505595173 07/29/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5641974

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JOHN L. MCCOLLUM	07/26/2019
FENGLIANG XUE	07/29/2019

RECEIVING PARTY DATA

Name:	MICROCHIP TECHNOLOGY INC.
Street Address:	2355 W. CHANDLER BLVD
City:	CHANDLER
State/Country:	ARIZONA
Postal Code:	85224

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16525546

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.

Phone: 408-354-4448

Email: admin@patentforce.com

Correspondent Name: GLASS & ASSOCATES

Address Line 1: 236 N. SANTA CRUZ AVENUE

Address Line 2: SUITE 243

Address Line 4: LOS GATOS, CALIFORNIA 95030

ATTORNEY DOCKET NUMBER:	19051US01
NAME OF SUBMITTER:	KENNETH GLASS
SIGNATURE:	/Kenneth Glass/
DATE SIGNED:	07/29/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

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PATENT REEL: 049894 FRAME: 0533

Title of Invention

METAL FILAMENT RERAM CELL WITH CURRENT LIMITING DURING PROGRAM AND ERASE

DECLARATION

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application (THE APPLICATION).

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in THE APPLICATION.

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

Note to Inventor: 37 C.F.R. § 1.63(c) states: "A person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56."

SUPPLEMENTAL ASSIGNMENT

To the extent not previously assigned to Microchip Technology Inc., a corporation organized under the laws of the state of Delaware, having an address of 2355 W. Chandler Blvd., Chandler, AZ 85224-6199 (ASSIGNEE), and for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and without expectation of any future compensation whatsoever, the below named inventor(s) (ASSIGNORS) of certain inventions or improvements (THE INVENTIONS) described and/or claimed in THE APPLICATION, do hereby sell. assign and transfer and set over to ASSIGNEE, the entire worldwide right, title and interest in and to: THE INVENTIONS; THE APPLICATION and any other related intellectual property rights, such as, but not limited to, copyright rights, copyrightable subject matter, know how, trade secrets, copyright registrations, reproduction rights; all continuations, divisions, reexams, renewals of or substitutes for THE APPLICATION; the right to file counterparts to THE APPLICATION in all countries and regions; the right to claim priority from THE APPLICATION in all countries and regions; all priority rights under the International Convention for the Protection of Industrial Property for every member country; all patents which may be granted on or as a result thereof; and any reissue or reissues of such patents; the same to be held and enjoyed by the ASSIGNEE, its successors, nominees, assigns or legal representatives, to the full end of the term or terms for which such patents respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by the ASSIGNORS, had this Assignment, sale and transfer not been made.

ASSIGNORS hereby covenant that they: have full right to convey the entire interest herein assigned and that they have not executed and will not execute any agreement to transfer any rights in THE INVENTIONS and/or THE APPLICATION to anyone other than the ASSIGNEE or that is otherwise in conflict herewith. Furthermore, ASSIGNORS hereby waive any and all moral rights under 17 U.S.C. § 106A or otherwise.

Each time a request is made and without undue delay ASSIGNORS promise that they shall: execute and deliver all such papers as may be necessary or desirable to perfect the title to THE INVENTIONS, THE APPLICATION, and the patents in the ASSIGNEE, its successors, assigns, nominees or legal representatives; communicate to the ASSIGNEE, or its nominees, all known facts respecting THE INVENTIONS, THE APPLICATION and said patents; testify in any legal proceedings; sign all lawful papers; execute all disclaimers and divisional, continuing, reissue and foreign applications; make all rightful oaths; and do everything possible to aid the ASSIGNEE, its successors, assigns, legal representatives and nominees to obtain and enforce for its or their own benefit, proper patent protection for the Inventions in all countries; all at the expense, however, of the ASSIGNEE or its successors, assigns, nominees or legal representatives. ASSIGNORS agree not to challenge or oppose, on any grounds whatsoever, the validity of this Assignment or to contest the validity or enforceability of any intellectual property rights assigned herein. ASSIGNORS agree not to assist or request any third party to: contest the validity of this Assignment or contest the validity or enforceability of any intellectual property rights assigned herein.

