PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7732852

SUBMISSION TYPE:	RESUBMISSION
NATURE OF CONVEYANCE:	ASSIGNMENT
RESUBMIT DOCUMENT ID:	507665437

CONVEYING PARTY DATA

Name	Execution Date
FANG CAO	11/06/2022
ZHENHUA GUO	11/05/2022
LI WANG	11/03/2022
KAI GAO	11/02/2022

RECEIVING PARTY DATA

Name:	INSPUR ELECTRONIC INFORMATION INDUSTRY CO., LTD.	
Street Address:	1036 LANGCHAO ROAD	
City:	JINAN, SHANDONG	
State/Country:	CHINA	
Postal Code:	250101	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	18012924

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:617-8330649Email:contact@us-ip.com

Correspondent Name: IPRO, PLLC

Address Line 1: 12332 TOWNCENTER PLAZA

Address Line 2: PMB# 816

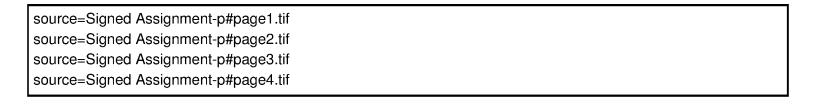
Address Line 4: STERLING, VIRGINIA 20164

NAME OF SUBMITTER:	QIAN GU
SIGNATURE: /	/QIAN GU/
DATE SIGNED:	01/09/2023

Total Attachments: 4

PATENT REEL: 062320 FRAME: 0127

507685710



PATENT REEL: 062320 FRAME: 0128

Attorney Docket Number				
⊺itle of Invention	METHOD FOR REALIZING NGRAPH FRAMEWORK SUPPORTING FPGA REAR-END DEVICE			
WHEREAS invention in	, I believe that I am th the application identi	ne original inventor or an original joint i fied by the title above.	nventor (referred to	o as ASSIGNOR below) of a claimed
WHEREAS	, INSPURI	ELECTRONIC INFORMAT	ION INDUST	RY CO.,LTD.
having a postal address of No.1036,Langchao Road,High-Tech Zone Jinan,Shandong 250101 CHINA			one	
(referred to	as ASSIGNEE below	v) desires to acquire the entire right, tit	le, and interest in a	and to the same in the United States;
ASSIGNOF said inven- division, co	t, by these presents	throughout the United States of An on-in-part, reexamination, and reissue	ASSIGNEE, the enerica, including a	intire right, title, and interest in and to ny and all patents granted on any
ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.				
ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.				
ASSIGNOR authorizes Practitioners associated with the Customer Number to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same.				
LEGAL NAME OF ASSIGNOR				
Assignor:	CAO,Fa	ng	Date:	2022.11.6
Signature:				

PAGE 2 OF 2

Attorney Docket Number	·······		
Title of Invention	METHOD FOR REALIZING NGRAPH FRAMEWORK SUPPORTING FPGA REAR-END DEVICE	(
WHEREAS invention in	AS, I believe that I am the original inventor or an original joint inventor (referred to as AS in the application identified by the title above.	SIGNOR below) of a claimed	
WHEREAS	_{AS,} INSPUR ELECTRONIC INFORMATION INDUSTRY CO	D.,LTD.	
having a po	postal address of No.1036,Langchao Road,High-Tech Zone Jinan,Shandong 250101 CHINA		
(referred to	to as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the	ne same in the United States;	
ASSIGNOR said inventorion, con	NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of v OR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire ri ention and application throughout the United States of America, including any and a continuation, continuation-in-part, reexamination, and reissue of said application, whethe ental examination thereof.	ght, title, and interest in and to all patents granted on any	
ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.			
ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.			
ASSIGNOR authorizes Practitioners associated with the Customer Number to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same.			
LEGAL N	NAME OF ASSIGNOR		
Assignor:	GUO,Zhenhua 2022 or:Date:	2.11.5	
Signature	ure: \$15 th 4		

