504532345 09/05/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4579052

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOU QING XIANG	08/22/2017
SHI WEN WANG	08/22/2017
WU FENG QIU	08/22/2017
YING CHAO LI	08/22/2017
YUN CHEN	08/22/2017
LIAN ZHONG ZHANG	08/22/2017
JUN ZHANG	08/22/2017

RECEIVING PARTY DATA

Name:	JOHNSON ELECTRIC S.A.
Street Address:	FREIBURGSTRASSE 33
City:	MURTEN
State/Country:	SWITZERLAND
Postal Code:	CH-3280

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15692256

CORRESPONDENCE DATA

Fax Number: (703)621-7155

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: 7036217140

Email: mailroom@mg-ip.com, alb@mg-ip.com
Correspondent Name: MUNCY, GEISSLER, OLDS & LOWE, PC

Address Line 1: 4000 LEGATO RD., SUITE 310
Address Line 4: FAIRFAX, VIRGINIA 22033

ATTORNEY DOCKET NUMBER:	1928/0874PUS1	
NAME OF SUBMITTER:	JOE MCKINNEY MUNCY	
SIGNATURE:	/Joe McKinney Muncy/	
DATE SIGNED:	09/05/2017	

PATENT 504532345 REEL: 043487 FRAME: 0380

Total Attachments: 12 source=2017-09-05 assignment as filed#page1.tif source=2017-09-05 assignment as filed#page2.tif source=2017-09-05 assignment as filed#page3.tif source=2017-09-05 assignment as filed#page4.tif source=2017-09-05 assignment as filed#page5.tif source=2017-09-05 assignment as filed#page6.tif source=2017-09-05 assignment as filed#page7.tif source=2017-09-05 assignment as filed#page8.tif source=2017-09-05 assignment as filed#page9.tif source=2017-09-05 assignment as filed#page10.tif source=2017-09-05 assignment as filed#page11.tif source=2017-09-05 assignment as filed#page11.tif

MUNCY, GEISSLER, OLDS & LOWE, P.C.

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: Motor Driving Circuit, Application Device including The Same, And
Braking Method For A Motor
As a below named inventor, I hereby declare that:
This declaration is directed to:
☐ The attached application; or X United States application number or PCT international application number
filed on $\frac{08/31/2017}{.}$.
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.
Direct all correspondence to the address associated with Customer Number 60601.
WHEREAS, Johnson Electric S.A. of Freiburgstrasse 33, CH-3280, Murten, Switzerland, its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and in any foreign countries.
NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the

Attorney Docket No. Page 2 of 4

entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letter Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional, conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Muncy, Geissler, Olds & Lowe, P.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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Attorney Docket No. Page 3 of 4

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

LEGAL NAME OF FIRST OR SOLE INVENTOR:

You Qing XIANG Signature: Date: 2017-Aug-22
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:
Shi Wen WANG Signature: Date:
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:
Wu Feng QIU
Signature:
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:
Ying Chao LI Signature: Date: 2017 - 08 - 22

 \boxtimes Additional inventors are being named on separately numbered sheets attached hereto.

Attorney Docket No. Page 4 of 4

SUPPLEMENTAL SHEET FOR COMBINED DECLARATION AND ASSGINMENT

LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:	
Yun CHEN	
Signature: 45.4	Date: 3017-8-22.
LEGAL NAME OF ADDITIONAL JOINT I	
Lian Zhong ZHANG	
Signature:	Date:
LEGAL NAME OF ADDITIONAL JOINT IN	NVENTOR, IF ANY:
Signature:	Date:
LEGAL NAME OF ADDITIONAL JOINT IN	NVENTOR, IF ANY:
Signature:	Date:
LEGAL NAME OF ADDITIONAL JOINT IN	VENTOR, IF ANY:
Signature:	Date:

PATENT

MUNCY, GEISSLER, OLDS & LOWE, P.C.

