including any and all renewals, reissues and passignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said applial divisions and continuations thereof, and the said invention and any and all patents which including any and all renewals, reissues and prolongations thereof, with all the rights, powers, pri anywise arising from or appertaining thereto, for and during the term or terms of any and all su including any and all renewals, reissues and prolongations thereof, for the use and benefit of assignee's successors and assigns, in as ample and beneficial a manner as the said assignor might enjoyed the same, if this assignment had not been made. AND said assignor hereby agrees to perform, upon the request of said assignee, or said assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any	ged, said assig d exclusive rigi and to said in- prolongations the lication, includ- may be grante ivileges and ad ach patents wh f said assigne- th or could have	mor hereby ht, title and vention and hereof; said ing any and ed therefor, vantages in en granted, e, and said we held and
and prolongations thereof.		
AND said assignor authorizes and requests the Commissioner of Patents and Trademarks said application, and on any and all divisions and continuations thereof, to said assignee, and said assigns, in accordance herewith.		
As an above-named inventor, I hereby declare that the above-identified application was made by me, and that I am the original inventor or an original joint inventor of a claimed invention	made or authorin the applicat	orized to be ion.
I hereby acknowledge that any willful false statement made in this declaration is punishaby fine or imprisonment of not more than five (5) years, or both.	ble under 18 (J.S.C. 1001
ASSIGNOR (INVENTOR):		
Sacration 200 and a second sec		
Signature: Moude Date: <u>091</u>	23/2019	
Remarkation of the second of t		
Printed or Typed Name: Andrei KONAN		
Dana 2 of 2		

Page 2 of 2

SK hynix **RECORDED: 09/11/2019**

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