

11-12-1998



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- ☒ New
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Document ID#
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Reel #  Frame #
- ☐ Corrective Document  
Reel #  Frame #

**Conveyance Type**

- ☐ Assignment ☒ Security Agreement **WRD**  
**10-30-98**
- ☐ License ☐ Change of Name
- ☐ Merger ☐ Other
- U.S. Government**  
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- ☐ Departmental File ☐ Secret File

**Conveying Party(ies)**☐ Mark if additional names of conveying parties attachedName (line 1) Execution Date  
Month Day Year  
Name (line 2) **Second Party**Name (line 1) Execution Date  
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Name (line 2) **Receiving Party**☐ Mark if additional names of receiving parties attachedName (line 1) ☐ If document to be recorded  
is an assignment and the  
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(Designation must be a  
separate document from  
Assignment.)Name (line 2) Address (line 1) Address (line 2) Address (line 3) 

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Name Address (line 1) Address (line 2) Address (line 3) Address (line 4) 

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11/09/1998 TTOM11 00000047 131241 5796304  
01 FC:501 30.00 CH 90.00 OP

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Mail documents to be recorded with required cover sheet(s) information to:  
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**PATENT**  
**REEL: 9580 FRAME: 0568**

**Correspondent Name and Address**

Area Code and Telephone Number (310) 312-4000

Name Jill M. Pietrini, Esq.

Address (line 1) Manatt, Phelps & Phillips, LLP

Address (line 2) 11355 W. Olympic Boulevard

Address (line 3) Los Angeles, California 90064

Address (line 4)

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments.

# 9

**Application Number(s) or Patent Number(s)**

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

**Patent Application Number(s)**

09/057,332

09/057/380

**Patent Number(s)**

5,796,304

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number  
only if a U.S. Application Number  
has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

**Number of Properties**

Enter the total number of properties involved.

# 3

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$ 90.00

Method of Payment:  
Deposit Account

Enclosed ☒

Deposit Account ☒

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

# DA 131 241

Authorization to charge additional fees:

Yes

☒

No


☐

**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. Charges to deposit account are authorized, as indicated herein.

Jill M. Pietrini

Name of Person Signing



Signature

October 27, 1998

Date

**PATENT SECURITY AGREEMENT**

(LETTERS PATENT, PATENT REGISTRATIONS,  
PATENT APPLICATIONS AND PATENT LICENSES)

WHEREAS, POWERWAVE TECHNOLOGIES, INC., a Delaware corporation ("Pledgor"), now owns or holds and/or may hereafter acquire or hold Patents (defined as all of the following: all letters patent, all registrations and recordings thereof or similar property rights, and all applications in connection therewith, including, without limitation, registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States, any state thereof or any other country or any political subdivision thereof, and all reissues, extensions or renewals thereof) including, without limitation, the Patents listed on Schedule A annexed hereto, as such Schedule may be amended from time to time by the addition of Patents subsequently registered or otherwise adopted or acquired;

WHEREAS, the Pledgor has entered into a Loan Agreement dated as of September 30, 1998 (as the same may be amended, supplemented or otherwise modified, renewed or replaced from time to time, the "Loan Agreement") with the financial institutions party thereto from time to time as Lenders (the "Lenders") and Comerica Bank-California, as Agent for the Lenders (the "Agent") (capitalized terms used herein without definition shall have the meanings ascribed to them in the Loan Agreement);

WHEREAS, in connection with the Loan Agreement, Pledgor has granted to Agent a security interest in certain personal property of Pledgor including, without limitation, all right, title and interest of Pledgor in, to and under all of Pledgor's Patents and Patent licenses (including, without limitation, those Patent licenses listed on Schedule B hereto), whether presently existing or hereafter arising, adopted or acquired, and all products and proceeds thereof and all income therefrom, including, without limitation, any and all causes of action which exist now or may exist in the future by reason of infringement or dilution thereof, to secure the payment and performance of the Obligations (such term being used herein as defined in the Loan Agreement).

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Pledgor does, as security for the Obligations, hereby grant to Agent a continuing security interest in all of Pledgor's right, title and interest in, to and under the following (all of the following items or types of property being collectively referred to herein as the "Patent Collateral"), whether presently existing or hereafter arising or acquired:

- (a) each Patent, including, without limitation, those Patents identified on Schedule A annexed hereto;
- (b) each Patent license, including, without limitation, each Patent license referred to on Schedule B annexed hereto, to the extent such Patent license does not prohibit the licensee from assigning or granting a security interest in its rights thereunder; and
- (c) all products and proceeds of, and income from, any of the foregoing, including, without limitation, any claim by Pledgor against third parties for the past, present or future infringement or dilution of any Patent or any Patent licensed under any Patent license.

