506910536 10/07/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT6957361 Stylesheet Version v1.2

SUBMISSION TYPE:NEW ASSIGNMENTNATURE OF CONVEYANCE:ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DANIEL E. KILLIAN	09/24/2019
SIVARAM BALASUBRAMANIAN	09/25/2019
KENDAL R. HARRIS	09/25/2019
CHANDRESH R. CHAUDHARI	09/25/2019

RECEIVING PARTY DATA

Name:	ROCKWELL AUTOMATION TECHNOLOGIES, INC.	
Street Address:	1 ALLEN-BRADLEY DRIVE	
City:	MAYFIELD HEIGHTS	
State/Country:	OHIO	
Postal Code:	44124	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17496072

CORRESPONDENCE DATA

Fax Number: (216)363-9001

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: 216.363.9149

Email: CSCHWETER@FAYSHARPE.COM

Correspondent Name: STEVEN HAAS

Address Line 1: 1228 EUCLID AVENUE

Address Line 2: THE HALLE BUILDING - 5TH FLOOR

Address Line 4: CLEVELAND, OHIO 44115

ATTORNEY DOCKET NUMBER: ROKZ 200222US02

NAME OF SUBMITTER: STEVEN HAAS

SIGNATURE: /Steven Haas/

DATE SIGNED: 10/07/2021

Total Attachments: 8

source=Assignment#page1.tif source=Assignment#page2.tif

PATENT 506910536 REEL: 057729 FRAME: 0258

DANIEL E. KILLIAN, SIVARAM BALASUBRAMANIAN, KENDAL R. HARRIS and CHANDRESH R. CHAUDHARI

(Inventors) have invented

DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

(the Inventions), as described in:

U.S. Patent Application Ser. No. <u>16/584,194</u>, filed <u>September 26, 2019</u> (the Application).

Rockwell Automation Technologies, Inc. (Assignee), an Ohio Corporation with a principal place of business at 1 Allen-Bradley Drive, Mayfield Heights, Ohio 44124, is desirous of acquiring the entire right, title, and interest in the Inventions and the Application. Any reference in this assignment to the Assignee encompasses the successors, legal representatives, and assigns of the Assignee.

For good and sufficient consideration, the receipt of which is hereby acknowledged, Inventors hereby transfer to Assignee the entire right, title, and interest in the Inventions and the Application, and in all patents and patent applications covering the Inventions or resulting from the Application, including all provisional, non-provisional, continuation, continuation-in-part, divisional, reissue, reexamination, foreign, and PCT applications, and any patents resulting from these applications, in the United States and in all foreign countries, including in particular the rights of priority originating from the Application.

Inventors hereby represent that, except for any rights that have arisen to Assignee under law or that have already been transferred to Assignee, Inventors have the right to convey the entire right, title, and interest in the Inventions and the Application, and that no assignment, sale, agreement, or encumbrance has been made or will be made which would conflict with this assignment.

Inventors hereby authorize the Director of the U.S. Patent and Trademark Office and the empowered officials of all other governments to issue all patents covering the Inventions or resulting from the Application, to the Assignee.

Inventors hereby agree to carry out in good faith the intent and purpose of this assignment; to communicate to Assignee any facts relating to the Inventions, the Application, and any patents and applications that cover the Inventions or result from

Outside Counsel Ref. No. <u>ROKZ 200222US01</u>
RA Ref. No. 2019P-081-US
Assignment by Inventors
DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH
REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

the Application; to testify in any legal proceeding when requested to do so; to execute all rightful oaths, assignments, powers of attorney and other papers; to sign all lawful papers, execute all necessary assignment papers to cause any patents resulting from the Application or covering the Inventions to be issued to Assignee; and to generally do everything necessary or desirable to aid the Assignee in attaining, perfecting title in, and enforcing proper protection for the Inventions, the Application and any patents and applications resulting from the Inventions or the Application, in the United States and in all other countries, all without further consideration, but at the expense of the Assignee.

Inventors hereby grant to Assignee the right to sue for past, present and future infringement of any patents covering the Inventions or resulting from the Application.

Inventors grant to Assignee and Assignee's attorneys the power to insert into this assignment any information necessary to comply with the rules of the United States Patent and Trademark Office for recordation of this Assignment.

The Inventors executed Date:	this assignment as of the dates indicated below: Daniel E Killian Market School Scho
	DANIEL E. KILLIAN
Date:	
	SIVARAM BALASUBRAMANIAN
Date:	
	KENDAL R. HARRIS
Date:	
	CHANDRESH R. CHAUDHARI

DANIEL E. KILLIAN, SIVARAM BALASUBRAMANIAN, KENDAL R. HARRIS and CHANDRESH R. CHAUDHARI

(Inventors) have invented

DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

(the Inventions), as described in:

U.S. Patent Application Ser. No. <u>16/584,194</u>, filed <u>September 26, 2019</u> (the Application).

