502110127 10/29/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| Luna H. Chiu | 09/09/2005 |
| Chen Zhang | 08/15/2005 |
| John King | 08/15/2005 |
| Barry Treadway | 09/12/2005 |
| Qinghua Kang | 09/15/2005 |

RECEIVING PARTY DATA

| Name: | RESEARCH IN MOTION RF, INC. | |
|-------------------|------------------------------|--|
| Street Address: | The Corporation Trust Center | |
| Internal Address: | 1209 Orange Street | |
| City: | Wilmington | |
| State/Country: | DELAWARE | |
| Postal Code: | 19801 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13613022 |

CORRESPONDENCE DATA

Fax Number: 8475100710

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

DOCKETING@GMGIP.COM Email: Correspondent Name: **GUNTIN MELES & GUST, PLC** Address Line 1: 304 INDIAN TRACE #750 Address Line 4: WESTON, FLORIDA 33326

| ATTORNEY DOCKET NUMBER: | 10209-0027-02 |
|-------------------------|---------------|
| NAME OF SUBMITTER: | Andrew Gust |

PATENT

REEL: 029205 FRAME: 0517

Total Attachments: 8

source=10209-027-02 Assignment#page1.tif source=10209-027-02 Assignment#page2.tif source=10209-027-02 Assignment#page3.tif source=10209-027-02 Assignment#page4.tif source=10209-027-02 Assignment#page5.tif source=10209-027-02 Assignment#page6.tif source=10209-027-02 Assignment#page7.tif source=10209-027-02 Assignment#page8.tif

Lucket No. JSF01-0003/WJT08-0054 PATENT ASSIGNMENT

ASSIGNMENT

WHEREAS, we, Luna H. Chiu, Jessie Zhang, John King, Barry Treadway, George Kang have invented

certain new and useful improvements in the following: METHOD OF APPLYING PATTERNED

METALLIZATION TO BLOCK FILTER RESONATORS for which we have made an application for United

States Letters Patent; and,

WHEREAS, Paratek Microwave, Inc., a corporation organized and existing under the laws of Maryland.

having its principal place of business at 6935 G Oakland Mills Road, Columbia, MD 20145 (hereinafter referred to

as "ASSIGNEE"), is desirous of acquiring our entire right, title and interest in and to the invention, and in and to the

said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00) and other good and valuable

consideration, the receipt and sufficiency of which is hereby acknowledged, I do hereby sell, assign and transfer

unto ASSIGNEE, its successors, assigns and legal representatives my entire right, title and interest in and to said

invention and in and to said applications and all patents which may be granted therefore, and all divisions, reissues,

substitutions, continuations-in-parts and continuations thereof; and I hereby authorize and request the Commissioner

of Patents and Trademarks to issue all patents for said invention, or patents resulting therefrom, insofar as our

interests are concerned, to the said ASSIGNEE of our entire right, title and interest.

We also hereby sell and assign to said ASSIGNEE, its successors, assigns and legal representatives the full

and exclusive rights, title and interest to the invention disclosed in said applications throughout the world, including

the right to file applications and obtain patents, utility models, industrial models and designs for said invention in its

own name throughout the world including all rights of priority, all rights to publish cautionary notices reserving

ownership of said invention and all rights to register said invention in appropriate registries; and

We further agree to execute any and all powers of attorney, applications, assignments, declarations,

affidavits, and any other papers in connection therewith necessary to perfect such rights, title and interest in

ASSIGNEE, its successors, assigns and legal representatives.

PATENT

REEL: 019100 FRAME: 0475

Ducket No. JSF01-0003/WJT08-0054 PATENT ASSIGNMENT

We hereby further agree that I will communicate to said ASSIGNEE, or its successors, assigns and legal representatives, any facts known to me respecting any improvements; and, at the expense of said ASSIGNEE, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, continuation-in-part, reissue and substitute applications, make all lawful oaths, and generally do everything possible to vest title in said ASSIGNEE and to aid said ASSIGNEE, its successors, assigns and legal representatives to obtain and enforce proper protection for said invention in all countries.

We further authorize and direct our attorneys to insert below* the serial number and filing date of said application now identified as Case Docket No. JSF01-0003/WJT08-0054 as soon as the same shall have been made known to them by the United States Patent Office.

*Serial Number:

Filing Date: December 15, 2003

INVENTOR

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 9 day of September 2005

VITNESS WHEREOF, I have hereunto set my hand and seal this 150 day of August, 2005.