PAGE 2 OF 2

METHOD FOR REALIZING NGRAPH FRAMEWORK SUPPORTING FPGA REAR-END DEVICE WHEREAS, I believe that I am the original inventor or an original joint inventor (referred to as ASSIGNOR below) of a claimed invention in the application identified by the title above. WHEREAS, INSPUR ELECTRONIC INFORMATION INDUSTRY CO., LTD. having a postal address of No. 1036, Langchao Road, High-Tech Zone Jinan, Shandong 250101 CHINA (referred to as ASSIGNEE below) desires to acquire the entire right, little, and interest in and to the same in the United States; NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does self, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any end all patents granted on any division, continuation, and installation-in-part, reexamination, and reissue of said application, whether granted and an initial or supplemental examination thereof. ASSIGNOR hereby agrees to execute any documents that legaly may be required in connection with the filling, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application or patent application or pa	Attorney Docket Number			
whereas, inspure Electronic Information Industry Co.,Ltd. having a postal address of No.1036, Langchao Road, High-Tech Zone Jinan, Shandong 250101 CHINA (referred to as ASSIGNEE below) desires to acquire the entire right, little, and interest in and to the same in the United States, NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does self, assign and transfer runto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and release of said application, whether granted in an initial or supplemental examination thereof. ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE; the total scale invention that are within further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that tawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and determony on behalf of ASSIGNEE that tawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and determony an ethalf of ASSIGNEE that tawfully may be required to above to ASSIGNEE at the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's select to above to ASSIGNEE as the ASSIGNEE's select to commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNE				
having a postal address of No.1036, Langchao Road, High-Tech Zone Jinan, Shandong 250101 CHINA (referred to as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States, NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does self, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof. ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's experience, to identify and communicate to ASSIGNEE at ASSIGNEE's requested documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lewfully may be required of ASSIGNOR in respect of the prosecution, maintenances and defense of any patents encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNEE's sole use and behalf, and thereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behalf, and for the use and behalf of ASSIGNEE's legal representatives. ASSIGNOR authorizes Practit				n original joint inventor (referred to as ASSIGNOR below) of a cialmed
Jinan, Shandong 250101 CHINA (referred to as ASSIGNEE below) desires to acquire the entire right, title, and interest in and to the same in the United States; NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does self, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patients granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof. ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's requested documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or greater accompassed within the terms of this instrument. ASSIGNOR obligations under this instrument shall extend to ASSIGNEE's sole use and behoof, and for the use and behoof of ASSIGNEE's elegations under this instrument shall extend to ASSIGNOR's helrs, executors, administrators and other legal representatives. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for	WHEREAS	NSPUR	ELECTRONIC IN	FORMATION INDUSTRY CO.,LTD.
NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, title, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof. ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to stail invention and application, at invention, assigned a supplication and maintenance of said application or any other patent applications and at ASSIGNEE as expense, to identify and communicate to ASSIGNEE at ASSIGNEE request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on the invention that are within assigned of ASSIGNEE as a substance of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof, and for the use and behoof of ASSIGNEE alegal representatives and successors, to the full and of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made. ASSIGNOR authorizes Practit	Jinan,Shandong 250101			. •
ASSIGNOR, by these presents does sell, assign and transfer unto ASSIGNEE, the entire right, titte, and interest in and to said invention and application throughout the United States of America, including any and all patents granted on any division, continuation, continuation-in-part, reexamination, and reissue of said application, whether granted in an initial or supplemental examination thereof. ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filling, prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that tawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the seme, for ASSIGNEE's sole use and behoof, and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made. ASSIGNOR authorizes Practitioners associated with the Customer Number to insert or complete any information	(referred to	as ASSIGNEE bel	ow) desires to acquire the	entire right, title, and interest in and to the same in the United States;
prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument, ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives. ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof, and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made. ASSIGNOR authorizes Practitioners associated with the Customer Number to insert or complete any information in this document needed to effect its recordel in the U.S. Patent and Trademark Office and to record the same. LEGAL NAME OF ASSIGNOR WANG, Li Date: Date: Date:	ASSIGNOR said invent division, co	t, by these presention and application the continuation, continuation, continuations.	ts does sell, assign and on throughout the United ation-in-part, reexamination	transfer unto ASSIGNEE, the entire right, title, and interest in and to I States of America, including any and all patents granted on any
referred to above to ASSIGNEE, as the ASSIGNEE of the entire right, title and interest in and to the same, for ASSIGNÉE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made. ASSIGNOR authorizes Practitioners associated with the Customer Number to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same. LEGAL NAME OF ASSIGNOR WANG, Li Date: Date:	prosecution and maintenance of said application or any other patent applications in the United States for said invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNOR also agrees, without further consideration and at ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument, ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's			
in this document needed to effect its recordel in the U.S. Patent and Trademark Office and to record the same. LEGAL NAME OF ASSIGNOR WANG, Li Date: Date:	referred to above to ASSIĞNEE, as the ASSIĞNEE of the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment			
Assignor:				
Assignor: Date:	LEGAL NAME OF ASSIGNOR			
The	Assignor	;	WANG,Li	
	Signature:			