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: <u>Motor Driving Circuit</u>, <u>Application Device Including The Same</u>, <u>And Braking Method For A Motor</u>

Braking Method For A Motor
As a below named inventor, I hereby declare that:
This declaration is directed to: The attached application; or United States application number or PCT international application number filed on
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 claime invention in the application.
I hereby acknowledge that any willful false statement made in this declaration i punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, o both.
Direct all correspondence to the address associated with Customer Number 60601.
WHEREAS, Johnson Electric S.A. of Freiburgstrasse 33, CH-3280, Murten Switzerland, its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and in any foreign countries.
NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the

Attorney Docket No. Page 2 of 4

entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

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The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America patent(s) or a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

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The undersigned hereby grant(s) the law firm of Muncy, Geissler, Olds & Lowe, P.C. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

PATENT.

Attorney Docket No. Page 3 of 4

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

LEGAL NAME OF FIRST OR SOLE INVENTOR:

You Qing XIANG	
Signature:	Date: 2017-Aug-22
LEGAL NAME OF ADDITIONAL JOINT IN	NVENTOR, IF ANY:
Shi Wen WANG	_
Signature:	Date: 201) - 68 - 22
LEGAL NAME OF ADDITIONAL JOINT IN	IVENTOR, IF ANY:
Wu Feng QIU	
Signature: 43+k4	Date: 117 - 08 - 22
LEGAL NAME OF ADDITIONAL JOINT IN	NVENTOR, IF ANY:
Ying Chao LI	
Signature:	Date: 2017 - 08 - 22

 \boxtimes Additional inventors are being named on separately numbered sheets attached hereto.

Attorney Docket No. Page 4 of 4

SUPPLEMENTAL SHEET FOR COMBINED DECLARATION AND ASSGINMENT

LEGAL NAME OF ADDITIONAL JOI	NT INVENTOR, IF ANY:	
Yun CHEN		
Signature:	Date:	
	The state of the s	
LEGAL NAME OF ADDITIONAL JOI	NT-INVENTUK, FFANEL -E. 55	
Lian Zhong ZHANG		
Signature: ZK 3± Z	Date: 2017.08.22	
LEGAL NAME OF ADDITIONAL JOI	NT INVENTOR, IF ANY:	
Jun <u>ZHANG</u>		
Signature:	Date:	
LEGALNAME OF ADDITIONAL JOI	INT INVENTOR, IF ANY:	
Signature:	Date:	
And the second s		
LEGAL NAME OF ADDITIONAL JOI	INT INVENTOR, IF ANY:	
Signature	Date:	

PATENT

MUNCY, GEISSLER, OLDS & LOWE, P.C.

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: <u>Motor Driving Circuit</u>, <u>Application Device Including The Same, And Braking Method For A Motor</u>

Braking Method For A Motor
As a below named inventor, I hereby declare that:
This declaration is directed to:
The attached application; or
United States application number or PCT international application number
filed on
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.
Direct all correspondence to the address associated with Customer Number 60601.
WHEREAS, <u>Johnson Electric S.A.</u> of <u>Freiburgstrasse 33</u> , <u>CH-3280</u> , <u>Murten</u> , <u>Switzerland</u> , its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and in any foreign countries.
NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the

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entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

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Attorney Docket No. Page 3 of 4

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

LEGAL NAME OF FIRST OR SOLE INVENTOR:

You Qing XIANG		
Signature: Date: 2017-Aug-20	<u></u>	
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:		
Shi Wen WANG		
Signature:	_	
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:		
Wu Feng QIU		
Signature: 43 # 17 - 08 - 22		
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:		
Ying Chao LI Signature: Date: 2017 - 08 - 22		

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Attorney Docket No. Page 4 of 4

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Yun CHEN		
Signature:	Date:	
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:		
Lian Zhong ZHANG		
Signature:	Date:	
LEGAL NAME OF ADDITIONAL JOINT I	NVENTOR, IF ANY: Date: 2017, 08, 22	
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:		
Signature:	Date:	
LEGAL NAME OF ADDITIONAL JOINT INVENTOR, IF ANY:		
Signature:	Date:	

PATENT