PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEYANCE: ASSIGNMENT						
CONVEYING PARTY DATA						
		Name	Execution Date			
Keith R. Manssen			11/16/2010			
Matthew R. Greene			11/16/2010			
Duane Rabe			12/06/2010			
RECEIVING PARTY DATA						
Name:		IOTION RF, INC.				
Street Address:	1209 Orange Stre	eet				
City:	Wilmington					
State/Country:	DELAWARE					
Postal Code:	19801					
PROPERTY NUMBER	RS Total: 1					
	Ū.			0		
Property Ty	уре	Number		85607		
Property Ty Application Number:		Number		13856075		
	138					
Application Number:	138 E DATA	56075				
Application Number: CORRESPONDENCE Fax Number:	138 DATA 8475100710	56075		\$40.00		
Application Number: CORRESPONDENCE Fax Number:	138 DATA 8475100710 be sent via US Mai	56075		_		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i>	DATA 8475100710 be sent via US Mai DOCKETING	156075 I when the fax attempt is unsuccessful. G@GGIP.COM		\$40.00		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i> Email: Correspondent Name Address Line 1:	E DATA 8475100710 be sent via US Mai DOCKETING GUNTIN & G 304 INDIAN	556075 <i>I when the fax attempt is unsuccessful.</i> G@GGIP.COM GUST, PLC TRACE # 750		\$40.00		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i> Email: Correspondent Name	E DATA 8475100710 be sent via US Mai DOCKETING GUNTIN & G 304 INDIAN	556075 <i>I when the fax attempt is unsuccessful.</i> G@GGIP.COM GUST, PLC		\$40.00		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i> Email: Correspondent Name Address Line 1:	E DATA 8475100710 be sent via US Mai DOCKETING GUNTIN & G 304 INDIAN WESTON, F	556075 <i>I when the fax attempt is unsuccessful.</i> G@GGIP.COM GUST, PLC TRACE # 750		\$40.00		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i> Email: Correspondent Name Address Line 1: Address Line 4:	DATA 8475100710 be sent via US Mai DOCKETIN GUNTIN & G 304 INDIAN WESTON, F	When the fax attempt is unsuccessful. G@GGIP.COM GUST, PLC TRACE #750 CLORIDA 33326		\$40.00		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i> Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET	DATA 8475100710 be sent via US Mai DOCKETIN GUNTIN & G 304 INDIAN WESTON, F	1 when the fax attempt is unsuccessful. G@GGIP.COM GUST, PLC TRACE #750 CLORIDA 33326		\$40.00		
Application Number: CORRESPONDENCE Fax Number: <i>Correspondence will L</i> Email: Correspondent Name Address Line 1: Address Line 4: ATTORNEY DOCKET NAME OF SUBMITTE	DATA 8475100710 be sent via US Mai DOCKETIN GUNTIN & G 304 INDIAN WESTON, F	556075 I when the fax attempt is unsuccessful. G@GGIP.COM GUST, PLC TRACE #750 CLORIDA 33326 10209-0115-02 Andrew Gust		\$40.00		

Total Attachments: 10
source=10209-0115-02 Signed Assignment - FULL#page1.tif
source=10209-0115-02 Signed Assignment - FULL#page2.tif
source=10209-0115-02 Signed Assignment - FULL#page3.tif
source=10209-0115-02 Signed Assignment - FULL#page4.tif
source=10209-0115-02 Signed Assignment - FULL#page5.tif
source=10209-0115-02 Signed Assignment - FULL#page6.tif
source=10209-0115-02 Signed Assignment - FULL#page7.tif
source=10209-0115-02 Signed Assignment - FULL#page8.tif
source=10209-0115-02 Signed Assignment - FULL#page9.tif
source=10209-0115-02 Signed Assignment - FULL#page10.tif

ASSIGNMENT

WHEREAS Keith R. Manssen, a citizen of the United States of America, residing in Bull Valley, IL; Matthew R. Greene, a citizen of the United States of America, residing in Crystal Lake, IL; Duane Rabe, a citizen of the United States of America, residing in Hawthorn Woods, IL, hereinafter called the "Assignor(s)", have made the invention described in the United States Patent Application entitled "METHOD AND APPARATUS FOR TUNING ANTENNAS IN A COMMUNICATION DEVICE" Attorney Docket No.10209-0115, for a full description of which reference is here made to an application for Letters Patent of the United States filed on herewith and,

WHEREAS, PARATEK MICROWAVE, INC., a corporation organized and existing under the laws of the State of Maryland, having a place of business at 6925 Oakland Mills Road, Suite L, Columbia, Maryland 21045, hereinafter called the "Assignee", desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent applic ation identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof.

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, the Assignor(s) have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term and terms for all such patents.

AND said Assignor(s) hereby covenant and agree, for both the Assignor(s) and the Assignor(s)' legal representatives, that the Assignor(s) will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignor(s) will execute and deliver to the Assignee to carry out the terms of this Assignment. Assignor(s) authorize attorney or agent to fill in the U.S. Application Serial No. above, if required.

AND said Assignor(s) authorize and request the Commissioner of Patents to issue Letters Patent on said application, and on any all divisions and continuations thereof, to said Assignee, its assigns and legal representatives, in accordance with the terms of this Assignment.