Pledgor agrees to deliver updated copies of Schedule A and Schedule B to Agent at the end of any quarter in which Pledgor registers or otherwise adopts or acquires any Patent not listed on

Schedule A hereto or enters into any Patent license not listed on Schedule B hereto, and to duly and promptly execute and deliver, or have duly and promptly executed and delivered, at the cost and expense of Pledgor and Borrower, such further instruments or documents (in form and substance satisfactory to Agent), and promptly perform, or cause to be promptly performed, any and all acts, in all cases, as may be necessary, proper or advisable from time to time, in the reasonable judgment of Agent, to carry out the provisions and purposes of Section 4 of the Loan Agreement and this Patent Security Agreement, and to provide, perfect and preserve the Liens of Agent under the Loan Agreement, this Patent Security Agreement and the other Loan Documents, in the Patent Collateral or any portion thereof.

Pledgor agrees that if any Person shall do or perform any acts which Agent believes constitute an infringement of any Patent, or violate or infringe any right of Pledgor or Agent therein or if any Person shall do or perform any acts which Agent believes constitute an unauthorized or unlawful use thereof, then and in any such event, Agent may and shall have the right, while an Event of Default is continuing, to take such steps and institute such suits or proceedings as Agent may deem advisable or necessary to prevent such acts and conduct and to secure damages and other relief by reason thereof, and to generally take such steps as may be advisable or necessary or proper for the full protection of the rights of the parties. Agent may take such steps or institute such suits or proceedings in its own name or in the name of Pledgor or in the names of the parties jointly. Agent hereby agrees to give Pledgor notice of any steps taken, or any suits or proceedings instituted, by Agent pursuant to this paragraph.

This security interest is granted in conjunction with the security interests granted to Agent pursuant to the Loan Agreement. Pledgor does hereby further acknowledge and affirm that the rights and remedies of Agent with respect to the security interest in the Patent Collateral made and granted hereby are subject to, and more fully set forth in, the Loan Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

This Patent Security Agreement is made for collateral purposes only. At such time as all of the Obligations under the Loan Agreement shall have been indefeasibly repaid in full and all Commitments shall have terminated, shall execute and deliver to Pledgor, at Borrower's or Pledgor's expense, without representation, warranty or recourse, all releases and reassignments, termination statements and other instruments as may be necessary or proper to terminate the security interest of Agent in the Patent Collateral, subject to any disposition thereof which may have been made by Agent pursuant to the terms hereof or of the Loan Agreement.

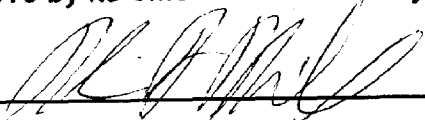
Agent agrees that there will be no assignment of the Patent Collateral, other than the security interest described herein, unless and until there shall occur an Event of Default and Agent gives written notice to Pledgor of its intention to enforce its rights against any of the Patent Collateral.

So long as no Event of Default shall have occurred and be continuing, and subject to the various provisions of the Loan Agreement and the other Loan Documents to which it is a party, Pledgor may use, license and exploit the Patent Collateral in any lawful manner.

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THIS PATENT SECURITY AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY, THE LAWS OF THE STATE OF CALIFORNIA APPLICABLE TO CONTRACTS MADE AND TO BE PERFORMED WHOLLY WITHIN THE STATE OF CALIFORNIA.

IN WITNESS WHEREOF, Pledgor has caused this Patent Security Agreement to be duly executed as of the date first set forth above by its officer thereunto duly authorized.

By: 

Print Name: Kevin T. Michaels

Title: Vice President, Finance and  
Chief Financial Officer

**Schedule A to Patent  
Security Agreement**

<i><b>Matter No.</b></i>	<i><b>Inventor's Name</b></i>	<i><b>Country</b></i>	<i><b>Serial No. Filing Date</b></i>	<i><b>Patent No. Issue Date</b></i>	<i><b>Title of Application</b></i>
02001	Charles R. Gentzier	USA	08/639,264 04/24/96	5,796,304	Broadband amplifier with Quadrature Pilot Signal
002EP1	Powerwave Technologies, I Linear Amplifier	European Union	97302845.9 04/24/97	0803974	Broadband Amplifier with Quadrature Pilot Signal
002KR1	Powerwave Technologies, I Linear Amplifier	Korea	97-15229 04/23/97	97-15229	Broadband Amplifier with Quadrature Pilot Signal
004001	Charles R. Ganizier	Pending USA	09/057,332	--	Dynamic Predistortion compensation for a Power Amplifier
007001	Charles R. Ganizier LDMOS bias	Pending USA	09/057,380 04/08/98	--	Adaptive Biasing in a Power Amplifier

PATENT LICENSES

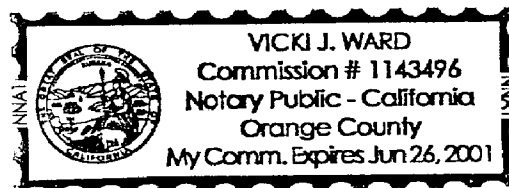
None.