Justice Zhang Chen Zhang

2

PATENT **REEL: 019100 FRAME: 0476**

| IN WITNESS WHEREOF, I have hereunto set my hand and seal this is day of August . 2 | 2002 |
|---|----------------|
| John King | _ |
| INVENTOR | |
| IN WITNESS WHEREOF, I have hereunto set my hand and seal this day of, 2 | <u> 2003</u> . |
| Barry Treadway | - |
| INVENTOR | |
| IN WITNESS WHEREOF, I have hereunto set my hand and seal this 1. 14 day of August . 2 | 200 8 S |
| Coores Kone | _ |
| Qinghua Kang | |

INVENTOR

3

PATENT REEL: 019100 FRAME: 0477

RECORDED: 03/19/2007

Docket No. JSF01-0003/WJT08-0054 PATENT ASSIGNMENT:

| INVENTOR | |
|---|------------------|
| IN WITNESS WHEREOF, I have hereunto set my hand and seal this day of | _, <u>2003</u> . |
| John King | |
| INVENTOR | |
| IN WITNESS WHEREOF, I have hereunto set my hand and scal this 12 day of Suptonbe- | . , 200 |
| Barry Freadway | |
| INVENTOR | |
| IN WITNESS WHEREOF, I have hereunto set my hand and scal this day of | <u>2003.</u> |
| George Kang | |

3

PATENT REEL: 019100 FRAME: 0478

PATENT

REEL: 029205 FRAME: 0522

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE RESTATED CERTIFICATE OF "PARATEK MICROWAVE, INC.", CHANGING ITS NAME FROM "PARATEK MICROWAVE, INC." TO "RESEARCH IN MOTION RF, INC.", FILED IN THIS OFFICE ON THE ELEVENTH DAY OF JUNE, A.D. 2012, AT 9:04 O'CLOCK A.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.

3012005 8100

DATE: 06-13-12

AUTHENT\[CATION: 9639797

PATENT REEL: 029205 FRAME: 0523

Jeffrey W. Bullock, Secretary of State

120722245

You may verify this certificate online at corp.delaware.gov/authver.shtml

State of Delaware Secretary of State Division of Corporations Delivered 09:10 AM 06/11/2012 FILED 09:04 AM 06/11/2012 SRV 120722245 - 3012005 FILE

NINTH RESTATED

CERTIFICATE OF INCORPORATION

OF

PARATEK MICROWAVE, INC.

* * * * * *

PARATEK MICROWAVE, INC., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

The name of the corporation is PARATEK MICROWAVE, INC. The date of filing of its original Certificate of Incorporation with the Secretary of State was March 3, 1999. Certificates of Amendment of the Certificate of Incorporation of the Corporation were filed with the Secretary of State of the State of Delaware on March 5, 1999 and August 13, 1999. A certificate of Designations, Powers, Preferences and Rights of the Series A Convertible Preferred Stock of the Corporation was filed with the Secretary of State of the State of Delaware on March 4, 1999, and a Certificate of Amendment to the Certificate of Designations was filed on August 13, 1999. An amended and Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on February 8, 2000, and a Certificate of Amendment of the Amended and Restated Certificated of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on July 19, 2000. A Second Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on February 20, 2001, a Third Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on April 30, 2002, a Fourth Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 15, 2003, which Fourth Restated Certificate of Incorporation was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on May 28, 2004, a Fifth Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on May 23, 2005, which Fifth Restated Certificate of Incorporation was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on August 7, 2006, a Sixth Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 25, 2007, a Seventh Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 23, 2008, which Seventh Restated Certificate of Incorporation was amended by a Certificate of Amendment filed with the Secretary of State of the State of Delaware on May 18, 2009 and a Certificate of Amendment filed with the Secretary of State of the State of Delaware on June 7, 2010. A Eighth Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware On November 3, 2010, which Eighth Restated Certificate of Incorporation was amended by Certificates of Amendment filed with the Secretary of State of the State of Delaware on August 23, 2011 and February 28, 2012.

- 2. This Restated Certificate of Incorporation integrates, restates and further amends the Certificate of Incorporation of this Corporation by (i) amending the name of the Corporation and (ii) decreasing the Corporation's authorized shares and eliminating the preferred class of stock.
- 3. The text of the Certificate of Incorporation as amended or supplemented heretofore is further amended to read as herein set forth in full:

FIRST: The name of the Corporation is RESEARCH IN MOTION RF, INC. (the "Corporation").

SECOND: The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle 19801. The name of the registered agent at such address is The Corporation Trust Company.

THIRD: The purposes of the Corporation are to engage in any lawful act or activities for which corporations may be organized under the General Corporation Law of the State of Delawarc.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is 3,000 shares of the par value of \$.0001 each, all of which shall be common stock.

FIFTH: Election of directors need not be by written ballot unless the by-laws of the Corporation so provide or unless required by law.

SIXTH: The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders in this Certificate of Incorporation are granted subject to this reservation.

SEVENTH: To the extent permitted by the General Corporation Law of the State of Delaware (or any statute succeeding such law), as such law now exists or may hereafter be amended, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director occurring during the time this Paragraph SEVENTH is in effect.

EIGHTH: In furtherance and not in limitation of the powers conferred by statute, the board of directors is expressly authorized to adopt, amend or repeal the by-laws of the Corporation.

4. This Restated Certificate of Incorporation was duly adopted by unanimous written consent of the holders of the outstanding common stock in accordance with the applicable provisions of Section 228, 242 and 245 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, the undersigned has subscribed this Certificate and affirmed it as true under penalties of perjury as of June <u>8</u>, 2012.

PARATEK MICROWAVE, INC. (now known as) RESEARCH IN MOTION RF, INC.

Name: James Yersh

Title: Secretary

033407.00045 Business 9728449v1

PATENT REEL: 029205 FRAME: 0526

RECORDED: 10/29/2012