The ASSIGNOR(S) hereby appoint registered patent practitioners associated with the patent application identified above as my representatives with full power of substitution and revocation to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, to amend the specification, to appeal in case of rejection, as may be deemed advisable, to receive the patent when granted and generally to do all matters and things needful and additionally 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.

This Assignment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and such counterparts together shall constitute one and the same instrument. A facsimile copy of this Assignment, including the signature pages hereto, shall be deemed to be an original.

IN TESTIMONY WHEREOF, this Assignment is executed by said Assignor(s), on the date(s) listed below.

Keith R. Manssen

Vikes Sharma

First Witness (Print Name)

Signature

Date

Signature

/16/2010

uli 6 horos

11-16-2010

Matthew R. Greene

kos Sharma

First Witness (Print Name)

Signature

/16/2010

JOHN & Spears Second Witness (Print Name) Signature

PATENT REEL: 030158 FRAME: 0257

-2-

Duane Rabe	Date	
First Witness (Print Name)	Signature	Date
Second Witness (Print Name)	Signature	Date

į

1

ASSIGNMENT

WHEREAS Keith R. Manssen, a citizen of the United States of America, residing in Bull Valley, IL; Matthew R. Greene, a citizen of the United States of America, residing in Crystal Lake, IL; Duane Rabe, a citizen of the United States of America, residing in Hawthorn Woods, IL, hereinafter called the "Assignor(s)", have made the invention described in the United States Patent Application entitled "METHOD AND APPARATUS FOR TUNING ANTENNAS IN A COMMUNICATION DEVICE" Attorney Docket No.10209-0115, for a full description of which reference is here made to an application for Letters Patent of the United States filed on herewith and,

WHEREAS, PARATEK MICROWAVE, INC., a corporation organized and existing under the laws of the State of Maryland, having a place of business at 6925 Oakland Mills Road, Suite L, Columbia, Maryland 21045, hereinafter called the "Assignee", desires to acquire the entire right, title and interest for the United States of America and elsewhere throughout the world in and to said invention and the patent application identified above, including any and all divisions and continuations thereof and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof.

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, the Assignor(s) have sold, assigned and transferred, and by these presents do sell, assign and transfer to the Assignee, the entire right, title and interest for the United States in and to the invention and the patent application identified above, and any patents that may issue for said invention in the United States; together with the entire right, title and interest in and to said invention and all patent applications and patents therefor in all countries foreign to the United States, including the full right to claim for any such application all benefits and priority rights under any applicable convention; together with the entire right, title and interest in and to all continuations, divisions, renewals and extensions of any of the patent applications and patents defined above; to have and to hold for the sole and exclusive use and benefit of the Assignee, its successors and assigns, to the full end of the term and terms for all such patents.

AND said Assignor(s) hereby covenant and agree, for both the Assignor(s) and the Assignor(s)' legal representatives, that the Assignor(s) will assist the Assignee in the prosecution of the patent application identified above; in the making and prosecution of any other patent applications that the Assignee may elect to make covering the invention identified above; in vesting in the Assignee like exclusive title in and to all such other patent applications and patents; and in the prosecution of any interference which may arise involving said invention, or any such patent application or patent; and that the Assignor(s) will execute and deliver to the Assignee to carry out the terms of this Assignment. Assignor(s) authorize attorney or agent to fill in the U.S. Application Serial No. above, if required.

AND said Assignor(s) authorize and request the Commissioner of Patents to issue Letters Patent on said application, and on any all divisions and continuations thereof, to said Assignee, its assigns and legal representatives, in accordance with the terms of this Assignment.

> PATENT REEL: 030158 FRAME: 0259

The ASSIGNOR(S) hereby appoint registered patent practitioners associated with the patent application identified above as my representatives with full power of substitution and revocation to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith, to amend the specification, to appeal in case of rejection, as may be deemed advisable, to receive the patent when granted and generally to do all matters and things needful and additionally 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.

This Assignment may be executed in any number of counterparts, each of which when so executed and delivered shall be deemed an original, and such counterparts together shall constitute one and the same instrument. A facsimile copy of this Assignment, including the signature pages hereto, shall be deemed to be an original.

IN TESTIMONY WHEREOF, this Assignment is executed by said Assignor(s), on the date(s) listed below.

Keith R. Manssen	Date	
First Witness (Print Name)	Signature	Date
Second Witness (Print Name)	Signature	Date
Matthew R. Greene	Date	
First Witness (Print Name)	Signature	Date
Second Witness (Print Name)	Signature	Date

Attorney Docket Number 10209-0115

Calu 12/ Date 10 Duane Rabe

MICHAGE P. METROKA First Witness (Print Name) <u>/2-06-</u>/⊃ Date <u>Tignature</u>

JOHN H. SPEARS Second Witness (Print Name)

<u>|2/6/28</u>/0 Date 1 r signature

PATENT REEL: 030158 FRAME: 0261

ì. •



PAGE 1

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

120722245 You may verify this certificate online at corp.delaware.gov/authver.shtml

AUTHENT CATION: 9639797

DATE: 06-13-12

PATENT REEL: 030158 FRAME: 0262

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 1. 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 Delawarc 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 Delaware.

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 8, 2012.

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

By: Name. James Yersh Title: Secretary

PATENT REEL: 030158 FRAME: 0265

033407.00045 Business 9728449v1

RECORDED: 04/05/2013

PORTER STORINGS IN THE REPORT