STATE OF California )  
COUNTY OF Orange )

SS.:

On the 2 day of October in the year 1998, before me personally came Kevin T. Michaels to me known, who, being by me sworn, did say that s/he is an Authorized Signatory of Powerware Tech, which entity is described in, and which entity executed, the above instrument, and that he signed his name by order of the Board of Directors of Powerware Technologies

Vicki J. Ward  
Notary Public





FORM OF  
MORTGAGE OF COPYRIGHT

BE IT KNOWN BY THESE PRESENTS, that for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned, POWERWAVE TECHNOLOGIES, INC., a Delaware corporation ("Grantor"), does hereby grant and assign to COMERICA BANK-CALIFORNIA, a California banking corporation ("Secured Party"), a security interest in, and mortgage on, all right title and interest of Grantor in and to the works listed on Schedule A hereto (the "Works"), including, without limitation, (a) all rights of Grantor in and to any and all copyrights, rights in copyright, interests in copyrights and renewals and extensions of copyrights, domestic and foreign, heretofore or hereafter obtained upon any Work, or underlying work upon which any Work is based, or derivative work of any Work, and the right (but not the obligation) to make publication thereof for copyright purposes, to register claim under copyright, and the right (but not the obligation) to renew and extend such copyrights, and the right (but not the obligation) to sue in the name of Grantor and/or in the name of Secured Party for past, present and future infringements of copyright; (b) all royalties, rents, revenues, income, compensation, products, increases, proceeds and profits or other property obtained or to be obtained by Grantor with respect to the Works from the production, release, sale, distribution, subdistribution, lease, sublease, marketing, licensing, sublicensing, performance, broadcast, transmission, reproduction, publication, ownership, exploitation or other uses or disposition of the Works, or underlying work upon which any Work is based, or derivative work of any Work, or any rights therein or part thereof, in any and all media (now know or hereafter devised), and of any collateral, allied, ancillary, merchandising and subsidiary rights therein and thereto, and amounts recovered as damages by reason of unfair competition, the infringement of copyright, breach of any contract or infringement of any rights, or derived therefrom in any manner whatever; (c) all of Grantor's right, title and interest in and to any agreement concerning the Works, whether entered into on or before the date hereof or after the date hereof, and all proceeds thereof, whether fixed or contingent, all as more particularly described in the Agreement (as defined below).

Grantor hereby acknowledges that it has entered into a Loan and Security Agreement (the "Agreement") in favor of Secured Party to secure the prompt and complete payment and performance of the Obligations (as defined in the Agreement), and hereby affirms that the rights and remedies of Secured Party pursuant to the Agreement are fully applicable with respect to the security interests granted pursuant hereto, and that the terms and provisions of the Agreement are hereby incorporated by this reference as if fully set forth herein.

[remainder of page intentionally left blank; signature page follows]

THIS MORTGAGE OF COPYRIGHT SHALL BE CONSTRUED IN ACCORDANCE WITH  
AND GOVERNED BY, THE LAWS OF THE STATE OF CALIFORNIA APPLICABLE TO  
CONTRACTS MADE AND TO BE PERFORMED WHOLLY WITHIN THE STATE OF CALIFORNIA.

IN WITNESS WHEREOF, Grantor has caused this Mortgage of Copyright to be duly executed  
by its duly authorized representative as of the 30th day of September, 1998.

POWERWAVE TECHNOLOGIES, INC.  
a Delaware corporation

By: 

Print Name: Kevin T. Michaels

Title: Vice President, Finance and  
Chief Financial Officer

STATE OF California  
COUNTY OF Orange

)  
)  
)  
SS

On the 2 day of October, in the year 1998, before me personally came Kevin J. Michaels, to me known, who, being by me sworn, did say that s/he is an Authorized Signatory of Powerwave Tech which entity is described in, and which entity executed, the above instrument, and that such person signed the above instrument by order of the Board of Directors of Powerwave Technologies

Vicki J. Ward  
Notary Public