PAGE 2 OF 2

Attomey Docket Number			
Title of Invention	METHOD FOR REALIZING NGRAPH SUPPORTING FPGA REAR-END DE	· · · · · · · · · · · · · · · · · · ·	
	5, I believe that I am the original inventor or an original joint in the application identified by the title above.	ventor (referred to as ASSIGNOR below) of a claimed	
WHEREAS	INSPUR ELECTRONIC INFORMATION	ON INDUSTRY CO.,LTD.	
having a po	^{ostal address of} No.1036,Langchao Road,Hig	h-Tech Zone	
	Jinan,Shandong 250101 CHINA		
(referred to	as ASSIGNEE below) desires to acquire the entire right, title	e, and interest in and to the same in the United States:	
ASSIGNOF sald inven- division, co	DW, THEREFORE, for good and valuable consideration, the r R, by these presents does sell, assign and transfer unto tion and application throughout the United States of Am ontinuation, continuation-in-part, reexamination, and reissue of tal examination thereof.	ASSIGNEE, the entire right, title, and interest in and to erica, including any and all patents granted on any	
ASSIGNOR hereby agrees to execute any documents that legally may be required in connection with the filing, prosecution and maintenance of said application or any other patent applications in the United States for said Invention, including additional documents that may be required to affirm the rights of ASSIGNEE in and to said invention and application, all without further consideration. ASSIGNEE's expense, to identify and communicate to ASSIGNEE at ASSIGNEE's request documents and information concerning the invention that are within ASSIGNOR's possession or control, and to provide further assurances and testimony on behalf of ASSIGNEE that lawfully may be required of ASSIGNOR in respect of the prosecution, maintenance and defense of any patent application or patent encompassed within the terms of this instrument. ASSIGNOR's obligations under this instrument shall extend to ASSIGNOR's heirs, executors, administrators and other legal representatives.			
ASSIGNOR hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all patents referred to above to ASSIGNEE, as the ASSIGNEE's the entire right, title and interest in and to the same, for ASSIGNEE's sole use and behoof; and for the use and behoof of ASSIGNEE's legal representatives and successors, to the full end of the term for which such patent may be granted, as fully and entirely as the same would have been held by ASSIGNOR had this assignment and sale not been made.			
ASSIGNOR authorizes Practitioners associated with the Customer Number to insert or complete any information in this document needed to effect its recordal in the U.S. Patent and Trademark Office and to record the same.			
LEGAL NAME OF ASSIGNOR			
åsskinor	GAO,Kai	2022.11.2 Date:	
Loophing.			
Signature	a) <u>(20</u> 4		

PAGE 2 OF 2

PATENT REEL: 062320 FRAME: 0132