### 505002241 07/13/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5048989

| SUBMISSION TYPE:      | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

### **CONVEYING PARTY DATA**

| Name              | Execution Date |
|-------------------|----------------|
| KRISTI PANCE      | 04/30/2018     |
| KARL E. SPRENTALL | 06/25/2018     |
| SHAWN P. WILLIAMS | 05/01/2018     |

### **RECEIVING PARTY DATA**

| Name:           | ROGERS CORPORATION           |  |
|-----------------|------------------------------|--|
| Street Address: | 2225 WEST CHANDLER BOULEVARD |  |
| City:           | CHANDLER                     |  |
| State/Country:  | ARIZONA                      |  |
| Postal Code:    | 85224                        |  |

### **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15769437 |

### **CORRESPONDENCE DATA**

**Fax Number:** (860)286-0115

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:** 860-286-2929

Email: usptopatentmail@cantorcolburn.com

Correspondent Name: CANTOR COLBURN LLP

Address Line 1: 20 CHURCH STREET, 22ND FLOOR Address Line 4: HARTFORD, CONNECTICUT 06103

| ATTORNEY DOCKET NUMBER: | RP30090US7 (15Y) |
|-------------------------|------------------|
| NAME OF SUBMITTER:      | DAVID ARNOLD     |
| SIGNATURE:              | /David Arnold/   |
| DATE SIGNED:            | 07/13/2018       |

**Total Attachments: 4** 

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PATENT 505002241 REEL: 046341 FRAME: 0897

### ASSIGNMENT

WHEREAS We, Kristi Pance, Karl E. Sprentall, and Shawn P. Williams of 9 Tudor Terrace, Auburndale, MA 02466, 7811 E. Lewis Avenue, Scottsdale, AZ 85257, and 63 Bartlett Street, Andover, MA 01810 (hereinafter collectively "ASSIGNOR(S)") have invented certain new and useful improvements in the following invention:

# BROADBAND MULTIPLE LAYER DIELECTRIC RESONATOR ANTENNA AND METHOD OF MAKING THE SAME

for which an application for Letters Patent of the United States was filed on <u>April 19, 2018</u>, as United States Serial Number <u>15/769,437</u> (We hereby authorize and request the Company or its delegated attorneys or agents to insert herein the application number and filing date of the application when known) having attorney docket No. <u>RP30090US7 (15Y)</u> (hereinafter the "APPLICATION"); and

WHEREAS, ROGERS CORPORATION, a corporation organized and existing under the laws of the UNITED STATES OF AMERICA, having a place of business at 2225 West Chandler Boulevard, Chandler, AZ 85224, desires to acquire or has acquired, and each undersigned inventor acknowledges the obligation to assign to, in and to the INVENTION, the APPLICATION, and any and all Patents to be obtained therefor to ROGERS CORPORATION, and the parties desire to use this Assignment to memorialize the grant to ROGERS CORPORATION of the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, including all embodiments thereof, and in and to any and all patent applications and patents directed thereto;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, the ASSIGNOR(S) have assigned and transferred, and hereby assign and transfer to ROGERS CORPORATION its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all Patents that may be issued therefrom, in any and all countries, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents.

In addition, the ASSIGNOR(S) hereby authorize and request any official whose duty it is to issue patents, to issue any patent on said improvements or resulting therefrom to ROGERS CORPORATION, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ROGERS CORPORATION, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the ASSIGNORS had this Assignment not been made; and the ASSIGNOR agrees on behalf of themselves, their successors and legal representatives, to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and any and all related patents and applications, in ROGERS CORPORATION, its successors, legal representatives, and assigns, whenever requested by ROGERS CORPORATION, its successors, legal representatives, and assigns.

### RP30090US7 (15Y)

The ASSIGNOR(S) also hereby grant ROGERS CORPORATION, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification of the APPLICATION (including, but not limited to, Application Number and filing date, and Attorney Docket Number), and further grants ROGERS CORPORATION, its successors, legal representatives, and assigns the right to execute confirmatory assignments on their behalf,

The undersigned declare that all statements made herein of their own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Witnessed by:

2

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|---------------|--|---------------|--|
| Date: 6/2     | 5/2019   | Karl-E. Spren | L.S.   |
| Witnessed by: | Signature  | Date:         | <u>6/25/2013</u>   |
| Witnessed by: | Monica Keseler Printed Name of Witness Signature |               | Date: 6/25/18  |
|               | Sugarre Webs<br>Printed Name of Witness          |               |  |

# Date: 5/1/Q L.S. Shawn P. Williams Witnessed by: Sand Mangamo Date: 5/1/20/8 Signature Signature Cara G. Canzano Printed Name of Witness Date: 5/1/V Printed Name of Witness

4

PATENT REEL: 046341 FRAME: 0901