ASSIGNORS hereby irrevocably designate and appoint the ASSIGNEE and its duly authorized officers and agents, and their successors, as theirs agents and attorneys-in-fact, to act on the ASSIGNORS' behalf and instead of the ASSIGNORS, to execute and file applications to patent THE INVENTIONS in all countries, and to do all other proper lawfully-permitted acts to further the assignment, prosecution and issuance of patents for the Inventions with the same legal force and effect as if executed by the ASSIGNORS. This power of attorney shall

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be deemed coupled with an interest and is irrevocable. ASSIGNORS hereby authorize and request any official of any country or countries whose duty it is to issue patents on applications to issue to the ASSIGNEE, its successors, assigns, legal representatives or nominees all patents for THE INVENTIONS in accordance with the terms of this Assignment.		
Inventor (Legal Name): John L. McCollum Signature: August Callum	Date: 7/24/2019	
Inventor (Legal Name): Fengliang Xue		
Signature:	Date:	

Patent Application Docket No.: 19051US02

PATENT REEL: 049894 FRAME: 0535

Title of Invention	METAL FILAMENT RERAM CELL WITH CURRENT LIMITING DURING PROGRAM AND ERASE
	<u> </u>

DECLARATION

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ASSIGNORS hereby covenant that they: have full right to convey the entire interest herein assigned and that they have not executed and will not execute any agreement to transfer any rights in THE INVENTIONS and/or THE APPLICATION to anyone other than the ASSIGNEE or that is otherwise in conflict herewith. Furthermore, ASSIGNORS hereby waive any and all moral rights under 17 U.S.C. § 106A or otherwise.

Each time a request is made and without undue delay ASSIGNORS promise that they shall: execute and deliver all such papers as may be necessary or desirable to perfect the title to THE INVENTIONS, THE APPLICATION, and the patents in the ASSIGNEE, its successors, assigns, nominees or legal representatives; communicate to the ASSIGNEE, or its nominees, all known facts respecting THE INVENTIONS, THE APPLICATION and said patents; testify in any legal proceedings; sign all lawful papers; execute all disclaimers and divisional, continuing, reissue and foreign applications; make all rightful oaths; and do everything possible to aid the ASSIGNEE, its successors, assigns, legal representatives and nominees to obtain and enforce for its or their own benefit, proper patent protection for the Inventions in all countries; all at the expense, however, of the ASSIGNEE or its successors, assigns, nominees or legal representatives. ASSIGNORS agree not to challenge or oppose, on any grounds whatsoever, the validity of this Assignment or to contest the validity or enforceability of any intellectual property rights assigned herein. ASSIGNORS agree not to assist or request any third party to: contest the validity of this Assignment or contest the validity or enforceability of any intellectual property rights assigned herein.

ASSIGNORS hereby irrevocably designate and appoint the ASSIGNEE and its duly authorized officers and agents, and their successors, as theirs agents and attorneys-in-fact, to act on the ASSIGNORS' behalf and instead of the ASSIGNORS, to execute and file applications to patent THE INVENTIONS in all countries, and to do all other proper lawfully-permitted acts to further the assignment, prosecution and issuance of patents for the Inventions with the same legal force and effect as if executed by the ASSIGNORS. This power of attorney shall

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any country or countries whose duty it is to issue patents on applications to issue to the ASSIGNEE, its successors, assigns, legal representatives or nominees all patents for THE INVENTIONS in accordance with the terms of this Assignment.		
Inventor (Legal Name): John L. McCollum	: :	
Signature:	Date:	
Inventor (Legal Name): Fengliang Xue		
Signature:	Date: 7/29/2819	

Patent Application Docket No.: 19051US02

RECORDED: 07/29/2019

PATENT

REEL: 049894 FRAME: 0537