

10-29-2003

FORM PTO-1595 (Rev. 6-93) QMB No. 0651-0011 (exp. 4/94) 10-20-03

F



HEET

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office Atty. Docket No. 2867-206

102586786

To the Commissioner for Patents: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): Joseph Smart, David Grider, Shawn Gibb, Brook Hosse, Jeffrey Shealy. Additional name(s) of conveying party(ies) attached? [] Yes [X] No

2. Name and address of receiving party(ies): Name: RF Micro Devices, Inc. Internal Address: Street Address: 7628 Thorndike Road. City: Greensboro State: NC Zip: 27409. Country: USA. Additional name(s) & address(es) attached? [] Yes [X] No

16834 U.S. PTO 10/689980 102003

3. Nature of conveyance: [X] Assignment [] Merger, [] Security Agreement [] Change of Name, [] Other. Execution Date: 8/25/03, 10/10/03, 9/22/03, 9/22/03, 9/22/03

4. Application number(s) or registration numbers(s): 101689980. If this document is being filed together with a new application, the execution date of the application is: 8/25/03, 10/10/03, 9/22/03, 9/22/03, 9/22/03. A. Patent Application No.(s) B. Patent No.(s). Additional numbers attached? [] Yes [X] No

5. Name and address of party to whom correspondence concerning document should be mailed: Name: Benjamin S. Withrow WITHROW & TERRANOVA, P.L.L.C. P.O. Box 1287 Cary, NC 27512. 501000030 10689980 40.00 DP

6. Total number of applications and patents involved: 1. 7. Total fee (37 CFR 3.41): \$40.00. [X] Payment by Credit Card Enclosed [X] Authorized to be charged to deposit account. 8. Deposit account number: 50-1732 (Attach duplicate of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Benjamin S. Withrow Signature Date: October 20, 2003

Total number of pages including cover sheet, attachments, and document: 5

Mail documents to be recorded with required cover sheet information to: Director of the United States Patent and Trademark Office PO Box 1450, Alexandria, Virginia 22313-1450

PATENT REEL: 014621 FRAME: 0900

ASSIGNMENT

This Assignment made by us, **Joseph Smart**, a citizen of the United States of America, residing at 358 Blume Road, City of Mooresville, County of Iredell, State of North Carolina; **David Grider**, a citizen of the United States of America, residing at 13412 Broadwell Court, City of Huntersville, County of Mecklenburg, State of North Carolina; **Shawn Gibb**, a citizen of the United States of America, residing at 2739 Highland Park Drive, City of Charlotte, County of Mecklenburg, State of North Carolina; **Brook Hosse**, a citizen of the United States of America, residing at 16023 Hollingbourne Road, City of Huntersville, County of Mecklenburg, State of North Carolina; and **Jeffrey Shealy**, a citizen of the United States of America, residing at 10229 Bayart Way, City of Huntersville, County of Mecklenburg, State of North Carolina, hereinafter referred to as assignors.

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in **SURFACE PASSIVATION OF GaN DEVICES IN EPITAXIAL GROWTH CHAMBER** for which we are about to make application for Letters Patent of the United States, and for which we have executed a declaration.

WHEREAS, **RF Micro Devices, Inc.**, a corporation duly organized and existing under the laws of the State of North Carolina and having a principal place of business at 7628 Thorndike Road, City of Greensboro, County of Guilford, State of North Carolina, hereinafter referred to as assignee, is desirous of acquiring the entire right, title and interest in and to said invention as described in the specification executed by us concurrently herewith, and any and all Letters Patent which shall be granted therefor;

NOW, THEREFORE, To All Whom It May Concern, be it known that for good and

valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over unto the said assignee, its successors and assigns, the entire right, title and interest in and to the above-mentioned application and invention and in and to any and all Letters Patent of the United States which may hereafter be granted therefor, and in any and to any and all continuations, continuations-in-part, substitutions, divisions or reissues of said Letters Patent, the same to be held and enjoyed by the said assignee, for its interest, and for its own use and behalf, and the use and behalf of its successors and assigns, to the full end of the term for which said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made.

And for the consideration aforesaid, we hereby covenant and agree to and with the said assignee, its successors and assigns, that at the time of the execution and delivery of these presents we are the joint and lawful owners of the entire right, title and interest in and to the invention, application and Letters Patent above-mentioned and that the same are unencumbered, and that we have good right and lawful authority to sell and convey the same in the manner herein set forth.

And for the consideration aforesaid, we hereby covenant and agree to and with the said assignee, its successors and assigns, that we will, whenever its counsel or the counsel of its successors and assigns, learned in the law, shall advise that an amendment, division, continuation, continuation-in-part, or substitution of, or any other proceeding in connection with said application, including interference proceedings, is lawful and desirable, sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for the procurement of valid Letters Patent for said invention, or for the reissue of the same without

charge to our said assignee, its successors or assigns, but at its or their expense.

We hereby request the Commissioner for Patents to issue the Letters Patent in accordance with this instrument.

For the consideration aforesaid, we have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the said assignee, its successors, assigns or nominee, the entire right, title and interest in and to any and all Letters Patent for said invention which may be granted in countries foreign to the United States and in and to any applications for Letters Patent which may be filed for said invention in countries foreign to the United States and in and to the invention described in said application; and we hereby authorize and empower the said assignee, its successors, assigns or nominees to apply for Letters Patent or other form of protection on said invention in its own name or in the name of its successor, assignee, or nominee, in any and all countries where it may desire to file such application and where said application may be filed by another than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, and do all acts necessary or required to be done for procurement of Letters Patent, or other form of protection, for said invention or inventions in countries foreign to the United States, and for further investing or confirming the right and title therein to the assignee, its successors, assignee, or nominee, without charge to our said assignee, its successor, assignee or nominee, but at its or their expense.

IN WITNESS WHEREOF, we have hereunto set our hands and seals.

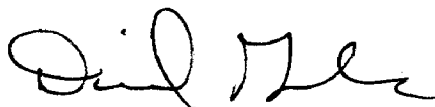
8/25/03

Date



Joseph Smart

10/10/03

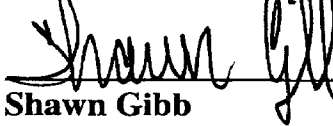


Date

9/22/2003

Date

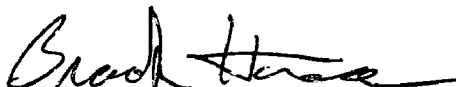
David Grider



Shawn Gibb

9/22/2003

Date



Brook Hosse

9/22/2003

Date



Jeffrey Shealy