Rockwell Automation Technologies, Inc. (Assignee), an Ohio Corporation with a principal place of business at 1 Allen-Bradley Drive, Mayfield Heights, Ohio 44124, is desirous of acquiring the entire right, title, and interest in the Inventions and the Application. Any reference in this assignment to the Assignee encompasses the successors, legal representatives, and assigns of the Assignee.

For good and sufficient consideration, the receipt of which is hereby acknowledged, Inventors hereby transfer to Assignee the entire right, title, and interest in the Inventions and the Application, and in all patents and patent applications covering the Inventions or resulting from the Application, including all provisional, non-provisional, continuation, continuation-in-part, divisional, reissue, reexamination, foreign, and PCT applications, and any patents resulting from these applications, in the United States and in all foreign countries, including in particular the rights of priority originating from the Application.

Inventors hereby represent that, except for any rights that have arisen to Assignee under law or that have already been transferred to Assignee, Inventors have the right to convey the entire right, title, and interest in the Inventions and the Application, and that no assignment, sale, agreement, or encumbrance has been made or will be made which would conflict with this assignment.

Inventors hereby authorize the Director of the U.S. Patent and Trademark Office and the empowered officials of all other governments to issue all patents covering the Inventions or resulting from the Application, to the Assignee.

Inventors hereby agree to carry out in good faith the intent and purpose of this assignment; to communicate to Assignee any facts relating to the Inventions, the Application, and any patents and applications that cover the Inventions or result from

Outside Counsel Ref. No. ROKZ 200222US01 RA Ref. No. 2019P-081-US Assignment by Inventors DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

the Application; to testify in any legal proceeding when requested to do so; to execute all rightful oaths, assignments, powers of attorney and other papers; to sign all lawful papers, execute all necessary assignment papers to cause any patents resulting from the Application or covering the Inventions to be issued to Assignee; and to generally do everything necessary or desirable to aid the Assignee in attaining, perfecting title in, and enforcing proper protection for the Inventions, the Application and any patents and applications resulting from the Inventions or the Application, in the United States and in all other countries, all without further consideration, but at the expense of the Assignee.

Inventors hereby grant to Assignee the right to sue for past, present and future infringement of any patents covering the Inventions or resulting from the Application.

Inventors grant to Assignee and Assignee's attorneys the power to insert into this assignment any information necessary to comply with the rules of the United States Patent and Trademark Office for recordation of this Assignment.

The Inventors executed this assignment as of the dates indicated below:

Date:	
Date:	DANIEL E. KILLIAN Sivaram Balasubramanian
	SIVARAM BALASUBRAMANIAN
Date:	
	KENDAL R. HARRIS
Date:	
	CHANDRESH R. CHAUDHARI

DANIEL E. KILLIAN, SIVARAM BALASUBRAMANIAN, KENDAL R. HARRIS and CHANDRESH R. CHAUDHARI

(Inventors) have invented

DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

(the Inventions), as described in:

U.S. Patent Application Ser. No. <u>16/584,194</u>, filed <u>September 26, 2019</u> (the Application).

Rockwell Automation Technologies, Inc. (Assignee), an Ohio Corporation with a principal place of business at 1 Allen-Bradley Drive, Mayfield Heights, Ohio 44124, is desirous of acquiring the entire right, title, and interest in the Inventions and the Application. Any reference in this assignment to the Assignee encompasses the successors, legal representatives, and assigns of the Assignee.

For good and sufficient consideration, the receipt of which is hereby acknowledged, Inventors hereby transfer to Assignee the entire right, title, and interest in the Inventions and the Application, and in all patents and patent applications covering the Inventions or resulting from the Application, including all provisional, non-provisional, continuation, continuation-in-part, divisional, reissue, reexamination, foreign, and PCT applications, and any patents resulting from these applications, in the United States and in all foreign countries, including in particular the rights of priority originating from the Application.

Inventors hereby represent that, except for any rights that have arisen to Assignee under law or that have already been transferred to Assignee, Inventors have the right to convey the entire right, title, and interest in the Inventions and the Application, and that no assignment, sale, agreement, or encumbrance has been made or will be made which would conflict with this assignment.

Inventors hereby authorize the Director of the U.S. Patent and Trademark Office and the empowered officials of all other governments to issue all patents covering the Inventions or resulting from the Application, to the Assignee.

