

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
RF Micro Devices, Inc.	06/26/2012
RECEIVING PARTY DATA	
Name:	Cambridge Silicon Radio Limited
Street Address:	Churchill House, Cambridge Business Park
Internal Address:	Cowley Road
City:	Cambridge
State/Country:	UNITED KINGDOM
Postal Code:	CB40WZ
PROPERTY NUMBERS Total: 18	
Property Type	Number
Patent Number:	7889123
Patent Number:	7852908
Patent Number:	7688883
Patent Number:	7495610
Patent Number:	7567783
Patent Number:	7505744
Patent Number:	7463866
Patent Number:	7356074
Patent Number:	7170961
Patent Number:	7167530
Patent Number:	7031250
Patent Number:	6990158
Patent Number:	6728324
Patent Number:	6700929

CH \$720.00 7889123

Patent Number:	6693954
Patent Number:	6683905
Patent Number:	6661834
Patent Number:	6647077

**CORRESPONDENCE DATA**

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ATTORNEY DOCKET NUMBER:

079280-0000007 RFMICRO

NAME OF SUBMITTER:

Mark J. Danielson

Total Attachments: 4

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## ASSIGNMENT OF PATENTS

WHEREAS, RF Micro Devices, Inc., a North Carolina corporation, is the owner of certain patents, as more particularly described on Attachment 1 hereto; and

WHEREAS, RF Micro Devices, Inc. has agreed to assign all of its right, title and interest in and to (i) such patents listed on Attachment 1 attached hereto, (ii) all reissues, reexaminations, extensions, divisions, continuations, continuations-in-part and counterparts (whether foreign or domestic) of such patents, and (iii) all patents issuing on or from any of the foregoing items in (ii) (the foregoing items in (i), (ii) and (iii) shall collectively comprise the "Patent Items"), and (iv) all rights of priority arising or derived from any of the Patent Items and all inventions (whether patentable or not) which are disclosed in any of the Patent Items or such rights of priority to Cambridge Silicon Radio Limited, a company registered in England and Wales, pursuant to a certain Patent Purchase Agreement and further evidence such assignment in this Assignment.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged:

RF Micro Devices, Inc. hereby sells, assigns, transfers and conveys to Cambridge Silicon Radio Limited, and its successors and assigns, all right, title, and interest in and to: (i) each of the Patent Items; (ii) all rights of priority arising or derived from any of the Patent Items and all inventions (whether patentable or not) which are disclosed in any of the Patent Items or such rights of priority; and (iii) all rights to sue for infringement of any Patent Items, whether arising prior to or subsequent to the date of this Assignment of Patents.

This sale, assignment, transfer and conveyance to Cambridge Silicon Radio Limited, and its successors and assigns, is made subject to that certain Patent Purchase Agreement by and between Cambridge Silicon Radio Limited and RF Micro Devices, Inc. (the "Purchase Agreement"), the terms and conditions of which are incorporated herein by this reference. RF Micro Devices, Inc. acknowledges and agrees that the representations, warranties, covenants and agreements contained in the Purchase Agreement shall not be superseded, enlarged or modified hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Purchase Agreement and the terms hereof, the terms of the Purchase Agreement shall govern. RF Micro Devices, Inc. hereby acknowledges and agrees that, on and after this sale, assignment, transfer and conveyance, RF Micro Devices, Inc. shall not retain: (i) any right under the Patent Items; (ii) any rights of priority arising or derived from any of the Patent Items and all inventions (whether patentable or not) which are disclosed in any of the Patent Items; and/or any rights: (a) to commence or prosecute any patent infringement litigation (including, but not limited to, any past claim of infringement) or procedure for resolution of a controversy (or to indicate or convey, either expressly, by implication or otherwise, any intention to do so), whether arising or created by any claim, counterclaim or otherwise (as determined in the broadest sense and in whatever form), and whether administrative, judicial, arbitral or otherwise, including, but not limited to, any proceeding before the U.S. International Trade Commission or in any jurisdiction throughout the world; or (b) to exclude others (including, but not limited to, Cambridge Silicon Radio Limited) from making, having made, selling, offering to sell, using, importing or otherwise disposing of any products or services, or from practicing or having practiced any of the inventions claimed therein.

This sale, assignment, transfer and conveyance to Cambridge Silicon Radio Limited, and its successors and assigns, also includes, without limitation, the right to enforce, assert and sue for past, present and future infringement on each of the foregoing items, including without limitation the right to seek injunctive relief, and the right to recover and collect for past, present and future damages with respect thereto.

IN WITNESS WHEREOF, the undersigned has caused this Assignment of Patents to be executed on June 26, 2012.

RF Micro Devices, Inc.

By: Suzanne Rudy  
Name: Suzanne Rudy  
Title: VP, Corp Treasurer

STATE OF NORTH CAROLINA)

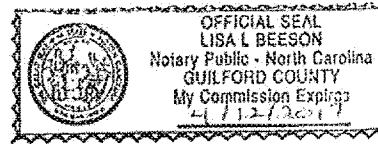
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COUNTY OF GUILFORD )

The foregoing Assignment of patents was hereby acknowledged and executed before me on this 21<sup>st</sup> day of June 2012 by Elizabeth Kelly, a VP & Corp (President) of RF Micro Devices, Inc., a North Carolina corporation, on behalf of such corporation.

Notary Public: Lisa L Beeson

My commission expires: 4/12/2017



Attachment 1  
Patents

Patent Number	Title
US7889123B1	Global positioning system (GPS) assembly test using wireless transmission
US7852908B1	Combined digital filter and correlator
US7688883B1	Received signal correlation using a correlation scaling factor
US7495610B1	System and method for decimating global positioning system signals
US7567783B1	I/Q mismatch calibration of direct conversion transceivers using the OFDM short training sequence
US7505744B1	DC offset correction using multiple configurable feedback loops
US7463866B1	I/Q mismatch calibration of direct conversion transceivers using the OFDM short training sequence
US7356074B2	Estimation of multipath channel with sub-chip resolution
US7170961B2	Method and apparatus for frequency-domain tracking of residual frequency and channel estimation offsets
US7167530B2	Estimation and correction of DC offset in the presence of frequency offset
US7031250B2	Method and apparatus for channel estimation
US6990158B2	Method and apparatus for multipath signal compensation in spread-spectrum communications systems
US6728324B1	Method and apparatus for multipath signal compensation in spread-spectrum communications systems
US6700929B1	Method and apparatus for multipath parameter estimation in spread-spectrum communications systems
US6693954B1	Apparatus and method of early-late symbol tracking for a complementary code keying receiver
US6683905B1	Dual-mode receiver
US6661834B1	Carrier recovery for spread spectrum communications
US6647077B1	Multipath parameter estimation in spread-spectrum communications systems