Inventors hereby agree to carry out in good faith the intent and purpose of this assignment; to communicate to Assignee any facts relating to the Inventions, the Application, and any patents and applications that cover the Inventions or result from

Outside Counsel Ref. No. <u>ROKZ 200222US01</u> RA Ref. No. 2019P-081-US Assignment by Inventors DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

the Application; to testify in any legal proceeding when requested to do so; to execute all rightful oaths, assignments, powers of attorney and other papers; to sign all lawful papers, execute all necessary assignment papers to cause any patents resulting from the Application or covering the Inventions to be issued to Assignee; and to generally do everything necessary or desirable to aid the Assignee in attaining, perfecting title in, and enforcing proper protection for the Inventions, the Application and any patents and applications resulting from the Inventions or the Application, in the United States and in all other countries, all without further consideration, but at the expense of the Assignee.

Inventors hereby grant to Assignee the right to sue for past, present and future infringement of any patents covering the Inventions or resulting from the Application.

Inventors grant to Assignee and Assignee's attorneys the power to insert into this assignment any information necessary to comply with the rules of the United States Patent and Trademark Office for recordation of this Assignment.

The Inventors executed this assignment as of the dates indicated below:

CHANDRESH R. CHAUDHARI

DANIEL E. KILLIAN, SIVARAM BALASUBRAMANIAN, KENDAL R. HARRIS and CHANDRESH R. CHAUDHARI

(Inventors) have invented

DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

(the Inventions), as described in:

U.S. Patent Application Ser. No. <u>16/584,194</u>, filed <u>September 26, 2019</u> (the Application).

Rockwell Automation Technologies, Inc. (Assignee), an Ohio Corporation with a principal place of business at 1 Allen-Bradley Drive, Mayfield Heights, Ohio 44124, is desirous of acquiring the entire right, title, and interest in the Inventions and the Application. Any reference in this assignment to the Assignee encompasses the successors, legal representatives, and assigns of the Assignee.

For good and sufficient consideration, the receipt of which is hereby acknowledged, Inventors hereby transfer to Assignee the entire right, title, and interest in the Inventions and the Application, and in all patents and patent applications covering the Inventions or resulting from the Application, including all provisional, non-provisional, continuation, continuation-in-part, divisional, reissue, reexamination, foreign, and PCT applications, and any patents resulting from these applications, in the United States and in all foreign countries, including in particular the rights of priority originating from the Application.

Inventors hereby represent that, except for any rights that have arisen to Assignee under law or that have already been transferred to Assignee, Inventors have the right to convey the entire right, title, and interest in the Inventions and the Application, and that no assignment, sale, agreement, or encumbrance has been made or will be made which would conflict with this assignment.

Inventors hereby authorize the Director of the U.S. Patent and Trademark Office and the empowered officials of all other governments to issue all patents covering the Inventions or resulting from the Application, to the Assignee.

Inventors hereby agree to carry out in good faith the intent and purpose of this assignment; to communicate to Assignee any facts relating to the Inventions, the Application, and any patents and applications that cover the Inventions or result from

Outside Counsel Ref. No. ROKZ 200222US01 RA Ref. No. 2019P-081-US Assignment by Inventors DISTRIBUTED MODULAR INPUT/OUTPUT (I/O) SYSTEM WITH REDUNDANT ETHERNET BACKPLANE NETWORKS FOR IMPROVED FAULT TOLERANCE

the Application; to testify in any legal proceeding when requested to do so; to execute all rightful oaths, assignments, powers of attorney and other papers; to sign all lawful papers, execute all necessary assignment papers to cause any patents resulting from the Application or covering the Inventions to be issued to Assignee; and to generally do everything necessary or desirable to aid the Assignee in attaining, perfecting title in, and enforcing proper protection for the Inventions, the Application and any patents and applications resulting from the Inventions or the Application, in the United States and in all other countries, all without further consideration, but at the expense of the Assignee.

Inventors hereby grant to Assignee the right to sue for past, present and future infringement of any patents covering the Inventions or resulting from the Application.

Inventors grant to Assignee and Assignee's attorneys the power to insert into this assignment any information necessary to comply with the rules of the United States Patent and Trademark Office for recordation of this Assignment.

The Inventors executed this assignment as of the dates indicated below:

Date:	
	DANIEL E. KILLIAN
Date:	
	SIVARAM BALASUBRAMANIAN
Date:	
	KENDAL R. HARRIS
Date: 09/25/2019	Chandresh R. Chaudhari
	CHANDRESH R. CHAUDHARI

CANRPortbl/IMANMAIN/CSCHWETER\4329980_1.docx

PATENT REEL: 057729 FRAME: 0267

RECORDED: 10/07/2021